



La Jolla
Pharmaceutical

Corporate Presentation

March 2021

Forward-looking Statements

This presentation contains “forward-looking statements” as defined by the Private Securities Litigation Reform Act of 1995. We caution investors that forward-looking statements are based on management’s expectations and assumptions as of the date of this presentation and involve substantial risks and uncertainties that could cause the actual outcomes to differ materially from what we currently expect. These risks and uncertainties include, but are not limited to, those associated with: GIAPREZA (angiotensin II) and XERAVA (eravacycline) sales; whether La Jolla will realize the benefits from the acquisition of Tetrphase Pharmaceuticals, Inc.; regulatory actions relating to La Jolla’s products by the U.S. Food and Drug Administration (FDA), European Commission and/or other regulatory authorities; expected future cash flows of La Jolla, including milestone and/or royalty payments resulting from La Jolla’s exclusive license agreement with PAION AG; and other risks and uncertainties identified in our filings with the U.S. Securities and Exchange Commission. Forward-looking statements in this presentation apply only as of the date made, and we undertake no obligation to update or revise any forward-looking statements to reflect subsequent events or circumstances.

Our Mission

La Jolla is dedicated to the development and commercialization of innovative therapies that improve outcomes in patients suffering from life-threatening diseases

Product Portfolio

Product	Indication	Pivotal Studies	Regulatory Status
GIAPREZA™ (angiotensin II)	Septic or other distributive shock ^a	321-patient, multinational, double-blind, randomized, placebo-controlled study	FDA-approved Dec 2017 European Commission-approved Aug 2019
XERAVA™ (eravacycline)	Complicated intra-abdominal infections ^b	538-patient, multinational, double-blind, randomized, active-controlled study 499-patient, multinational, double-blind, randomized, active-controlled study	FDA-approved Aug 2018 European Commission-approved Sep 2018

^a U.S.: GIAPREZA is a vasoconstrictor to increase blood pressure in adults with septic or other distributive shock
European Union: GIAPREZA is indicated for the treatment of refractory hypotension in adults with septic or other distributive shock who remain hypotensive despite adequate volume restitution and application of catecholamines and other available vasopressor therapies

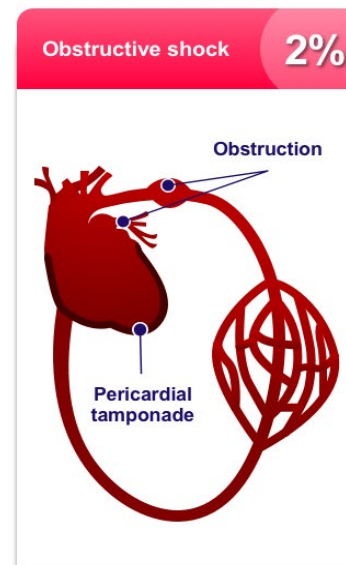
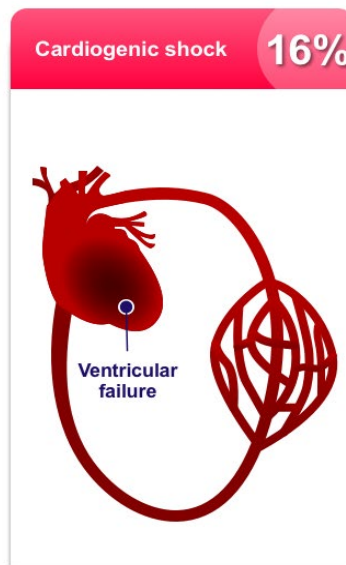
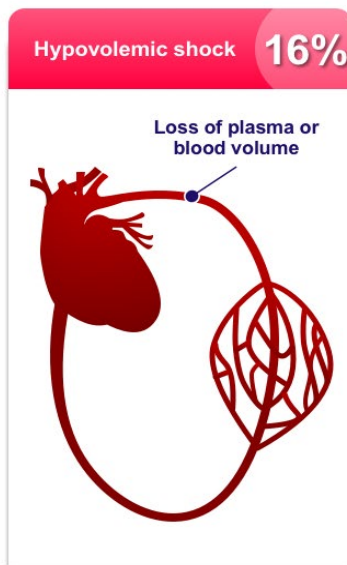
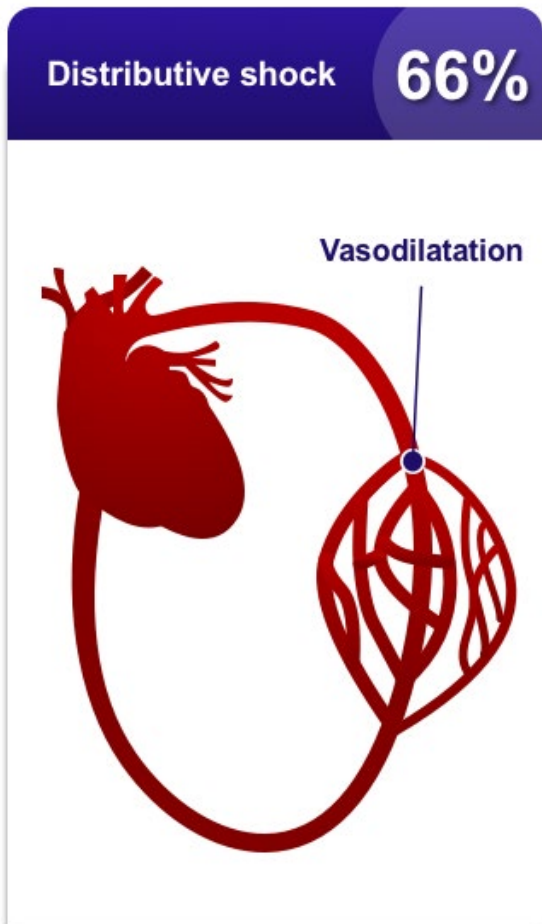
^b U.S.: XERAVA is a tetracycline class antibacterial indicated for the treatment of complicated intra-abdominal infections (cIAs) in patients 18 years of age and older
European Union: XERAVA is indicated for the treatment of cIAI in adults



/// GIAPREZA™
(angiotensin II)
injection for intravenous infusion

**GIAPREZA is a vasoconstrictor to increase
blood pressure in adults with septic or
other distributive shock**

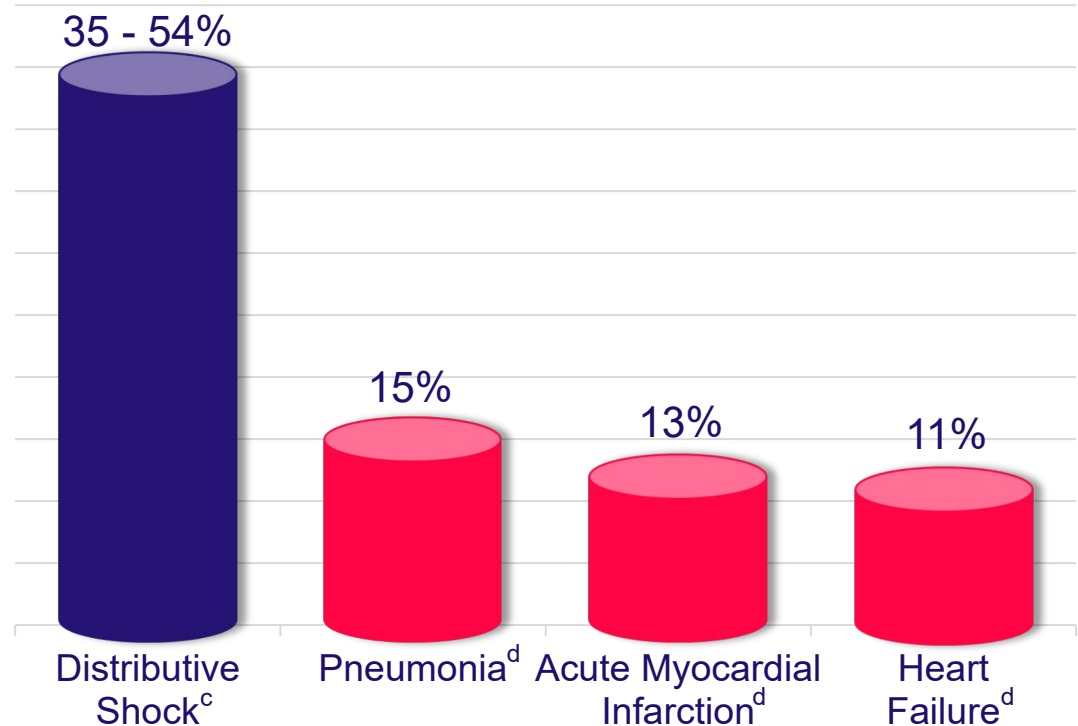
Distributive Shock Is the Most Common Form of Shock^a



Distributive Shock Is a Leading Cause of Death in Hospitalized Patients

Septic shock accounts for >90% of distributive shock^a

Mortality Rate



- Mortality rate exceeds that of most acute conditions requiring hospitalization
- Shock affects one-third of patients in the intensive care unit (ICU)^b

^a [Vincent et al, *New England Journal of Medicine* 2013; 369\(18\):1726-1734](#)

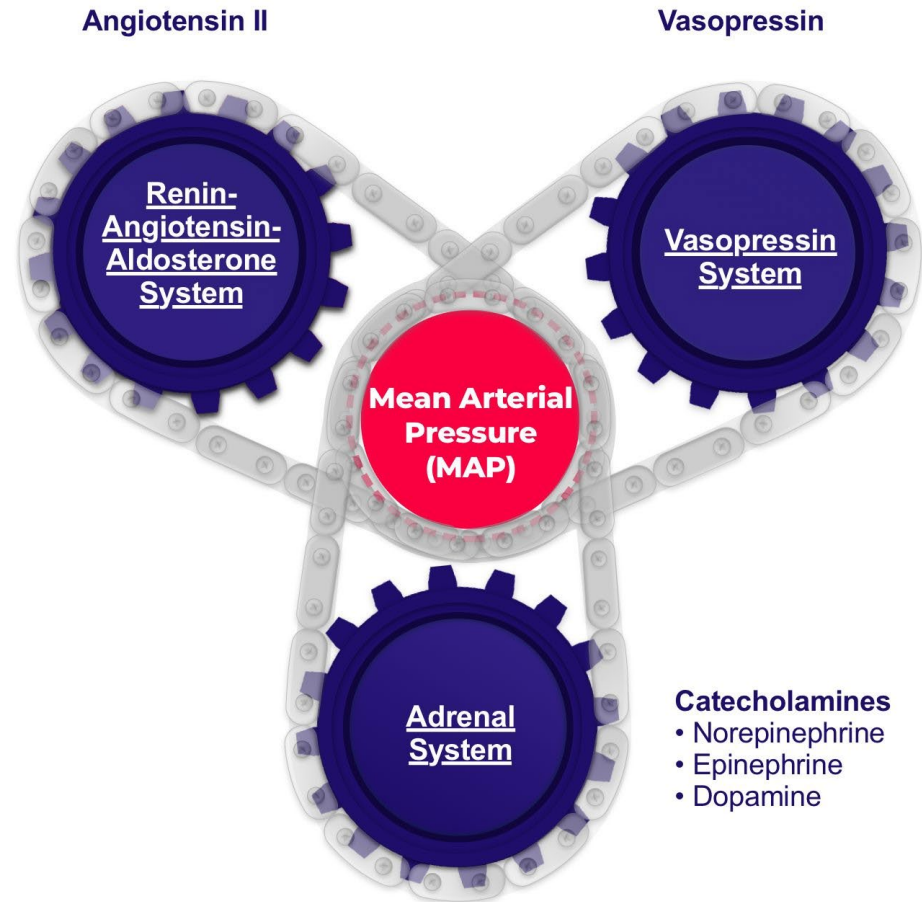
^b [Sakr et al, *Critical Care Medicine* 2006; 34:589-597](#)

^c Based on the 28-day mortality rates of: (i) 35% from [Russell et al, *New England Journal of Medicine* 2008; 358:877-87](#); (ii) 49% from [De Backer et al, *New England Journal of Medicine* 2010; 362:779-89](#); and (iii) 54% from [Khanna et al, *New England Journal of Medicine* 2017; 377:419-430](#)

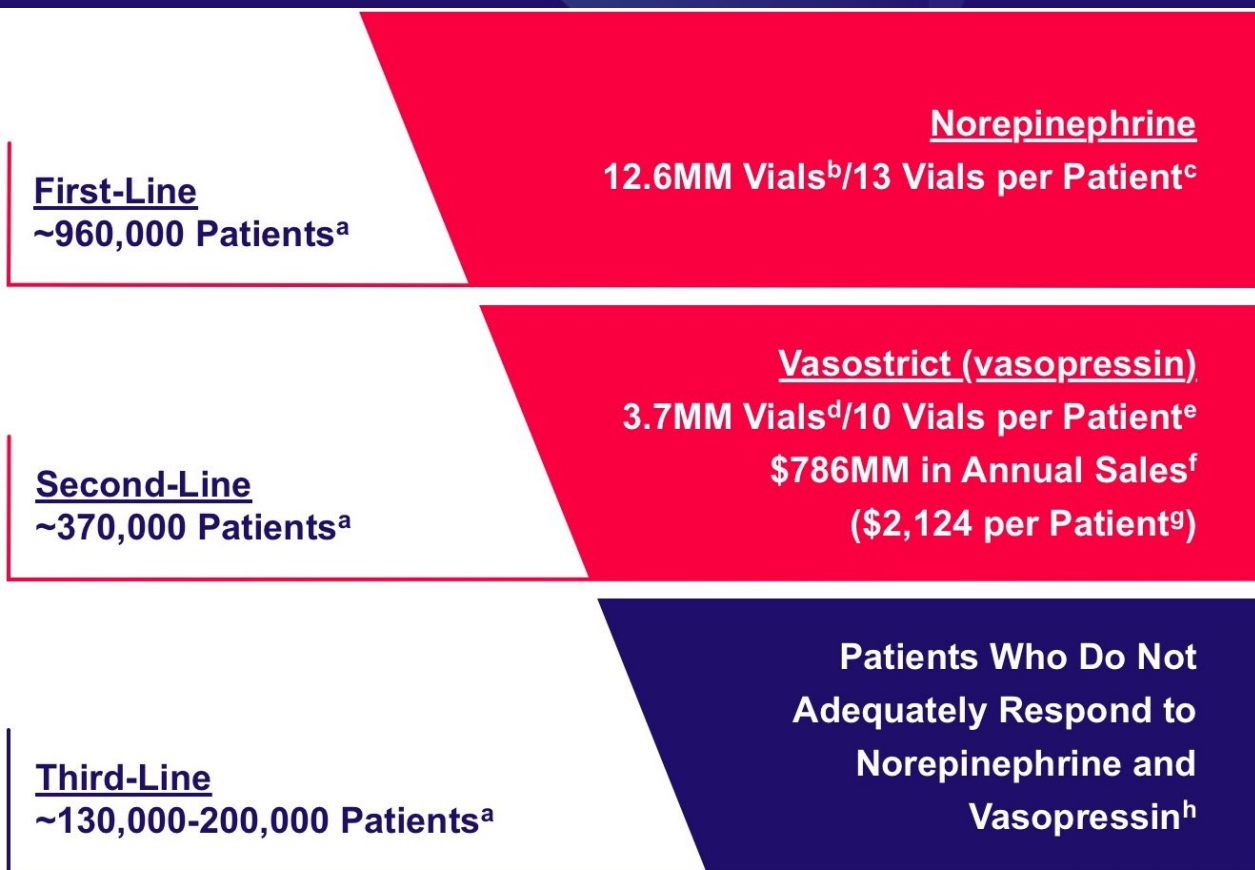
^d 30-day mortality rate from [Medicare.gov](#)

In Healthy Individuals, Three Systems Work in Harmony to Regulate Blood Pressure

- Angiotensin II regulates blood pressure through the renin-angiotensin-aldosterone system (RAAS)
- Other therapeutic options regulate blood pressure through the adrenal system and vasopressin system



~130,000-200,000 Patients Fail to Respond to Current Vasopressor Options



^a Annually in the U.S.

^b Year ended December 31, 2020 per Symphony Health Solutions

^c Estimate based on [Russell et al, *New England Journal of Medicine* 2008; 358:877-87](#) and [Asfar et al, *New England Journal of Medicine* 2014; 370:1583-93](#)

^d Annual sales per Endo International plc SEC filings, divided by price per vial per Wolters Kluwer *PriceRx*

^e Estimate based on [Dunser et al, *Circulation* 2003; 107:2313-2319](#) and [Gordon et al, *Critical Care Medicine* 2014; 42\(6\):1325-1333](#)

^f Year ended December 31, 2020 per Endo International plc SEC filings

^g \$212.38 per vial per Wolters Kluwer *PriceRx*, multiplied by 10 vials per patient

^h Estimate based on: 35.4% 28-day mortality rate from [Russell et al, *New England Journal of Medicine* 2008; 358:877-87](#); 48.5% 28-day mortality rate from [De Backer et al, *New England Journal of Medicine* 2010; 362:779-789](#); and 54.6% non-responder rate from [Sacha et al, *Annals of Intensive Care* 2018; 8:35](#)

Angiotensin II for the Treatment of High-Output Shock (ATHOS-3)

The NEW ENGLAND JOURNAL *of* MEDICINE

ESTABLISHED IN 1812

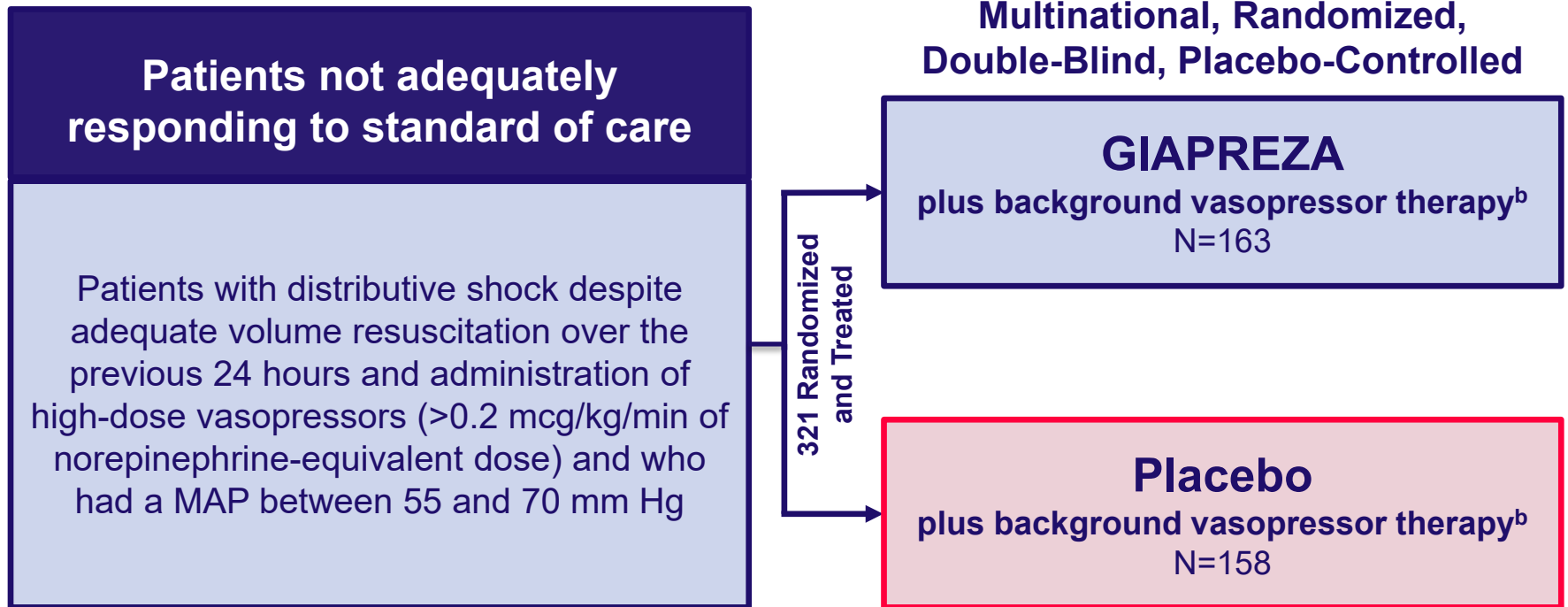
AUGUST 3, 2017

VOL. 377 NO. 5

Angiotensin II for the Treatment of Vasodilatory Shock

Ashish Khanna, M.D., Shane W. English, M.D., Xueyuan S. Wang, M.D., Kealy Ham, M.D., James Tumlin, M.D., Harold Szerlip, M.D., Laurence W. Busse, M.D., Laith Altaweel, M.D., Timothy E. Albertson, M.D., M.P.H., Ph.D., Caleb Mackey, M.D., Michael T. McCurdy, M.D., David W. Boldt, M.D., Stefan Chock, M.D., Paul J. Young, M.B., Ch.B., Ph.D., Kenneth Krell, M.D., Richard G. Wunderink, M.D., Marlies Ostermann, M.D., Ph.D., Raghavan Murugan, M.D., Michelle N. Gong, M.D., Rakshit Panwar, M.D., Johanna Hästbacka, M.D., Ph.D., Raphael Favory, M.D., Ph.D., Balasubramanian Venkatesh, M.D., B. Taylor Thompson, M.D., Rinaldo Bellomo, M.D., Jeffrey Jensen, B.S., Stew Kroll, M.A., Lakhmir S. Chawla, M.D., George F. Tidmarsh, M.D., Ph.D., and Adam M. Deane, M.D., for the ATHOS-3 Investigators*

ATHOS-3 Study Design^a



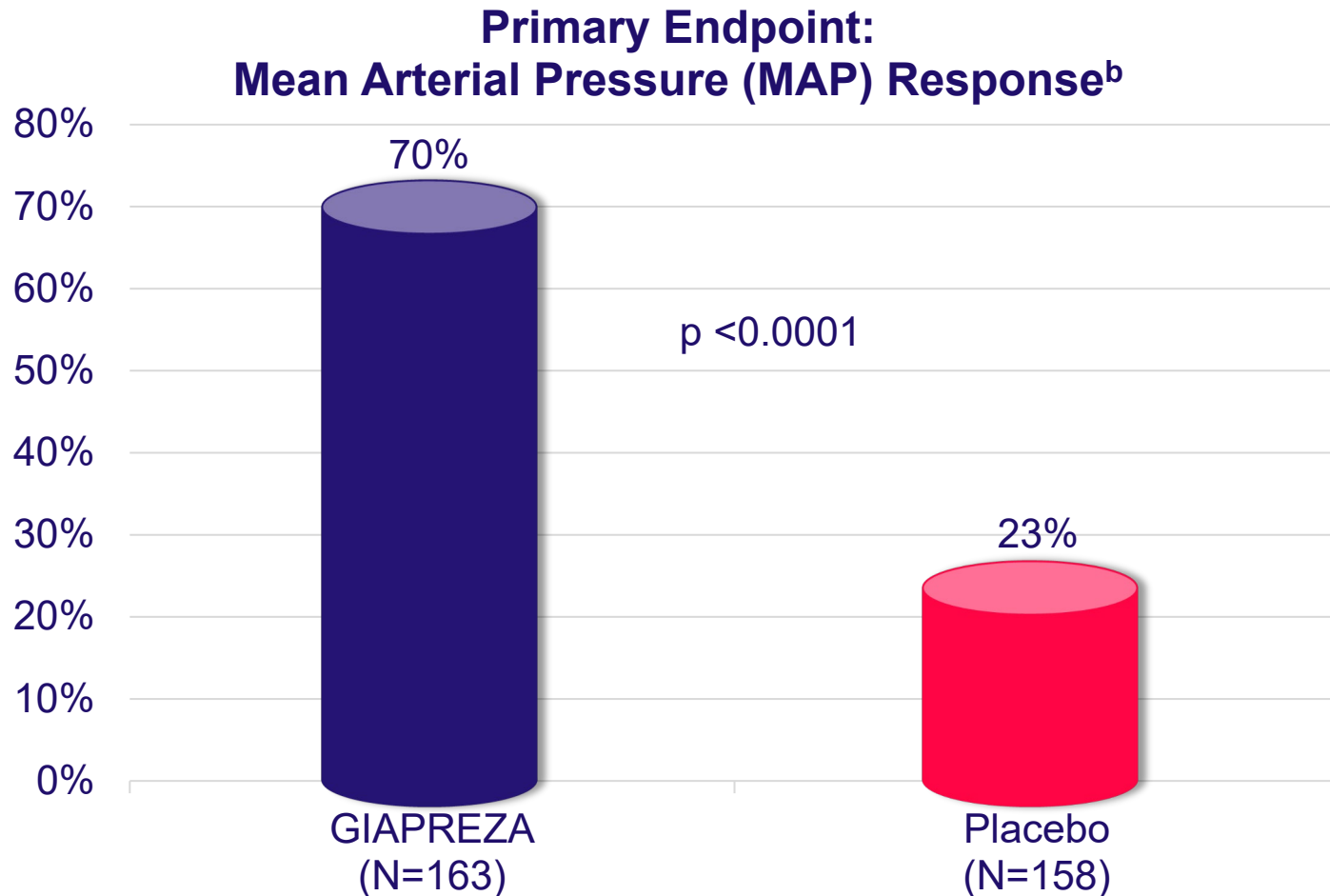
Primary Endpoint: MAP response of ≥ 75 mm Hg or an increase from baseline of ≥ 10 mm Hg at Hour 3, without an increase in the dose of background vasopressors

MAP=mean arterial pressure

^a [Khanna et al, *New England Journal of Medicine* 2017; 377:419-430](#)

^b Background vasopressor therapy included norepinephrine, epinephrine, dopamine and vasopressin

GIAPREZA Significantly Improved Blood Pressure Response^a



^a [GIAPREZA FDA prescribing information](#)

^b MAP of 75 mm Hg or higher or an increase in MAP from baseline of at least 10 mm Hg at Hour 3 without an increase in the dose of background vasopressors

Ability to Rapidly Achieve and Adjust Therapeutic Response

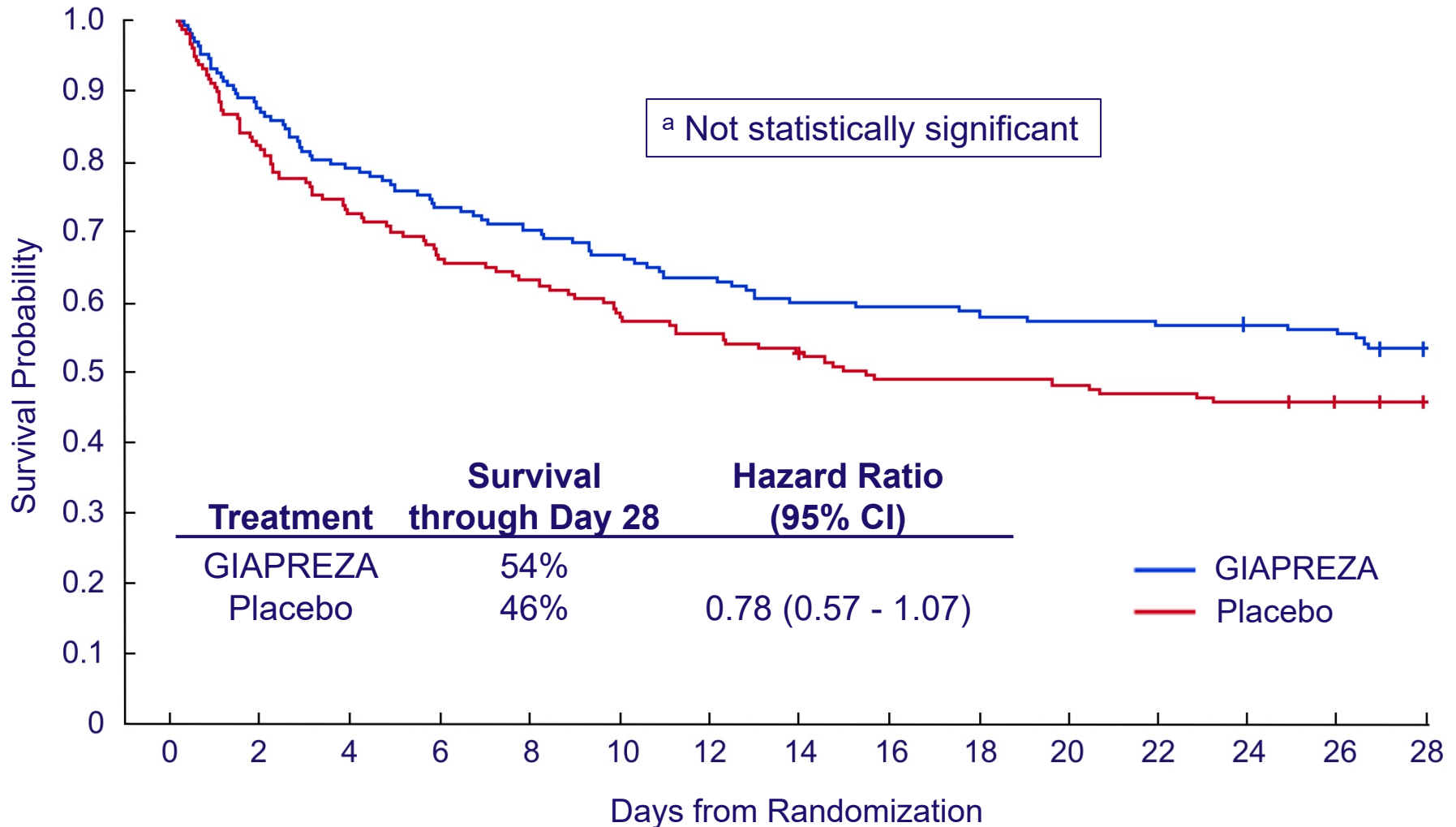


Angiotensin II rapidly increased MAP with a median time to MAP response of approximately 5 minutes^a



Plasma half-life of angiotensin II is less than 1 minute^a

Positive Survival Trend Observed (N=321)^{a,b}



Adverse Reactions Occurring in $\geq 4\%$ of Patients Treated with GIAPREZA and $\geq 1.5\%$ More Often Than in Placebo-treated Patients^a

	GIAPREZA (N=163)	Placebo (N=158)
Thromboembolic events ^b	21 (12.9%)	8 (5.1%)
Deep vein thrombosis	7 (4.3%)	0 (0.0%)
Thrombocytopenia	16 (9.8%)	11 (7.0%)
Tachycardia	14 (8.6%)	9 (5.7%)
Fungal infection	10 (6.1%)	2 (1.3%)
Delirium	9 (5.5%)	1 (0.6%)
Acidosis	9 (5.5%)	1 (0.6%)
Hyperglycemia	7 (4.3%)	4 (2.5%)
Peripheral ischemia	7 (4.3%)	4 (2.5%)

There is a potential for venous and arterial thrombotic and thromboembolic events in patients who receive GIAPREZA. Use concurrent venous thromboembolism (VTE) prophylaxis.

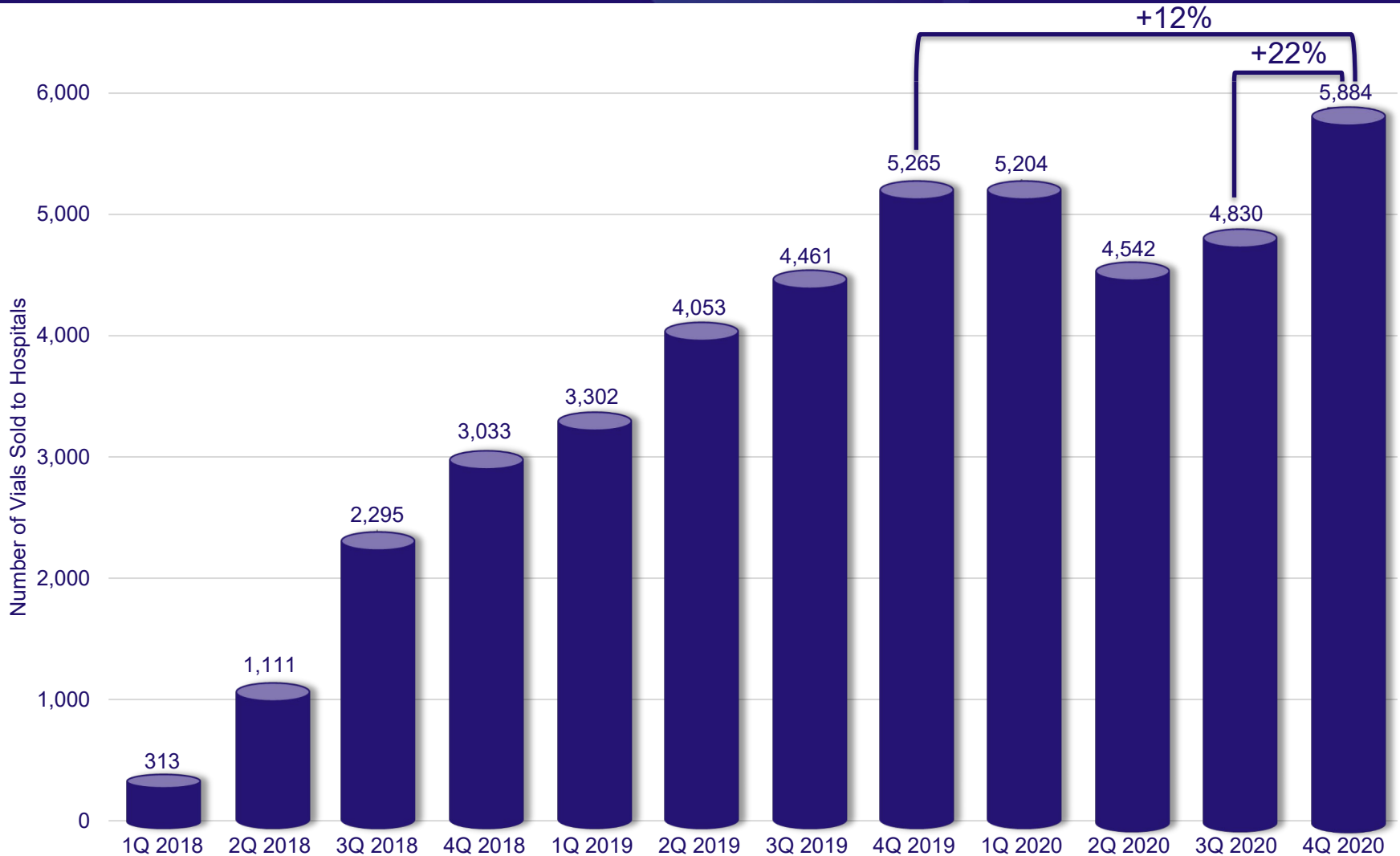
^a [GIAPREZA FDA prescribing information](#)

^b Including arterial and venous thrombotic events

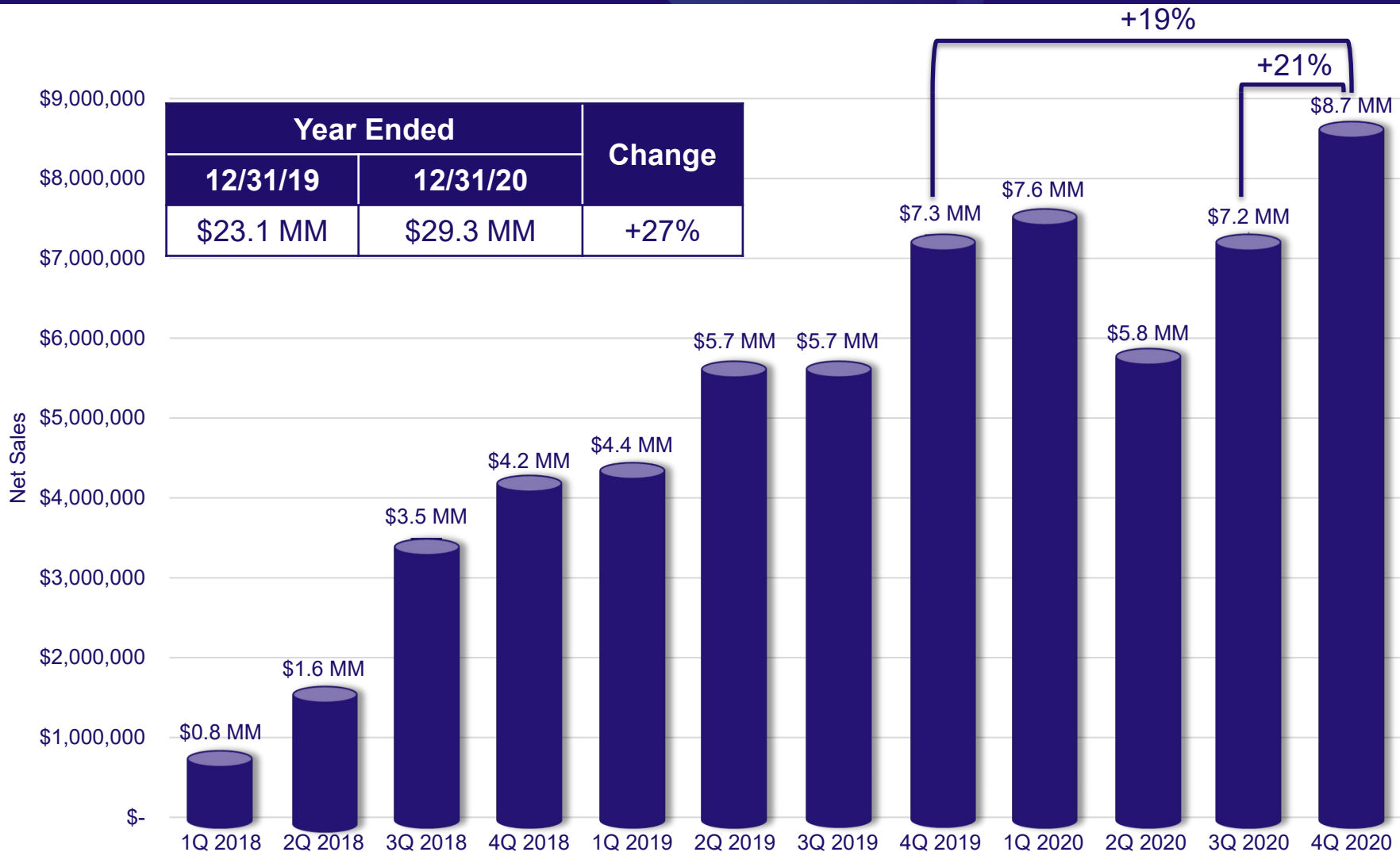
Percentage of Patients Experiencing ≥ 1 Adverse Event, Experiencing ≥ 1 Serious Adverse Event and Discontinuing Treatment Due to an Adverse Event^a

	GIAPREZA (N=163)	Placebo (N=158)
Percentage of patients experiencing ≥ 1 adverse event	87%	92%
Percentage of patients experiencing ≥ 1 serious adverse event	61%	67%
Percentage of patients discontinuing treatment due to an adverse event	14%	22%

GIAPREZA Quarterly Vials Sold to U.S. Hospitals from Inception through 4Q 2020



GIAPREZA U.S. Net Sales from Inception through 4Q 2020



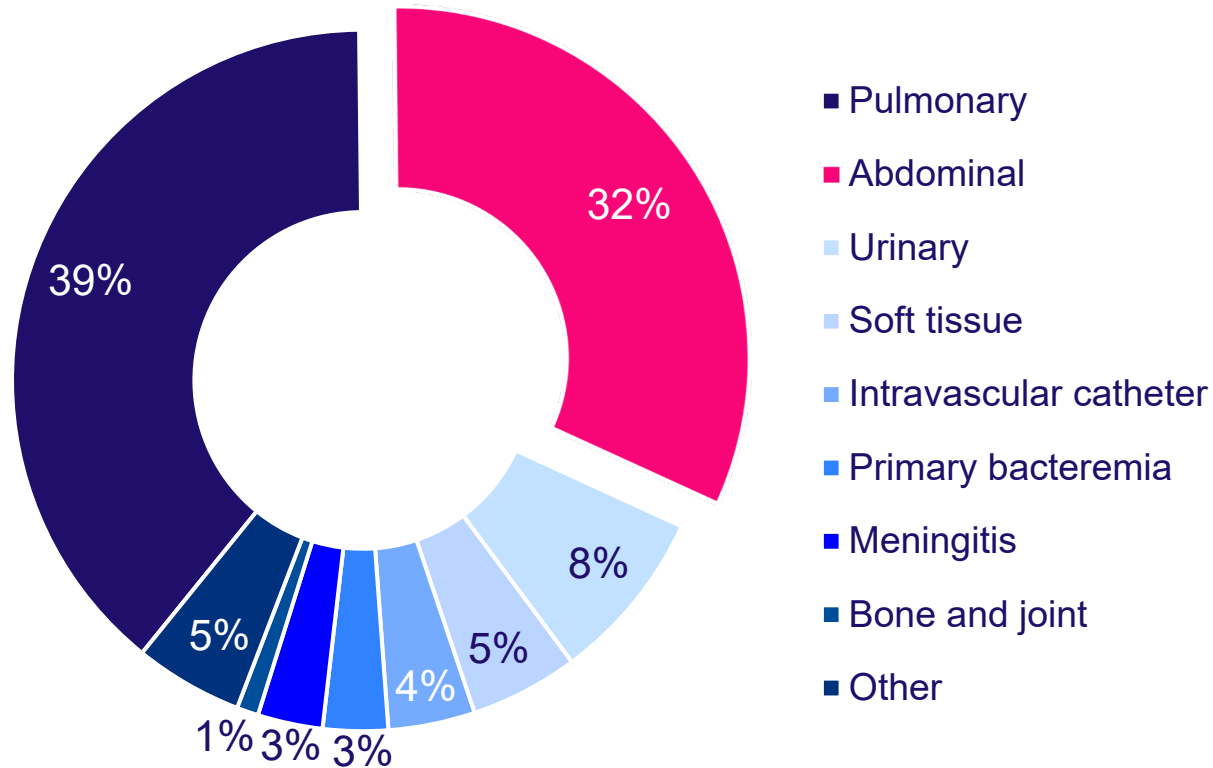


XERAVA™
(eravacycline) for injection

**XERAVA is a tetracycline class
antibacterial indicated for the treatment of
complicated intra-abdominal infections (cIAIs)
in patients 18 years of age and older**

clAIs Are the 2nd Most Common Source of Severe Sepsis in the ICU^a

Source of Severe Sepsis in the ICU (%)^a



clAIs are defined as consequences of perforations of the gastrointestinal tract that result in contamination of the peritoneal space^b

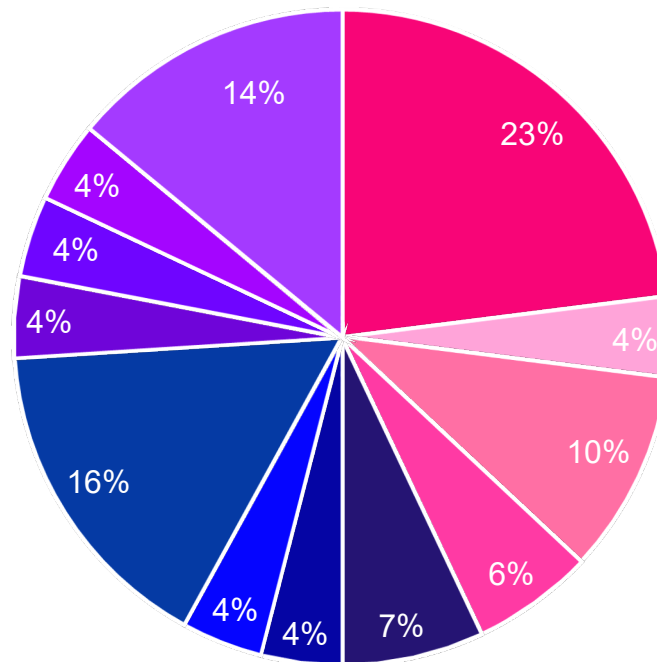
^a Brun-Buisson et al, *JAMA* 1995; 274(12):968-974

^b Solomkin et al, *Clinical Infectious Diseases* 2018; 69(6):921-9

Delivering Appropriate Empiric Treatment for cAIs Is Challenging

2,733 Baseline Pathogens in 846 Patients with cAI
3.2 Pathogens/Patient^a

- Use of antimicrobial agents that have activity against gram-negative, gram-positive and anaerobic pathogens is strongly recommended^b
- Increased prevalence of resistant bacteria makes the selection of appropriate treatment more challenging^b



Gram-negative – 43%

- 23% - *Escherichia coli*
- 4% - *Klebsiella pneumoniae*
- 10% - Other Enterobacteriaceae
- 6% - Non-Enterobacteriaceae

Gram-positive – 26%

- 4% - *Enterococcus faecalis*
- 4% - *Enterococcus faecium*
- 4% - *Streptococcus anginosus*
- 14% - Other gram-positive aerobes

Anaerobes – 31%

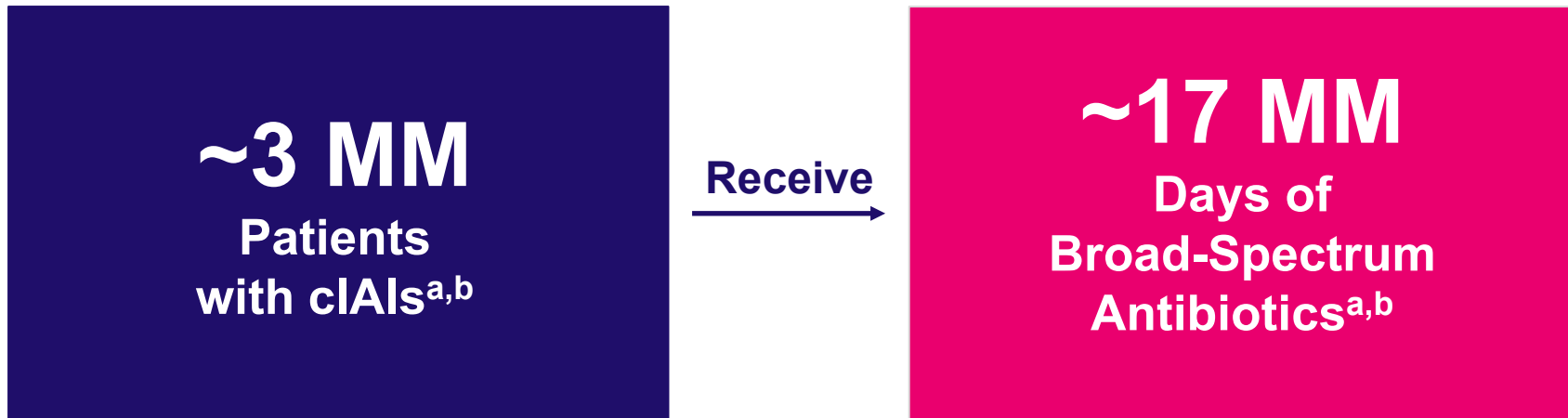
- 7% - *Bacteroides fragilis*
- 4% - *Bacteroides ovatus*
- 4% - *Bacteroides thetaiotaomicron*
- 16% - Other anaerobes

Empiric treatment=treatment without specific pathogen diagnosis

^a Data on file from IGNITE1 and IGNITE4 microbiologic intent-to-treat (micro-ITT) population

^b [Mazuski et al, *Surgical Infections* 2017; 18\(1\):1-76](#)

~3 MM Patients with cIAls Receive Broad-Spectrum Antibiotics



^a 2014 Decision Resources AMR Hospital Database

22 ^b Annually in the U.S. and EU5 (France, Germany, Italy, Spain and the United Kingdom)

XERAVA for the Treatment of cIAIs

Research

JAMA Surgery | **Original Investigation**

Assessing the Efficacy and Safety of Eravacycline vs Ertapenem in Complicated Intra-abdominal Infections in the Investigating Gram-Negative Infections Treated With Eravacycline (IGNITE 1) Trial A Randomized Clinical Trial

Joseph Solomkin, MD; David Evans, MD; Algirdas Slepavicius, MD; Patrick Lee, MD; Andrew Marsh; Larry Tsai, MD; Joyce A. Sutcliffe, PhD; Patrick Horn, MD

Clinical Infectious Diseases

MAJOR ARTICLE



IGNITE4: Results of a Phase 3, Randomized, Multicenter, Prospective Trial of Eravacycline vs Meropenem in the Treatment of Complicated Intraabdominal Infections

Joseph S. Solomkin,¹ Janis Gardovskis,² Kenneth Lawrence,³ Philippe Montravers,^{4,5,6} Angie Sway,⁷ David Evans,⁸ and Larry Tsai³

ignite 1

ignite 4

IGNITE1 and IGNITE4 Study Design



Multinational, Randomized,
Double-Blind, Active-Controlled

Hospitalized patients with cIAs

Patients with clinical evidence of
cIAs requiring urgent surgical or
percutaneous intervention

538 Randomized
and Treated

XERAVA

1.0 mg/kg every 12 hours
N=270

Ertapenem

1.0 g every 24 hours
N=268

Primary Endpoint: Clinical cure, defined as complete resolution or significant improvement of signs or symptoms of the index infection, at the TOC visit^c



Multinational, Randomized,
Double-Blind, Active-Controlled

Hospitalized patients with cIAs

Patients with clinical evidence of
cIAs requiring urgent surgical or
percutaneous intervention

499 Randomized
and Treated

XERAVA

1.0 mg/kg every 12 hours
N=250

Meropenem

1.0 g every 8 hours
N=249

Primary Endpoint: Clinical cure, defined as complete resolution or significant improvement of signs or symptoms of the index infection, at the TOC visit^c

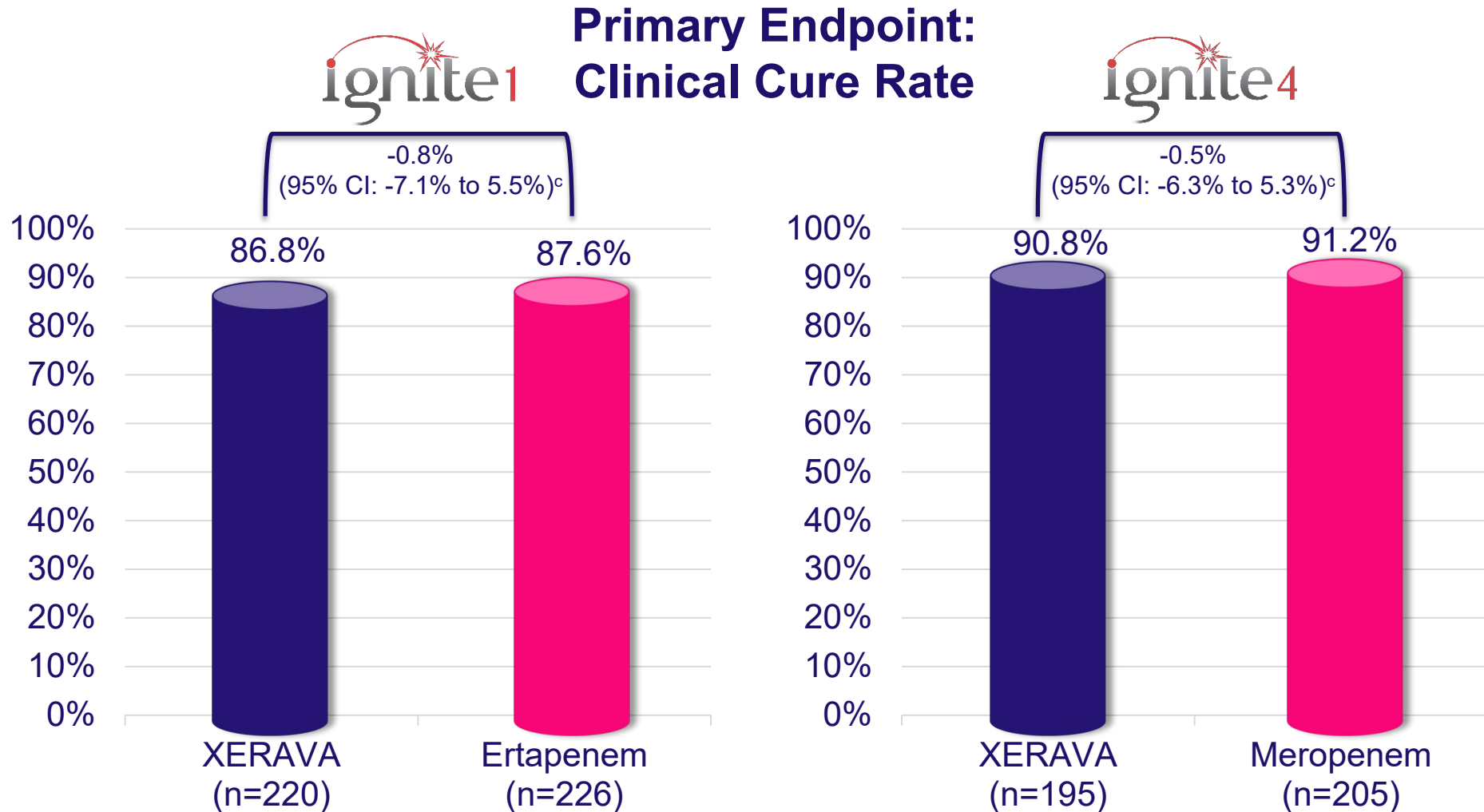
TOC=Test of Cure

^a [Solomkin et al, JAMA Surgery 2017; 152\(3\):224-232](#)

^b [Solomkin et al, Clinical Infectious Diseases 2018; 69\(6\):921-9](#)

^c TOC visit was conducted 25 to 31 calendar days after the first dose of the study drug was administered

XERAVA Demonstrated Statistical Noninferiority in Clinical Cure Rate in the Micro-ITT Population^{a,b}



^a [XERAVA FDA prescribing information](#)

^b Micro-ITT population included all randomized subjects who had baseline bacterial pathogens that caused cIAIs and against at least one of which the investigational drug has in vitro antibacterial activity (N=846)

25 ^c Noninferiority margins of 10% and 12.5% were used for IGNITE1 and IGNITE4, respectively

Clinical Cure Rates at TOC by Selected Baseline Pathogens in the Micro-ITT Population^a

	XERAVA N=415 n/N1	Comparators ^b N=431 n/N1
Enterobacteriaceae	271/314 (86.3%)	289/325 (88.9%)
<i>Citrobacter freundii</i>	19/22 (86.4%)	8/10 (80.0%)
<i>Enterobacter cloacae complex</i>	17/21 (81.0%)	23/24 (95.8%)
<i>Escherichia coli</i>	220/253 (87.0%)	237/266 (89.1%)
<i>Klebsiella oxytoca</i>	14/15 (93.3%)	16/19 (84.2%)
<i>Klebsiella pneumoniae</i>	37/39 (94.9%)	42/50 (84.0%)
<i>Enterococcus faecalis</i>	45/54 (83.3%)	47/54 (87.0%)
<i>Enterococcus faecium</i>	38/45 (84.4%)	48/53 (90.6%)
<i>Staphylococcus aureus</i>	24/24 (100.0%)	12/14 (85.7%)
<i>Streptococcus anginosus group</i> ^c	79/92 (85.9%)	50/59 (84.7%)
Anaerobes ^d	186/215 (86.5%)	194/214 (90.7%)

N=Number of subjects in the micro-ITT Population; N1=Number of subjects with a specific pathogen; n=Number of subjects with a clinical cure at the TOC visit

^a [XERAVA FDA prescribing information](#)

^b Comparators included ertapenem and meropenem for IGNITE1 and IGNITE4, respectively

^c Includes *Streptococcus anginosus*, *Streptococcus constellatus*, and *Streptococcus intermedius*

^d Includes *Bacteroides caccae*, *Bacteroides fragilis*, *Bacteroides ovatus*, *Bacteroides thetaiotaomicron*, *Bacteroides uniformis*, *Bacteroides vulgatus*, *Clostridium perfringens*, and *Parabacteroides distasonis*

XERAVA Demonstrated High Clinical Cure Rates Against Resistant Pathogens^a

	XERAVA N=415 n/N1	Comparators ^b N=431 n/N1
Enterobacteriaceae	271/314 (86.3%)	289/325 (88.9%)
CEPH-R	43/48 (89.6%)	40/45 (88.9%)
ESBL confirmed	32/36 (88.9%)	25/29 (86.2%)
Carbapenemase ^c	1/1 (100.0%)	2/3 (66.7%)
MDR	40/46 (87.0%)	29/32 (90.6%)
Acinetobacter baumannii	13/13 (100.0%)	7/7 (100.0%)
CEPH-R	13/13 (100.0%)	5/5 (100.0%)
ESBL confirmed	5/5 (100.0%)	1/1 (100.0%)
Carbapenemase ^c	2/2 (100.0%)	4/4 (100.0%)
MDR	12/12 (100.0%)	5/5 (100.0%)

CEPH-R=cephalosporin-resistant; ESBL=extended-spectrum β-lactamases; MDR=multidrug resistance; N=Number of subjects in the micro-ITT Population; N1=Number of subjects with a specific pathogen; n=Number of subjects with a clinical cure at the TOC visit

^a [Ditch et al, 2018 ASM Microbe Annual Meeting](#)

^b Comparators included ertapenem and meropenem for IGNITE1 and IGNITE4, respectively

^c Data on file from IGNITE1 and IGNITE4 micro-ITT population



Selected Adverse Reactions Reported in $\geq 1\%$ of Patients Receiving XERAVA^a

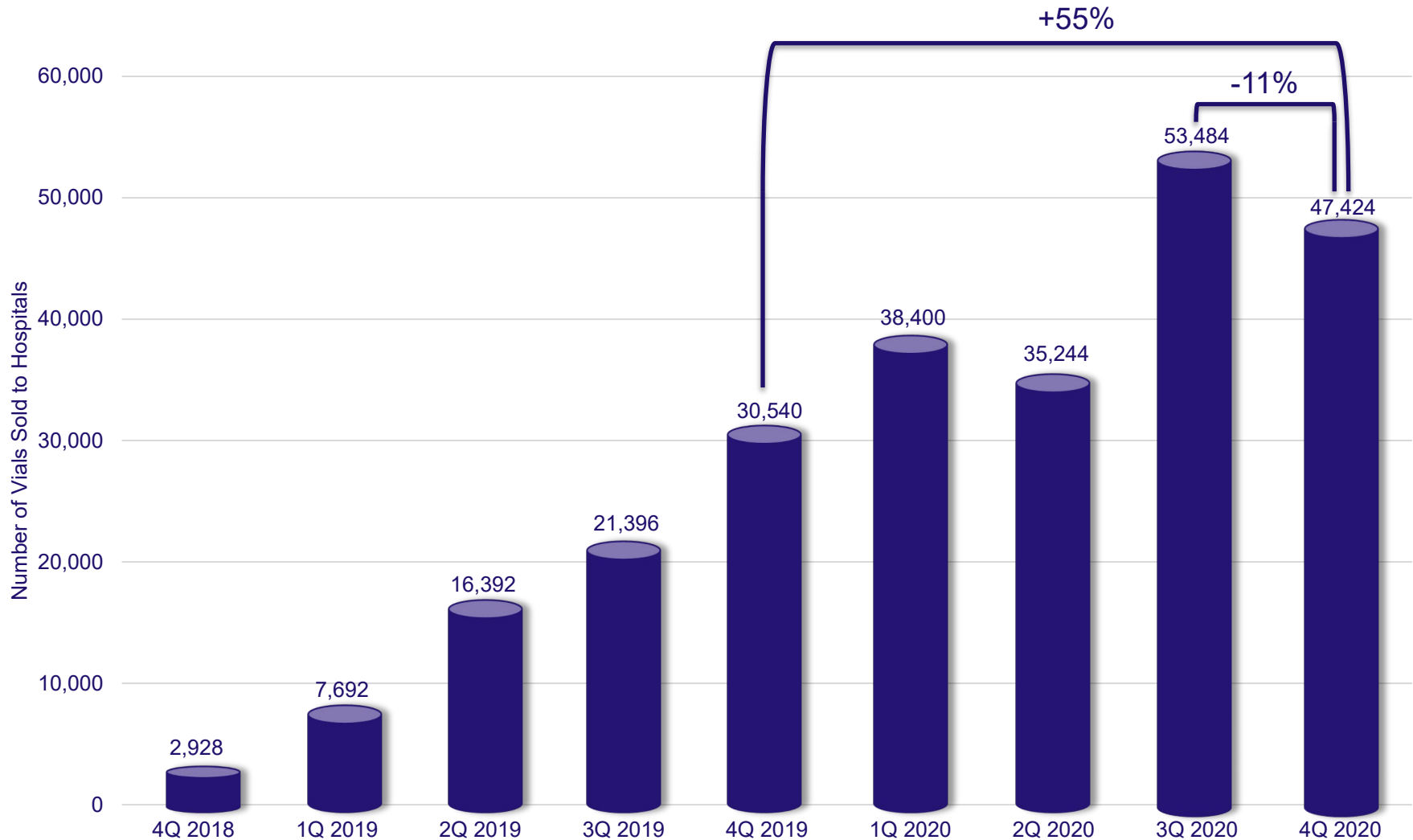
	XERAVA (N=520)	Comparators ^b (N=517)
Infusion site reactions ^c	40 (7.7%)	10 (1.9%)
Nausea	34 (6.5%)	3 (0.6%)
Vomiting	19 (3.7%)	13 (2.5%)
Diarrhea	12 (2.3%)	8 (1.5%)
Hypotension	7 (1.3%)	2 (0.4%)
Wound dehiscence	7 (1.3%)	1 (0.2%)

^a [XERAVA FDA prescribing information](#)

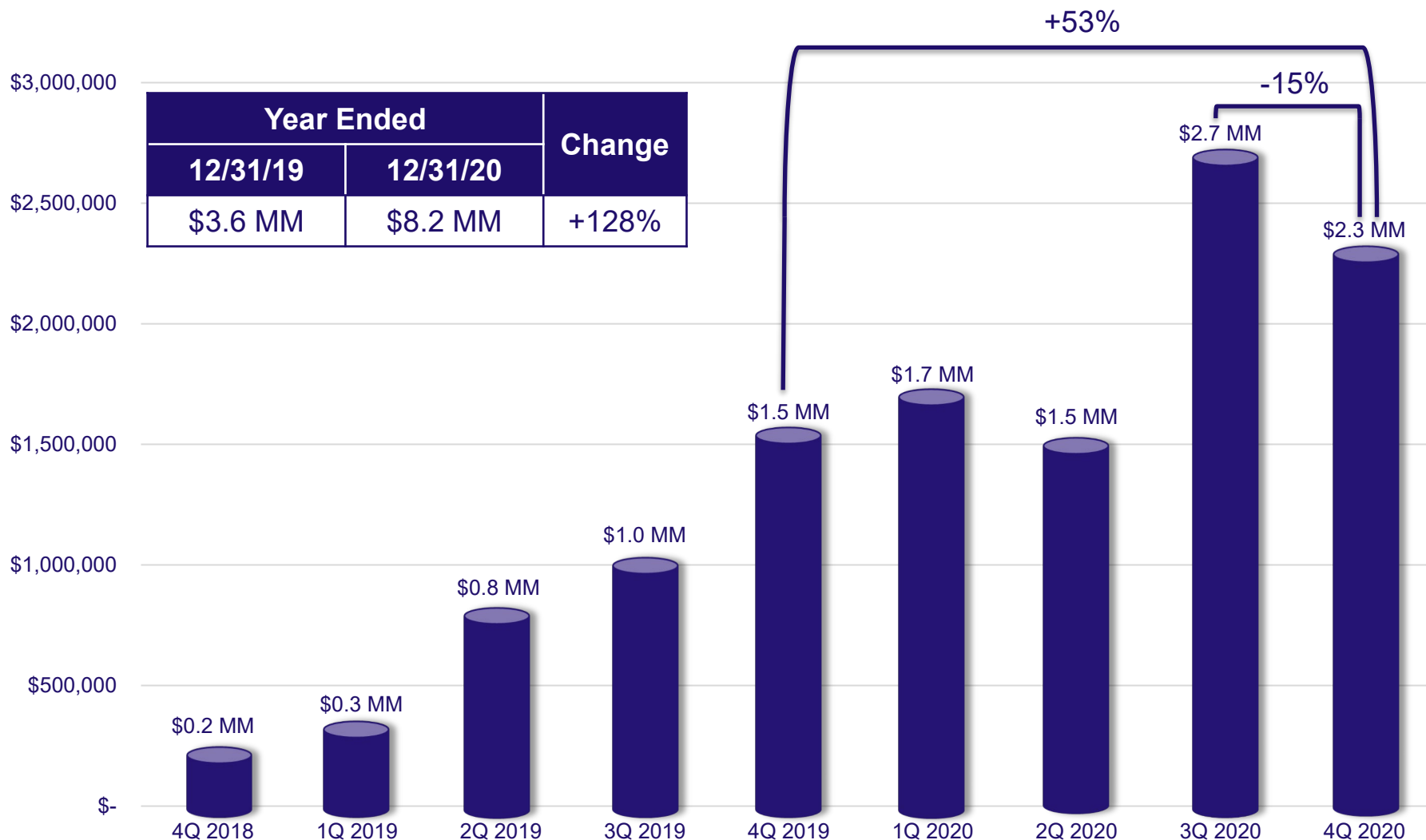
^b Comparators included ertapenem and meropenem for IGNITE1 and IGNITE4, respectively

^c Infusion site reactions include: catheter/vessel puncture site pain, infusion site extravasation, infusion site hypoaesthesia, infusion/injection site phlebitis, infusion site thrombosis, injection site/vessel puncture site erythema, phlebitis, phlebitis superficial, thrombophlebitis, and vessel puncture site swelling

XERAVA Quarterly Vials Sold to U.S. Hospitals from Inception through 4Q 2020



XERAVA U.S. Net Sales^a from Inception through 4Q 2020



^a On July 28, 2020, La Jolla completed its acquisition of Tetrphase Pharmaceuticals, Inc. (Tetrphase), a biopharmaceutical company focused on commercializing XERAVA. La Jolla's financial results only include XERAVA net sales subsequent to the acquisition closing date of July 28, 2020. Subsequent to July 28, 2020 and through December 31, 2020, XERAVA U.S. net sales were \$4.2 MM.



Financial Summary^a

	(in millions)			
	3 Months Ended		12 Months Ended	
	<u>Dec. 31, 2020</u>	<u>Dec. 31, 2019</u>	<u>Dec. 31, 2020</u>	<u>Dec. 31, 2019</u>
GIAPREZA net sales	\$8.7	\$7.3	\$29.3	\$23.1
XERAVA net sales	\$2.3	N/A	\$4.2	N/A
XERAVA net sales (pro forma ^b)	\$2.3	\$1.5	\$8.2	\$3.6
Total net sales (pro forma^b)	\$11.0	\$8.8	\$37.5	\$26.7
Net cash used for operating activities	\$7.3	\$17.1	\$37.6	\$85.0
Adjusted net cash used for operating activities^c	\$5.7	\$16.2	\$27.2	\$81.8

	(in millions)
	<u>Dec. 31, 2020</u>
Cash and cash equivalents	\$21.2
Cash and cash equivalents (pro forma^d)	\$40.1
Debt ^e	\$2.3
Fully diluted, as-converted shares outstanding ^f	34.1

^a On July 28, 2020, La Jolla completed its acquisition of Tetrphase, a biopharmaceutical company focused on commercializing XERAVA. La Jolla's financial results only include Tetrphase's financial results subsequent to the acquisition closing date of July 28, 2020.

^b Includes XERAVA net sales as if La Jolla's acquisition of Tetrphase occurred on January 1, 2019.

^c Excludes cash expenditures related to reductions in headcount and transaction costs associated with the Tetrphase acquisition. Please refer to La Jolla's [press release](#) issued on March 8, 2021.

^d Includes \$18.9 million of upfront net proceeds from La Jolla's licensing agreement with PAION AG. Please refer to La Jolla's [press release](#) issued on March 8, 2021.

^e Paycheck Protection Program loan.

^f Includes common stock and preferred stock (as-converted).





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Thank You