**1963. Combined Microbiological Response Rates From Two Phase 3 Trials Demonstrating the Activity of Eravacycline in the Treatment of Complicated Intra-abdominal Infections: A Pooled Analysis of IGNITE1 and IGNITE4**

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***Background.*** IGNITE1 and IGNITE4 were randomized, double-blind, double-dummy, multicenter studies which demonstrated the efficacy and safety of eravacycline (ERV) compared with a carbapenem in subjects with complicated intra-abdominal infections (cIAIs). The primary objective of this analysis was to compare the microbiological response at the test-of-cure (TOC) visit for subjects in the two treatment groups.

***Methods.*** Appropriate aerobic and anaerobic specimens for culture at the time of the initial procedure were collected from the site of infection and directly inoculated into transport media. Blood and intra-abdominal specimens were cultured, and species identified according to local laboratory practice. Pure cultures of isolates were sent to a reference laboratory for susceptibility analysis to ERV and comparators. Favorable microbiological response rates at the TOC visit were determined for each baseline pathogen isolated from blood and/or intra- or extra-abdominal specimens in the micro-ITT population.

***Results.*** For subjects with infections caused by *Enterobacteriaceae*, the overall favorable microbiological response rates for ERV-treated subjects were 86.3% and 91.8% for IGNITE1 and IGNITE4, respectively. The favorable microbiological response rates among pooled ERV-treated subjects are shown in the Table.

| Baseline Pathogen | ERV No./Total No. (%) | Baseline Pathogen | ERV No/Total No. (%) |
|---|---|---|---|
| *Enterobacteriaceae* | 277/314 (88.2) | *Streptococcus viridans* group | 109/120 (90.8) |
| *E. coli* | 223/253 (88.1) | *E. faecalis* | 45/54 (83.3) |
| *E. cloacae* | 18/21 (85.7) | *E. faecium* | 39/45 (86.7) |
| *K. pneumoniae* | 38/39 (97.4) | *S. aureus* | 24/24 (100) |
| *A. baumannii* | 13/13 (100) | *B. fragilis* | 74/84 (88.1) |

***Conclusion.*** In IGNITE1 and IGNITE4 studies, high favorable microbiological responses were observed for ERV. More than 88% of five *Enterobacteriaceae* spp. and *B. fragilis,* the most common bacteria associated with intraabdominal infections, were eradicated by ERV. Comparable eradication rates were observed following ertapenem and meropenem therapy, further establishing that ERV was at least as effective as carbapenem treatments. These data support in vitro observations that ERV has broad-spectrum activity against common isolates found in intra-abdominal infections.

***Disclosures.*** **J. Newman**, Tetraphase Pharmaceuticals: Employee, Salary. **S. Izmailyan**, Tetraphase Pharmaceuticals: Employee, Salary. **C. Fyfe**, Tetraphase Pharmaceuticals: Employee, Salary. **L. Tsai**, Tetraphase Pharmaceuticals: Employee and Shareholder, Salary.

**1964. Microbiological Outcomes With Plazomicin (PLZ) vs. Colistin (CST) in Patients With Bloodstream Infections (BSI) Caused by Carbapenem-Resistant Enterobacteriaceae (CRE) in the CARE Study**

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***Background.*** PLZ is a next-generation aminoglycoside with structural modifications that protect it from aminoglycoside-modifying enzymes (AMEs) and in vitro activity against multidrug-resistant (MDR) Enterobacteriaceae, including aminoglycoside- and carbapenem-resistant strains. In the CARE study, PLZ was associated with improvement in 28-day all-cause mortality vs. CST in patients with CRE BSI. We report the microbiological outcomes in the CARE study by pathogen and key resistance mechanism.

***Methods.*** CARE was a multinational, open-label trial that enrolled BSI patients with documented or presumed CRE into two cohorts. Patients in the randomized cohort received PLZ (15 mg/kg q24h IV) or CST (300-mg load [CST base activity] then 5 mg/kg/day IV) plus adjunctive tigecycline or meropenem. Patients in the observational cohort received PLZ plus investigator's choice of adjunctive agent. Treatment duration was 7–14 days. Isolate identification and susceptibility testing were conducted by a central laboratory. Whole-genome sequencing was used to identify AME and carbapenemase genes. Microbiological outcomes were assessed in patients with confirmed CRE who received ≥1 dose of study drug (mMITT population).

***Results.*** Of 45 BSI patients enrolled, 43 had confirmed CRE (mMITT), including *Klebsiella pneumoniae* (*n* = 42) and *Enterobacter aerogenes* (*n* = 1). Against CRE, PLZ MICs ranged from 0.12 to >128 µg/mL; 25/28 (89.3%) isolates from PLZ-treated patients had a PLZ MIC ≤4 µg/mL, while 3 had a PLZ MIC ≥128 µg/mL and a confirmed 16S ribosomal methyltransferase gene. CST MICs ranged from 0.25 to >128 µg/mL; 6/16 (37.5%) isolates from CST-treated patients had an MIC >2 µg/mL. There were 47 distinct Enterobacteriaceae pathogens isolated from 43 patients, and of these, AME genes were detected in 43/47 (91.5%), most commonly *aac(6')-Ib* (n = 29). Carbapenemase genes were detected in 45/47 (95.7%) isolates, most commonly $bla_{KPC}$ (*n* = 33). PLZ demonstrated higher microbiological eradication rates than CST against CRE, including AME- and carbapenemase-producing isolates (table).

***Conclusion.*** The results provide evidence of the efficacy of PLZ-based therapy for patients with BSI due to MDR Enterobacteriaceae, including AME- and carbapenemase-producing organisms.

**Table. Microbiological Response at TOC[a] in BSI Pts by Pathogen, Resistance Phenotype, and Resistance Genotype in Baseline Enterobacteriaceae (mMITT Population)**

| | Randomized Cohort | | | Observational Cohort |
|---|---|---|---|---|
| **Pathogen or Genotype Category** | **PLZ (N = 14)** | **CST (N = 15)** | **Difference PLZ Minus CST (90% CI)** | **PLZ (N = 14)** |
| Pts with CRE[b], n/N1 (%) | 13/14 (92.9) | 8/15 (53.3) | 39.5 (11.2 to 65.6) | 11/14 (78.6) |
| *K. pneumoniae* | 12/13 (92.3) | 8/15 (53.3) | 39.0 (7.9 to 64.7) | 11/14 (78.6) |
| *E. aerogenes*[c] | 1/1 (100) | 0 | - | - |
| Aminoglycoside-NS CRE[d,e] | 9/10 (90.0) | 8/14 (57.1) | 32.9 (-1.7 to 62.2) | 10/13 (76.9) |
| Pts with additional non-CRE Enterobacteriaceae, n/N1 (%) | 1/1 (100.0) | 0 | - | 2/2 (100) |
| Pts with AME-gene positive Enterobacteriaceae[e], n/N2 | 12/13 (92.3) | 8/15 (53.3) | 39.0 (7.9 to 64.7) | 12/15 (80.0) |
| *aac(6')-Ib* | 6/6 (100) | 7/13 (53.8) | 46.2 (7.4 to 76.8) | 8/10 (80.0) |
| Pts with carbapenemase-gene positive Enterobacteriaceae, n/N2 | 13/14 (92.9) | 8/16 (50.0) | 42.9 (13.3 to 67.5) | 12/15 (80.0) |
| $bla_{KPC}$ | 8/9 (88.9) | 4/11 (36.4) | 52.5 (15.7 to 79.2) | 7/9 (77.8) |
| $bla_{OXA-48}$ | 1/1 (100) | 2/2 (100) | - | 2/2 (100) |
| $bla_{VIM}$ | 0 | 0 | - | 3/3 (100) |
| $bla_{NDM-1}$ | 0 | 1/2 (50.0) | - | 0 |
| $bla_{KPC}$ + $bla_{VIM}$ | 3/3 (100) | 0 | - | 0/1 (0.0) |
| $bla_{NDM-1}$ + $bla_{VIM}$ | 1/1 (100) | 1/1 (100) | - | 0 |

[a]Favorable microbiological response required confirmed negative results in 2 consecutive cultures measured on separate study days, with no recurrence on or before the TOC visit (7 ± 2 days after end of therapy).

[b]CRE was confirmed by a central laboratory as meropenem MIC of ≥4 µg/mL, or MIC of 2 µg/mL coupled with a disk diffusion zone ≤19 mm.

[c]The Clinical and Laboratory Standards Institute (CLSI) has recommended a nomenclature change of *Enterobacter aerogenes* to *Klebsiella aerogenes*.

[d]Aminoglycoside-NS was defined as intermediate or resistant to amikacin, gentamicin, or tobramycin confirmed by central laboratory MIC testing and CLSI 2016 breakpoints.

[e]Includes some pts with a confirmed 16S ribosomal methyltransferase gene.

CI, confidence interval; KPC, *K. pneumoniae* carbapenemase; MIC, minimum inhibitory concentration; mMITT, microbiological modified intent-to-treat; N, number of pts with BSI; N1, number of pts with specified pathogen(s) at baseline (pts with >1 CRE pathogen were counted only once); N2, number of pts with specified genotype in Enterobacteriaceae at baseline (pts with >1 genotype in the same category were counted only once); NDM, New Delhi metallo-β-lactamase; NS, nonsusceptible; OXA, oxacillinase; TOC, test of cure; VIM, Verona integron-encoded metallo-β-lactamase.

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**1965. Safety and Efficacy of Glecaprevir/Pibrentasvir in Patients With Chronic Hepatitis C Virus Genotypes 1–6 and Human Immunodeficiency Virus-1 Co-Infection: An Integrated Analysis of Two Phase 3 Clinical Trials**

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***Background.*** People co-infected with hepatitis C virus (HCV) and human immunodeficiency virus (HIV)-1 may be treated for HCV without special considerations apart from drug interactions with antiretroviral therapies (ART). The once-daily, all-oral, ribavirin-free, pangenotypic combination of glecaprevir (identified by AbbVie and Enanta) and pibrentasvir has shown high sustained virologic response at post-treatment Week 12 (SVR12) in HCV mono-infected patients. We evaluated the safety/efficacy of glecaprevir/pibrentasvir in patients co-infected with HCV/HIV-1.

***Methods.*** Data were pooled from two Phase 3 trials for treatment-naïve and -experienced patients co-infected with HCV genotypes (GT) 1–6/HIV-1 without cirrhosis or with compensated cirrhosis who received glecaprevir/pibrentasvir for 8 or 12