



Corporate Presentation

*November 2024*

# Forward Looking Statements

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# I. Overview of Seralutinib

*A Novel Investigational Inhaled Treatment for  
Pulmonary Hypertension (PH)*

# Gossamer Bio Quick Facts



HQ in San Diego, California



Focused on treating rare, fatal lung diseases



Positive Phase 2 Proof of Concept Study



~\$327 million cash<sup>(1)</sup>

INVESTIGATIONAL PROGRAM	CLASS (Route of Admin.)	INDICATION	PHASES			COMMERCIAL RIGHTS
			PHASE 1	PHASE 2	PHASE 3	
<b>Seralutinib</b> (GB002)	<b>Tyrosine Kinase Inhibitor (PDGFR, CSF1R, c-KIT)</b> (Inhaled)	<b>Pulmonary Arterial Hypertension (PAH)</b>				Partnered with <b>Chiesi</b> Gossamer leads global development and US commercial efforts in PAH and PH-ILD. Gossamer is entitled to a 50:50 profit / loss split in the US, exUS royalties and milestones. Chiesi is responsible for 50% of development costs, outside of the ongoing PAH Phase 3.
		<b>Pulmonary Hypertension Associated with Interstitial Lung Disease (PH-ILD)</b>				

**Registrational Phase 3 Study Ongoing**  
**Completed Phase 2 Study**  
 Met Primary Endpoint  
 Well-Tolerated

**Registrational Phase 3 Expected to Commence Mid-2025**

# Seralutinib Overview

## *A Novel Investigational Inhaled Treatment for PH*

- Inhaled kinase inhibitor, designed from scratch to address the underlying disease pathophysiology of pulmonary hypertension (PH)
  - PH is a class of rare lung diseases including PAH and PH-ILD, amongst others
- Status in PAH: Ongoing global, registrational Phase 3 study
- Status in PH-ILD: Expect to initiate a global, registrational Phase 3 mid-2025
- In the positive Phase 2 TORREY Study in PAH patients, seralutinib demonstrated statistically significant<sup>1</sup>:
  - ✓ Improvement in pulmonary vascular resistance (“PVR”, primary endpoint)
  - ✓ Improvement in NT-proBNP, a biomarker of right heart failure
  - ✓ Improvements in right heart structure & function
- In an open-label extension study, seralutinib showed a continued improvement in PVR, with a near doubling of improvement from Week 24 to Week 72<sup>2</sup>
- Seralutinib has been generally well tolerated to date
- Patent protection to 2039<sup>3</sup>; Orphan Drug Designation from FDA and EMA



1) Frantz RP, et al. Lancet Respir Med 2024;12(7):523-534.

2) Sitbon O, et al. Am J Respir Crit Care Med 2024;209:A1011.

3) Includes assumption of maximum 5 years of patent term extension. Corresponding patent(s) and patent application(s) with compound-specific claims. Total patent life with patent term extension cannot exceed 14 years from approval.

PAH = pulmonary arterial hypertension; PH-ILD = pulmonary hypertension associated with interstitial lung disease; NT-proBNP = N-terminal pro b-type natriuretic peptide; FDA = US Food and Drug Administration; EMA = European Medicines Agency.

## II. Seralutinib in PAH

# PAH is a Rare, Progressive & Fatal Disease



- PAH is a rare, progressive cardiopulmonary disease, with no known cure, affects approximately 50,000 patients in the US<sup>1</sup>
- Characterized by high blood pressure in the blood vessels carrying deoxygenated blood from the right side of the heart to the lungs
- Caused when the small arteries in the lungs become narrowed, thickened and / or stiff as a result of pathological remodeling and vasoconstriction
- Heart works harder to pump blood to the lungs, potentially leading to right heart failure and death

1) CardioVascular Resource Group.

# Pulmonary Vascular Remodeling: A Key Structural Alteration in PAH

## Pathological mechanisms



## Vascular remodeling of the small pulmonary arteries

- Peri-vascular inflammation
- Neointimal proliferation of endothelial cells and myofibroblasts
- Proliferation and hypertrophy of pulmonary artery smooth muscle cells
- Perivascular fibrosis

## Leading to

- Increased pulmonary vascular resistance
- Decreased pulmonary artery compliance
- Right ventricular hypertrophy and right heart failure

Healthy → Disease

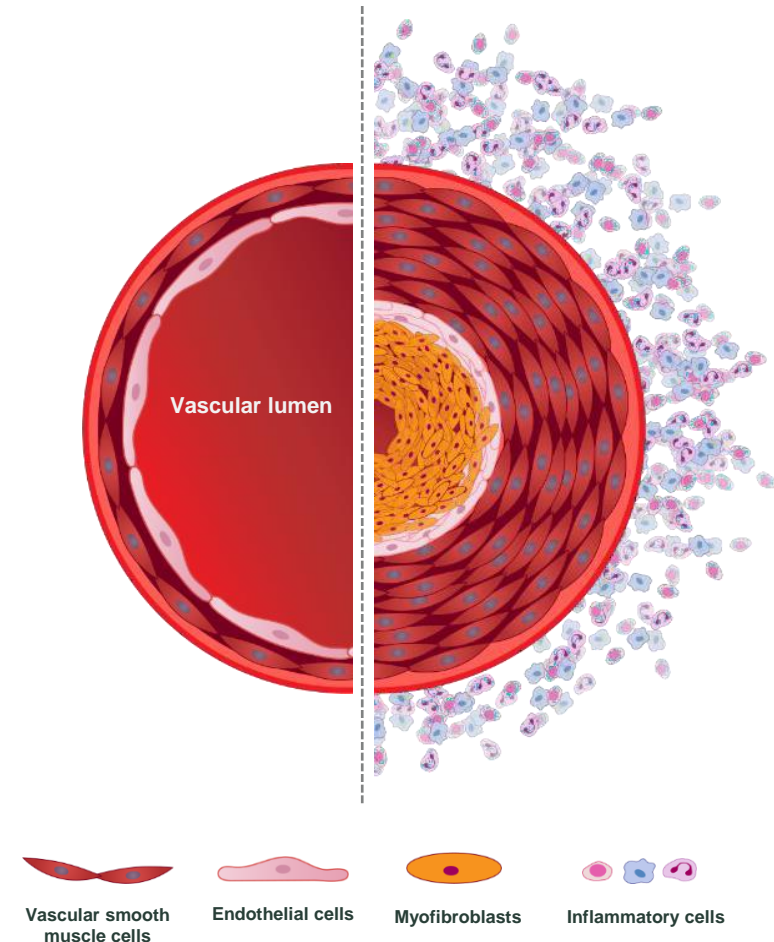
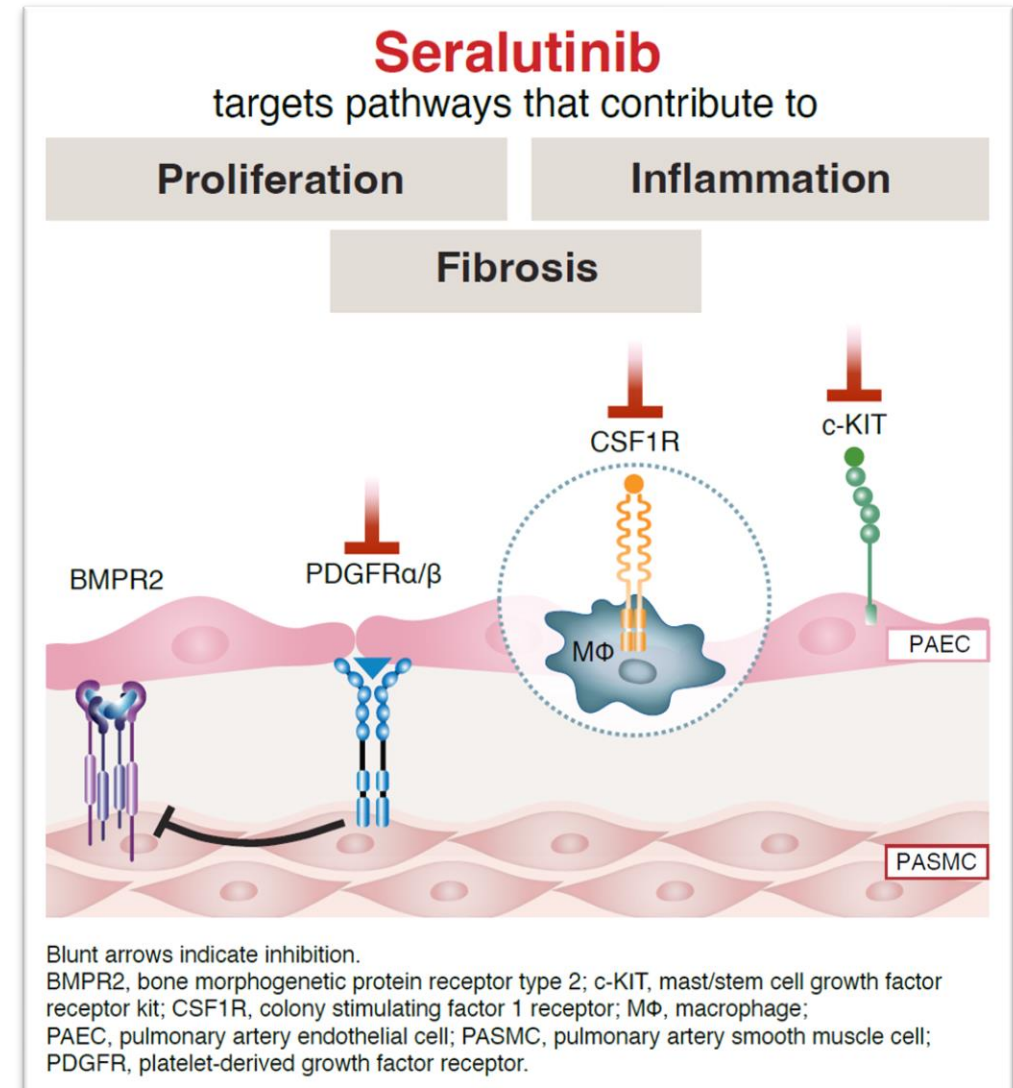


Figure adapted from: Schermuly RT et al. *Nat Rev Cardiol.* 2011;8(8):443-455.



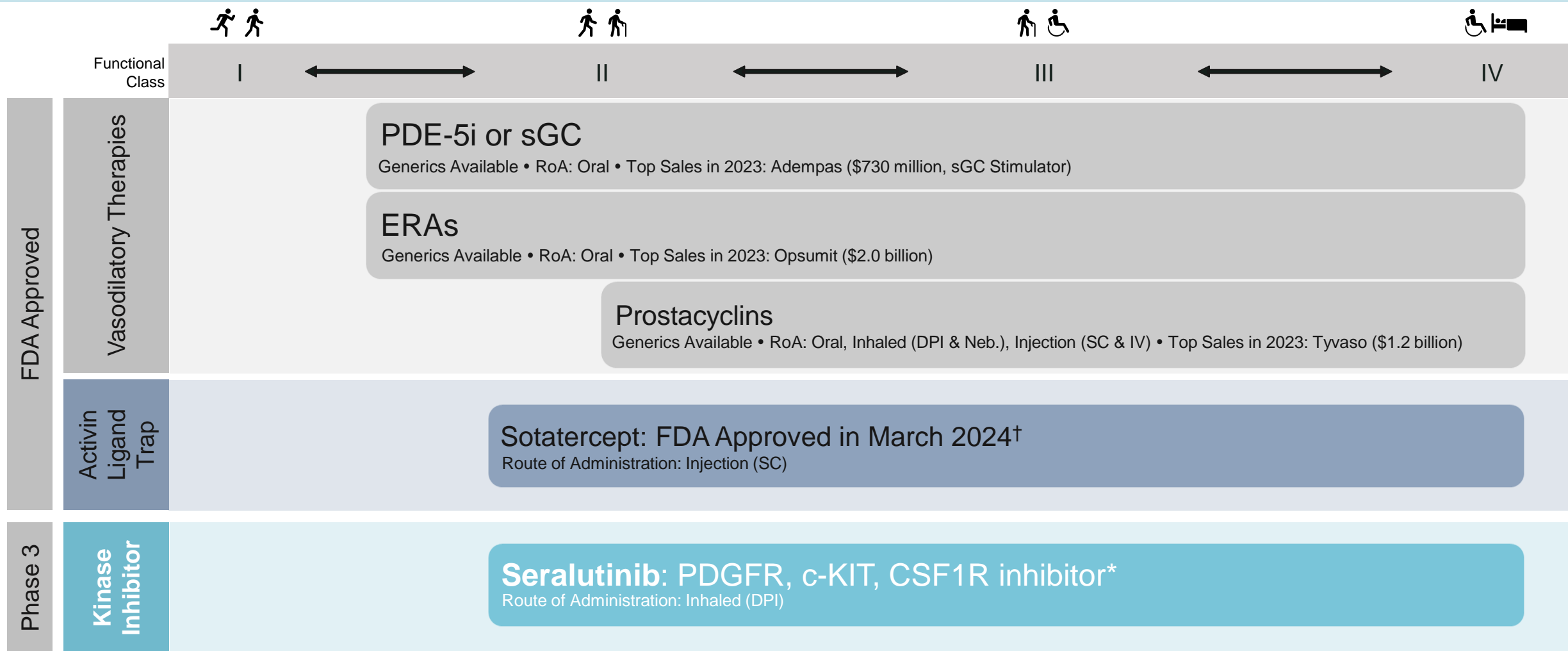
# Seralutinib: An Intentional Approach to PAH

- Designed from scratch to address the underlying disease pathophysiology of pulmonary hypertension (PH)
  - Only tyrosine kinase inhibitor (TKI) intentionally developed as an inhaled treatment for PAH
- Inhibiting the PDGFR pathway reverses pulmonary vascular remodeling in animal models of PAH<sup>1,2</sup>
- TKIs have been used to target this pathway, but safety concerns occurred with oral imatinib (anti-cancer therapy)<sup>3</sup>
- This led to the development of seralutinib, a distinct next-generation TKI to address these concerns
- In preclinical models, seralutinib has shown greater potency and selectivity as compared to imatinib, targeting PDGFR $\alpha/\beta$ , CSF1R, and c-KIT, thereby acting on inflammatory, proliferative, and fibrotic drivers of pulmonary vascular remodeling<sup>4</sup>



1) Schermuly et al. *J Clin Invest* 2005; 115:2811-21.  
2) Antoniu *Expert Opin Ther Targets* 2012; 16:1055-63.  
3) Hoepfer et al. *Circulation* 2013; 127(10):1128-38.  
4) Galkin et al. *Eur Respir J* 2022; 60:2102356.

# In a Treatment Paradigm Long-Dominated by Vasodilatory Therapies, Patients Need Treatments that Address the Underlying Disease



*Branded PH drug sales totaled over \$7 billion in sales in 2023.*

Sources: Company financial reports.

DPI = dry powder inhaler; Neb. = nebulized; SC = subcutaneous injection; IV = intravenous injection.

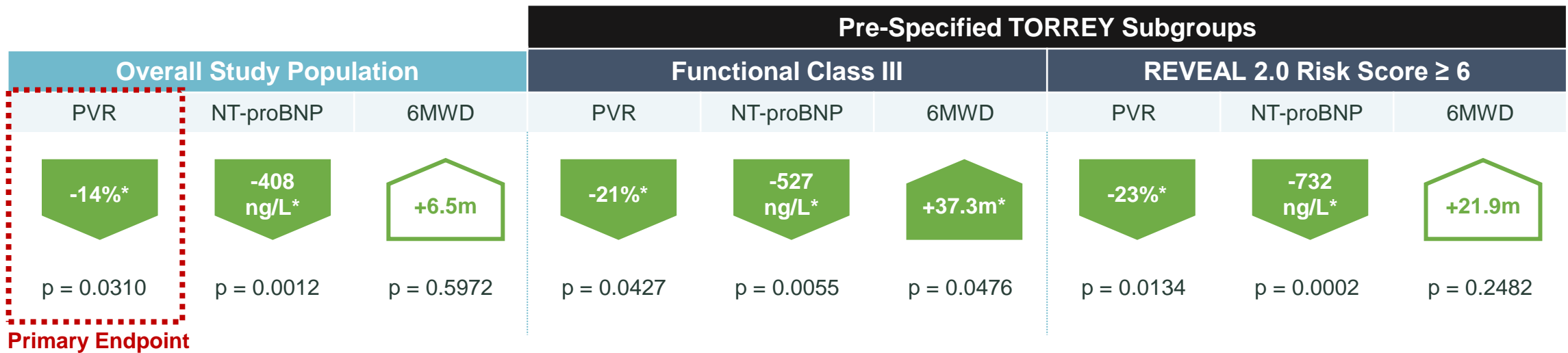
<sup>†</sup>Sotatercept positioning is conjectural and subject to adjustment, given its recent entry into the market and the PAH treatment paradigm.

\*Reflects potential positioning for an investigational therapy that is not yet approved and is subject to regulatory review and approval. Safety and efficacy have not yet been established. Subject to change.

### III. Phase 2 TORREY Study in PAH

# TORREY Study Phase 2 Topline Results (24 Weeks)

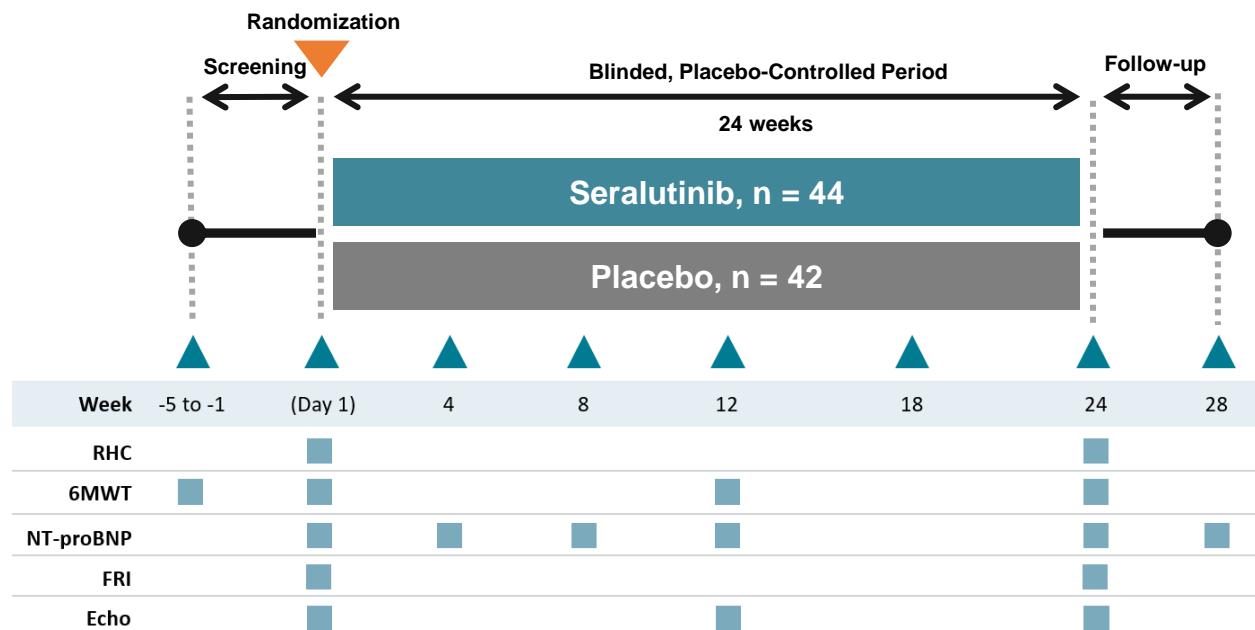
- Met Primary Endpoint: Statistically significant reduction in PVR in heavily-treated study population
- **Consistent numerical PVR (primary endpoint) benefit seen in all 21 pre-specified subgroups in favor of seralutinib - enhanced benefit seen in patients with more severe disease at baseline<sup>§</sup>**



- Additional evidence of seralutinib benefit seen in multiple pre-specified endpoints
- Well-tolerated, avoiding side effect profile associated with systemic imatinib in PAH

PVR = pulmonary vascular resistance; NT-proBNP = N-terminal pro-brain natriuretic peptide; 6MWD = six-minute walk distance.  
 \* = p-value ≤ 0.05. All p-values in this presentation are nominal, aside from primary endpoint (overall study population delta in PVR).  
 § At baseline, as determined by Functional Class and REVEAL 2.0 Risk Score (pre-specified subgroups).

# TORREY: Completed Phase 2 Study of Seralutinib in Patients With Functional Class II and III PAH



# TORREY STUDY

<b>Patient Population</b>	<b>Stable FC II &amp; III PAH patients</b> on background therapy, including double & triple therapy
<b>Endpoints</b>	<b>Primary:</b> $\Delta$ PVR at Week 24 <b>Key Secondary:</b> $\Delta$ 6MWD at Week 24 <sup>†</sup> <b>Exploratory:</b> Includes NT-proBNP, Echo
<b>Dosing Regimen</b>	<b>Titrated up to 90mg BID</b> (Started at 60mg BID; protocol allowed for down-titration to 45mg BID)

RHC = right heart catheterization; 6MWT = six-minute walk test; FRI = functional respiratory imagining; Echo = echocardiogram; FC = Functional Class; OLE = open label extension; PVR = pulmonary vascular resistance; 6MWD = six-minute walk distance; BID = twice-daily dosing.

Frantz RP, et al. Lancet Respir Med 2024;12(7):523-534.

\*As determined by baseline PVR & 6MWD, we believe that TORREY enrolled the most well-controlled PAH patient trial population to meet its primary efficacy endpoint.

†Trial was not powered to demonstrate a statistically significant difference in 6MWD.

# Selected Baseline Disease Characteristics

(ITT Population)

- Baseline patient PAH disease characteristics were milder than precedent PAH clinical trial populations, in large part due to patient availability during the COVID pandemic, which was ongoing during enrollment
- Despite this, seralutinib demonstrated a statistically significant treatment effect in its primary endpoint
- The TORREY Study is the most well-controlled PAH clinical trial patient population to meet its primary endpoint\*

Characteristic	Placebo (N=42)	Seralutinib (N=44)	Total (N=86)
Number of PAH background therapies – n (%)			
1	2 (4.8)	1 (2.3)	3 (3.5)
2	16 (38.1)	18 (40.9)	34 (39.5)
3	24 (57.1)	25 (56.8)	49 (57.0)
WHO FC – n (%)			
Class II	20 (47.6)	<b>30 (68.2)</b>	50 (58.1)
Class III	<b>22 (52.4)</b>	14 (31.8)	36 (41.9)
PVR (dyne*s/cm <sup>5</sup> ) – mean (SD)	661.3 (164.91)	675.8 (240.35)	<b>668.7 (205.90)</b>
6MWD (m) – mean (SD)	407.1 (107.02)	408.6 (75.11)	<b>407.9 (91.54)</b>
NT-proBNP (ng/L) – mean (SD)	645.6 (1158.75)	611.0 (714.58)	<b>628.3 (956.83)</b>

**Heavily pre-treated patient population**

**Hit Primary Endpoint Despite FC Imbalance in Drug & Pbo Arms**

**Mildest baseline PAH disease to see treatment effect\***

**STELLAR Trial Phase 3 NT-proBNP mean baseline was 1,121.1ng/L; PVR was 763.7 dyne\*s/cm<sup>5</sup> (1)**

1) Source: <https://doi.org/10.1056/NEJMoa2213558>.











\*As determined by baseline PVR & 6MWD, we believe that TORREY enrolled the most well-controlled PAH patient trial population to meet its primary efficacy endpoint.

6MWD = six-minute walk distance; FC = Functional Class; NT-proBNP = N-terminal pro B-type natriuretic peptide; PVR = pulmonary vascular resistance; WHO = World Health Organization; ITT = intention-to-treat; SD = standard deviation; Pbo = placebo.



# Seralutinib Phase 2 TORREY Study Scorecard

Consistently Demonstrated Improvement across Multiple Meaningful Measures

## Up to 24 Weeks...

Pre-Specified Endpoint	Assessed Attribute	Measure	Measurement Procedure	Stat. Sig. Improvement*?	p-value	Notes	Citation
Primary	 Pulmonary Resistance & Function	PVR	RHC		<b>0.0310</b>	<ul style="list-style-type: none"> <li>Demonstrated numerical improvement across all 21 pre-specified subgroups with nominal statistical significance in 7 of them</li> <li>Generally, enhanced benefit seen in higher risk patients</li> </ul>	1
Secondary	 Exercise Capacity	6MWD	6MWT		<b>0.0476#</b>	<ul style="list-style-type: none"> <li>Demonstrated stat. sig. improvement in pre-specified subgroup, Functional Class III patients (n = 36)#                             <ul style="list-style-type: none"> <li>+37.3-meter improvement v. placebo</li> </ul> </li> </ul>	1
Exploratory	 Heart Failure Biomarker	NT-proBNP	Blood Sample		<b>0.0012</b>	<ul style="list-style-type: none"> <li>Demonstrated stat. sig. improvement at weeks 12 &amp; 24</li> <li>Numerical improvement relative to pbo seen at wks 4 &amp; 8 (p &lt; 0.07)</li> </ul>	1
Exploratory	 Hemodynamics, Heart Structure, etc.	Multiple	RHC, ECHO		<b>Multiple &lt; 0.05</b>	<ul style="list-style-type: none"> <li>Demonstrated stat. sig. improvement in Right Atrium Area, RV Free Wall Strain, PA Compliance, RV Systolic Pressure, PA Systolic Pressure, PA Diastolic Pressure, mPAP</li> </ul>	2
Sub-Study	 Lung Blood Vessel Structure & Remodeling	FRI	CT Scan		<b>0.028</b>	<ul style="list-style-type: none"> <li>Demonstrated stat. sig. improvement in imaging-based biomarker of pulmonary vascular pruning, which correlated with improvement in hemodynamics</li> </ul>	3

## 24 Weeks & Beyond...

Category	Notes:	Citation
 Safety & Tolerability	<ul style="list-style-type: none"> <li>Generally well-tolerated in the 24-week blinded study and the ongoing OLE (to date)</li> <li>Vast majority of patients were able to reach and maintain highest tested dose, 90mg twice daily</li> <li>Top adverse events seen in imatinib's Phase 3 IMPRES Study have not been observed at high incidence in TORREY Study</li> </ul>	1,4
 Open-label Extension	<ul style="list-style-type: none"> <li>Patients continue to show meaningful improvement in PVR and 6MWD beyond 24 weeks of treatment, relative to treatment baseline, in ongoing OLE</li> <li>56% (15/27) &amp; 15% (4/27) of patients on drug for 72 weeks showed 20%+ &amp; 50%+ improvement in PVR, respectively, versus 33% (9/27) &amp; 0% of patients at week 24</li> </ul>	4

1) Frantz et al, Lancet Respiratory Medicine 2024.

2) Frantz et al, World Symposium on Pulmonary Hypertension 2024.

3) Zamanian et al, World Symposium on Pulmonary Hypertension 2024.

4) McLaughlin et al, ERS Congress 2024. Patient 20%+, 50%+ PVR improvement data previously presented on investor OLE update call in December 2023.

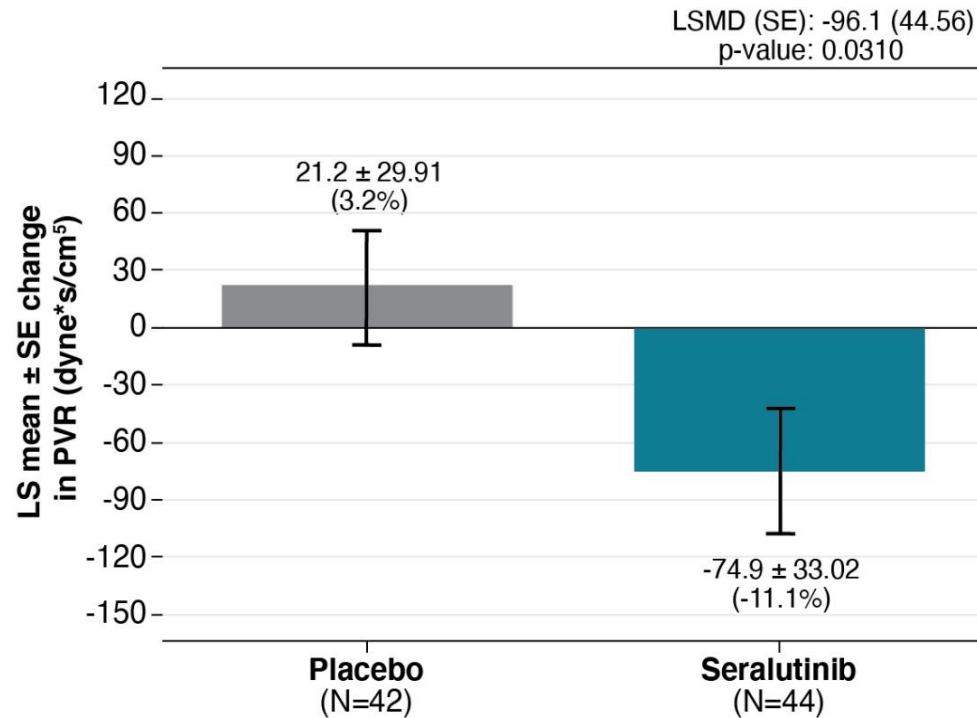
PVR = pulmonary vascular resistance; RHC = right heart catheterization; 6MWD = 6-minute walk distance; 6MWT = 6-minute walk test; ECHO = echocardiogram; FRI = functional respiratory imaging; RV = right ventricle; PA = pulmonary arterial; mPAP = mean pulmonary arterial pressure; CT Scan = computed topography scan; OLE = open-label extension; wks = weeks; pbo = placebo.

\*Statistical significance ("stat. sig.") defined as p ≤ 0.05. All improvements are relative to placebo. All p-values are week 24, unless otherwise noted. All p-values in this presentation are nominal, aside from primary endpoint (overall study population delta in PVR).

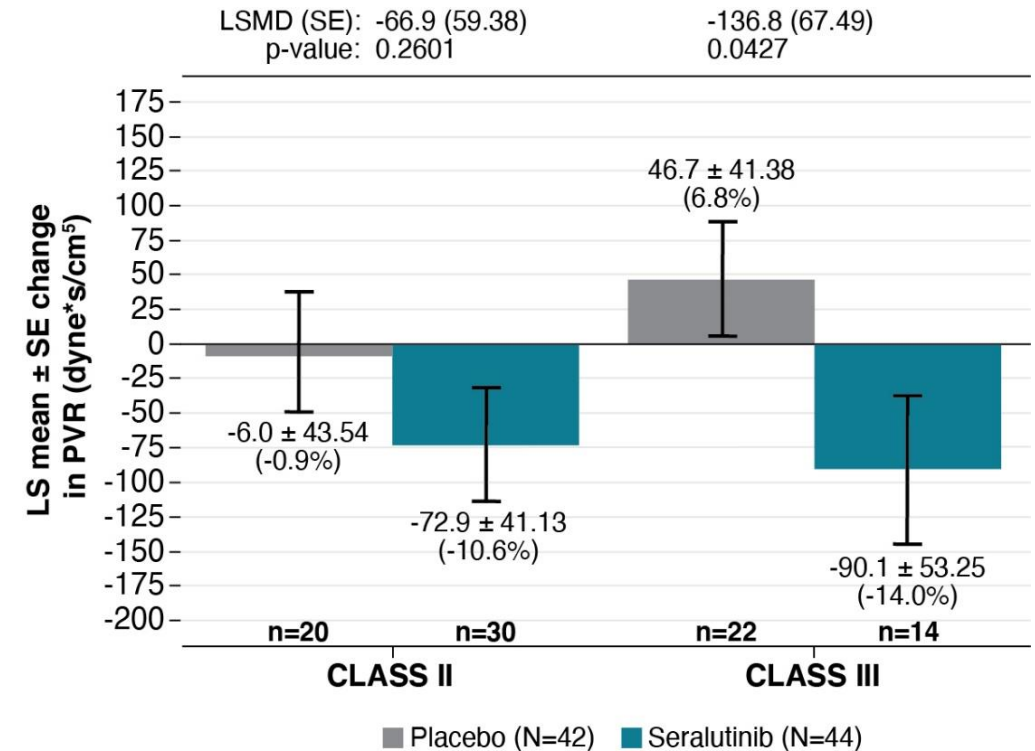
#TORREY Phase 2 Study was neither designed nor powered to achieve statistical significance in 6MWD. Seralutinib demonstrated a statistically significant improvement in 6MWD in Functional Class III (FC III) patients (n = 36), which was a pre-specified subgroup. In the overall population, seralutinib demonstrated a +6.5m improvement in 6MWD relative to placebo, which did not achieve statistical significance. P-value for FC III patient population shown.

# Primary Endpoint: Change in PVR From Baseline to Week 24

## Overall Population

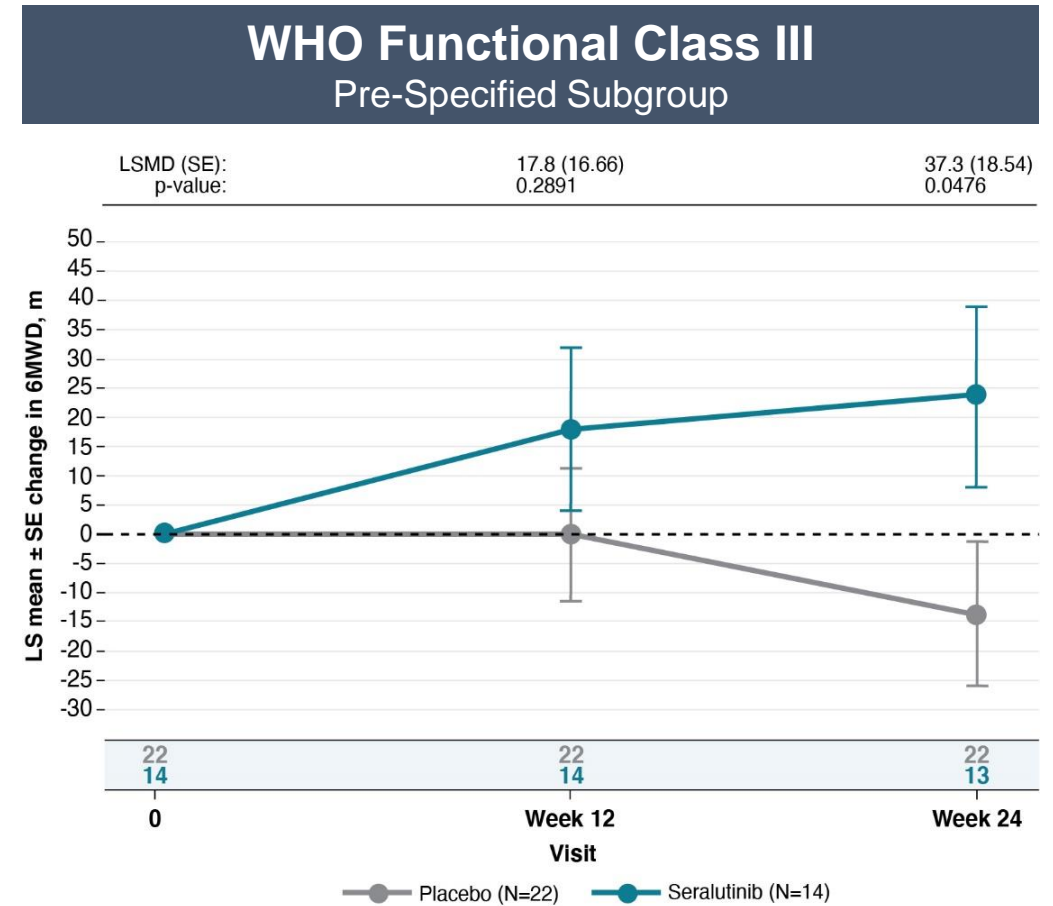
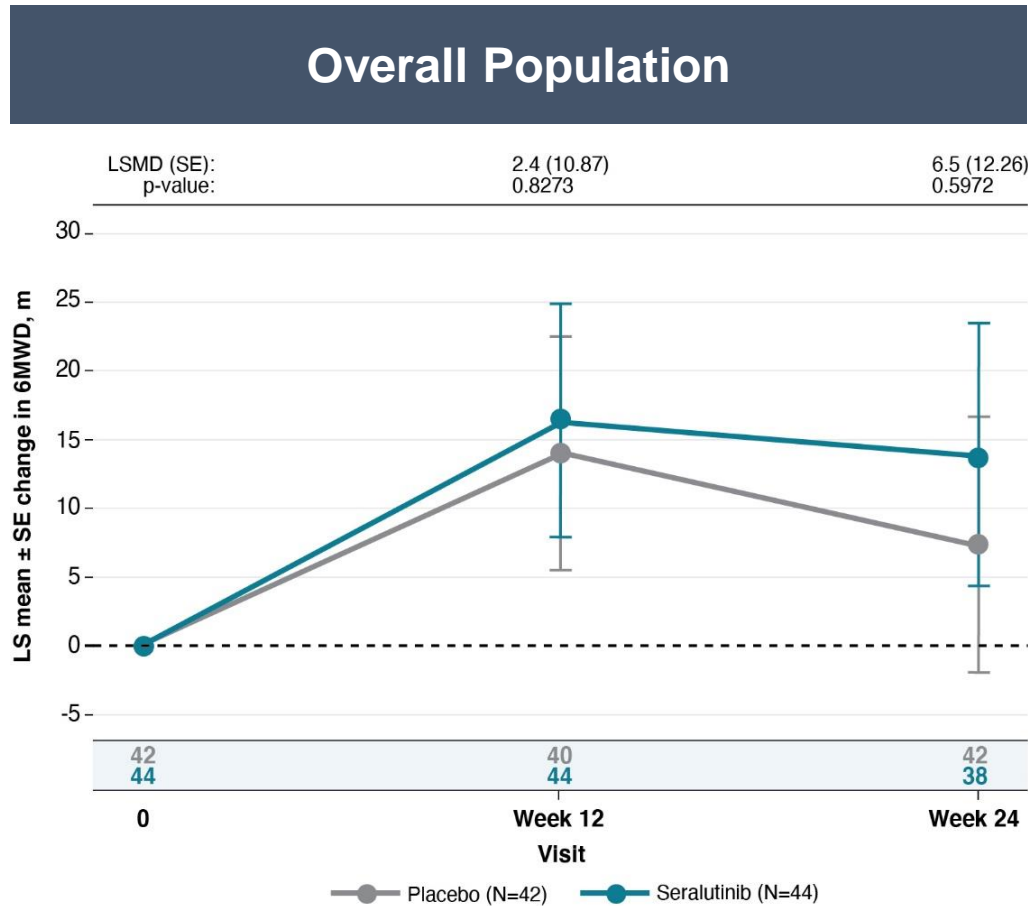


## WHO Functional Class Breakout Pre-Specified Subgroup Analysis

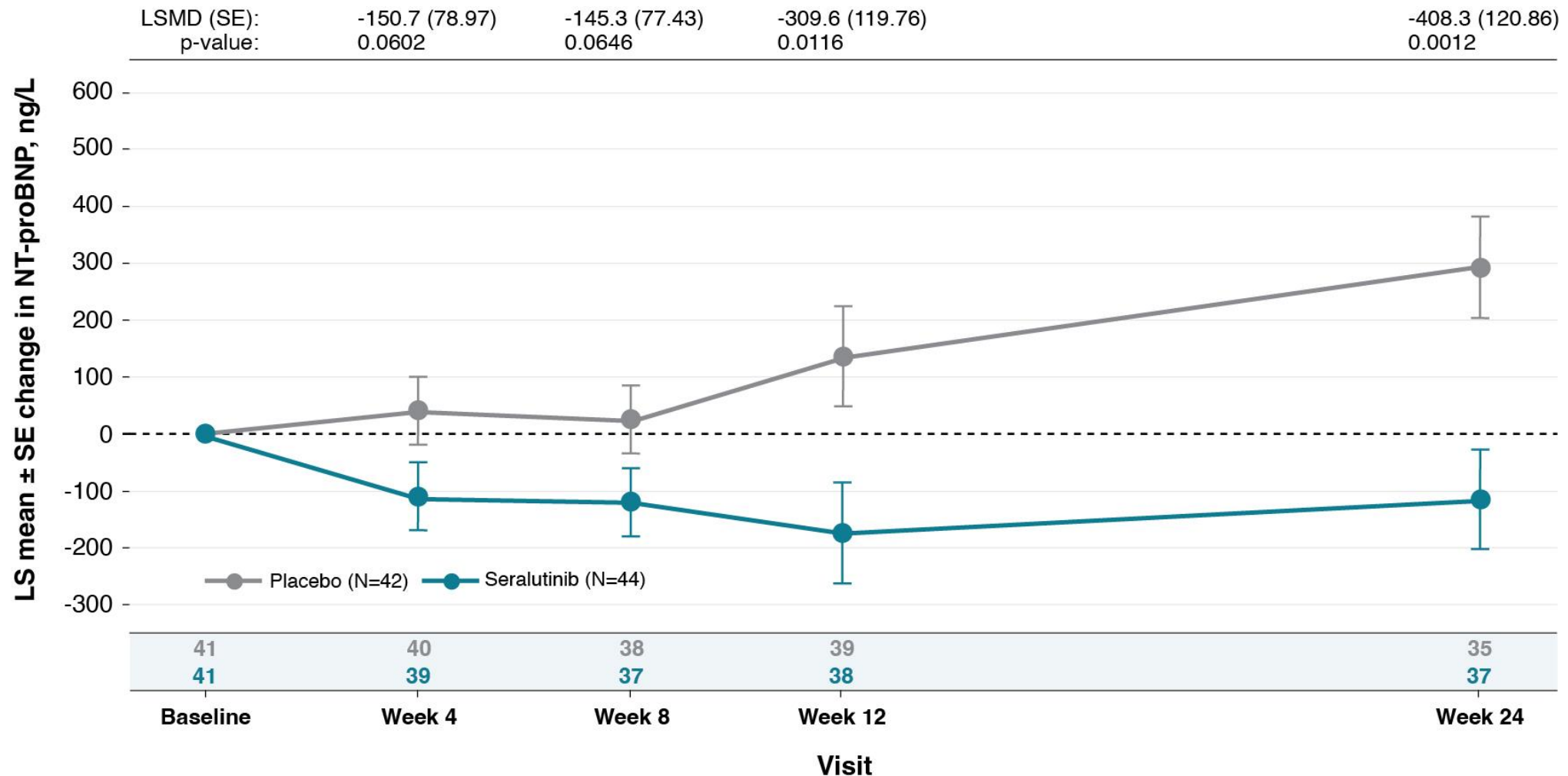




# Secondary Endpoint: Change in 6MWD from Baseline by Functional Class



# Seralutinib Treatment Resulted in a Rapid and Sustained Reduction in NT-proBNP, a Biomarker of Right Heart Strain



- Seralutinib treatment resulted in significant reduction in NT-proBNP vs placebo at Week 12 (-309.6 ng/L, p=0.0116) and Week 24 (-408.3 ng/L, p=0.0012).

Frantz RP, et al. Lancet Respir Med 2024;12(7):523-534.

ITT Population. Based on a MMRM model.

ITT, intention-to-treat; LS, least squares; LSMD, least squares mean difference; MMRM, mixed-effects model with repeated measures; NT-proBNP, N-terminal pro-brain natriuretic peptide; SE, standard error.

# Centrally-Read RHC and ECHO Results at Week 24 Consistently Favored Seralutinib (ANCOVA – Observed Cases)

Endpoint	LS Mean Difference (95% CI)	Statistically Significant Result Favoring Seralutinib (p ≤ 0.05)	Point Estimate Favoring Seralutinib	p-value
Right Atrium Area (cm <sup>2</sup> )	-1.99 (-3.783, -0.206)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<b>0.0293*</b>
RV Free Wall Strain (%)	-2.64 (-5.172, -0.098)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<b>0.0420*</b>
PA Compliance (mL/mmHg)	0.22 (0.009, 0.423)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<b>0.0410*</b>
RV Systolic Pressure (mmHg)	-8.10 (-13.877, -2.317)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0067*
PA Systolic Pressure (mmHg)	-6.98 (-12.774, -1.187)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0189*
PA Diastolic Pressure (mmHg)	-3.43 (-6.211, -0.643)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0165*
RV Fractional Area Change	2.62 (-1.405, 6.652)		<input checked="" type="checkbox"/>	0.1983
PVR index (dyne*s/cm <sup>5</sup> /m <sup>2</sup> )	-160.42 (-333.970, 13.138)		<input checked="" type="checkbox"/>	0.0695
mRAP (mmHg)	-0.99 (-2.350, 0.367)		<input checked="" type="checkbox"/>	0.1503
Stroke Volume Index (mL/m <sup>2</sup> )	2.19 (-0.917, 5.299)		<input checked="" type="checkbox"/>	0.1644
Cardiac Index (L/min/m <sup>2</sup> )	0.13 (-0.100, 0.359)		<input checked="" type="checkbox"/>	0.2658

\* p ≤ 0.05.

mRAP = mean right atrial pressure; PA = pulmonary artery; PVR = pulmonary vascular resistance; RV = right ventricle; LS = least squares; RHC = right heart catheterization; ECHO = echocardiography. Frantz RP, et al. Lancet Respir Med 2024;12(7):523-534.

# Incidence of TEAEs by Preferred Term: $\geq 5\%$ in Seralutinib (Safety Population)

Preferred Term <sup>a</sup>	Placebo (N=42)	Seralutinib (N=44)
Number of subjects with a TEAE	36 (85.7)	41 (93.2)
Cough	16 (38.1)	19 (43.2)
COVID-19	7 (16.7)	6 (13.6)
Diarrhea	3 (7.1)	6 (13.6)
Headache	8 (19.0)	6 (13.6)
Dizziness	2 (4.8)	5 (11.4)
Fatigue	3 (7.1)	5 (11.4)
Nausea	6 (14.3)	5 (11.4)
Dyspnea	5 (11.9)	4 (9.1)
Nightmare	1 (2.4)	4 (9.1)
Abdominal pain lower	0	3 (6.8)
Arthralgia	1 (2.4)	3 (6.8)
Back pain	2 (4.8)	3 (6.8)
Chest discomfort	1 (2.4)	3 (6.8)
Nasal congestion	1 (2.4)	3 (6.8)
Nasopharyngitis	0	3 (6.8)
Rash	1 (2.4)	3 (6.8)
Throat irritation	0	3 (6.8)

All TEAEs in the table above were mild or moderate in severity.

MedDRA = Medical Dictionary for Regulatory Activities; TEAE = treatment-emergent adverse event.

<sup>a</sup> Coded using MedDRA v 24.0

Frantz RP, et al. Lancet Respir Med 2024;12(7):523-534.

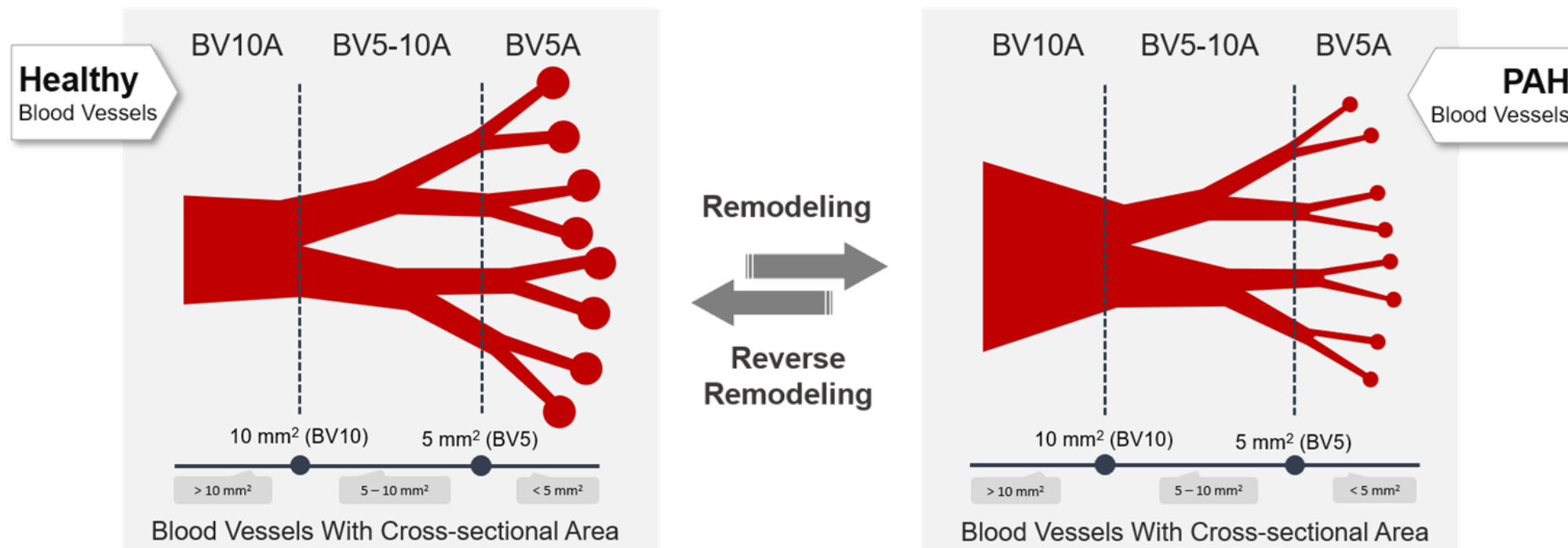
# TORREY Phase 2 Imaging Sub-Study: Assessing Pulmonary Vascular Remodeling in Patients Treated with Seralutinib

- **Purpose:** Provide evidence consistent with a reverse remodeling effect of seralutinib
- **Hypothesis:** volume of distal pulmonary arteries relative to volume of proximal pulmonary arteries will be increased by seralutinib as expressed by the ratio of BV5A to BV10A (BV510ARatio)
- **Method:** Thin-section, volumetric, non-contrast chest CTs were obtained, followed by automated pulmonary vascular segmentation



*See publication - presented at ERS International Congress 2023 in Milan, Italy: "Seralutinib improves pulmonary arterial blood vessel volume distribution in pulmonary arterial hypertension (PAH): Results of the TORREY Phase 2 imaging substudy"*

# Pulmonary Vascular Volume of Small Distal Arterial Vessels is Decreased in PAH, Leading to Dilatation of Larger Proximal Vessels



CT imaging can quantify these changes: BV5A: BVV of pulmonary arteries with a CSA < 5 mm<sup>2</sup>

BV5-10A: BVV of pulmonary arteries with a CSA between 5-10 mm<sup>2</sup>

BV10A: BVV of pulmonary arteries with a CSA > 10 mm<sup>2</sup>

BV510ARatio: BV5A/BV10A

Pulmonary vascular pruning on CT correlates with histologic pulmonary vascular remodeling<sup>1</sup>

1) Synn AJ, et al. *Pulm Circ.* 2021;11(4):20458940211061284. Histologic remodeling correlation shown is based on a study in patients undergoing resection for early-stage adenocarcinoma.

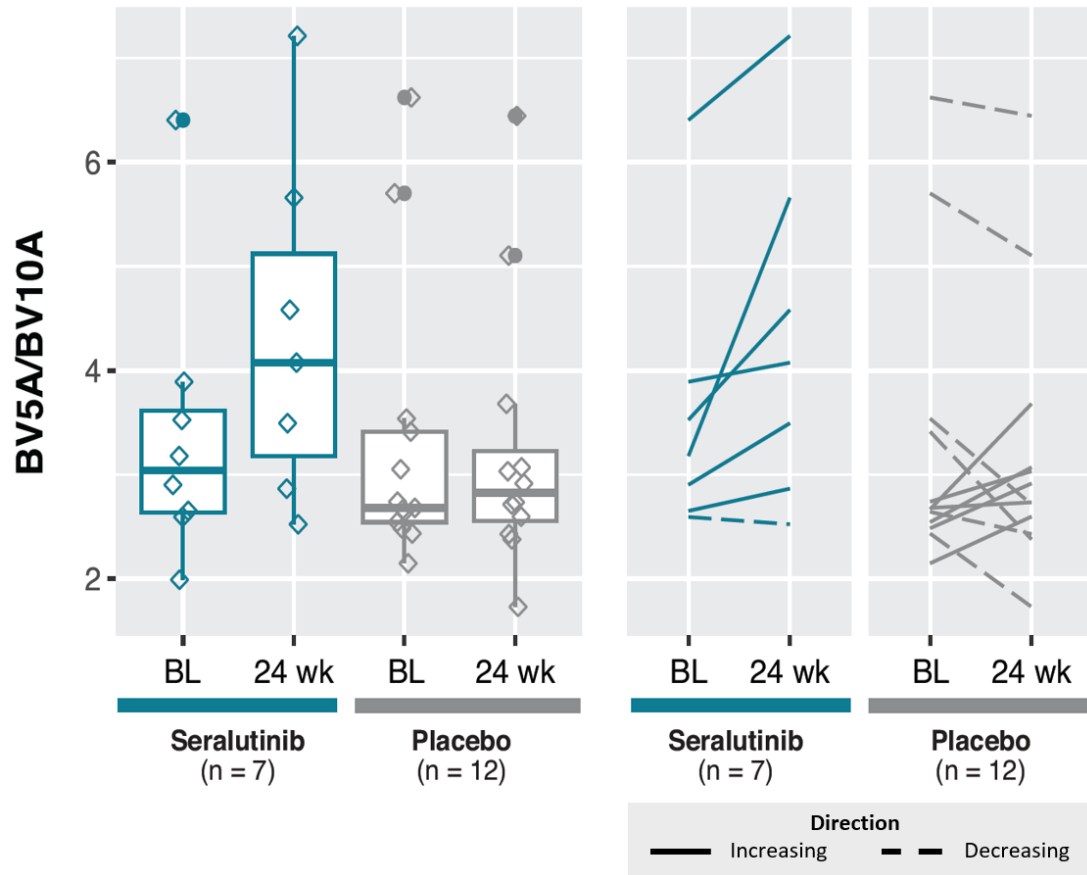
Illustration adapted from FLUIDDA, Inc.

BVV = blood vessel volume; CT = computed tomography.

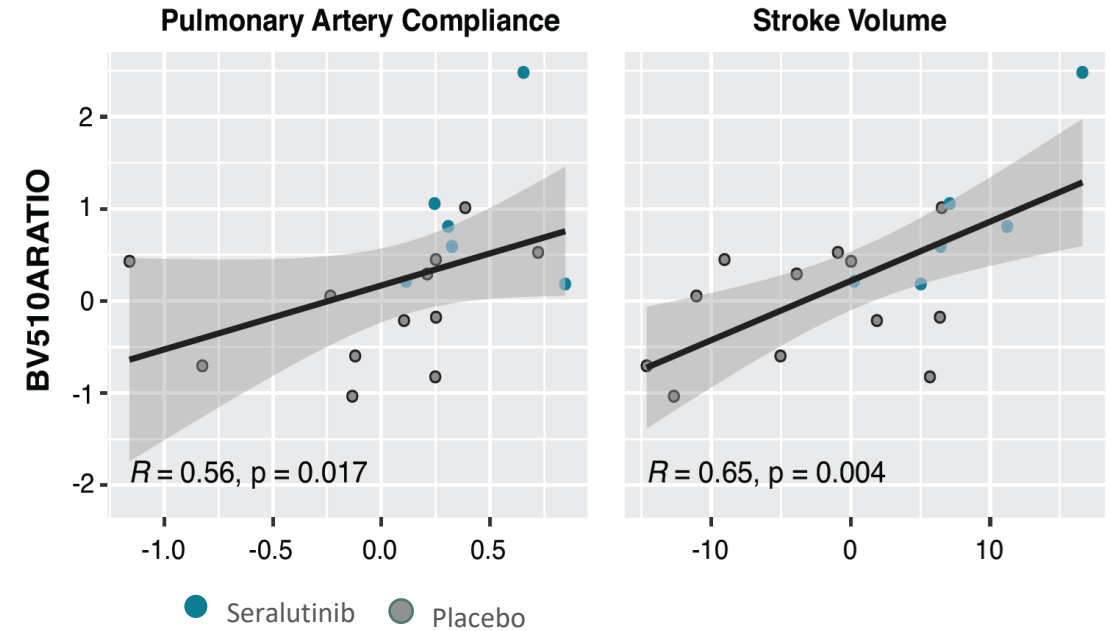
# Seralutinib Treatment Increases the BV5A/BV10A Ratio & Supports Blood Volume Redistribution Hypothesis

## Seralutinib increases BV5A/BV10A ratio

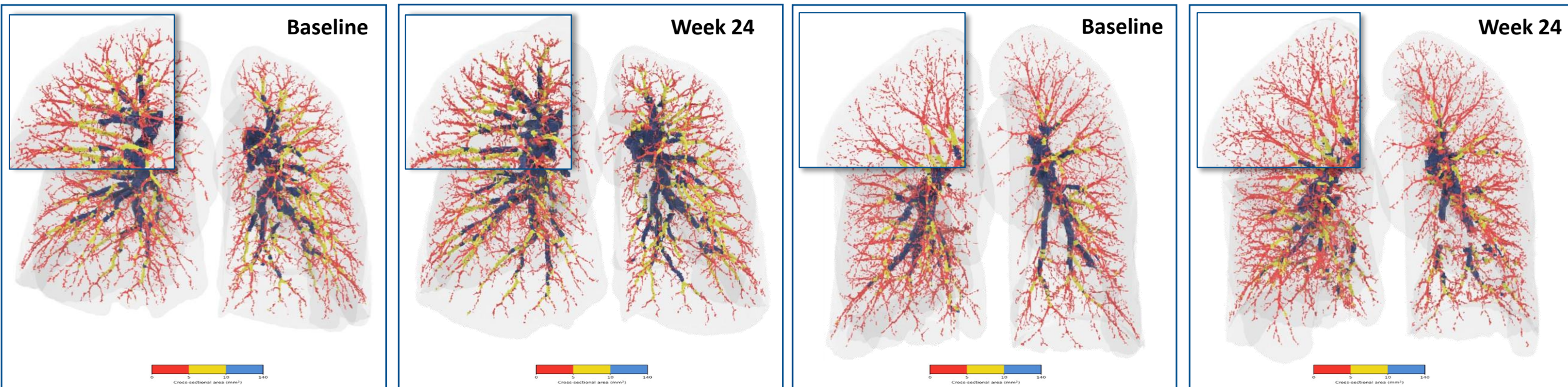
Parameter	LSMD Estimate (95% CI)	p-value
BV5A/BV10A ratio	0.845 (0.105, 1.585)	0.028



## Change in BV5A/BV10A ratio from BL to Week 24 correlates with change in hemodynamics



# Examples of Imaging: Placebo vs. Seralutinib



## Placebo patient

Female, 24 y, iPAH, FC II, treated with PDE5-i + prostacyclin

PVR change, dyne\*s/cm<sup>5</sup> (%)      283 (+65.4)

$\Delta$ BV510ARatio (% change)      -0.70 (-28.9)

## Seralutinib patient

Female, 58 y, iPAH, FC II, treated with ERA + PDE5-i + prostacyclin

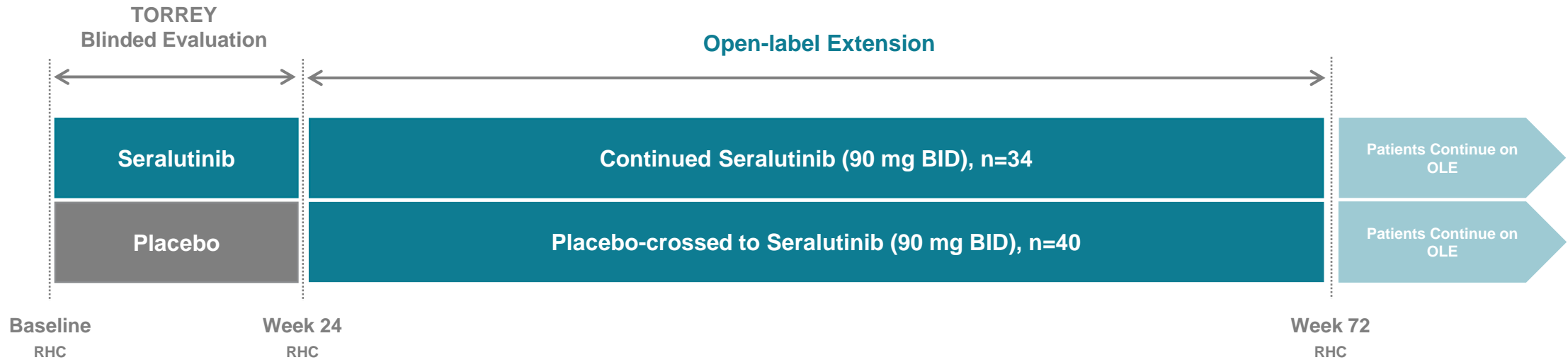
PVR change, dyne\*s/cm<sup>5</sup> (%)      -159 (-39.0)

$\Delta$ BV510ARatio (% change)      +2.5 (+78.0)

The images shown are representative examples. The highlighted sections were chosen to illustrate changes in the pulmonary vasculature.



# Ongoing TORREY Open-Label Extension



- Patient population: 73/80 patients who completed TORREY, 1 patient from a phase 1B study
- Objectives:
  - Ongoing, long-term safety & tolerability
  - Efficacy parameters, including hemodynamics at Week 72

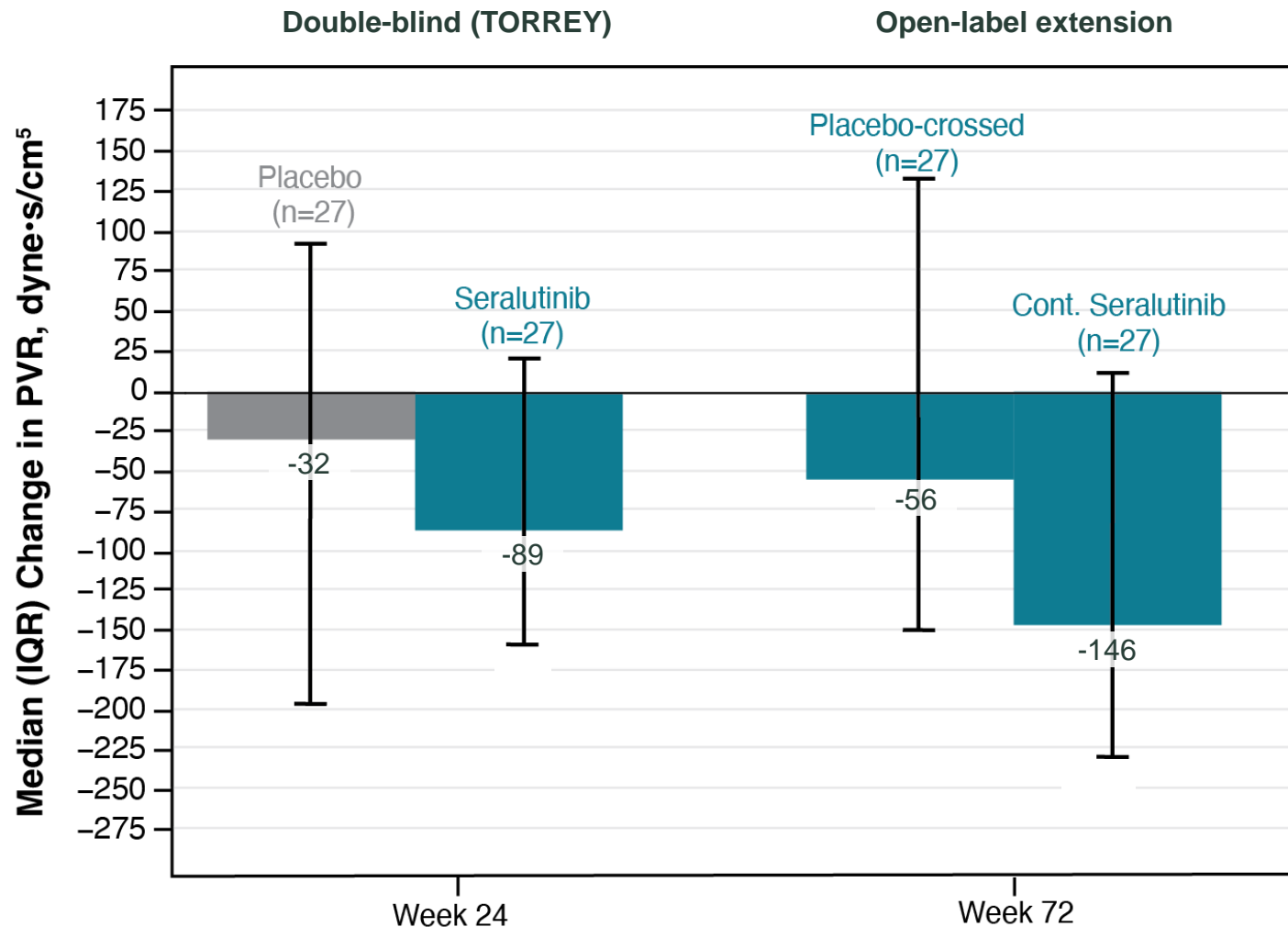
Cut-off date for data presented: March 4, 2024.

Phase 1B: NCT03926793; Phase 2 TORREY: NCT04456998; Open-label extension: NCT04816604.

BID = twice daily; OLE = open-label extension; RHC = right heart catheterization; TEAEs = treatment-emergent adverse events.

Source: <https://www.gossamerbio.com/wp-content/uploads/Poster-ATS24b.pdf>

# PVR Continues to Improve With Seralutinib in the OLE

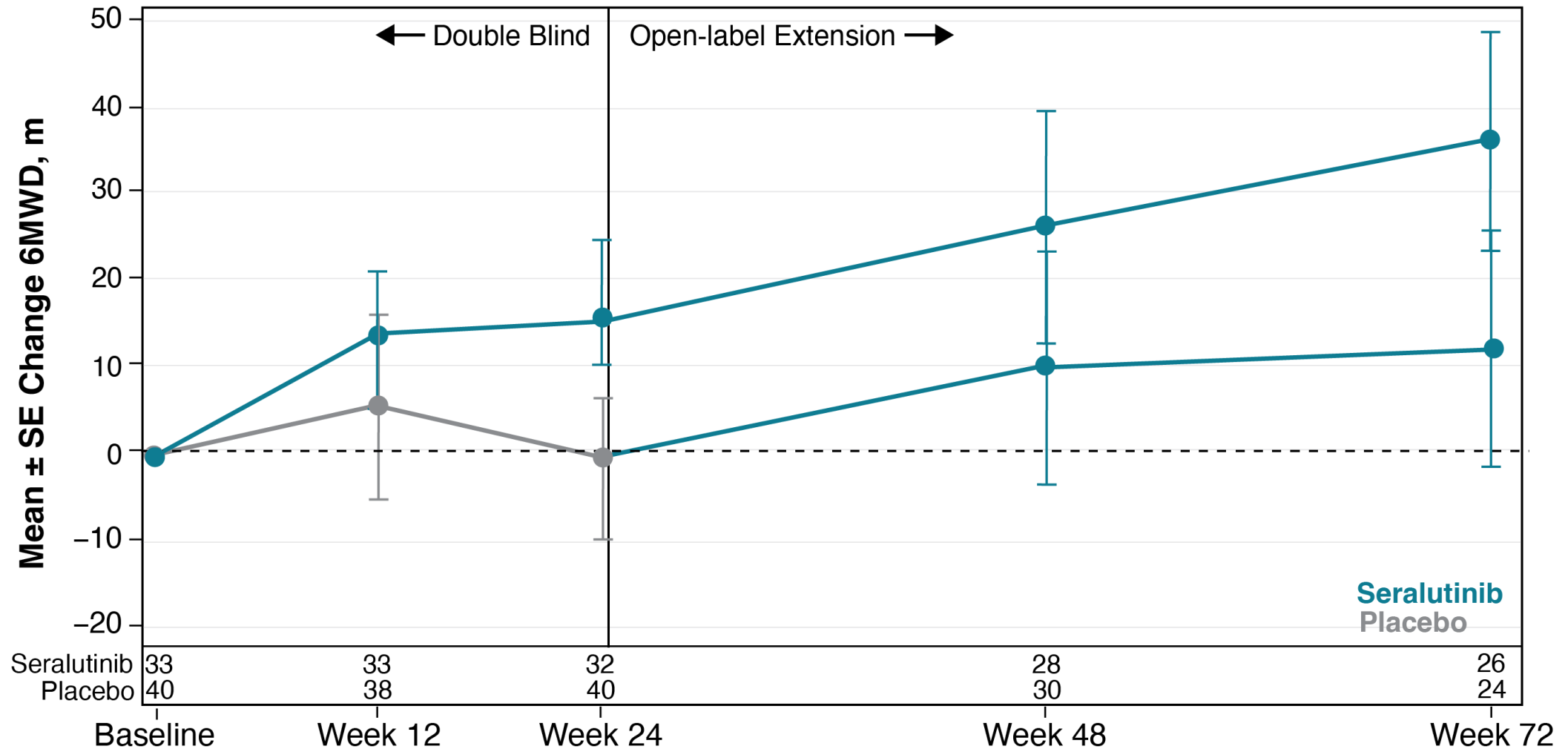


Median PVR Values, dyne\*s/cm<sup>5</sup>

Visit	Placebo/ Placebo- Crossed	Seralutinib/ Cont.- Seralutinib
Baseline	650.0	620.0
Week 24	647.0	505.0
Week 72	603.0	475.0

Note: OLE study is ongoing. Week 72 data are reflective of the database as of March 4, 2024.  
 IQR = interquartile range; OLE = open-label extension; PVR = pulmonary vascular resistance; RHC = right heart catheterization.  
 Sitbon O, et al. Am J Respir Crit Care Med 2024;209:A1011.

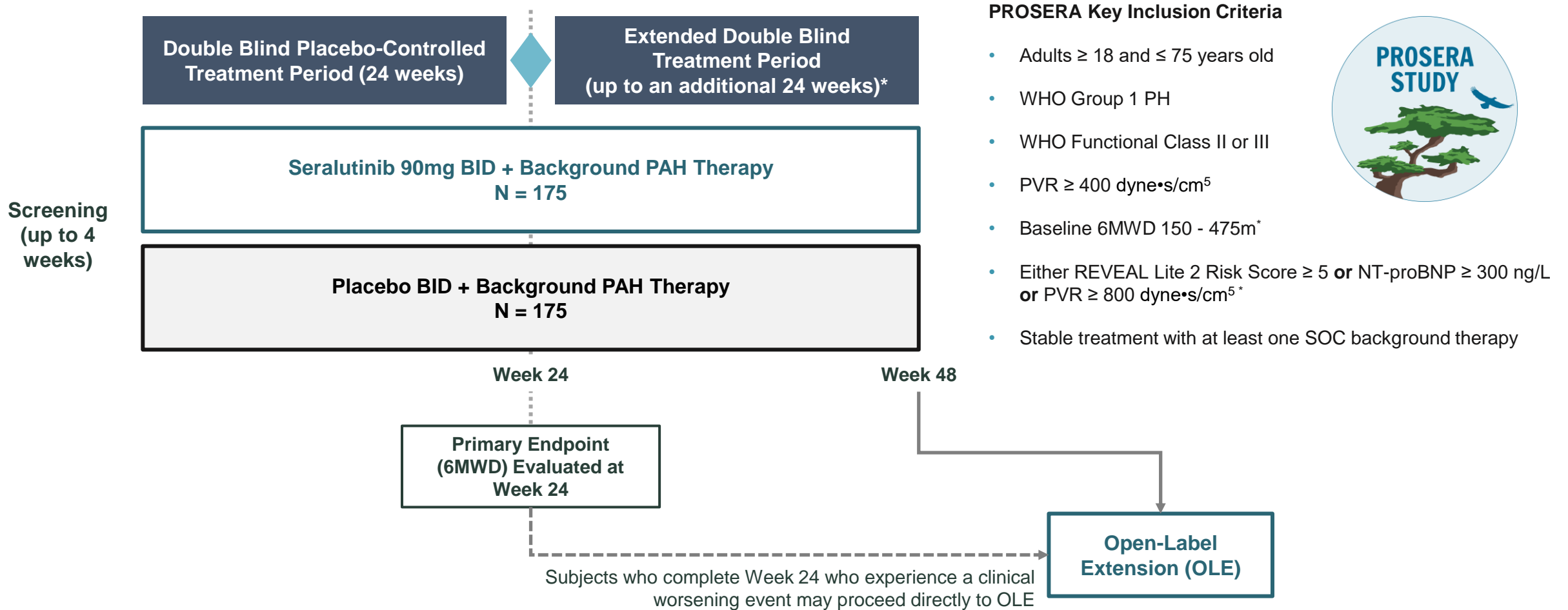
# 6MWD Increases in Continued-Seralutinib Group & Placebo-Crossed Group



Note: OLE study is ongoing. Week 48 and 72 data are reflective of the database as of March 4, 2024.  
 6MWD = six-minute walk distance; OLE = open-label extension; SE = standard error.  
 Source: <https://www.gossamerbio.com/wp-content/uploads/Poster-ATS24b.pdf>

### III. PROSERA Phase 3 Study

# Ongoing PROSERA Phase 3 Study



## PROSERA Key Inclusion Criteria

- Adults  $\geq 18$  and  $\leq 75$  years old
- WHO Group 1 PH
- WHO Functional Class II or III
- $PVR \geq 400 \text{ dyne}\cdot\text{s}/\text{cm}^5$
- Baseline 6MWD 150 - 475m\*
- Either REVEAL Lite 2 Risk Score  $\geq 5$  or NT-proBNP  $\geq 300 \text{ ng/L}$  or  $PVR \geq 800 \text{ dyne}\cdot\text{s}/\text{cm}^5$ \*
- Stable treatment with at least one SOC background therapy



\* Key enrichment criteria.

WHO = World Health Organization; PVR = pulmonary vascular resistance; 6MWD = six-minute walk distance; NT-proBNP = N-terminal pro B-type natriuretic peptide; SOC = standard of care

## IV. The Next Frontier: PH-ILD

# Seralutinib's Next Frontier: What is PH-ILD?

- WHO Group 3 PH is pulmonary hypertension associated with lung diseases and / or hypoxia
  - PH associated with interstitial lung disease (PH-ILD) is a subgroup of Group 3 PH
  - PH-ILD includes PH related to idiopathic pulmonary fibrosis (IPF) & PH related to connective tissue disease-associated interstitial lung disease (CTD-ILD)
- Characterized by pulmonary vascular pathology associated with PH, in addition to thickening & scarring of the lung interstitium resulting from ILD
- Only Tyvaso® is approved for PH-ILD, & only in the US
- **Patients have poor disease prognosis & increased mortality rate as compared to PAH patients (40% 3-year survival rate<sup>2</sup>)**



**~60-100K PH-ILD patients in US<sup>(1)</sup>**



**One approved therapy (US only)**



**Call point overlap with PAH**

WHO = World Health Organization; PH = pulmonary hypertension; PAH = pulmonary arterial hypertension.

1) Based on internal company estimates. Prevalence estimates of PH-ILD indicate the patient population is likely to be 1-2 times that of PAH.

2) Gall H. et al, *J Heart Lung Transplant* 2017;36(9):957-967.

Tyvaso is a registered trademark of United Therapeutics Corporation.

# PH-ILD is an Ideal Next Indication for Seralutinib

1

## Biologic Rationale:

Demonstrated Positive Impact on Reducing Pulmonary Hypertension



- The pulmonary hypertension in PH-ILD is caused by the same proliferative, inflammatory, & fibrotic pathways as PAH
- Seralutinib demonstrated statistically significant improvement in PVR, right heart function/structure measures, & NT-proBNP in TORREY

2

## Clinical Trial Patient Dynamics are Favorable



- Lack of therapeutic options has fostered strong patient demand for clinical trials
- PH-ILD clinical trial patients have increased exercise impairment, as compared to PAH studies
  - Mean BL STELLAR (PAH) 6MWD: 401m
  - Mean BL INCREASE (PH-ILD) 6MWD: 260m
- Seralutinib demonstrated a stat. sig. pbo-controlled 38m increase in 6MWD in baseline FC III PAH patients\* in TORREY (mean BL 6MWD = 367m)

3

## High Unmet Need



- Only Tyvaso® is approved for PH-ILD, & only in the US and other select markets
  - No approved therapies in EU
- Patient population is potentially double the PAH population
- Patients have a high mortality rate, even compared to PAH

Phase 3 design to be discussed after interactions with global regulatory authorities



# Seralutinib MoA Aligned with Underlying Pathophysiology of Group 3 PH

Disease Process	Cell Type / Mechanism	Potentially Relevant Pathway
Vascular Inflammation	Macrophages & ECs	<ul style="list-style-type: none"> <li>• CSF1R</li> <li>• KIT</li> </ul>
Vascular fibrosis	Fibroblasts / myofibroblasts	<ul style="list-style-type: none"> <li>• PDGFR</li> </ul>
Pulmonary vasculopathy (plexiform lesions)	Endothelial-to-mesenchymal transition	<ul style="list-style-type: none"> <li>• PDGFR</li> </ul>
Pulmonary arteriolar hypertrophy / hyperplasia	Pulmonary arteriole vascular smooth muscle cells	<ul style="list-style-type: none"> <li>• PDGFR</li> <li>• BMPR2</li> </ul>
Parenchymal interstitial lung inflammation & fibrosis	Fibroblasts	<ul style="list-style-type: none"> <li>• PDGFR</li> <li>• CSF1R</li> </ul>
	Epithelial-to-mesenchymal transition	<ul style="list-style-type: none"> <li>• PDGFR</li> </ul>
Shunt/hypoxia	V/Q mismatch	<ul style="list-style-type: none"> <li>• Multiple</li> </ul>

Seralutinib Was Rationally Designed For PH & Is Highly Relevant For Targeted Indications

# PH-ILD Presents a Significant Market Opportunity

	PAH	PH-ILD
US Prevalence	~30-50k <sup>1</sup>	~60-100k+ <sup>3</sup>
Competitive intensity	16 marketed products	1 marketed product (US Only)
5-year survival rate	57% <sup>2</sup>	23% <sup>4</sup>
Generics	8 generic products	0 generic products

Patients living with PH-ILD are deeply underserved

## V. Milestones & Finances

# Milestones & Financial Overview

## Near Term Clinical Milestones

- Mid-2025: Commence Global Registrational Phase 3 Clinical Trial in PH-ILD
- 4Q 2025: Topline Data from Ongoing Phase 3 Clinical Trial in PAH, PROSERA Study

## Financial Overview

Cash, Cash Equivalents and Marketable Securities ~\$327mm  
*(As of 9/30/24)*

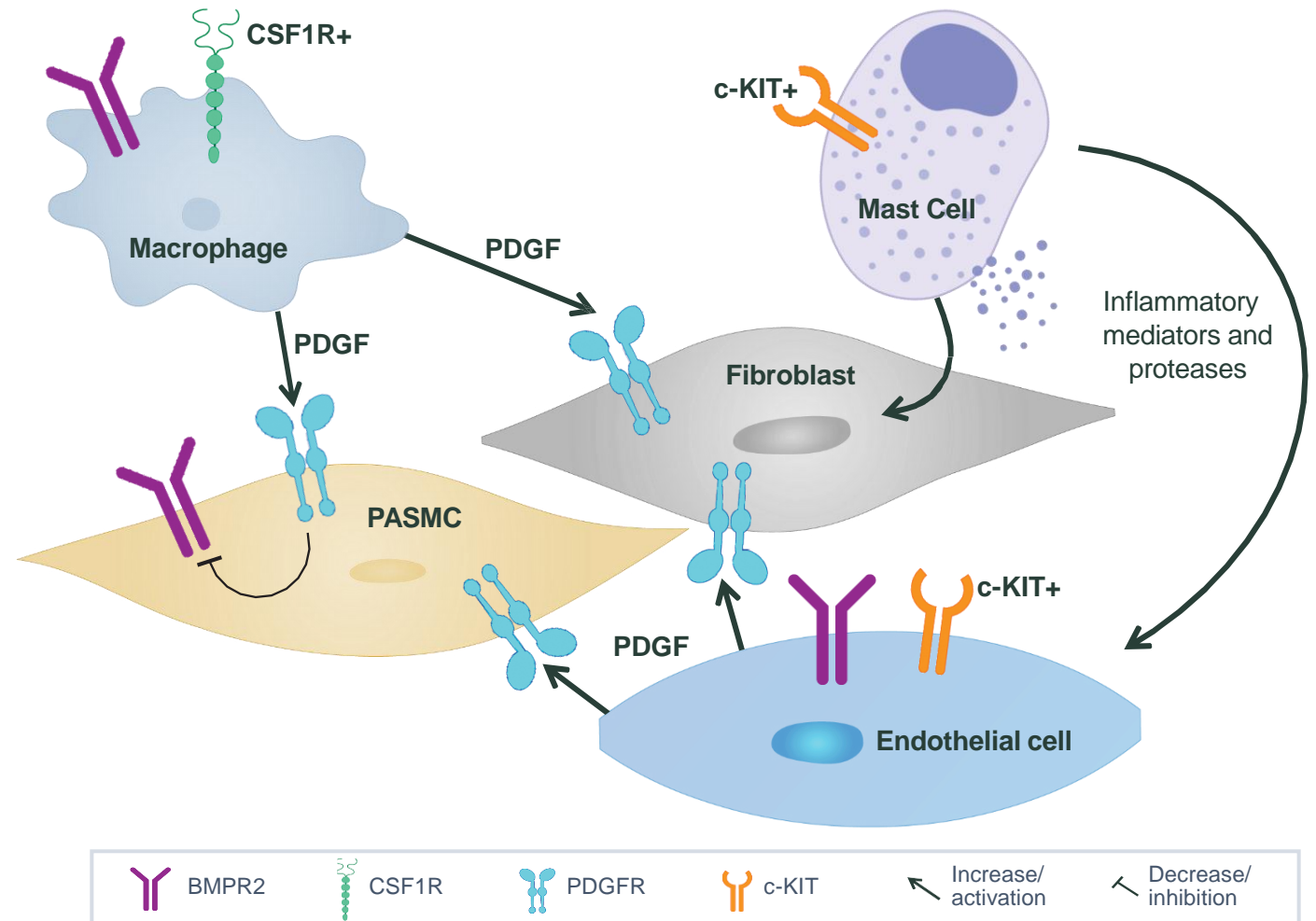
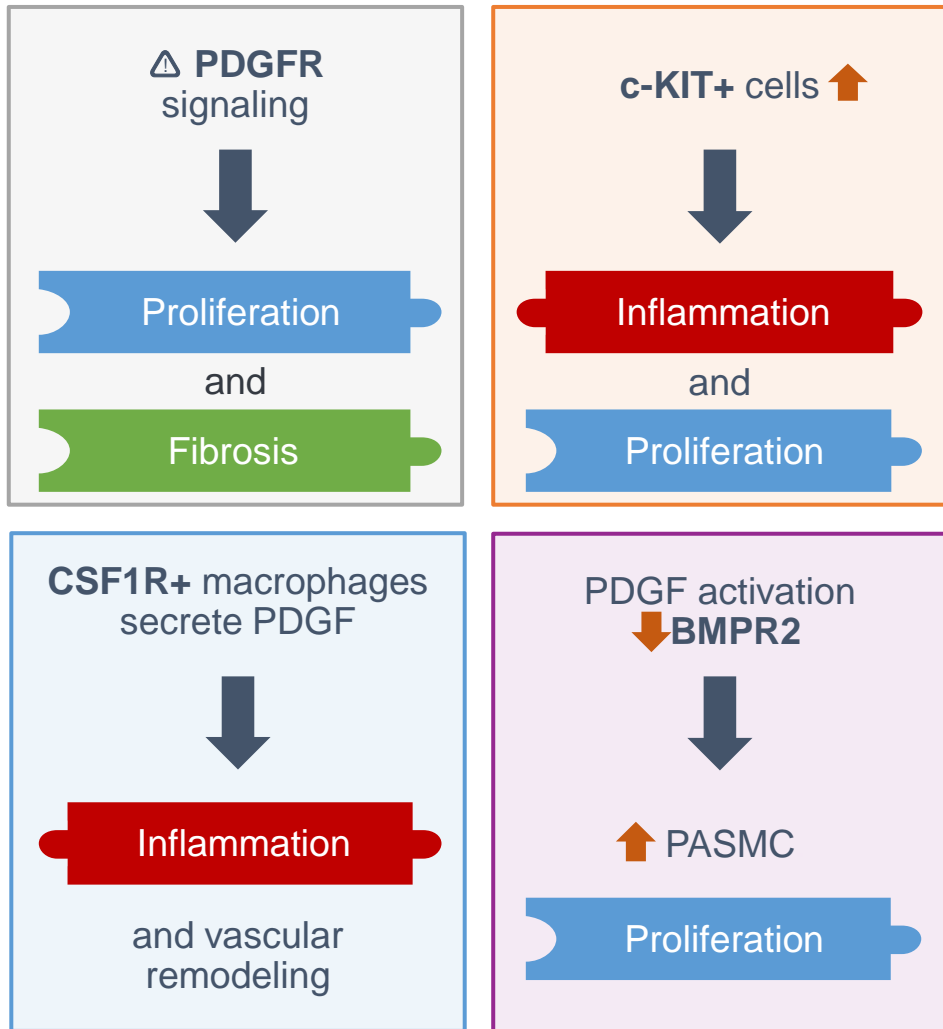
Principal of Convertible Notes Outstanding ~\$200mm  
*(As of 9/30/24; 5% annual interest; matures May 2027; conversion price: \$16.23)*

Common Shares Outstanding ~227mm  
*(As of 11/4/24)*

# Appendix

# Contributing Factors to Vascular Remodeling

*Role of PDGFR, CSF1R, c-KIT and Interactions with BMPR2*



# A Well-Suited Partner

- Global biopharmaceutical group with international R&D and commercialization infrastructure & operations, headquartered in Italy
- Over 85 years of experience, operations in >30 countries, >7,000 employees world-wide, including ~700 in R&D, and >€3 billion in revenue in 2023
- Chiesi's therapeutic focus perfectly aligns with serralutinib: AIR (respiratory disease), RARE (rare diseases), & CARE (specialty care, including cardiovascular disease)
- Global reach & areas of focus position Chiesi to enhance serralutinib's access to pulmonary hypertension (PH) patients across the globe



Encompasses products & services for the treatment of respiratory diseases among patients of all ages, from newborns to the elderly.

**Asthma • COPD • PAH • IPF**



Focusing on the treatment of patients living with rare or ultra-rare diseases.

**Rare Immunologic Diseases**



Combines products & services that support special care provided by medical professionals, as well as consumer healthcare/over the counter.

**Cardiovascular Diseases**

# Value of Partnership to Gossamer

Provides Adequate Capital & Global Commercial Partner for Investment in Commercial Launch of PAH

- Bolstered Gossamer cash balance
- Gossamer & Chiesi can confidently invest in commercial planning during PROSERA study (expected Q4:25 topline readout)
- Chiesi is a global partner with significant commercial pulmonary & rare disease infrastructure

Accelerates Seralutinib into a Phase 3 Study in PH-ILD

- Pivotal Phase 3 Study in PH-ILD expected to begin in mid-2025, cutting years off potential development timeline
- Adds multi-billion-dollar peak sales opportunity in indication with high unmet medical need, strong biological rationale, & limited competition

Retained Strategic Optionality & Experienced, Motivated Partner

- Gossamer retains control over US commercialization & global development in PAH & PH-ILD
- Gossamer & Chiesi are committed to smart expansion into indications of unmet need that overlap with areas of expertise

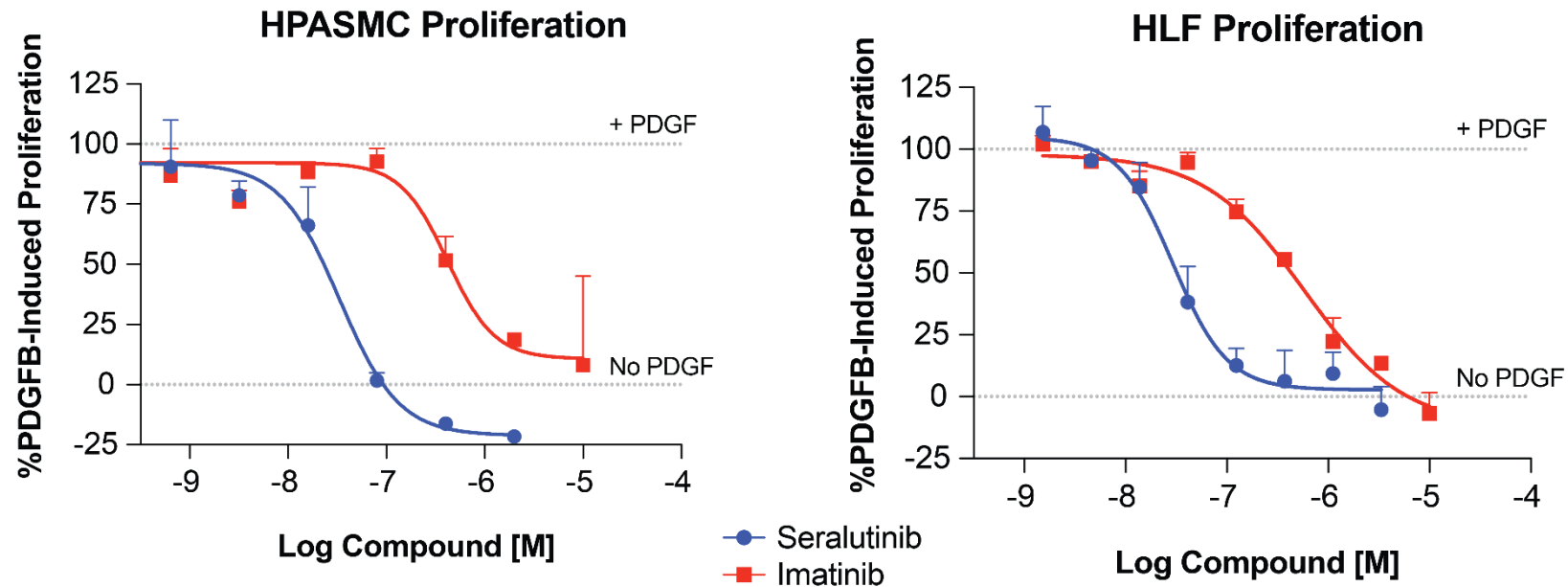


# Seralutinib In Vitro Profile

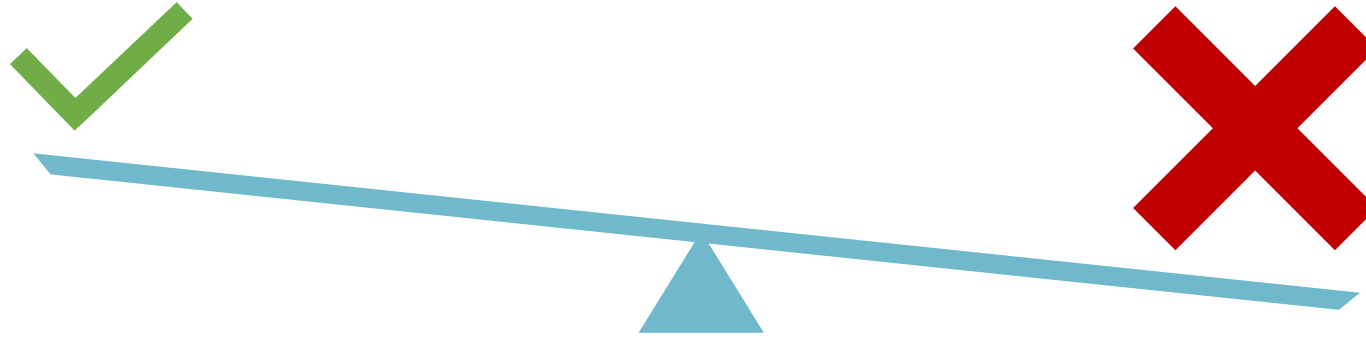
Seralutinib is a potent PDGFR, CSF1R and c-KIT inhibitor

Compound	Cell Based IC50 (nM)				
	H1703 PDGFR $\alpha$	HLF PDGFR $\beta>\alpha$	PASMC PDGFR $\alpha=\beta$	CSF1R	c-KIT
Seralutinib	32	29	33	8	8
Imatinib	62	579	419	1032	301

Seralutinib is highly potent in PASMC and HLF proliferation assays



# In the Phase 3 IMPRES Study of Imatinib in PAH, Safety Liabilities Outweighed Clinically Meaningful Efficacy



## Clinical Efficacy Results

Phase 3 IMPRES Study

- Primary Endpoint:
  - 6-Minute Walk Distance (6MWD)
  - 32-meter improvement (pbo-adj.)\*
- Secondary Endpoint:
  - Pulmonary Vascular Resistance (PVR)
  - 32% reduction (pbo-adj.)\*

## Clinical Safety / Tolerability

Phase 3 IMPRES Study

- Adverse Events:
  - High rate of GI side effects
  - 44% SAE rate for imatinib group
  - 8 subdural hematomas across study and extension
- Discontinuations:
  - 33% for imatinib group, with most occurring in first 8 weeks of trial

Source: Hoepfer M, et al. Circulation 2013;127(10), 1128–1138.

\*Statistically significant result.

SAE = serious adverse event; pbo = placebo; pbo-adj. = placebo-adjusted; GI = gastrointestinal.

# Seralutinib Employs Multiple Strategies to Mitigate Imatinib's Liabilities

## Molecule Specifically Designed for PAH

- Imatinib was developed & approved as an anti-cancer therapy
- Seralutinib utilized Phase 3 IMPRES learnings and targets underlying biology of PAH, including PDGFR $\alpha/\beta$ , CSF1R and c-Kit
- Seralutinib avoids c-ABL inhibition

## Improved Selectivity Against Targets of Interest

- Increased potency\* across target kinases v. imatinib
  - Increased potency against the PDGFR $\alpha$  isoform
  - Greater than ten-fold higher potency against PDGFR $\beta$ , c-Kit, and CSF1R

## Designed for Inhalation

- Inhalation limits systemic exposure to mitigate systemic AEs, while directly getting drug to site of disease
- As part of inhalation process, some drug product is inevitably swallowed
  - Swallowed / ingested drug can enter systemic concentration
  - Seralutinib designed to have limited oral bioavailability (~5%)

\*Based upon cell based IC50 assays. Source: Galkin et al. Eur Respir J 2022; 60: 2102356.  
AE = adverse event.

# TORREY Phase 2 - Baseline Demographics (ITT Population)

Characteristic	Placebo (N=42)	Seralutinib (N=44)	Total (N=86)
Age (years) – mean (SD)	49.5 (11.81)	48.3 (12.70)	48.8 (12.22)
Sex – n (%)			
Female	38 (90.5)	40 (90.9)	78 (90.7)
Male	4 (9.5)	4 (9.1)	8 (9.3)
Race – n (%)			
White	37 (88.1)	37 (84.1)	74 (86.0)
Black or African American	1 (2.4)	0	1 (1.2)
Asian	2 (4.8)	4 (9.1)	6 (7.0)
Other	2 (4.8)	3 (6.8)	5 (5.8)
Ethnicity – n (%)			
Hispanic or Latino	6 (14.3)	8 (18.2)	14 (16.3)
Not Hispanic or Latino	34 (81.0)	36 (81.8)	70 (81.4)
Not reported	2 (4.8)	0	2 (2.3)
Region – n (%)			
North America	30 (71.4)	29 (65.9)	59 (68.6)
Western Europe	10 (23.8)	11 (25.0)	21 (24.4)
Asia Pacific	1 (2.4)	4 (9.1)	5 (5.8)
Eastern Europe	1 (2.4)	0	1 (1.2)

ITT = Intention-to-treat; SD = standard deviation.

# TORREY Phase 2 - Baseline Background PAH Medication Use (ITT Population)

Characteristic	Placebo (N=42)	Seralutinib (N=44)	Total (N=86)
Number of background therapies – n (%)			
1	2 (4.8)	1 (2.3)	3 (3.5)
2	16 (38.1)	18 (40.9)	34 (39.5)
3	24 (57.1)	25 (56.8)	49 (57.0)
Prostacyclin/Prostacyclin Receptor Agonist use – n (%)			
None	13 (31.0)	15 (34.1)	28 (32.6)
Monotherapy	1 (2.4)	1 (2.3)	2 (2.3)
Double therapy	4 (9.5)	3 (6.8)	7 (8.1)
Triple therapy	24 (57.1)	25 (56.8)	49 (57.0)
Parenteral Prostacyclin	19 (45.2)	19 (43.1)	38 (44.2)
Oral	10 (23.8)	10 (22.7)	20 (23.3)

# TORREY Phase 2 - Baseline Disease Characteristics (ITT Population)

Characteristic	Placebo (N=42)	Seralutinib (N=44)	Total (N=86)
Age at PAH diagnosis (years) – mean (SD)	41.2 (11.65)	40.7 (15.84)	40.9 (13.87)
Years since PAH diagnosis – mean (SD)	8.78 (7.218)	8.07 (7.074)	8.41 (7.111)
PAH classification – n (%)			
Idiopathic	22 (52.4)	20 (45.5)	42 (48.8)
Heritable	5 (11.9)	10 (22.7)	15 (17.4)
Associated with:			
CTD	11 (26.2)	6 (13.6)	17 (19.8)
Anorexigen use	0	1 (2.3)	1 (1.2)
Methamphetamine use	4 (9.5)	4 (9.1)	8 (9.3)
Corrected congenital shunts	0	3 (6.8)	3 (3.5)
WHO FC – n (%)			
Class II	20 (47.6)	30 (68.2)	50 (58.1)
Class III	22 (52.4)	14 (31.8)	36 (41.9)
REVEAL 2.0 Risk Score ≥ 6 – n (%)	17 (40.5)	20 (45.5)	37 (43.0)
PVR (dyne*s/cm <sup>5</sup> ) – mean (SD)	661.3 (164.91)	675.8 (240.35)	668.7 (205.90)
6MWD (m) – mean (SD)	407.1 (107.02)	408.6 (75.11)	407.9 (91.54)
NT-proBNP (ng/L) – mean (SD)	645.6 (1158.75)	611.0 (714.58)	628.3 (956.83)

6MWD = six-minute walk distance; CTD = connective tissue disease; FC = functional class; NT-proBNP = N-terminal pro B-type natriuretic peptide; PAH = pulmonary arterial hypertension; PVR = pulmonary vascular resistance; WHO = World Health Organization; ITT = Intention-to-treat.

# TORREY Phase 2 - Baseline Demographics and Disease Characteristics *by Baseline WHO FC* (ITT Population)

Characteristic	Baseline WHO FC Class II			Baseline WHO FC Class III		
	Placebo (N=20)	Seralutinib (N=30)	Total (N=50)	Placebo (N=22)	Seralutinib (N=14)	Total (N=36)
Age (years) – mean (SD)	47.6 (11.69)	47.7 (13.42)	47.7 (12.63)	51.1 (11.94)	49.4 (11.40)	50.4 (11.60)
Female – n (%)	19 (95.0)	27 (90.0)	46 (92.0)	19 (86.4)	13 (92.9)	32 (88.9)
Race, White – n (%)	19 (95.0)	24 (80.0)	43 (86.0)	18 (81.8)	13 (92.9)	31 (86.1)
Region, North America – n (%)	13 (65.0)	20 (66.7)	33 (66.0)	17 (77.3)	9 (64.3)	26 (72.2)
Years since PAH diagnosis – mean (SD)	9.60 (7.262)	8.40 (6.961)	8.88 (7.034)	8.02 (7.263)	7.36 (7.527)	7.76 (7.266)
PAH classification – n (%)						
Idiopathic	11 (55.0)	16 (53.3)	27 (54.0)	11 (50.0)	4 (28.6)	15 (41.7)
Heritable	4 (20.0)	6 (20.0)	10 (20.0)	1 (4.5)	4 (28.6)	5 (13.9)
Associated with CTD	5 (25.0)	5 (16.7)	10 (20.0)	6 (27.3)	1 (7.1)	7 (19.4)
<b>REVEAL 2.0 Risk Score ≥ 6 – n (%)</b>	<b>4 (20.0)</b>	<b>11 (36.7)</b>	<b>15 (30.0)</b>	<b>13 (59.1)</b>	<b>9 (64.3)</b>	<b>22 (61.1)</b>
PVR (dyne*s/cm <sup>5</sup> ) – mean (SD)	638.3 (161.85)	689.9 (265.72)	669.3 (229.34)	682.2 (168.62)	645.7 (179.29)	668.0 (171.25)
<b>6MWD (m) – mean (SD)</b>	<b>455.5 (63.96)</b>	<b>425.5 (62.98)</b>	<b>437.5 (64.45)</b>	<b>363.2 (120.05)</b>	<b>372.4 (87.97)</b>	<b>366.8 (107.43)</b>
<b>NT-proBNP (ng/L) – mean (SD)</b>	<b>406.8 (798.39)</b>	<b>609.9 (715.31)</b>	<b>525.3 (749.58)</b>	<b>873.0 (1403.06)</b>	<b>613.3 (742.17)</b>	<b>773.7 (1187.34)</b>
On 3 background therapies – n (%)	11 (55.0)	18 (60.0)	29 (58.0)	13 (59.1)	7 (50.0)	20 (55.6)
ERA + PDE-5i + Prostacyclins/PRA	8 (40.0)	16 (53.3)	24 (48.0)	10 (45.5)	6 (42.9)	16 (44.4)
ERA + sGC + Prostacyclins/PRA	3 (15.0)	2 (6.7)	5 (10.0)	3 (13.6)	1 (7.1)	4 (11.1)

ITT = Intention-to-treat; SD = standard deviation; CTD = connective tissue disease; PVR = pulmonary vascular resistance; 6MWD = 6-minute walk distance; NT-proBNP = N-terminal pro B-type natriuretic peptide; WHO = World Health Organization; FC = Functional Class.