

development for the treatment of invasive candidiasis. This study evaluated the *in vitro* antifungal activity of SCY-078 against a collection of clinical *C. parapsilosis* isolates.

Methods. Retrospective analysis of data from 7 independent studies evaluating the activity of SCY-078 is presented. Data were available for 206 *C. parapsilosis* isolates collected between 2008 and 2015 in the US and EU. The collection included 186 wild-type isolates as well as 14 azole-resistant, and 6 echinocandin-resistant isolates. Minimum inhibitory concentrations (MIC) were determined according to the CLSI M27-A3 and EUCAST E.DEF 7.3 guidelines. Comparator compounds varied across studies and included fluconazole, micafungin (MCF), caspofungin (CSP), and anidulafungin (ANI). MIC₅₀ and MIC₉₀ values were defined as the concentrations inhibiting growth of 50% and 90% of isolates, respectively. Echinocandin and azole resistance were determined based on CLSI M27-A4 guidelines.

Results. The MIC₅₀ values obtained for SCY-078 against the wild-type *C. parapsilosis* isolates across the 7 studies ranged from 0.25 to 1 µg/mL and the MIC₉₀ values ranged from 0.25 - 2 µg/mL. Among the echinocandins, MIC₉₀ values ranged from 0.5 to 2 µg/mL (CSP), 1 to 4 µg/mL (MCF) and 2 to 4 µg/mL (ANI). SCY-078 was active against the 14 azole-resistant isolates (MIC ranging from 0.25 to 2 µg/mL). Similar activity was observed across the 6 echinocandin-resistant isolates with MIC values for SCY-078 ranging from 0.25 to 1 µg/mL. Among the 4 most recent studies in the US and EU (2013–2015) *C. parapsilosis* isolates represented 14 - 20% of the *Candida* isolates; rates were similar in the EU and US.

Conclusion. SCY-078 demonstrated potent activity against *C. parapsilosis* clinical isolates. Notably, SCY-078 was effective against all the echinocandin and azole resistant *C. parapsilosis* isolates tested.

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1207. Analysis of Oritavancin Activity against Gram-Positive Clinical Isolates Responsible for Bacterial Endocarditis in United States and European Hospitals (2008–2016)

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Session: 147. Expanded Spectrum – New Antimicrobial Susceptibility Testing
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Background. Oritavancin (ORI) has documented *in vitro* activity against gram-positive (GP) isolates. This study analyzed ORI tested against organisms causing endocarditis in United States (US) and European (EU) sites.

Methods. A total of 424 organisms recovered from patients with a diagnosis of bacterial endocarditis at US and EU sites during the SENTRY Antimicrobial Surveillance Program (2008–2016) were included (see Table). Isolates were identified by standard biochemical algorithms and MALDI-TOF. Susceptibility (S) testing was performed by CLSI methods, and MICs were interpreted per CLSI and/or EUCAST criteria.

Results. Among the 424 isolates, 212 (50.0%) were *S. aureus* (SA; 31.6% methicillin-resistant [MRSA]), 47 (11.1%) were coagulase-negative staphylococci (CoNS), 81 (19.1%) were *E. faecalis* (EFC), 21 (5.0%) were *E. faecium* (EFM), 24 (5.7%) were BHS, and 39 (9.2%) were viridans group streptococci (VGS). ORI had similar MIC₉₀ values (0.06 µg/mL) against SA and CoNS, inhibiting 98.8% of these isolates at ≤0.12 µg/mL. ORI MIC₅₀ values were 8- to 32-fold lower than those for vancomycin (VAN), daptomycin (DAP), and ceftaroline (CPT) against staphylococci. ORI showed MICs against EFM (MIC_{50/90} 0.008/0.03 µg/mL) that were 2-fold lower than against EFC (MIC_{50/90} 0.015/0.03 µg/mL; 97.5%S against all or 100%S against indicated VAN-S isolates). ORI inhibited 98.0% of all enterococci, including VAN-resistant isolates at ≤0.12 µg/mL. VAN, DAP, ampicillin (MIC_{50/90} ≤1/2 µg/mL), and linezolid (LZD) (MIC_{50/90} 1/2 µg/mL) were similarly active against EFC, while DAP and LZD had coverage (100.0%S) against EFM. Overall, BHS were highly S to all agents tested, except for erythromycin (70.8%S) and tetracycline (43.5%S). ORI was the most active agent (MIC₉₀ 0.12 µg/mL) tested against VGS.

Conclusion. ORI showed potent *in vitro* activity against isolates recovered from patients with endocarditis in US and EU sites. The data presented here warrant further investigations to determine whether ORI has a role for treating endocarditis.

| Organism* (no. tested) | Oritavancin | | Vancomycin | | Daptomycin | | Ceftaroline | | | | | |
|-------------------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------|--------|------|-------|
| | MIC (µg/mL) | %S ^b | MIC (µg/mL) | %S ^b | MIC (µg/mL) | %S ^b | MIC (µg/mL) | %S ^b | | | | |
| <i>S. aureus</i> (212) | 0.03 | 0.06 | 99.1 | 1 | 1 | 100.0 | 0.25 | 0.5 | 100.0 | 0.25 | 1 | 93.5 |
| MSSA (145) | 0.03 | 0.06 | 100.0 | 1 | 1 | 100.0 | 0.25 | 0.5 | 100.0 | 0.25 | 0.25 | 100.0 |
| MRSA (67) | 0.03 | 0.06 | 97.0 | 1 | 1 | 100.0 | 0.25 | 0.5 | 100.0 | 0.5 | 2 | 80.0 |
| CoNS (47) | 0.03 | 0.06 | - | 1 | 2 | 100.0 | 0.25 | 0.5 | 100.0 | 0.25 | - | - |
| <i>E. faecalis</i> (81) | 0.015 | 0.03 | 97.5 | 1 | 2 | 96.3 | 1 | 2 | 100.0 | NT | NT | - |
| <i>E. faecium</i> (21) | >0.008 | 0.03 | - | 1 | >16 | 57.1 | 2 | 2 | 100.0 | NT | NT | - |
| BHS (24) | 0.03 | 0.12 | 100.0 | 0.25 | 0.5 | 100.0 | 0.12 | 0.25 | 100.0 | <0.008 | - | 100.0 |
| VGS (39) | 0.015 | 0.12 | 100.0 | 0.5 | 0.5 | 100.0 | 0.25 | 0.5 | 100.0 | 0.015 | - | - |

* MSSA, methicillin (oxacillin)-susceptible *S. aureus*; MRSA, methicillin (oxacillin)-resistant *S. aureus*; CoNS, coagulase-negative staphylococci; BHS, β-hemolytic streptococci; and VGS, viridans group streptococci.
^b %S, percentage susceptible according to CLSI (M100-S27, 2017). ORI breakpoint for *E. faecalis* vancomycin-susceptible applied to all isolates, including 3 vancomycin-resistant isolates. All vancomycin-susceptible *E. faecalis* were susceptible to oritavancin; -, breakpoints not available; NT, not tested.

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1208. In Vitro Evaluation of Delafloxacin Activity when Tested Against Contemporary community-Acquired Bacterial Respiratory Tract Infection Isolates (2014–2016): Results from the SENTRY Antimicrobial Surveillance Program

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Session: 147. Expanded Spectrum – New Antimicrobial Susceptibility Testing
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Background. Delafloxacin (DLX) is a broad-spectrum fluoroquinolone (FQ) antibacterial that has completed clinical development (oral and intravenous formulations) with the new drug application currently under the Food and Drug Administration review for the treatment of acute bacterial skin and skin structure infections (ABSSSI). DLX is also in clinical trials for community-acquired bacterial pneumonia. In this study, *in vitro* susceptibility results for DLX and comparator agents were determined for clinical isolates from community-acquired respiratory tract infections (CA-RTI) collected in medical centers in the United States and Europe participating in the SENTRY surveillance program during 2014–2016.

Methods. A total of 3,093 isolates that included 1,673 *Streptococcus pneumoniae* (SPN), 805 *Haemophilus influenzae* (HI) and 555 *Moraxella catarrhalis* (MC) were collected during 2014–2016 and included only 1 isolate/patient/infection episode. Isolate identifications were confirmed at JMI Laboratories. Susceptibility testing was performed according to CLSI reference broth microdilution methodology, and results were interpreted per CLSI (2017) breakpoints. Other antibacterials tested included levofloxacin (LVX) and penicillin. β-lactamase production for HI and MC was determined by the nitrocephin disk test.

Results. DLX demonstrated potent *in vitro* activity against SPN (MIC_{50/90} 0.015/0.03 mg/L). Activity remained the same for penicillin-intermediate or -resistant isolates. For 23 LVX nonsusceptible SPN, the DLX MIC_{50/90} were 0.12/0.25 mg/L with all isolates having DLX MIC values ≤1 mg/L. For HI, the DLX MIC_{50/90} were ≤0.001/0.004 mg/L, and for MC the MIC_{50/90} were 0.008/0.008 mg/L. DLX activity was unaffected by the presence of β-lactamase for either HI or MC. Activity of DLX was similar for US and European isolates.

Conclusion. Delafloxacin demonstrated potent *in vitro* antibacterial activity against CA-RTI pathogens, including SPN, HI, and MC. These data support the continued study of DLX as a potential treatment for community-acquired pneumonia.

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1209. In Vitro Activity of Eravacycline and Comparator Antimicrobials Against 143 Strains of Bacteroides Species.

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Background. Eravacycline (ERV) is the first fully synthetic fluorocycline with activity against tetracycline (TET)-resistant organisms. In addition, it is 2–8 times more potent than tigecycline (TGC). Like other tetracyclines, it inhibits protein synthesis by binding to the 30S ribosomal subunit exhibiting a broad spectrum of activity. To further explore its activity, we tested 143 clinical isolates of *Bacteroides* and included TET, TGC and other drugs frequently used to treat serious infections.

Methods. Clinical isolates recovered during the past 3 years from patients in southern California were saved as pure cultures in 20% skim milk at -70°C. Prior to testing, they were transferred at least twice to ensure purity and good growth. Antimicrobials included ERV, TET, TGC, piperacillin-tazobactam (P-T), meropenem (MER), clindamycin (CLI), and metronidazole (MET). The method was agar dilution as described in the CLSI M11-A8 document for testing anaerobes using Brucella agar and incubation in the anaerobic chamber at 36°C for 44h. The MIC was defined as the lowest dilution that completely inhibited growth or resulted in a marked reduction compared with a drug-free growth control.

Results. The MIC₉₀ values (µg/ml) for *Bacteroides* and *Parabacteroides* are presented in the table:

| Organism (no.) | ERV | TGC | TET | P-T | MER | CLI | MET |
|---------------------------|-----|-----|-----|-----|------|-----|-----|
| <i>B. caccae</i> (10) | 2 | 16 | >32 | 8 | 0.25 | >32 | 1 |
| <i>B. fragilis</i> (25) | 2 | 8 | >32 | 1 | 0.5 | >32 | 1 |
| <i>B. theta</i> (25) | 4 | 16 | >32 | 16 | 1 | >32 | 1 |
| <i>B. ovatus</i> (33) | 4 | 32 | >32 | 8 | 4 | >32 | 2 |
| <i>B. vulgatus</i> (25) | 1 | 4 | >32 | 8 | 1 | >32 | 2 |
| <i>P. distasonis</i> (25) | 1 | 8 | >32 | 8 | 1 | >32 | 2 |

ERV showed excellent activity against these strains and was 4–8 times more potent than TGC. TET and CLI were poorly active with most strains showing marked resistance. The other antimicrobials showed modest to good activity.