Background. Macromyscus is a life-threatening infection that predominantly occurs in immunocompromised hosts. The antifungal APX001A (manogepix) inhibits Got1, an enzyme required for the conserved glycosylphosphatidyl inositol (GPI) post-translational modification in eukaryotes. We previously reported the activity of APX001A against Rhizopus delemar (minimally effective concentration [MEC] ≥ 0.125 µg/mL). Here we assessed the activity against R. oryzae, which has an elevated MEC value.

Methods. R. oryzae 99–892 MIC and MEC values were 0.125 µg/mL and 4 µg/mL for tetracycline (ISAV) and APX001A, respectively. ISAV mice were immunosuppressed with cyclophosphamide (200 mg/kg) and cortisone acetate (50 mg/kg) on Days -2, +3, and +8 relative to intratracheal infection with 2.5 × 10^7 cells of R. oryzae 99–892. For survival studies, treatment with 104 mg/kg APX001 was compared with ISAV (110 mg/kg TID). Oral treatment started on Day +1 through Day +7, relative to infection for survival studies, and through Day +4 for tissue fungal burden studies (assessed by conidial equivalent [CE] using qPCR). Placebo mice received vehicle control. To extend the half-life of APX001, mice were administered 50 mg/kg of the cytochrome P450 inhibitor 1-aminobenzotriazole (ABT) 2 h prior to APX001 administration.

Results. APX001 and ISAV equally prolonged median survival time of mice (n = 20) vs. placebo (12 and 14 days for APX001 and ISAV, respectively, vs. 8 days for placebo). Furthermore, APX001 and ISAV treatment both resulted in 30%–21 day survival in severely immunosuppressed mice with C/A-resistant mutants with MICs of 4–8 µg/mL, and ≤0.125 to 2 µg/mL, respectively. ERV possesses significant activity against many of these strains. We tested the activity of ERV against a recent collection of clinical isolates from NYC hospitals.

Methods. Eravacycline (ERV), a fluoroquinolone antibiotic released in the USA in 2018, has demonstrated problematic hospital pathogens in NYC and other areas. Eravacycline (ERV), a fluoroquinolone antibiotic released in the USA in 2018, has demonstrated problematic hospital pathogens in NYC and other areas. Eravacycline (ERV), a fluoroquinolone antibiotic released in the USA in 2018, has demonstrated problematic hospital pathogens in NYC and other areas.

Results. Excel.

Conclusion. ERV possesses significant in vitro activity against contemporary clinical isolates of Enterobacteriaceae and A. baumannii from NYC, including many carbapenemase producing strains.

Disclosures. All authors: No reported disclosures.

727. Potency of the β-Lactamase Inhibitor QPX7728 Is Minimally Affected by Post-translational Modification in eukaryotes. We previously reported the activity of APX001A against Rhizopus delemar (minimally effective concentration [MEC] ≥ 0.125 µg/mL). Here we assessed the activity against R. oryzae, which has an elevated MEC value.

Methods. Ten strains of K. pneumoniae, Enterobacter aerogenes, and Enterococcus faecalis were resistant to C/A-producing strains and Ceftazidime–Avibactam (C/A) (C/A) is increasingly used to treat infections caused by KPC-producers. C/A resistant (C/A-R) mutants with mutations in blaKPC can be isolated in vitro and were reported in patients treated with C/A. QPX7728 (QPX) is a new ultra-broad-spectrum β-lactamase inhibitor based on a cyclic boronic acid pharmacophore with a potent activity against many of these strains. We tested the activity of ERV against a recent collection of clinical isolates from NYC hospitals.

Results. In hospitalized patients with co-morbidities diagnosed with influenza between October 1, 2018 and March 31, 2019. This study included 117 patients hospitalized with influenza, of which 73 were diagnosed by nucleic acid amplification test and 44 by rapid antigen test. Due to heterogeneity in reasons for hospitalization, analysis was stratified by the main reasons for hospitalization. T-test and Wilcoxon’s rank-sum test were used for continuous variables, and Pearson’s chi-squared test was used for categorical variables. The significance level was 0.05.

Results. The study population (n = 145) has a mean age of 66.5 years; of whom, 48% are male. In terms of patient characteristics, those treated with BM (n = 105) vs. OP (n = 40) were older, less frequently admitted to ICU and of differing ethnic compositions. The length of stay was similar in those treated with BM vs. OP in both univariate and multivariate linear regression (5.5 (5.3) vs. 8.2 (11.4) days, P = 0.03). In addition, the length of stay was similar in those treated with BM vs. OP when stratified by reasons for hospitalization: pneumonia/bronchitis (6.6 (7.1) vs. 8.2 (9.2) days, P = 0.43), obstructive airway disease exacerbation (5.3 (4.8) vs. 4.8 (8.0) days, P = 0.56), elderly with multiple co-morbidities (5.0 (4.9) vs. 3.4 (6.8) days, P = 0.63), reactive airway disease (4.1 (4.8) vs. 5.4 (1.5) days, P = 0.07) or congestive heart failure exacerbation (9.8 (9.0) vs. 5.6 (5.0) days, P = 0.43).

Conclusion. In hospitalized patients with co-morbidities diagnosed with influenza, there was no difference in length of stay in those who received BM vs. OP.

Disclosures. All authors: No reported disclosures.

729. Comparing Length of Stay and Clinical Outcomes for Hospitalized Patients in Bridgeport Health System who Received Baloxavir Marboxil (BM) or Oseltamivir Phosphate (OP) During the 2018–2019 Influenza Season Arun C. Nachiapian, MBBS, BSc(Hons); Wei-Teng Yang, MD, MPH; Yale-New Haven Health Bridgeport Hospital, Bridgeport, Connecticut

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Background. Enterobacteriaceae (CAE) are mainly represented by KPC-producing strains and Ceftazidime–Avibactam (C/A)–Resistant mutants with C/A MICs, and the majority of mutants did not have an increase in MICs for these isolates were ≤0.125 µg/mL and 4.0 µg/mL were used in resistance studies using C/A at 2x–8x concentrations

Results. For all isolates, 727 MIC and MEC values were 0.125 µg/mL and 4.0 µg/mL, respectively. Of 518 isolates of K. pneumoniae, 20 possessed KPC. The ERV MIC₅₀ and MEC₅₀ for these isolates were 1 and 1 µg/mL, respectively. Of 172 isolates of Enterobacter spp., 3 possessed KPC. ERV MIC₅₀ for these isolates were 4.5 µg/mL. Of 45 isolates of A. baumannii, 11 isolates possessed a carbapenemase (OXA23 in 8, OXA24 in 2, and KPC in 1). The ERV MIC₅₀ and MEC₅₀ for these isolates were 1 and 2 µg/mL, respectively. Overall, ERV MIC₅₀ were two-fold lower than TGC MICs for A. baumannii.

Conclusion. ERV possesses significant in vitro activity against contemporary clinical isolates of Enterobacteriaceae and A. baumannii from NYC, including many carbapenemase producing strains.

Disclosures. All authors: No reported disclosures.

730. Cefiderocol for the Treatment of Achromobacter xylosidovis Infections in Transplant Recipients with Cystic Fibrosis Nathanial C. Warner, MD; Luther Bartelt, MD; Anne Lachiewicz, MD, MPH;