



Results of IGNITE4: A Phase 3 Study to Evaluate the Efficacy and Safety of Eravacycline versus Meropenem in Complicated Intra-abdominal Infections

Larry Tsai¹, Patrick Horn¹, Joseph Solomkin²,
David Evans³, Janis Gardovskis⁴

¹Tetraphase Pharmaceuticals, Watertown, MA

²University of Cincinnati

³The Ohio State University

⁴P. Stradins Clinical University Hospital

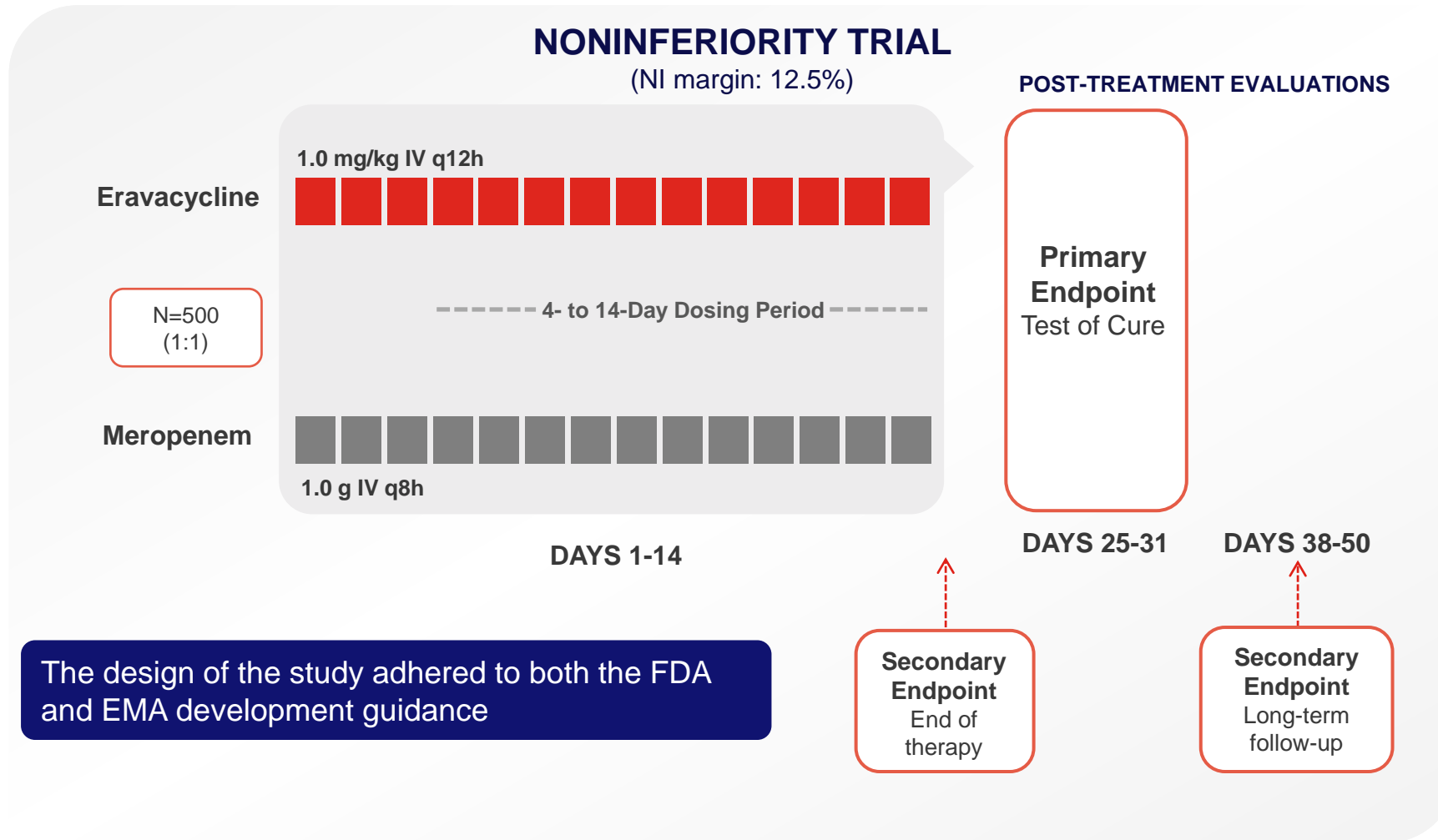
ignite 4 Eravacycline: A Novel Fluorocycline



- Novel, fully-synthetic fluorocycline antibiotic
- Retains activity against the most common tetracycline-specific acquired resistance mechanisms (i.e., efflux and ribosomal protection)
- Eravacycline has potent activity against antibiotic-resistant bacteria identified as urgent/critical or serious/high threats by CDC and WHO, as well as certain anaerobes
 - Carbapenem-resistant Enterobacteriaceae (CRE)
 - Methicillin-resistant *Staphylococcus aureus* (MRSA)
 - Extended-spectrum beta-lactamases (ESBL)-producing Enterobacteriaceae
 - Vancomycin-resistant enterococci (VRE)
 - Multidrug-resistant (MDR) *Acinetobacter*
 - *Bacteroides fragilis*
- Eravacycline is under FDA and EMA review for indication in patients with cIAI

Xiao X, et al. J Med Chem. 2012;55:597-605.; Sutcliffe JA, et al AAC. 2013;57(11):5548-5558; Bassetti et al. P1825 Presented at IDWeek, October 26-30, 2016, New Orleans, LA
Bassetti et al. P1820 Presented at IDWeek, October 26-30, 2016, New Orleans, LA, USA

ignite 4 Study Design





Demographics and Baseline Characteristics

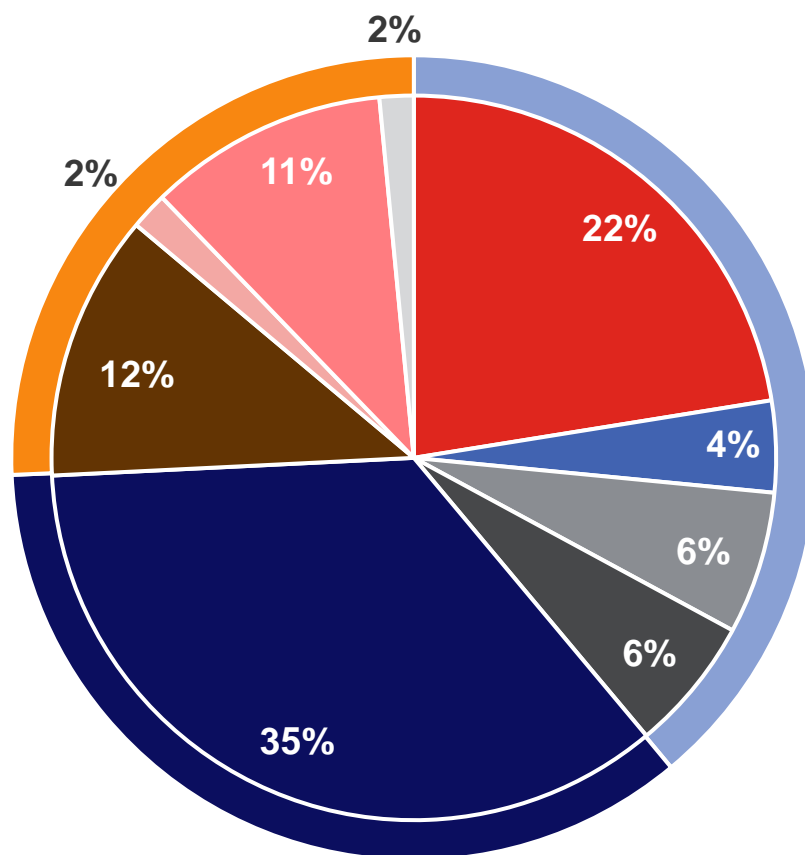
MITT population

	Eravacycline (N=250)	Meropenem (N=249)
Gender, male, n (%)	139 (55.6)	129 (51.8)
Race, White, n (%)	249 (99.6)	249 (100)
Age, n (%)		
<65	180 (72)	174 (69.9)
≥65	70 (28)	75 (30.1)
APACHE II score, n (%)		
<10	202 (80.8)	200 (80.3)
≥10	48 (19.2)	49 (19.7)
≥15	7 (2.8)	11 (4.4)
Primary Disease Diagnosis, n (%)		
Complicated Appendicitis	99 (39.6)	99 (39.8)
Other cIAI	151 (60.4)	150 (60.2)

MITT = modified intent-to-treat

ignite 4 Baseline Pathogen Distribution

- 39% Gram-negative aerobes, 26% Gram-positive aerobes and 35% anaerobes
- 1445 baseline isolates; 3.6 isolates/patient



GRAM-NEGATIVES

- *E. coli*
- *K. pneumoniae*
- Other Enterobacteriaceae
- Non-Enterobacteriaceae

ANAEROBES

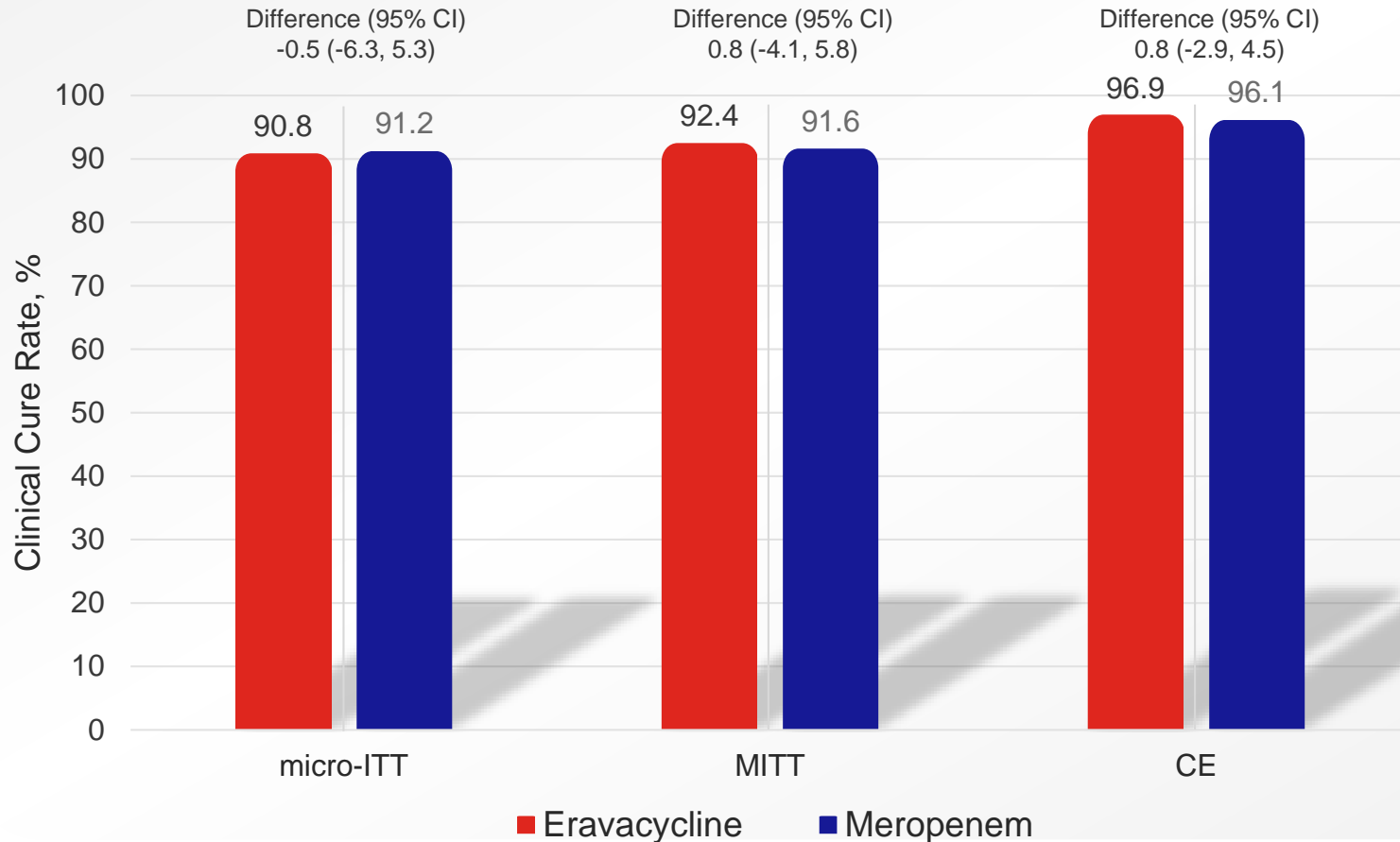
- Anaerobes

GRAM-POSITIVES

- *Enterococci spp*
- *Staphylococci spp*
- *Streptococci spp*
- Other Gram-positive aerobes

ignite 4 Efficacy Overview

Clinical Response at TOC



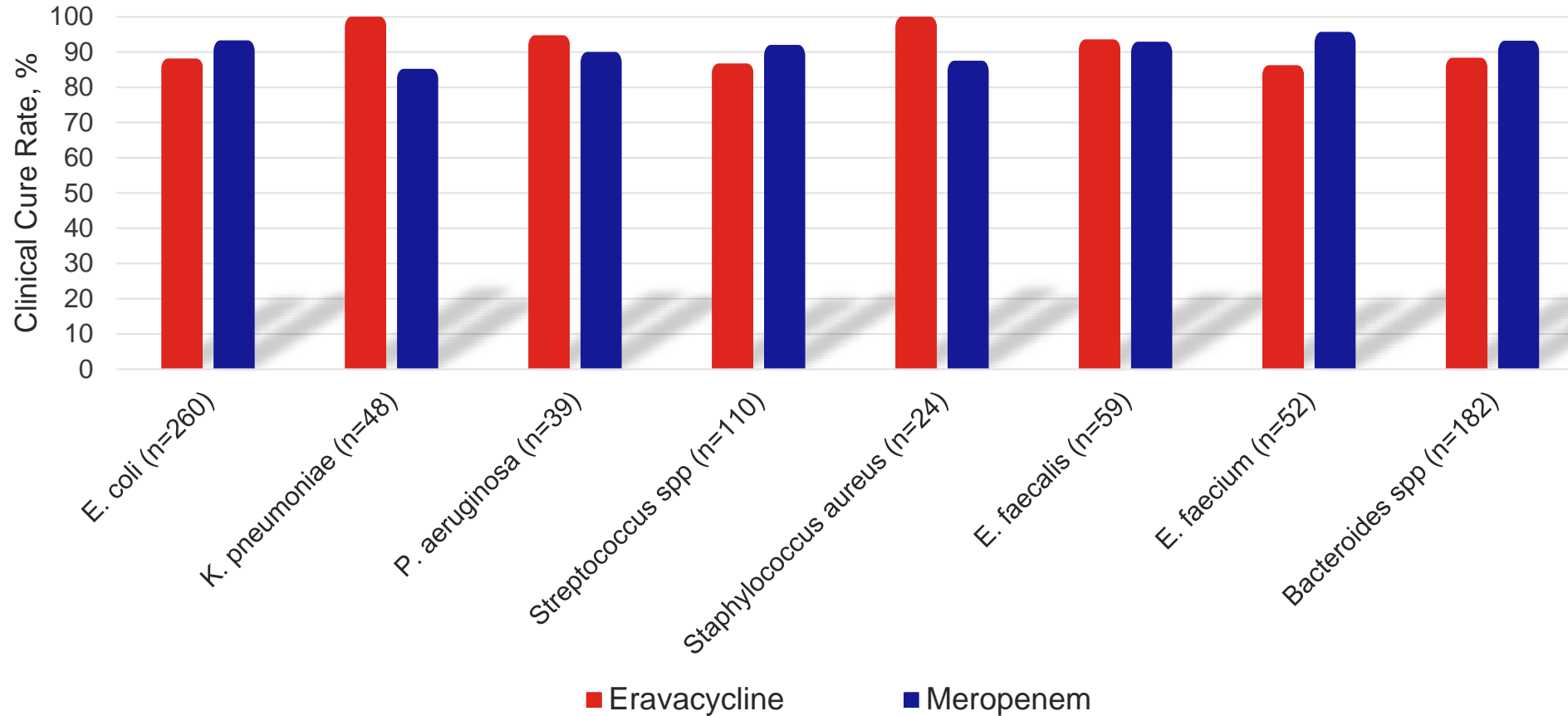
Eravacycline

- Met FDA and EMA 1⁰ endpoints demonstrating non-inferiority to meropenem in cIAI patients
- Achieved high clinical cure rates

TOC = test of cure; micro-ITT = microbiological intent-to-treat ; MITT = modified intent-to-treat; CE = clinically evaluable

ignite 4 Secondary Efficacy Endpoint

Clinical Response per Pathogen at TOC (micro-ITT)



TOC = test of cure; micro-ITT = microbiological intent-to-treat

ignite 4 Safety Overview

	Eravacycline (N=250)	Meropenem (N=249)
TEAEs Occurring in >2 % of Subjects, n (%)		
Nausea	12 (4.8)	2 (0.8)
Vomiting	9 (3.6)	5 (2)
Infusion site phlebitis	8 (3.2)	1 (0.4)
Diarrhea	6 (2.4)	3 (1.2)
Anemia	3 (1.2)	6 (2.4)

- Eravacycline was generally well-tolerated
- There were no drug-related serious adverse events

TEAE: Treatment Emergent Adverse Event