

CHANGING THE LANDSCAPE IN GI

Going beyond to advance treatments for patients with acid-related disorders

Corporate Overview

April 2026

Safe harbor statement

This presentation contains forward-looking statements. All statements other than statements of historical facts contained in this presentation, including statements regarding: our plans, expectations, strategies, forecasts and goals for commercialization of VOQUEZNA and potential results of our commercialization efforts; our expectations regarding the revenue opportunity and potential market for VOQUEZNA; our guidance and other expectations regarding revenues, operating expenses, and other financial metrics; our expectations with respect to potential profitability, cash flow positivity and our ability, based on our current plans and revenue forecasts, to fund our business and meet outstanding debt obligations without additional equity or debt financing; our expectations regarding regulatory exclusivity and the potential timeline for entry of generic versions of vonoprazan; the potential timelines and impact of approval and launch of other PCABs; our development plans and potential timelines; our business strategy, goals, mission and vision; and our other expectations, forecasts and predictions as to future performance, results and likelihood of success, are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “expect,” “plan,” “anticipate,” “can,” “could,” “intend,” “target,” “project,” “contemplates,” “believes,” “estimates,” “predicts,” “potential”, “guidance”, or “continue” or the negative of these terms or other similar expressions.

These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements, including the risk that: we may not be able to successfully commercialize VOQUEZNA or to achieve results or revenues at the levels we expect; the market opportunity for VOQUEZNA may be significantly smaller than our expectations; market acceptance for VOQUEZNA from healthcare professionals, patients, and payors in the indications for which it is approved may be significantly lower than we anticipate; we may encounter coverage, reimbursement, market access, or other issues in the course of our commercialization efforts that may negatively impact our efforts and results; the unmet need for new treatment options in GERD may not be as high as we anticipate; estimates of the number of patients with the disorders for which VOQUEZNA is approved, now or in the future, and our estimates of potential market size may not be accurate; our decisions as to where to allocate our resources and focus our efforts may not lead to the results we expect; we may not seek, achieve or maintain the patent and regulatory exclusivity we expect or that could be available to us and may encounter generic competition sooner than we anticipate; our results may be negatively impacted by the launch of other competitive products; we may experience adverse impact as the result of our dependence on third parties in connection with commercialization, product manufacturing, research and preclinical and clinical testing; we may be negatively impacted by regulatory developments or other governmental actions in the United States and foreign countries; we may encounter unexpected adverse side effects or inadequate efficacy of VOQUEZNA that may limit or impair market acceptance or impair current or future development or regulatory approvals, or may result in recalls, withdrawals or product liability claims; we may not be able to obtain and maintain intellectual property protection important to our business; if we were to breach our license agreement with Takeda for vonoprazan, Takeda might take action, including termination, that would significantly impair our business; we may encounter issues with our ongoing or planned clinical trials, including slower than expected enrollment that affect timing or chances of success; we may receive negative or mixed results from our ongoing or future clinical trials that impact our business, goals or future opportunities; our operating expenses may be higher than we anticipate, including if we decide to engage in activities not currently in our plan or if we face unexpected, or higher than anticipated, expenses, including as the result of unexpected events such as litigation; depending on our results and activities, we may not achieve profitability or cash flow positivity on the timelines we expect or at all and we may not be able to meet our cash covenant obligations or our other obligations under our term debt or revenue interest financing agreement; in the future, we may not have sufficient cash to fund our operations at the levels we expect or to meet our obligations under certain of our agreements or to enable us to achieve profit from operations; despite our current expectations, we may need to or decide to raise additional capital; we may not be able to raise cash on acceptable terms; and any of the foregoing or other factors may negatively impact our ability to achieve our plans, goals, mission, vision and potential. For additional discussion of these and other risks, see the risk disclosure in our filings with the Securities and Exchange Commission (SEC), including our Annual Report on Form 10-K and any subsequent filings with the SEC. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof, and we undertake no obligation to revise or update this presentation to reflect events or circumstances after the date hereof. All forward-looking statements are qualified in their entirety by this cautionary statement, which is made under the safe harbor provisions of the Private Securities Litigation Reform Act of 1995.

This presentation also contains estimates and other statistical data made by independent parties and by us. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. In addition, projections, assumptions, and estimates of our future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk.

This presentation contains non-GAAP operating expense, which excludes stock-based compensation and should be considered only a supplement to, and not a substitute for or superior to, GAAP measures. Refer to slide 16 of this presentation for a reconciliation of the non-GAAP operating expense to GAAP operating expense.

Going beyond

*to advance treatments
for patients with
acid related disorders*

VOQUEZNA[®] (vonoprazan):

Belongs to a novel class of therapies called PCABs (Potassium Competitive Acid Blockers)

THREE FDA APPROVED PRODUCTS



Rights to vonoprazan
licensed from Takeda for
the US, Europe, and Canada

~1.35 Million
filled prescriptions¹

Revenues

Q1 '26 reported: \$58.3M
FY26 guidance²: \$320-\$345M

Targeting operating
profitability by Q3
and for full year 2026^{2,3}

¹ IQVIA + BlinkRx as of 4/17/26

² Guidance maintained as part of first quarter 2026 earnings release on 4/30/26

³ Assumes anticipated future product sales, based on the operating plan and excluding stock-based compensation

Locations
HQ: Florham Park, NJ
Buffalo Grove, IL

Formed In 2019
Listed on NASDAQ:
PHAT

VOQUEZNA has blockbuster potential

VOQUEZNA



**Only FDA-approved
Potassium Competitive
Acid Blocker (PCAB)**

1st new MOA in GERD in over 30 years

- Approved for Erosive & Non-Erosive GERD, and *H. pylori*
- VOQUEZNA demonstrated superiority to a PPI in Erosive GERD¹ & *H. pylori*²

High unmet need & attractive commercial dynamics

- ~22M+ patients with GERD are treated annually
- ~40% of GERD patients experience inadequate symptom relief from PPI therapy³

#1 prescribed acid suppressant in Japan⁴

For US prescribing information, including important safety information: <https://www.phathompharma.com/wp-content/uploads/VOQUEZNA-tablets-Prescriber-Information.pdf>

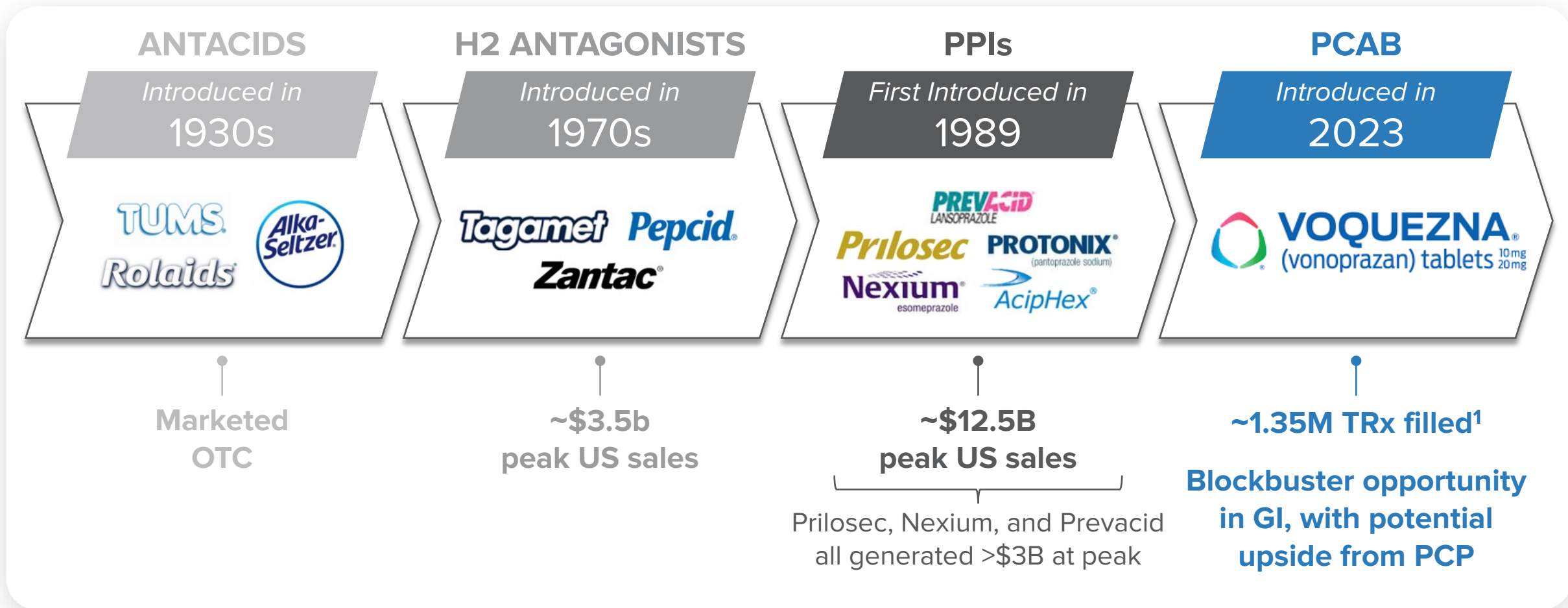
¹ Laine, Loren et al. Vonoprazan Versus Lansoprazole for Healing and Maintenance of Healing of Erosive Esophagitis: A Randomized Trial. *Gastroenterology*. 2023 Jan

² Chey, William D. et al. Vonoprazan Triple and Dual Therapy for Helicobacter pylori Infection in the United States and Europe: Randomized Clinical Trial. *Gastroenterology*. 2022 Sep

³ Yadlapati R, DeLay K. Proton Pump Inhibitor-Refractory Gastroesophageal Reflux Disease. *Med Clin North Am*. 2019 Jan

⁴ IQVIA MIDAS as of March 31, 2024, amongst all PPI and PCAB molecules

The US GERD market has generated several >\$3B brands



~40% of GERD patients experience inadequate symptom relief from PPI therapy²

¹ IQVIA + BlinkRx as of 4/17/26

² Yadlapati R, DeLay K. Proton Pump Inhibitor-Refractory Gastroesophageal Reflux Disease. Med Clin North Am. 2019 Jan

VOQUEZNA is the only approved PCAB in the United States

Rapid

Increased pH in 2-3 hours

Potent

Day 1 mean pH 4.6



Durable

24 hour acid suppression

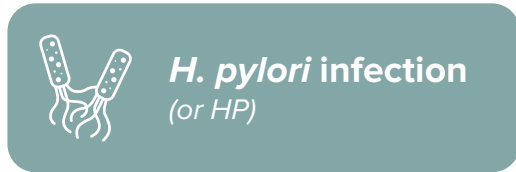
Acid suppression profile demonstrated by VONO-103¹

¹ Study performed in healthy volunteers

VOQUEZNA has broad approved commercial indications

Commercial Launch Sequence

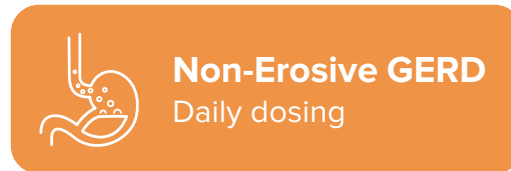
First Launch
Q4 2023



GERD



Expanded Launch
Q3 2024



GERD US Rx Market

~22M

total treated patients¹



~7M

treated
Erosive GERD patients¹

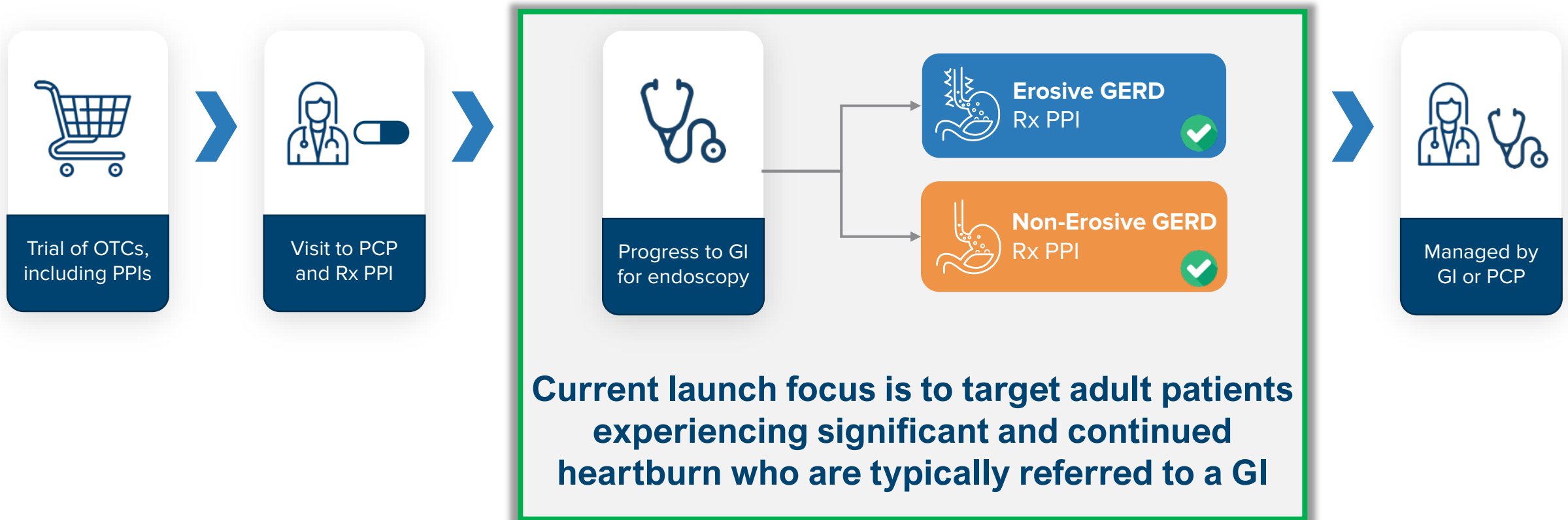


~15M

treated
Non-Erosive GERD patients¹

¹ Diagnosed and treated adults; company estimates based on its market research

GERD patients with continued heartburn are typically referred to GIs then revert to their PCP for ongoing care



Executing strategy to generate depth with GI writers

Total US GI Market



~24K

Annual PPI Writers¹

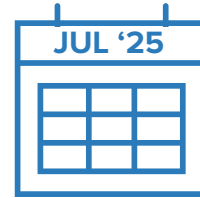


~20M

Annual PPI Prescriptions¹



Announced new GI-focused call point strategy



Rolled out new target lists including nearly all GIs



Realignment of sales territories focusing on GI accounts



Sales force realignment complete, reps in field calling on GIs

Strong commercial coverage secured for VOQUEZNA

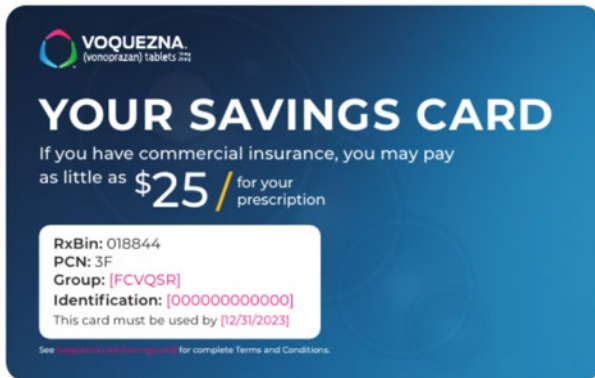


>80%
commercial
coverage¹

>120M
commercial
lives covered¹

Utilization management largely defined by a generic PPI step edit via PA which aligns with targeting PPI patients experiencing continued heartburn

Patient Co-Pay Assistance²



Enhanced Patient Access



BlinkRx Benefits

- Hub lite PA support – intended to improve fulfillment for GERD and HP patients regardless of coverage status
- Designed to help covered patients pay the lowest price possible
- Provides cash-pay option to eligible patients denied coverage (i.e., comm. & govt.)

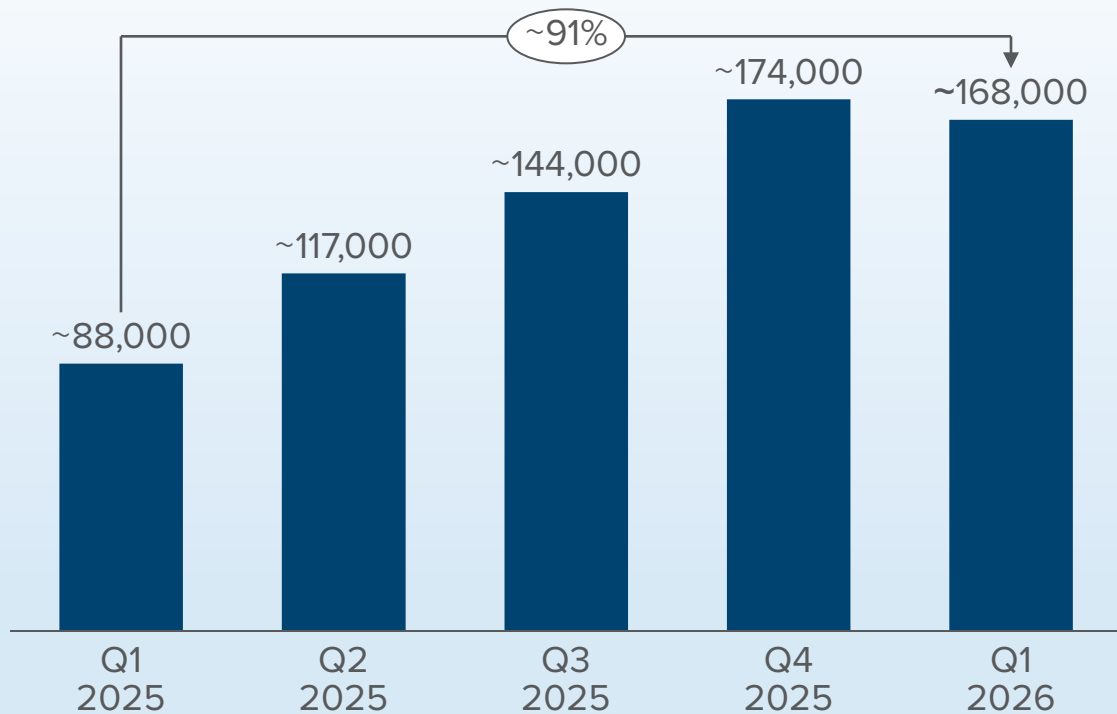
¹ Per MMIT formulary lookup tool as of 4/24/26

² Eligible, commercially insured patients may pay as little as \$25 per prescription fill of VOQUEZNA; Offer not valid for patients enrolled in Medicare, Medicaid, or other federal or state healthcare programs; See VOQUEZNA.com for full program eligibility terms and conditions

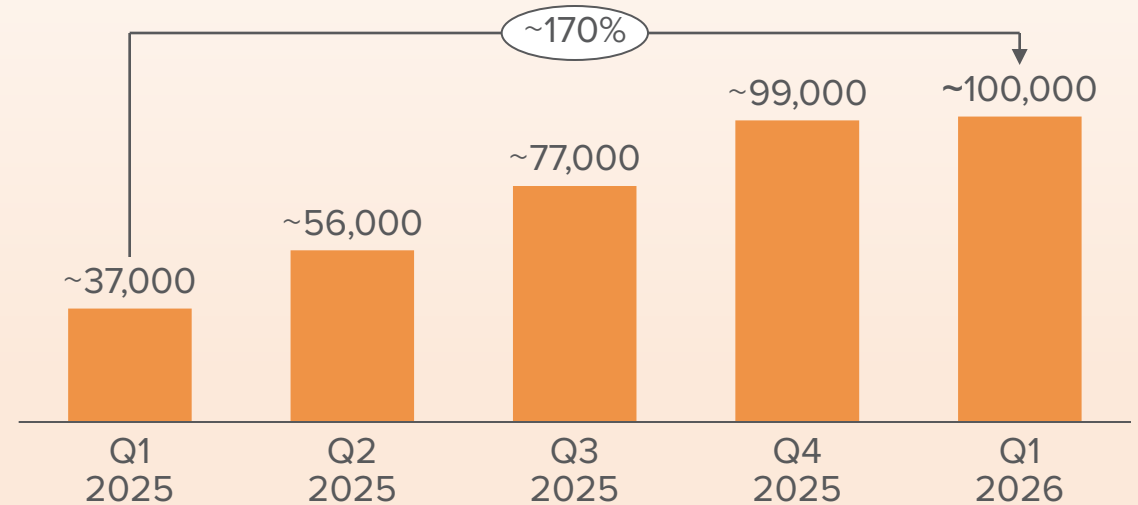
Covered TRx grew ~91% from Q1 2025 to Q1 2026

~268,000 Total Prescriptions Filled in Q1 2026

Covered Prescriptions¹



Cash-Pay Prescriptions¹



¹ IQVIA + BlinkRx as of 4/17/26

Strong NBRx market share among our top GI writers

Q1 2026

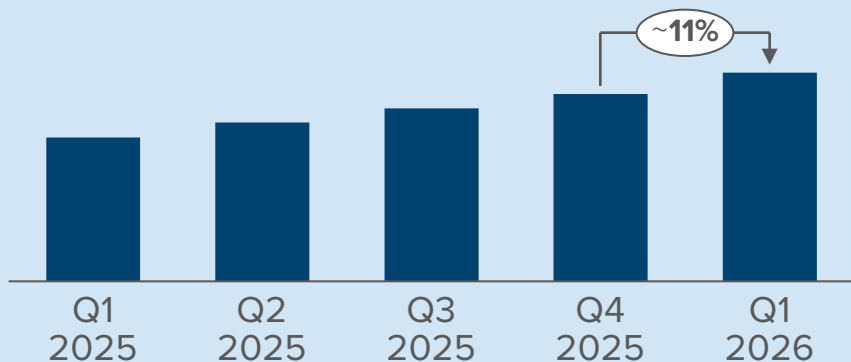


VOQUEZNA NBRx Market Share¹ PPI NBRx Market Share¹

¹ IQVIA APLD + BlinkRx as of 3/31/26 (reflects cumulative share among the identified group of writers during Q1 2026)

NBRx + persistence = future TRx growth potential

Covered NBRx



~11% growth from Q4 2025 to Q1 2026

in covered new-to-brand prescriptions¹

Patient Persistence



12-months

~6 bottles worth of VOQUEZNA dispensed

on average over a 12-month period²

¹ IQVIA + BlinkRx as of 3/31/26

² IQVIA APLD + BlinkRx claims for a cohort of patients beginning GERD therapy in 2024 and tracked for 12 months

Vision for evolving the VOQUEZNA commercial strategy

Current GI Focus

- ▶ GI oriented realignment
- ▶ High GI call frequency
- ▶ Depth of GI writing



$$\sim 20\text{M PPI TRx} \times 20\text{-}30\% \text{ potential market share} = \sim 4\text{-}6\text{M VOQUEZNA TRx}$$

Annual PPI scripts written by GIs & GI APPs¹

Positive signal: ~20% average share among top 300 VOQUEZNA GI writers²

Path to ~\$1B/yr revenue potential in GI

Future PCP Plans



Patients cycle back to primary care



Potential primary care sales force expansion

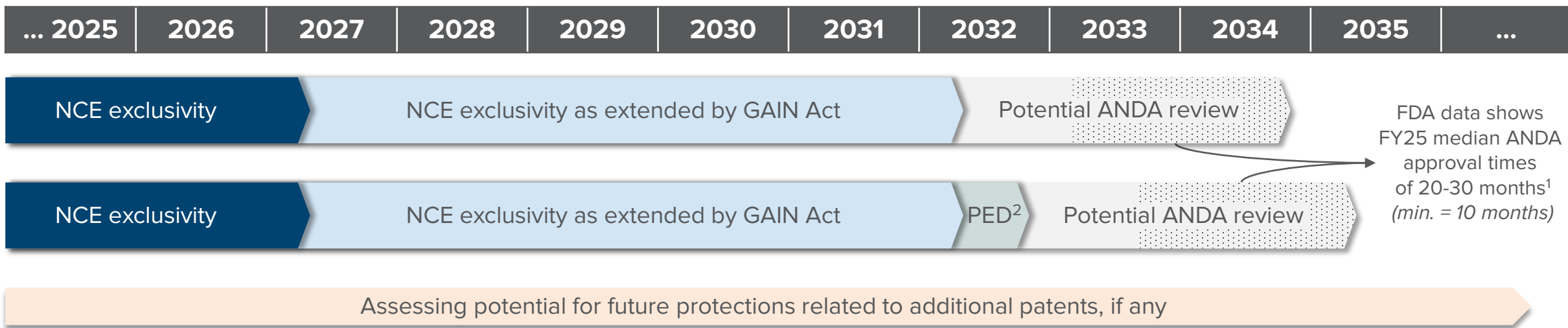


Synergistic & efficient DTC advertising

¹ IQVIA trailing 12 months as of October 2025 (including Advanced Practice Providers (APPs) = nurse practitioners and physician assistants)

² Average of individual shares of writing demonstrated by the top 300 GI VOQUEZNA writers during Q1 2026 (based on VOQUEZNA + PPI TRx)

Extended exclusivity based on FDA's confirmation of GAIN Act application



Key Considerations & Expectations

Orange Book NCE exclusivity (NCEE) extended to May 2032 for all VOQUEZNA products

An ANDA is not expected to be filed until NCEE fully expires (May 2032) if the Orange Book has no unexpired patents for paragraph IV certification 1 year prior to NCEE expiry³

Assessing potential for:
6-month pediatric exclusivity²
+
possible future patent-related protections

¹ <https://www.fda.gov/drugs/abbreviated-new-drug-application-anda/generic-drugs-program-activities-report-fy-2025-monthly-performance> – actual FDA review timelines may be longer or shorter

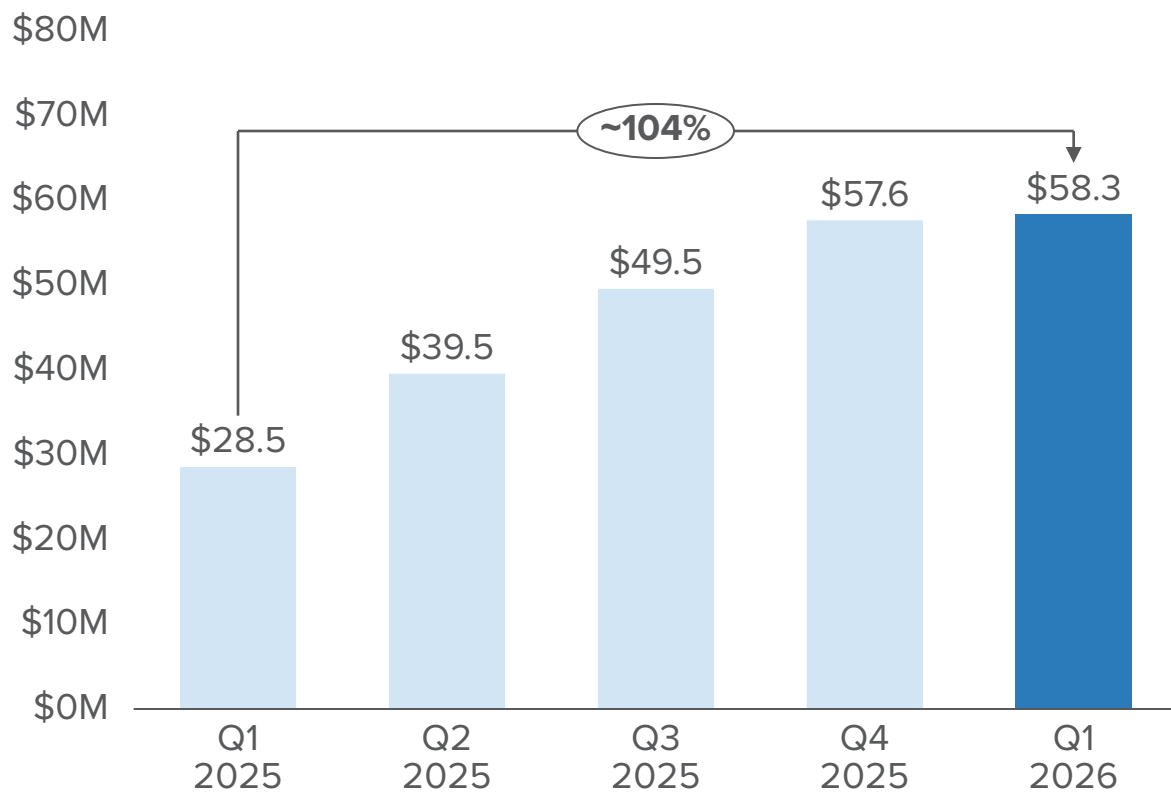
² Subject to successful completion of Phase 2 EoE study and agreement with the FDA on studies to be conducted under a written request, decision to proceed, and completion of the studies prior to expiration of the applicable exclusivity

³ If there is an unexpired Orange Book listed patent to certify against, an ANDA filing could occur one year prior to NCEE expiry

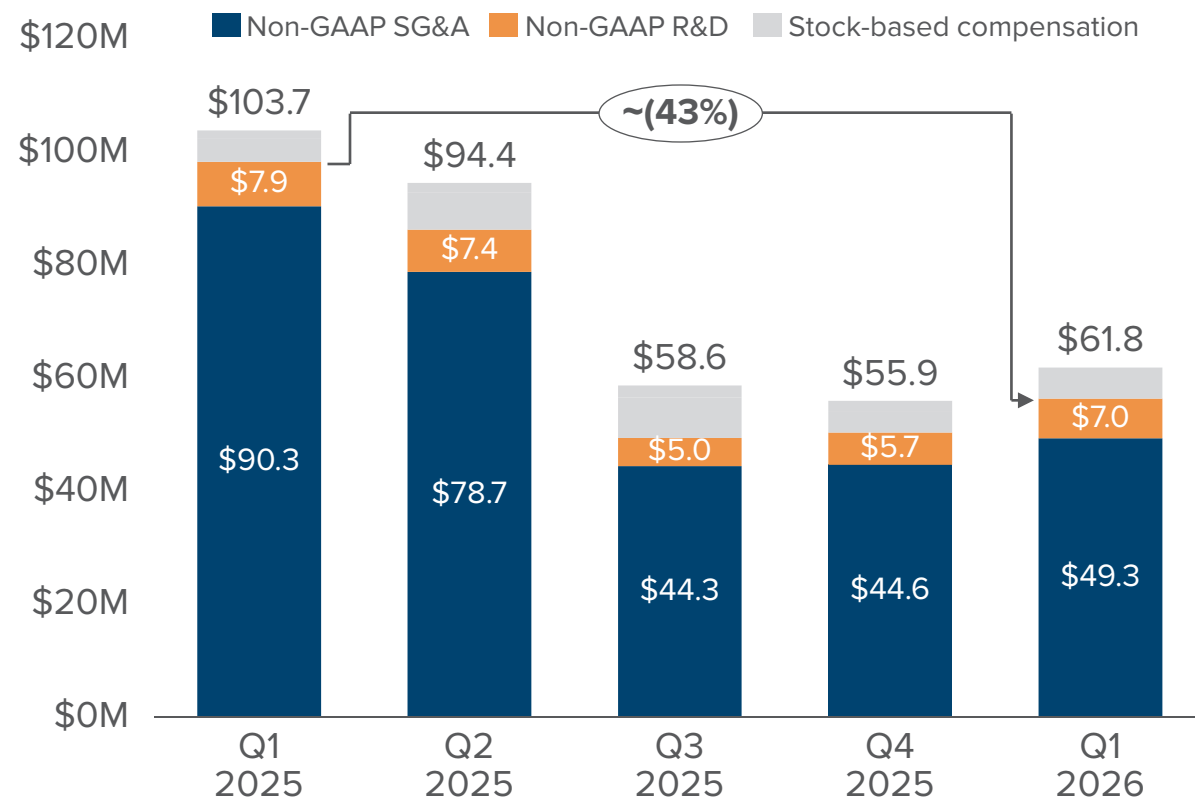
Revenues doubled from Q1 2025 to Q1 2026

~\$181M cash and cash equivalents
(as of 3/31/26)

Net Revenue



Operating Expenses¹



¹ The summation of non-GAAP SG&A, non-GAAP R&D, and stock-based compensation expenses equates to reported GAAP operating expenses

2026 financial guidance¹

Net Revenues

\$320M
to
\$345M

GTN Discount

55%
to
59%

Operating Expenses²

\$235M
to
\$255M

Path to Profitability

2026: We anticipate we will achieve operating profitability by Q3 and in total for the full year 2026, excluding stock-based compensation

2027: We believe we will achieve cash flow positivity in 2027

¹ Guidance maintained as part of first quarter 2026 earnings release on 4/30/26

² Reflective of non-GAAP cash operating expenses which exclude stock-based compensation



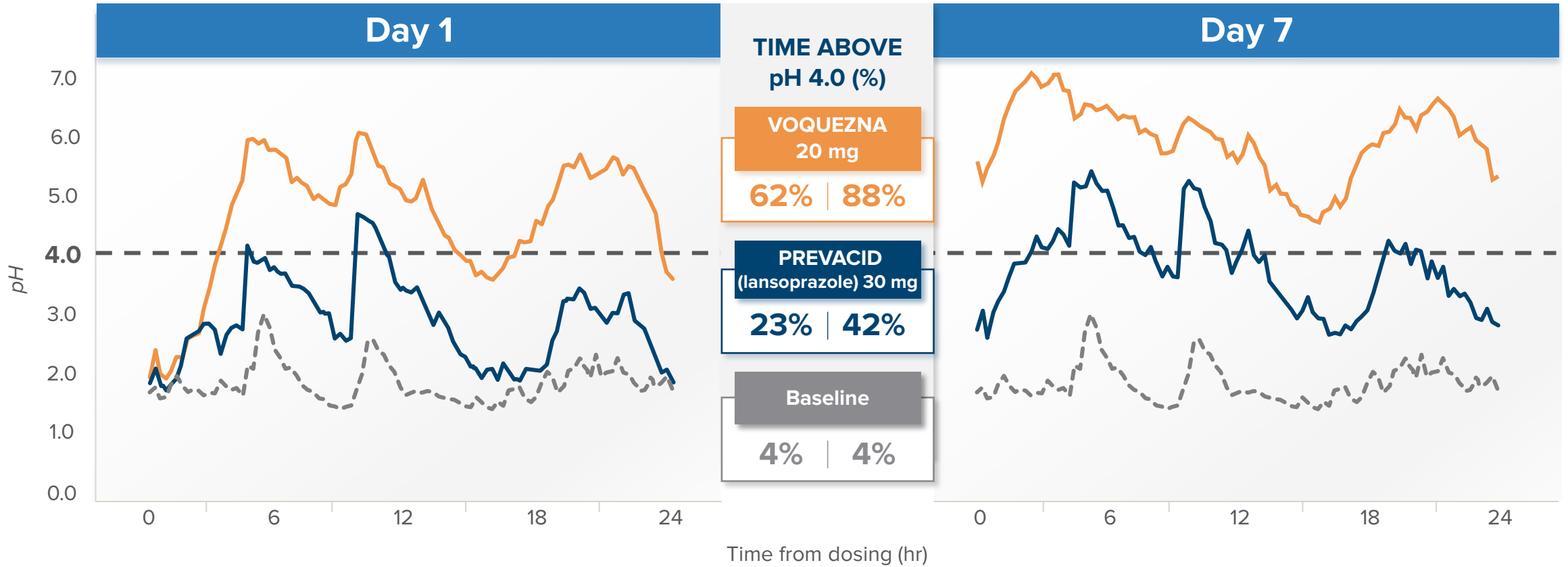
VOQUEZNA[®]
(vonoprazan) tablets 10mg
20mg

APPENDIX: SUPPLEMENTAL CLINICAL DATA

VONO-103: Phase 1 Study Evaluating PK/PD

VOQUEZNA has shown rapid, potent, and durable acid control

VOQUEZNA raised gastric pH higher than PREVACID (lansoprazole) in VONO-103¹

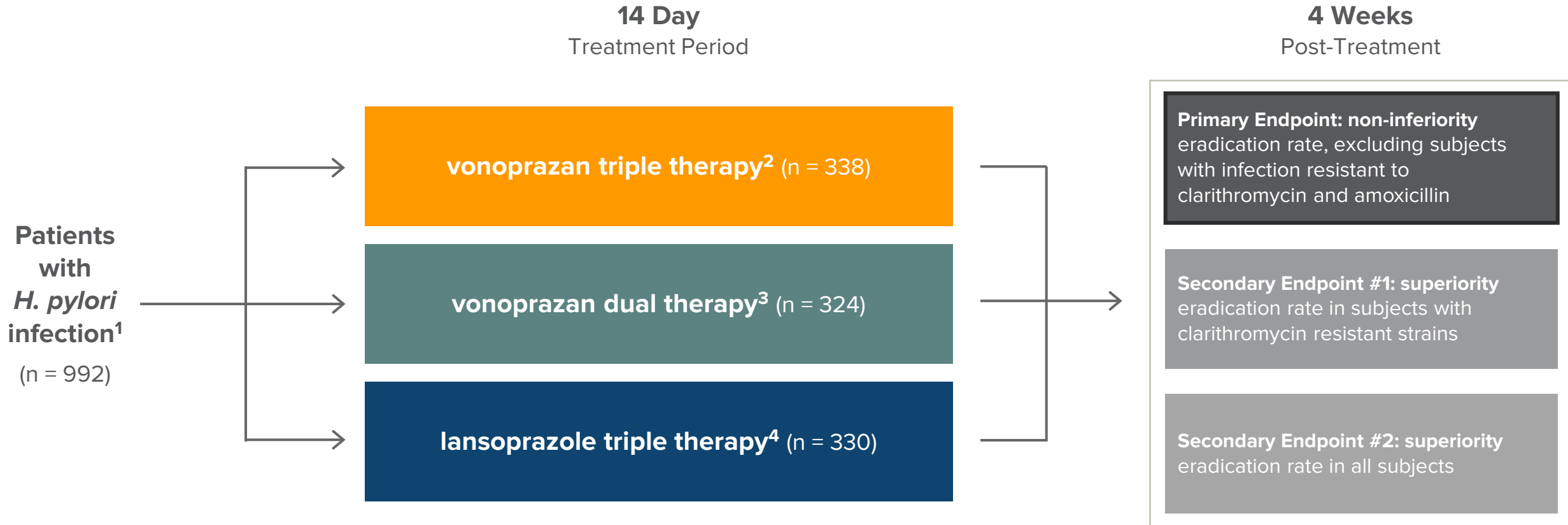


¹ VONO-103: Mean 0-24 hour gastric pH profiles; Phase 1 study evaluating the PK, PD, safety and tolerability of vonoprazan in comparison to PREVACID (lansoprazole) in 41 healthy adult subjects (out of 44 total subjects enrolled)

PHALCON-HP:

Phase 3 Trial for *H. pylori* Infection

PHALCON-HP Phase 3 study design



¹ Diagnosis of infection and test of cure confirmed by 13C-urea breath test

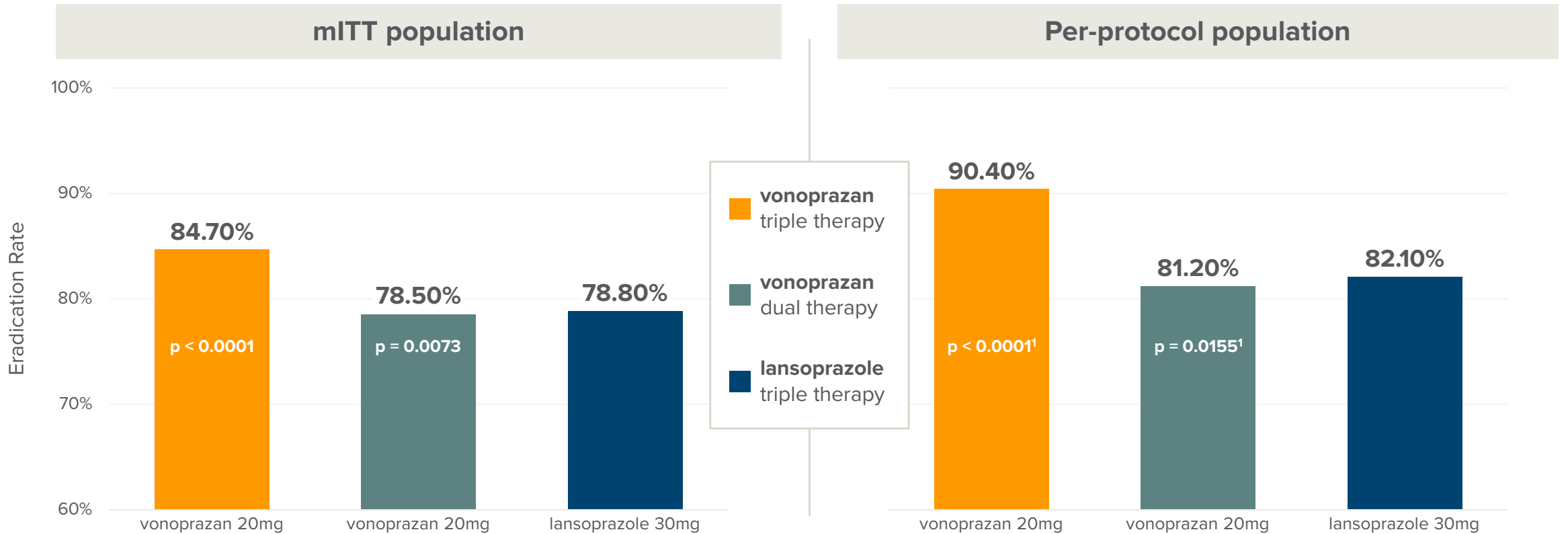
² Vonoprazan triple therapy = vonoprazan 20 mg BID + amoxicillin 1 g BID + clarithromycin 500 mg BID

³ Vonoprazan dual therapy = vonoprazan 20 mg BID + amoxicillin 1 g TID

⁴ Lansoprazole triple therapy = lansoprazole 30 mg BID + amoxicillin 1 g BID + clarithromycin 500 mg BID

PHALCON-HP met primary endpoints

Eradication rates (%) among patients without clarithromycin- or amoxicillin-resistant strains



¹ Not adjusted for multiple comparisons

Safety profile

Vonoprazan-based regimens generally well tolerated; comparable to lansoprazole triple therapy

Most frequent (>2.0%) adverse events in PHALCON-HP subjects

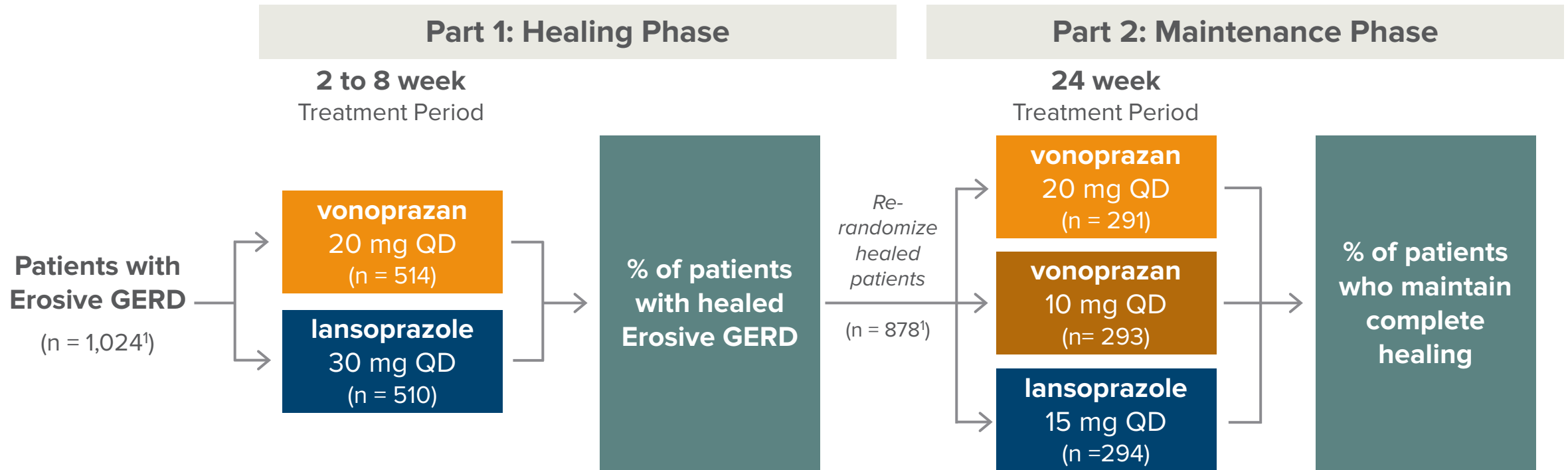
| % (n) with adverse event | Vonoprazan triple therapy (n=346) | Vonoprazan dual therapy (n=348) | Lansoprazole triple therapy (n=345) |
|--------------------------|-----------------------------------|---------------------------------|-------------------------------------|
| Diarrhea | 4.0% (14) | 5.2% (18) | 9.6% (33) |
| Nausea | 1.7% (6) | 1.7% (6) | 2.6% (9) |
| Dysgeusia | 4.3% (15) | 0.6% (2) | 6.1% (21) |
| Headache | 2.6% (9) | 1.4% (5) | 1.4% (5) |
| Vaginal infection | 2.3% (8) | 0.9% (3) | 0.3% (1) |

Safety Set: All subjects who received at least one dose of study medication

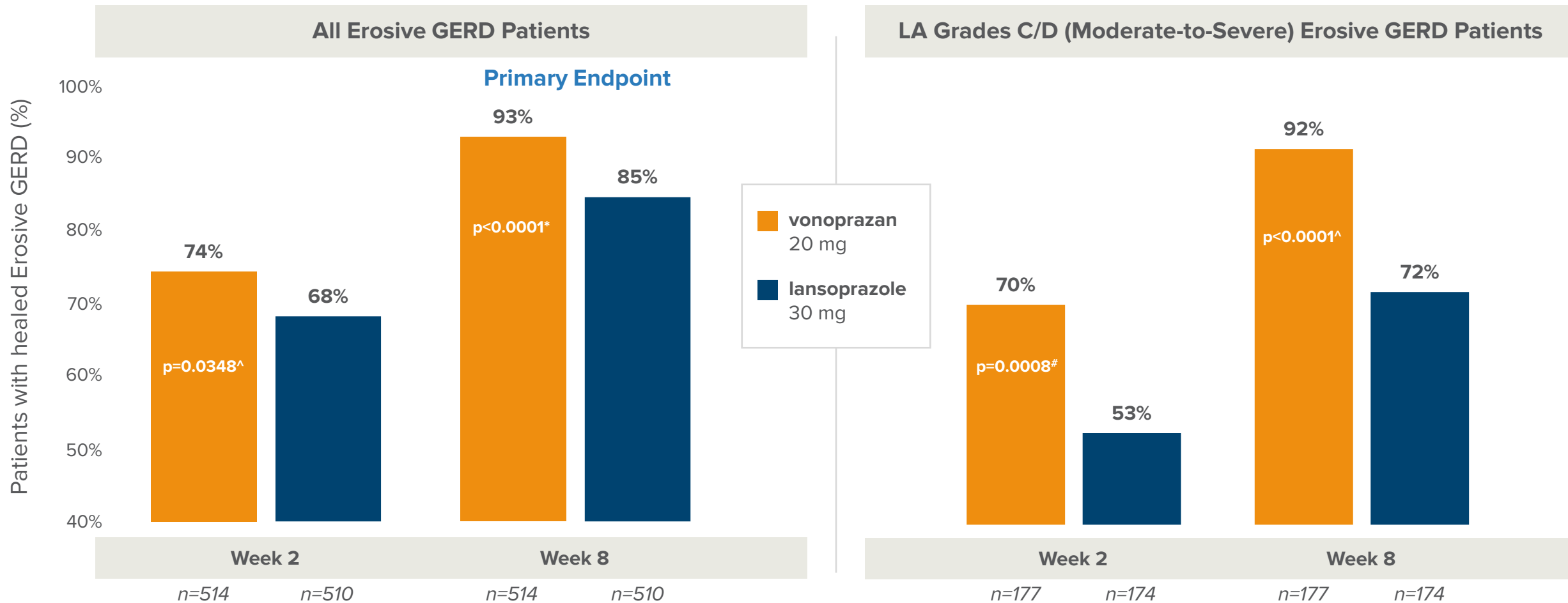
PHALCON-EE: Phase 3 Trial for Erosive GERD

PHALCON-EE Phase 3 study design

US/Europe study in Erosive GERD



PHALCON-EE Phase 3 met primary and key secondary healing endpoints

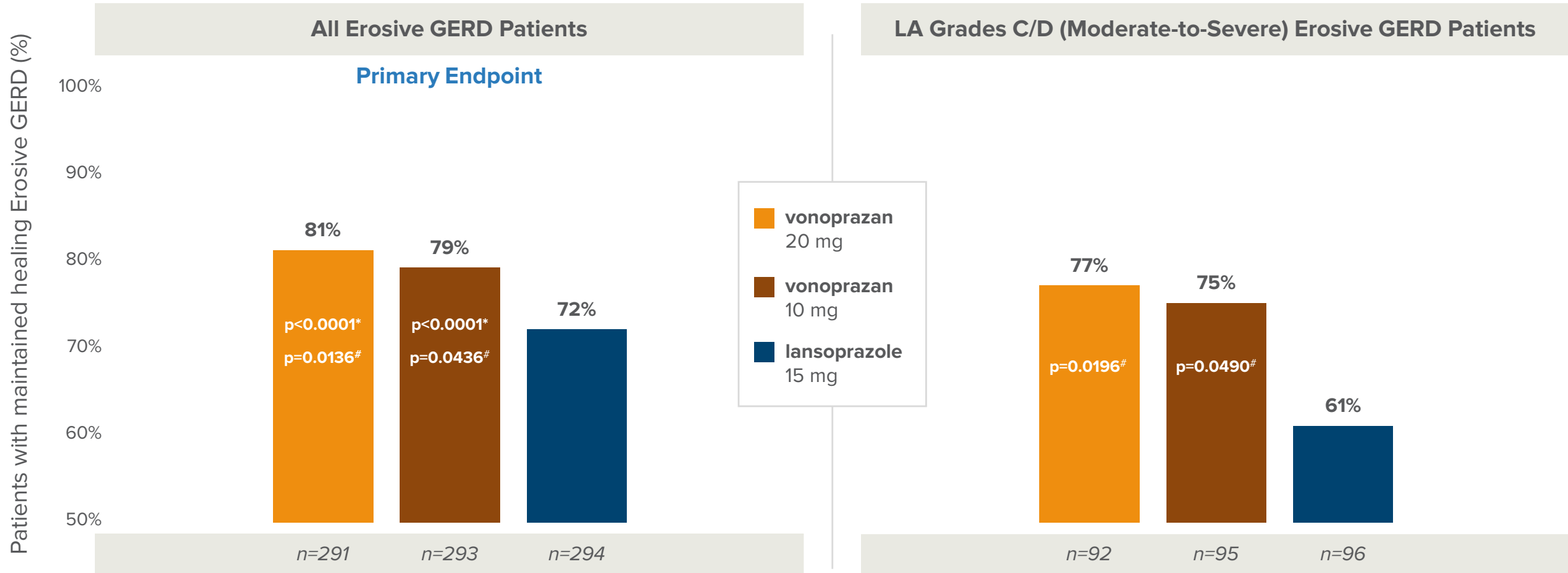


^ nominal p-value presented, superiority comparison, not formally tested based on pre-specified testing hierarchy

* p-value for both primary non-inferiority endpoint and unadjusted p-value for exploratory superiority comparison

p-value for pre-specified secondary endpoint superiority comparison

PHALCON-EE Phase 3 met all maintenance of healing endpoints



* p-value for primary endpoint non-inferiority comparison

p-value for pre-specified secondary endpoint superiority comparison

Summary of PHALCON-EE Phase 3 safety data

Overall, the safety results observed in PHALCON-EE were consistent with those observed in prior clinical studies of vonoprazan

Healing Phase

Most Common Adverse Events

| % (n) | Vonoprazan 20 mg | Lansoprazole 30 mg |
|----------|---------------------|-----------------------|
| Diarrhea | 2.1% (11) | 2.5% (13) |

Maintenance Phase

Most Common Adverse Events (≥ 5%)

| % (n) | Vonoprazan 20 mg | Vonoprazan 10 mg | Lansoprazole 15 mg |
|----------------|---------------------|---------------------|-----------------------|
| Abdominal Pain | 5.4% (16) | 4.1% (12) | 2.4% (7) |
| Gastritis | 2.7% (8) | 6.4% (19) | 2.7% (8) |
| COVID-19 | 10.1% (30) | 6.1% (18) | 6.7% (20) |

Both Phases

Serious Adverse Events (>1 patient)

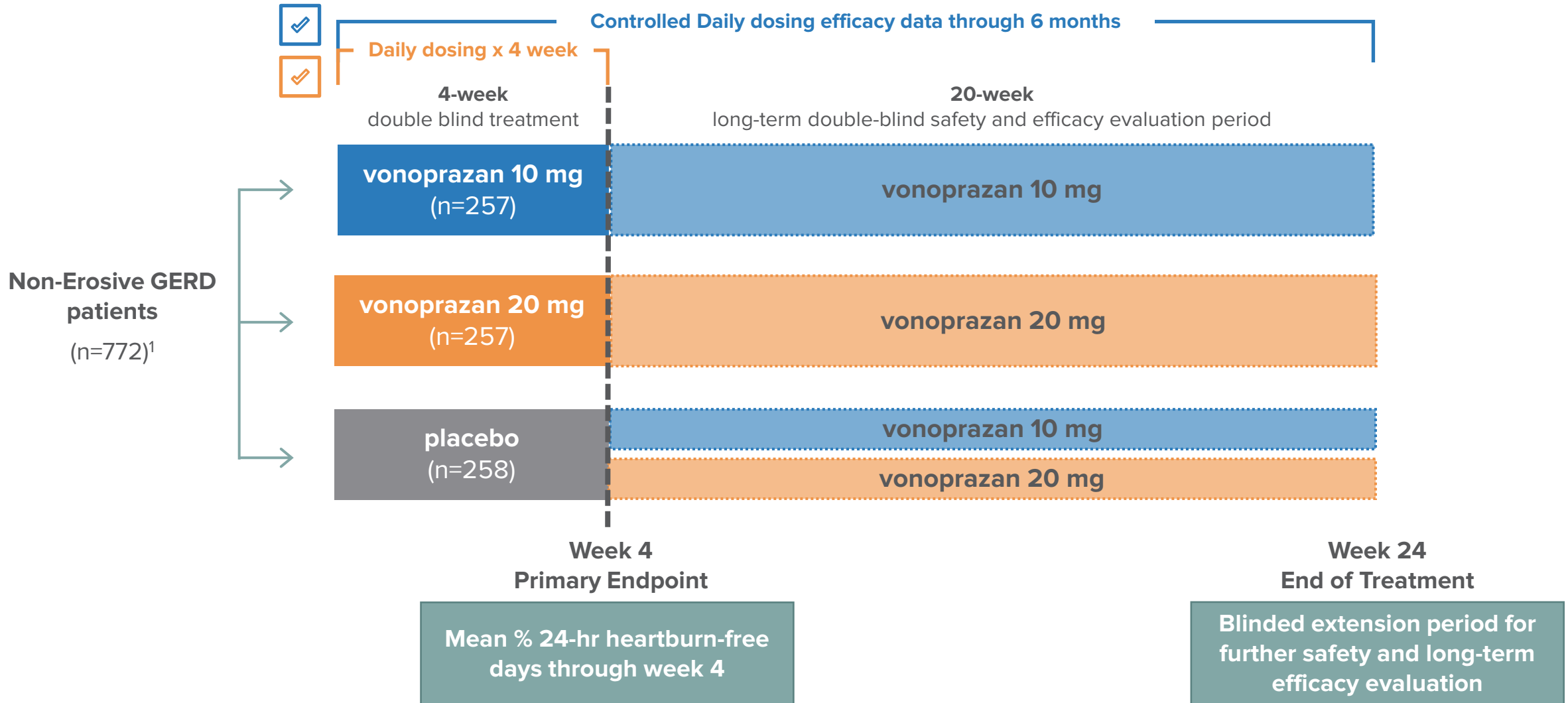
| | Vonoprazan 20 mg | Vonoprazan 10 mg | Lansoprazole 15 mg |
|---------------------------|---------------------|---------------------|-----------------------|
| COVID-19 ¹ (n) | 5 | 2 | 0 |

¹ No COVID-19 SAEs were deemed related to the study drug by the investigator | Safety Set: All subjects who received at least one dose of study medication

PHALCON-NERD-301: Phase 3 Trial for Non-Erosive GERD Daily Dosing

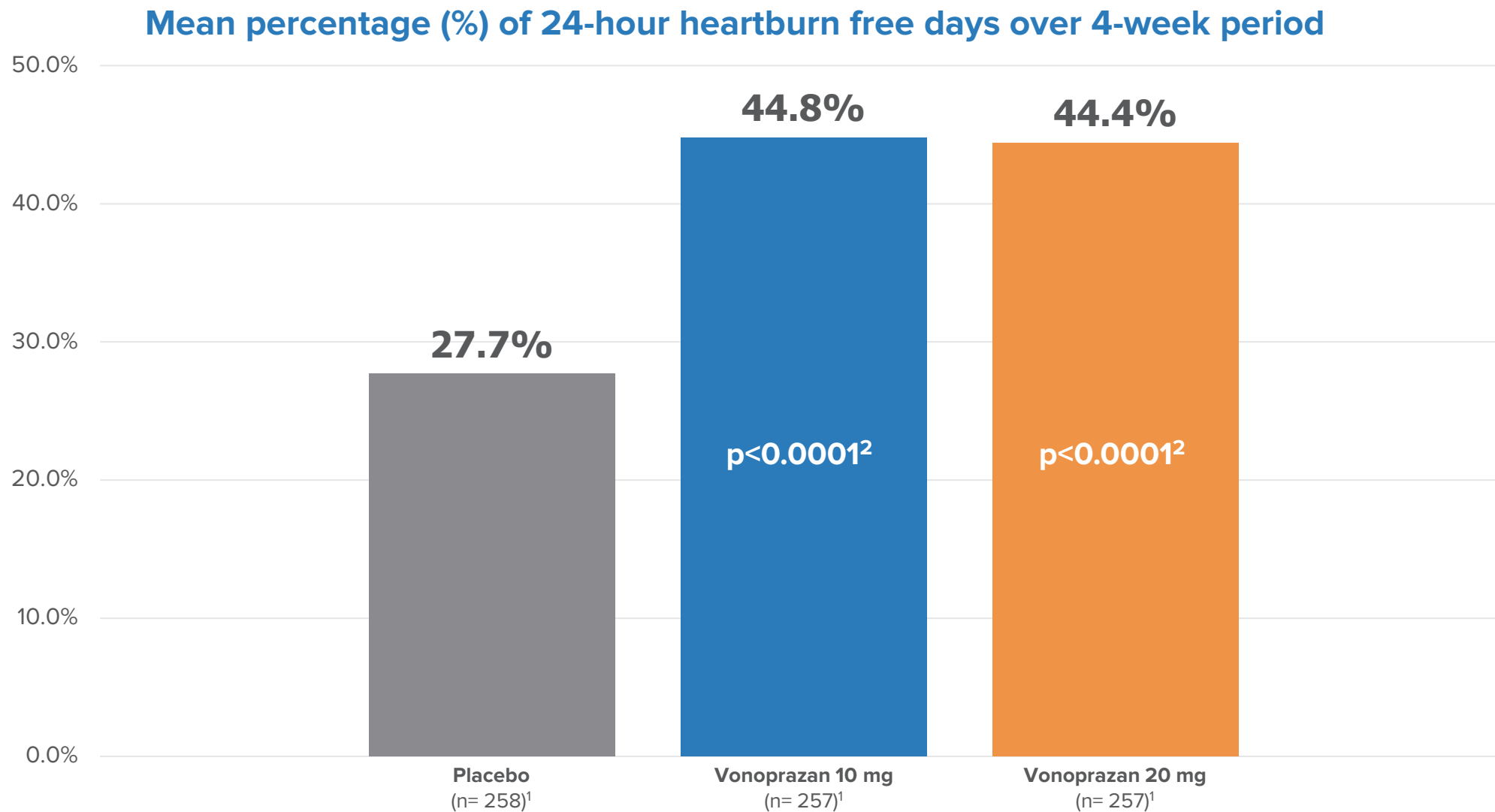
PHALCON-NERD-301 Phase 3 Daily dosing trial design

Vonoprazan 10 mg dose was submitted in sNDA for treatment of Non-Erosive GERD



¹ A total of 772 patients with Non-Erosive GERD were randomized and dosed

PHALCON-NERD-301 met the primary endpoint for both doses

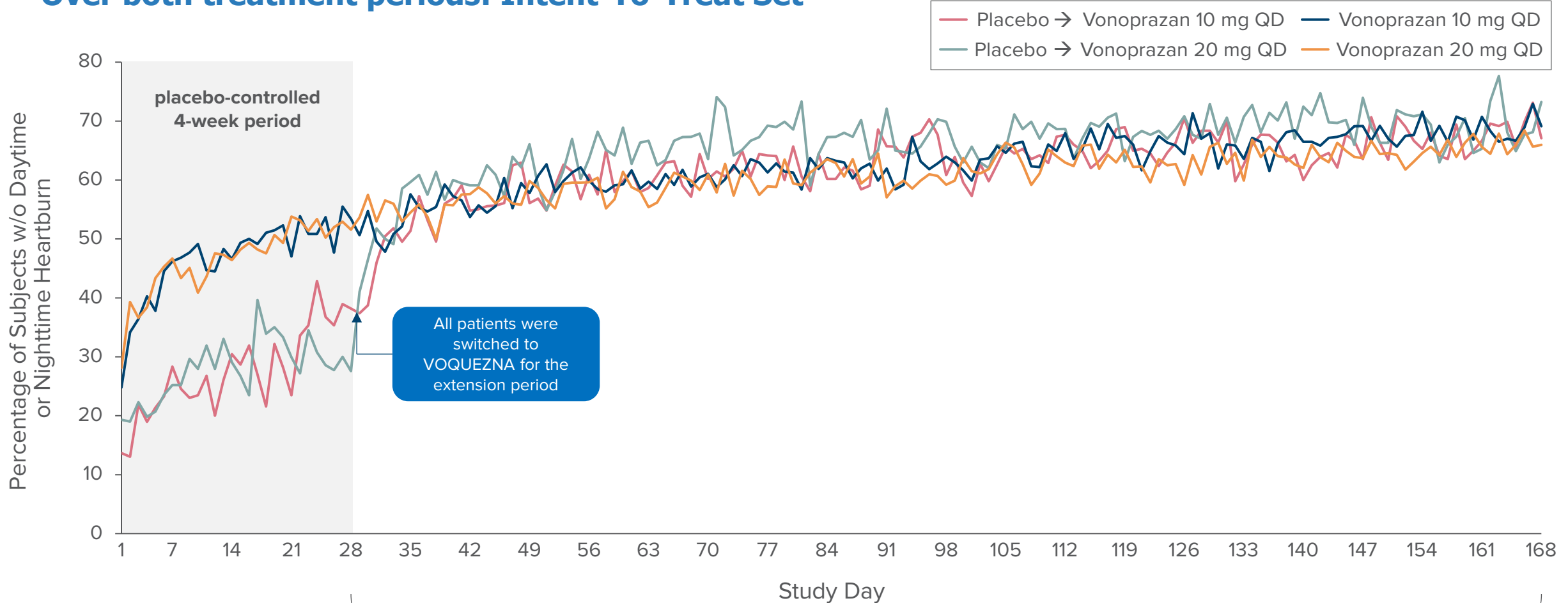


¹ Intent-to-Treat Set: All subjects who received at least one dose of study medication, randomized treatment

² p-values from general linear model with treatment group as a factor and severity and frequency of heartburn at baseline as covariates

PHALCON-NERD-301 percentage of subjects without heartburn

Over both treatment periods: Intent-To-Treat Set¹



| Exploratory 20-Week Extension Period (Not Placebo-Controlled): Mean % of 24-hr Heartburn Free Days ² | | | |
|---|----------------------------|------------------|------------------|
| Placebo → Vonoprazan 10 mg | Placebo → Vonoprazan 20 mg | Vonoprazan 10 mg | Vonoprazan 20 mg |
| 61.9% | 62.9% | 62.6% | 60.7% |

¹ Intent-to-Treat Set: All subjects who received at least one dose of study medication, randomized treatment

² The 20-week extension period was not placebo-controlled; descriptive analysis only; no statistical comparisons were conducted

Summary of PHALCON-NERD-301 safety data

Most Common Adverse Events¹ (≥ 2%), Safety Set²

Overall, the safety results observed in PHALCON-NERD-301 were consistent with those observed in prior clinical studies of vonoprazan

4-week placebo-controlled period

| % (n) | Placebo (n=256) | Vonoprazan 10 mg (n=259) | Vonoprazan 20 mg (n=257) |
|----------------|--------------------|--------------------------------|--------------------------------|
| Abdominal Pain | 0.8% (2) | 1.5% (4) | 2.3% (6) |
| Constipation | 0.8% (2) | 2.3% (6) | 0.8% (2) |
| Diarrhea | 1.2% (3) | 2.3% (6) | 0.4% (1) |
| Nausea | 0.4% (1) | 2.3% (6) | 3.1% (8) |

Serious Adverse Events¹ from the Safety Set² (n):

- Placebo: n/a (–)
- Vonoprazan 10 mg: viral pericarditis (1)
- Vonoprazan 20 mg: salivary gland calculus (1), fibula/tibia fracture (1)

20-week extension period

| % (n) | Placebo → Vonoprazan 10 mg (n = 118) | Placebo → Vonoprazan 20 mg (n = 121) | Vonoprazan 10 mg (n = 248) | Vonoprazan 20 mg (n = 236) |
|-----------------------------------|--|--|----------------------------------|----------------------------------|
| Upper Respiratory Tract Infection | 1.7% (2) | 0.8% (1) | 4.8% (12) | 2.1% (5) |
| Sinusitis | 1.7% (2) | 1.7% (2) | 3.2% (8) | 1.3% (3) |
| Influenza | 3.4% (4) | 1.7% (2) | 2.0% (5) | 1.3% (3) |
| Urinary Tract Infection | 1.7% (2) | -- | 2.0% (5) | 2.5% (6) |
| Nasopharyngitis | 1.7% (2) | -- | -- | 2.1% (5) |
| Gastroenteritis | 1.7% (2) | 0.8% (1) | 0.4% (1) | 2.1% (5) |
| Nausea | 0.8% (1) | 0.8% (1) | 1.2% (3) | 2.1% (5) |

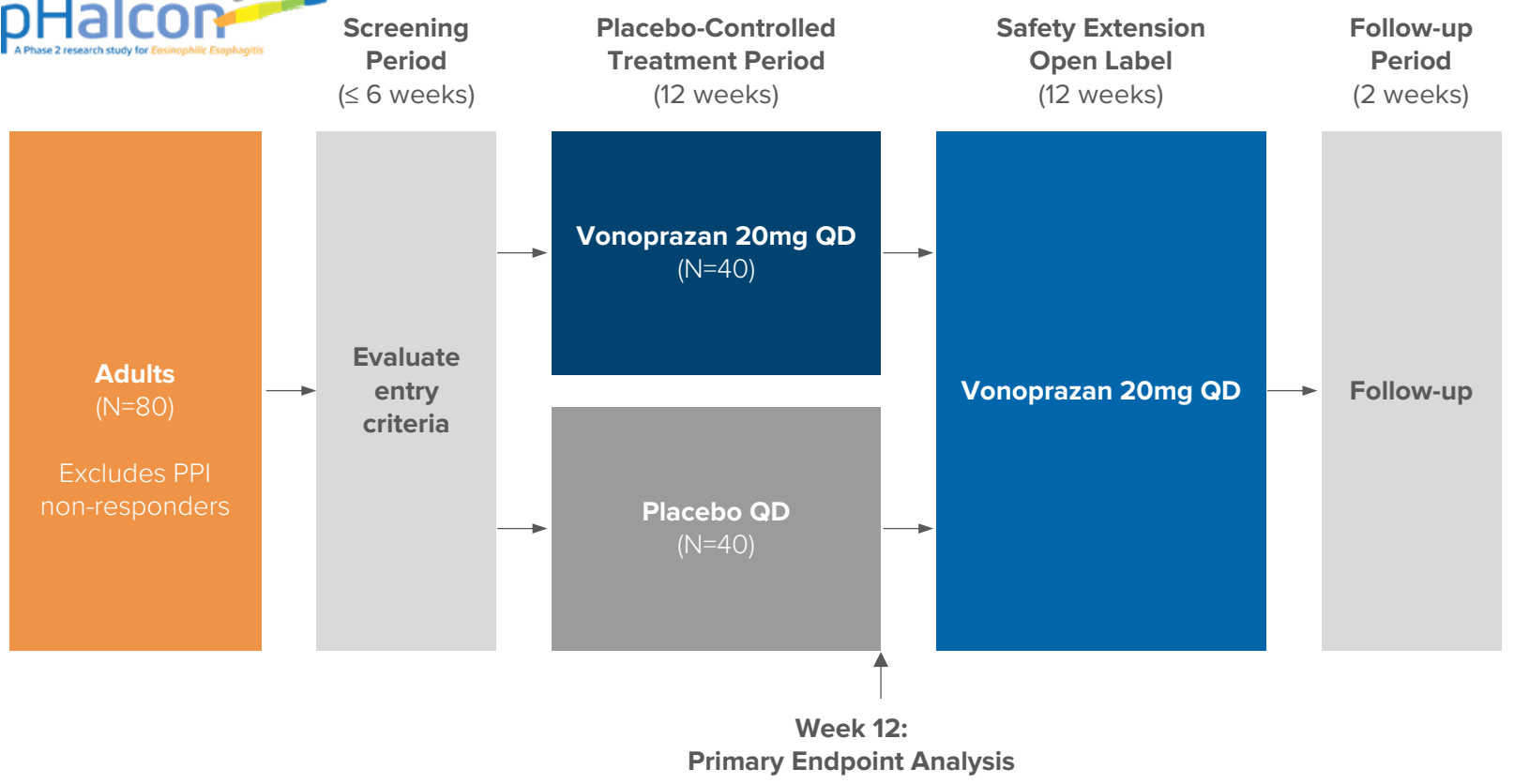
¹ Summary results only include adverse events that are treatment emergent (i.e., started after treatment)

² Among all subjects who received at least one dose of study medication, actual treatment received

PHALCON-EOE-201: Phase 2 Trial for Eosinophilic Esophagitis

PHALCON-EOE-201 Phase 2 study design

FSI: Nov. 2025 **Topline Data Expected: Late Q4 '26 / Early Q1 '27**



Week 12 Efficacy Endpoints

Primary

- Proportion of subjects achieving peak esophageal intraepithelial eosinophil count <15 eosinophils per high-power field (eos/hpf)

Secondary

- Mean change from baseline in dysphagia days
- Mean change from baseline in EoE Endoscopic Reference Score (EREFS)
- Mean change from baseline in peak esophageal intraepithelial eosinophil count