gossamerbio®

Corporate Presentation

August 2024

Forward Looking Statements

This presentation contains forward-looking statements. All statements other than statements of historical facts contained in this presentation, including statements regarding our future results of operations and financial position, business strategy, prospective products, product approvals, research and development costs, timing and likelihood of success, plans and objectives of management for future operations, and future results of current and anticipated products, are forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "contemplates," "believes," "estimates," "predicts," "potential" 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. These known risks and uncertainties are described in detail in our filings with the Securities and Exchange Commission (the "SEC") from time to time. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified and some of which are beyond our control, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise. 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 and we undertake no obligation to revise or update this presentation to reflect events or circumstances after the date hereof.

This presentation also contains estimates and other statistical data made by independent parties and by us relating to market size and growth and other data about our industry. 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.

I. Seralutinib Overview

Phase 3 Pulmonary Hypertension Program Partnered with Chiesi

PROGRAM	CLASS (Route of Admin.)	INDICATION	PHASE 1 / PHASE 2 / PHASE 3	Partner
Seralutinib (GB002)	PDGFR, CSF1R, c-KIT Inhibitor (Inhaled)	Pulmonary Arterial Hypertension (PAH)	**Ph. 3 PROSERA Study Ongoing** Completed Phase 2 TORREY Study Met Primary Endpoint Well-Tolerated	Chiesi • 50 / 50 US Profit Split • Gossamer to receive mid-to-high teens royalties on ex-US sales • $146mm regulatory & $180 sales milestones • Gossamer leads global development & US commercialization in PAH & PH-ILD
		Pulmonary Hypertension Associated with Interstitial Lung Disease (PH-ILD)	**Future Development** *Registrational Phase 3 Expected Mid-2025*	

Seralutinib is Poised to be a Potential Paradigm-Shifting Therapy in PAH

- **Seralutinib is a novel inhaled kinase inhibitor, currently in an ongoing registrational Phase 3 for the treatment of PAH**
- **In the Phase 2 TORREY study, seralutinib demonstrated statistically significant[3]:**
  - Reduction in pulmonary vascular resistance (PVR – primary endpoint)
  - Reduction in NT-proBNP, a biomarker of right heart strain
  - Changes in right heart structure & function
- **In an open-label extension study, seralutinib showed a continued reduction in PVR, with a near doubling of improvement from Week 24 to Week 72[4]**
- Seralutinib has been generally well tolerated to date
  - No reports of GI or CNS bleeding events[4]
- PROSERA Phase 3 study initiated Q4:23; topline results expected Q4:25
- Patent protection to 2039[5]; Orphan Drug Designation from FDA and EMA

~30-50K PAH patients in US[(1)]

Low long-term survival (5-year: 57%[2])

PAH = pulmonary arterial hypertension; NT-proBNP = N-terminal pro b-type natriuretic peptide; GI = gastrointestinal; CNS = central nervous system.

Note: Source: 1. Kirson, et al 2011, prevalence estimates vary widely across sources; 2. Chang et al, J Amer Heart Assoc 2022; 3. Frantz et al, Lancet Respiratory Medicine 2024; 4. Sitbon O et al. Am J Respir Crit Care Med 2024;209:A1011 5) 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 Has High Unmet Need & Significant Disease Burden

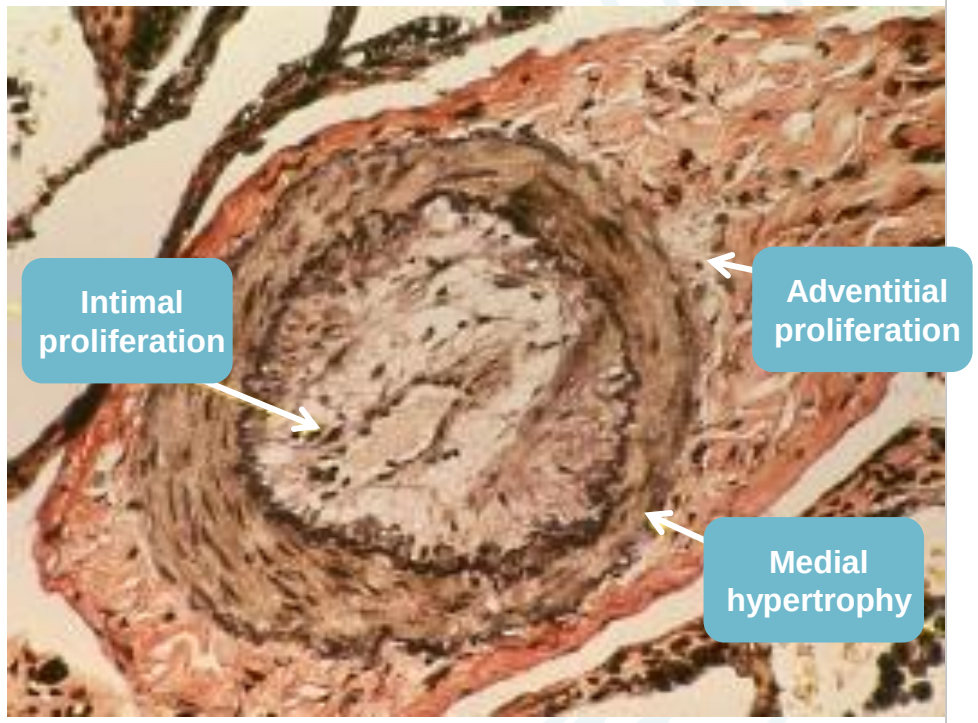
Pulmonary Arterial Hypertension (PAH)

- Rare, orphan disease
- 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 arteries in the lungs become narrowed, thickened and / or stiff as a result of pathological remodeling and vasoconstriction
- **Progressive disease and often fatal**
- **Heart works harder to pump blood to the lungs, potentially leading to right heart failure**

Symptoms

- Dyspnea
- Fatigue
- Dizziness
- Chest pressure / pain
- Edema in ankles, legs, abdomen
- Cyanosis
- Heart palpitations

PAH is Characterized by Vascular Remodeling



Muscular pulmonary artery from iPAH patient[1]

1) Gaine S and Rubin L: Lancet 1998; 352: 719-725.

Contributing Factors to Vascular Remodeling

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

⚠ PDGFR signaling

↓

Proliferation

and

Fibrosis

c-KIT+ cells ↑

↓

Inflammation

and

Proliferation

CSF1R+ macrophages secrete PDGF

↓

Inflammation

and vascular remodeling

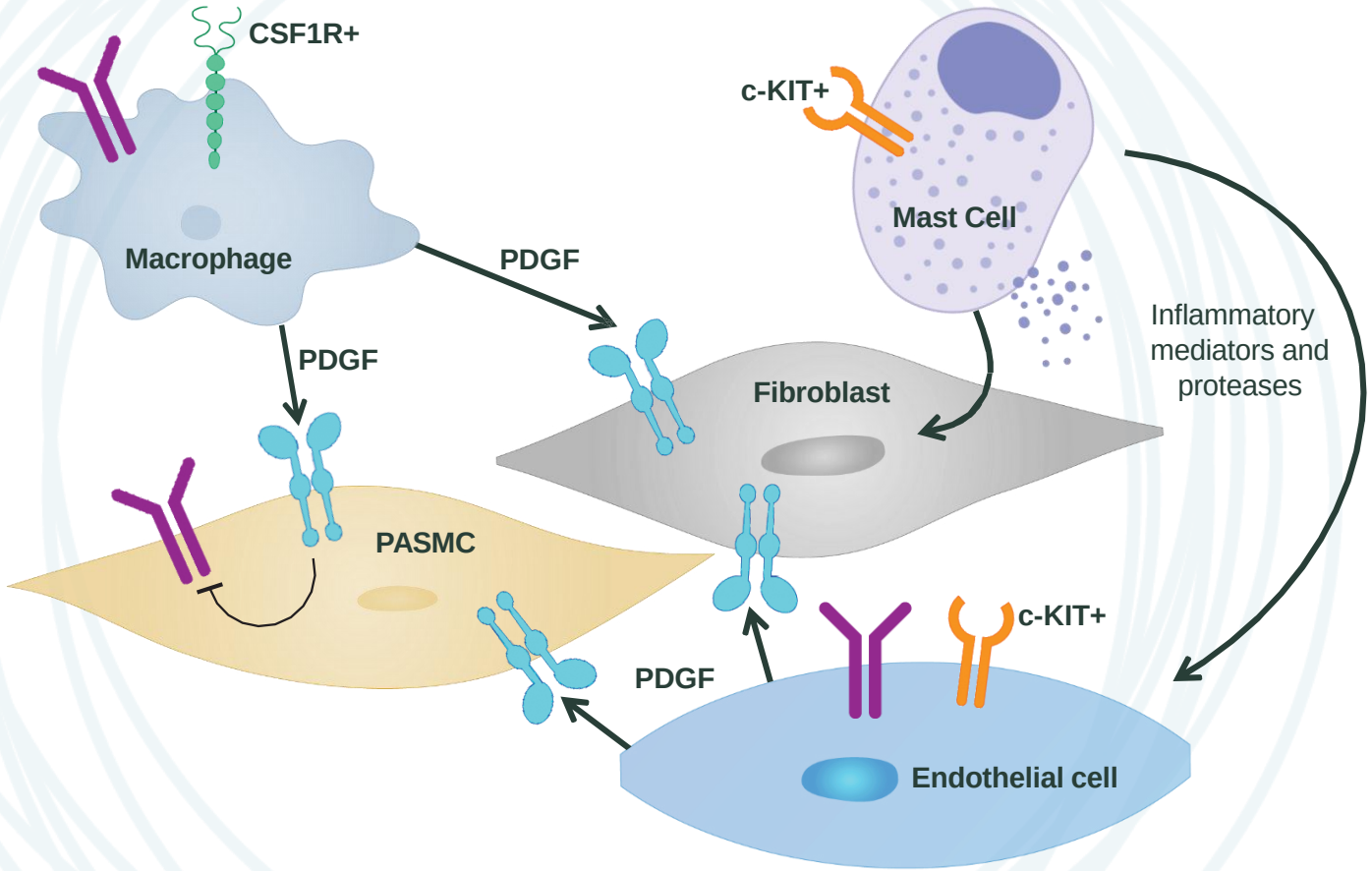
PDGF activation

↓**BMPR2**

↓

↑ PASMC

Proliferation



PDGFR = platelet derived growth factor receptor; CSF1R = colony stimulating factor 1 receptor; PASMC = pulmonary arterial smooth muscle cells.
Source: Galkin A et al. Eur Respir J 2022;60:2102356

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: Hoeper, et al. *Circulation*, 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 PDGFRα/β, 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 PDGFRα isoform
  - Greater than ten-fold higher potency against PDGFRβ, 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%)

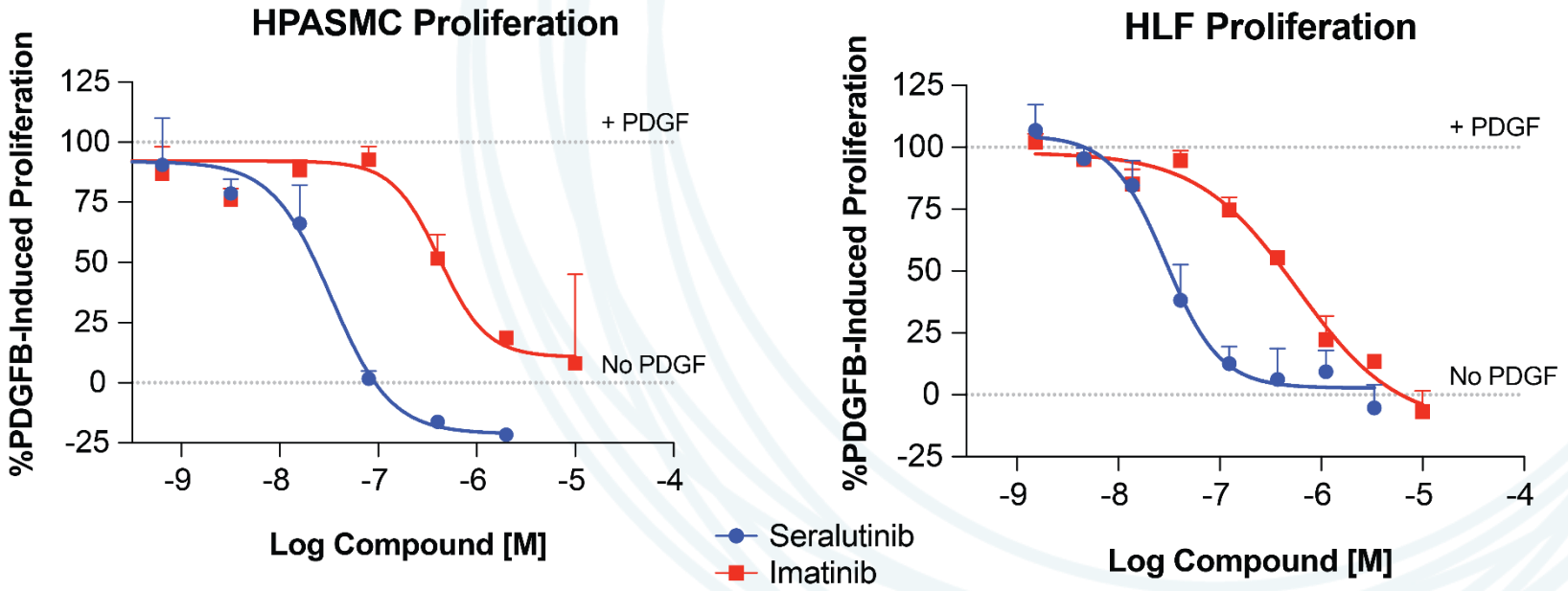
*Based upon cell based IC50 assays. Source: Galkin et al. Eur Respir J 2022; 60: 2102356.
AE = adverse event.

Seralutinib In Vitro Profile

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

Compound	Cell Based IC50 (nM)				
	H1703 PDGFRα	HLF PDGFβ>α	PASMC PDGFRα=β	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



HPASMC: human pulmonary arterial smooth muscle cell; HLF: human lung fibroblast
Source: Galkin et al. Eur Respir J 2022; 60: 2102356.

Seralutinib Utilizes Convenient Dry Powder Inhaler

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 seralutinib: AIR (respiratory disease), RARE (rare diseases), & CARE (specialty care, including cardiovascular disease)
- Global reach & areas of focus position Chiesi to enhance seralutinib's access to pulmonary hypertension (PH) patients across the globe

air

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

Asthma • COPD • PAH • IPF

rare

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

Rare Immunologic Diseases

care

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

Cardiovascular Diseases

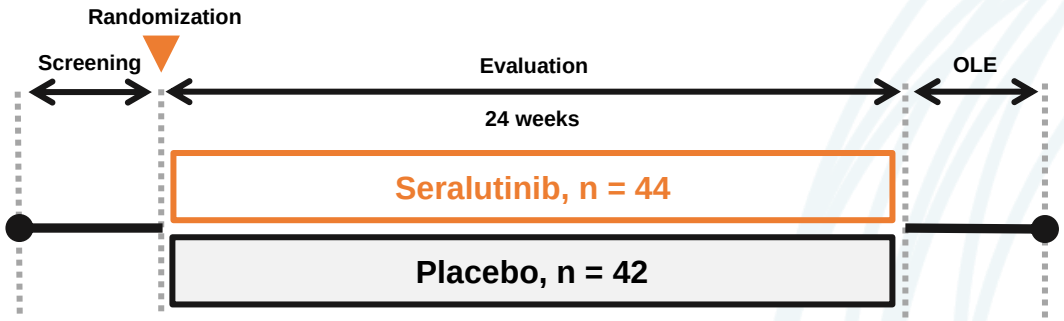
Value of Partnership to Gossamer

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

PAH = pulmonary arterial hypertension; PH-ILD = pulmonary hypertension associated with interstitial lung disease.

II. Completed TORREY Phase 2 Study

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



Patient Population	**Stable FC II & III PAH patients** on background therapy, including double & triple therapy
Endpoints	**Primary:** ΔPVR at Week 24 **Key Secondary:** Δ6MWD at Week 24† **Exploratory:** Includes NT-proBNP, Echo
Dosing Regimen	**Titrated up to 90mg BID** *(Started at 60mg BID; protocol allowed for down-titration to 45mg BID)*

TORREY STUDY

Enrolled relatively low-risk PAH patient population; most well-controlled PAH pop. to meet primary efficacy endpoint*

Met primary endpoint; seralutinib treatment benefit observed across primary, secondary and exploratory endpoints

Treatment well tolerated - vast majority of patients able to achieve and maintain 90mg BID dosing

*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.
FC = Functional Class; OLE = open label extension; PVR = pulmonary vascular resistance; 6MWD = six-minute walk distance; BID = twice-daily dosing.
Source: clinical trials.gov/NCT04456998
†Trial was not powered to demonstrate a statistically significant difference in 6MWD.

Selected Baseline Disease Characteristics

(ITT Population)

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)	**30 (68.2)**	50 (58.1)
Class III	**22 (52.4)**	14 (31.8)	36 (41.9)
PVR (dyne*s/cm^5) – 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)**

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^5 (1)

Full Baseline Characteristics Available in Appendix

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.

TORREY Study Phase 2 Topline Results

- **Met Primary Endpoint:** Statistically significant reduction in PVR in heavily-treated study population
- **Consistent, favorable PVR benefit seen in all pre-specified sub-groups** in favor of seralutinib with **enhanced effects in patients with more severe disease** at baseline§

	Overall Study Population			Pre-Specified TORREY Subgroups: Functional Class III			Pre-Specified TORREY Subgroups: REVEAL 2.0 Risk Score ≥ 6		
	PVR	NT-proBNP	6MWD	PVR	NT-proBNP	6MWD	PVR	NT-proBNP	6MWD
	-14%*	-408 ng/L*	+6.5m	-21%*	-527 ng/L*	+37.3m*	-23%*	-732 ng/L*	+21.9m
	p = 0.0310	p = 0.0012	p = 0.5972	p = 0.0427	p = 0.0055	p = 0.0476	p = 0.0134	p = 0.0002	p = 0.2482

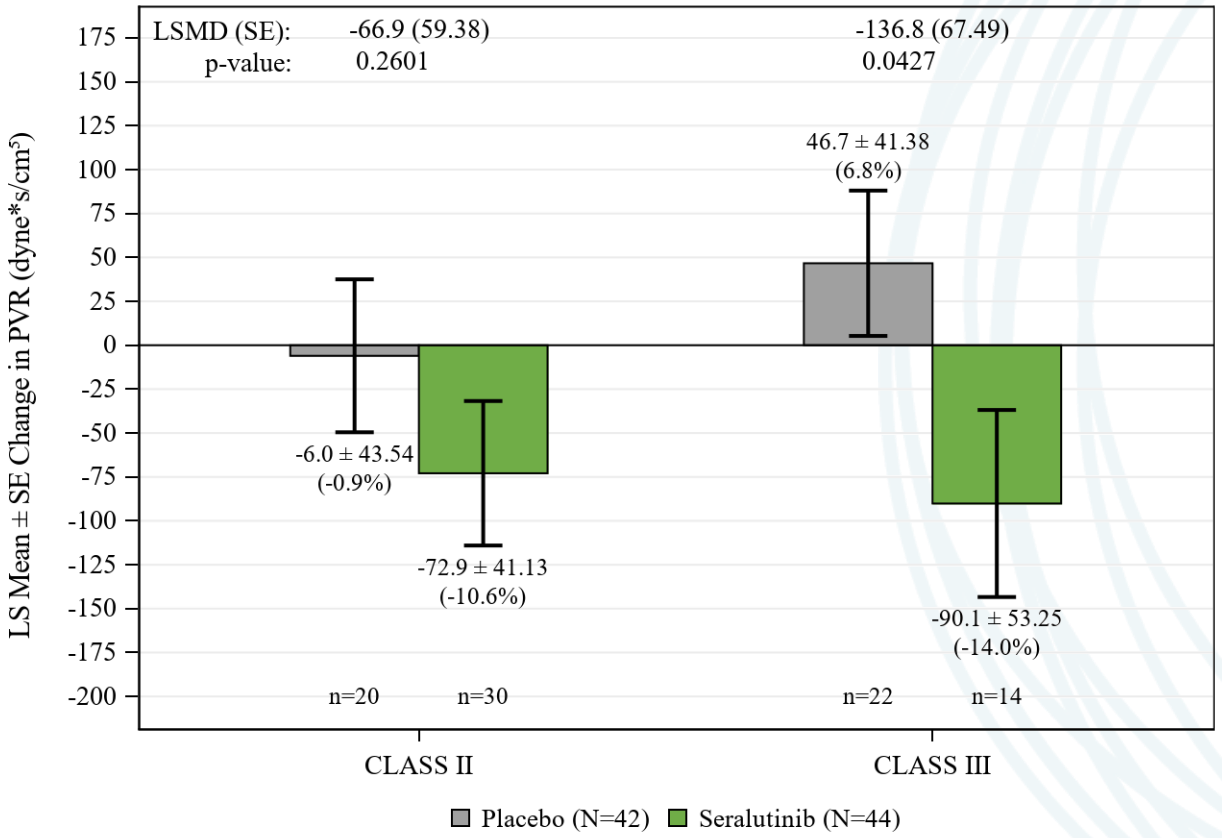
Primary Endpoint

- Consistently favorable results for hemodynamic and ECHO endpoints
- **Well-tolerated**, avoiding side effect profile associated with systemic imatinib in PAH

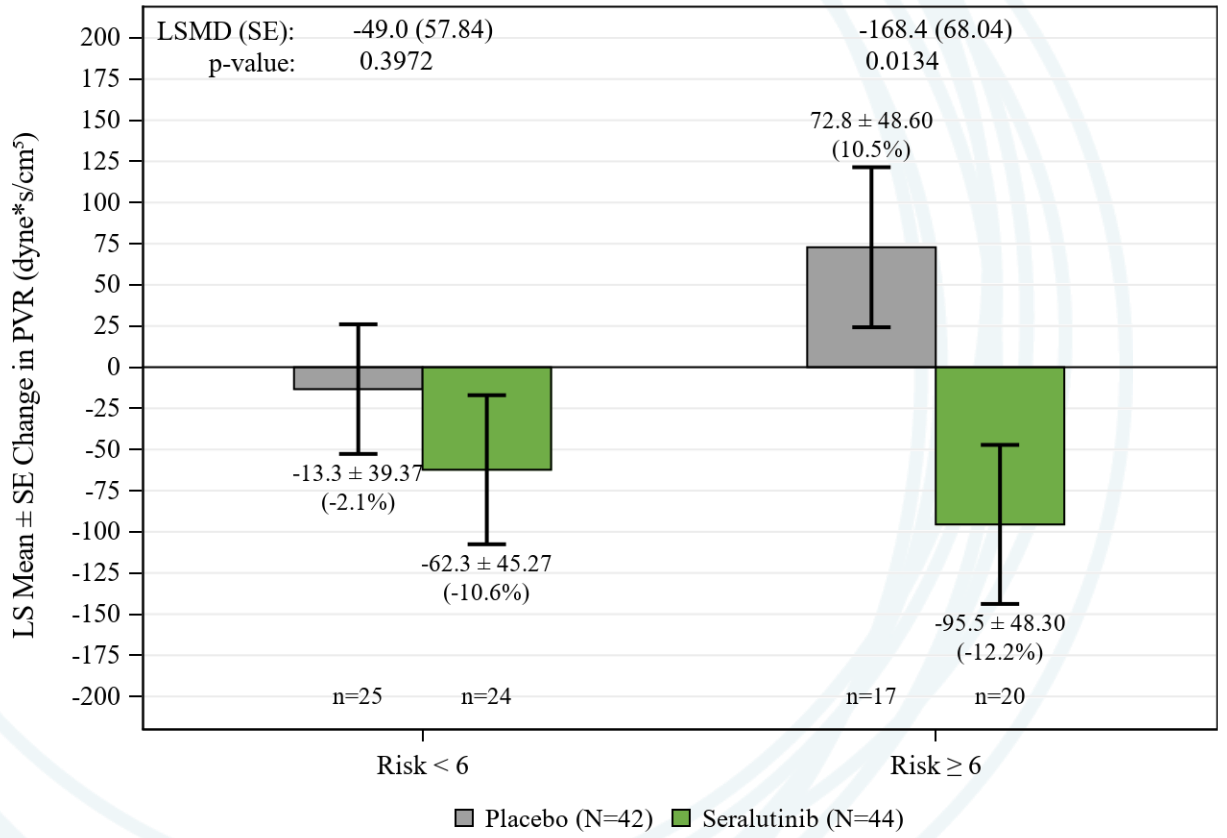
***** = p-value ≤ 0.05. All p-values in this presentation are nominal, aside from primary endpoint (overall study population delta in PVR).
§ At baseline, as determined by Functional Class and REVEAL 2.0 Risk Score (pre-specified subgroups).

Seralutinib's Effect on PVR was More Pronounced in Patients with More Severe Disease at Baseline (ITT Population)

WHO Functional Class
Change in PVR, by Functional Class



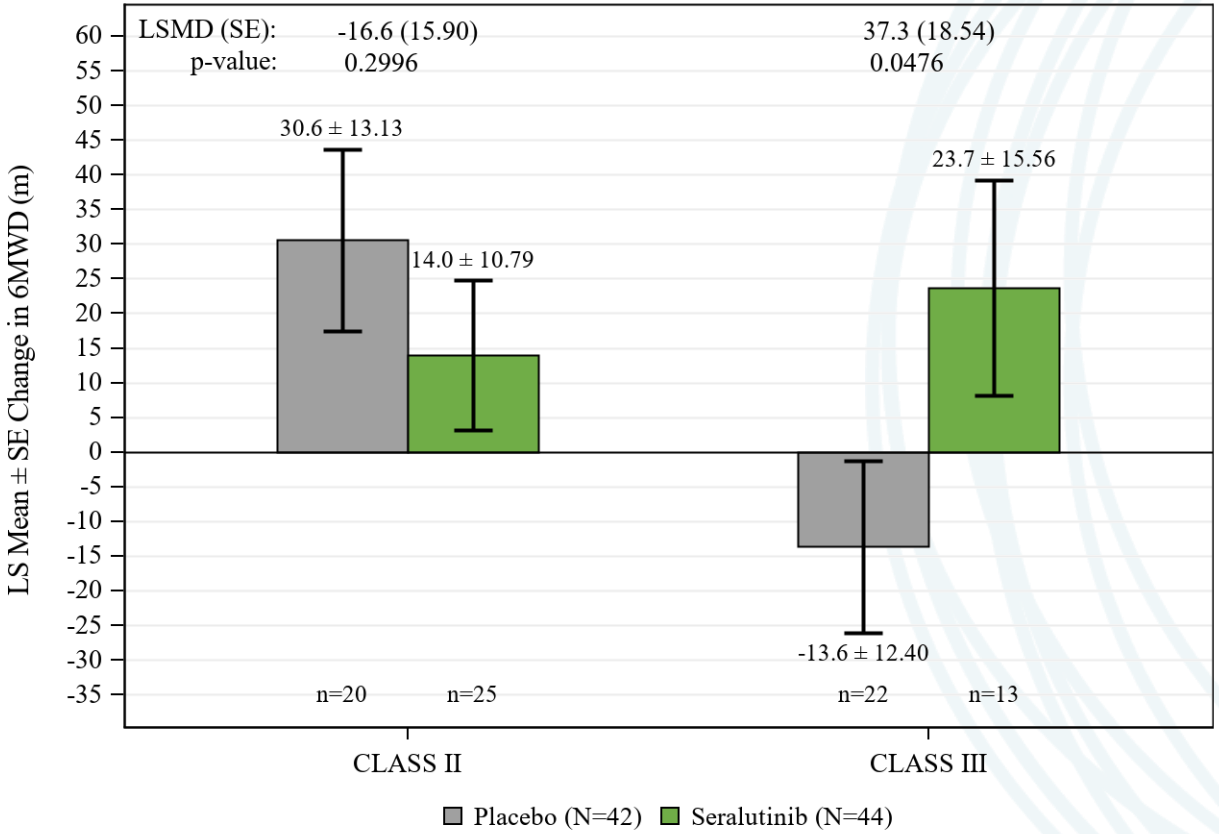
REVEAL 2.0 Risk Score
Change in PVR, by Risk Score



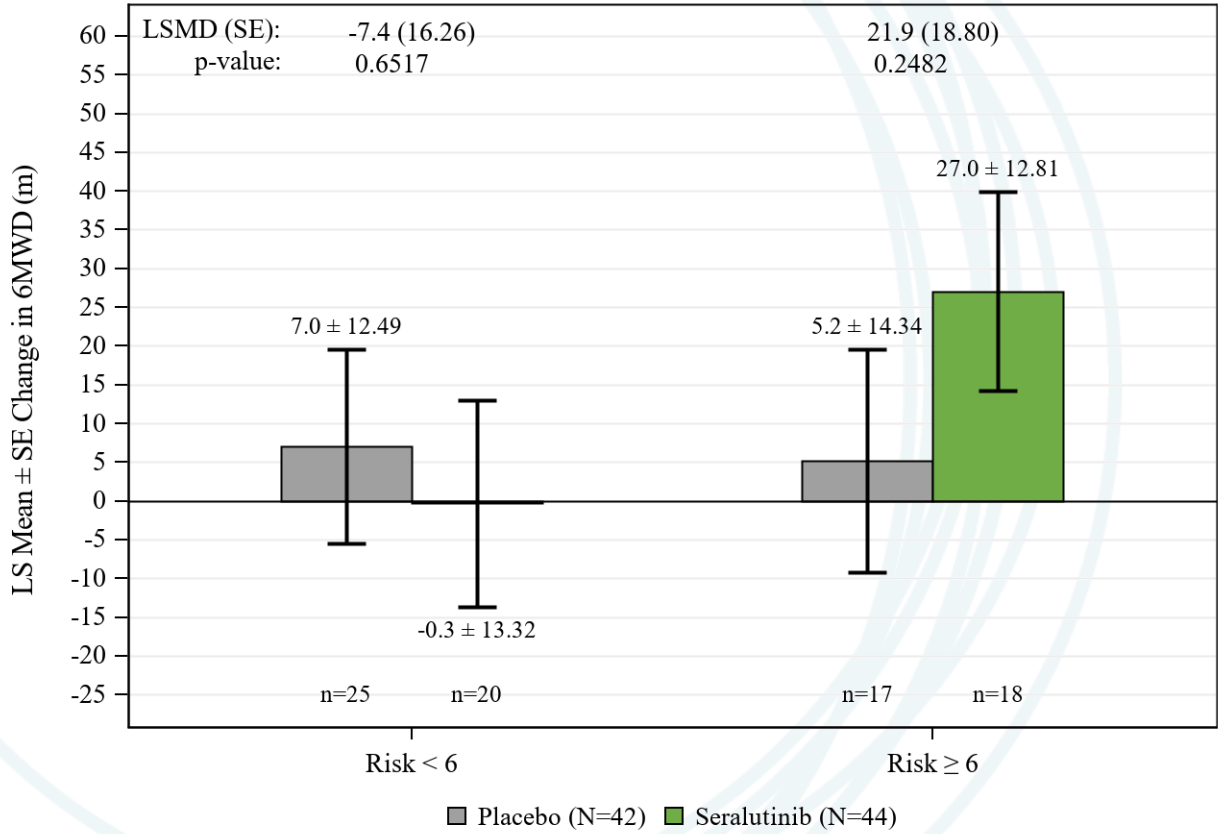
LS = least squares; LSMD = least squares mean difference; PVR = pulmonary vascular resistance; WHO = World Health Organization.
Based on ANCOVA modelling. Source: Data on file.

Change in 6MWD by Functional Class and REVEAL 2.0 Risk Score (ITT Population)

Functional Class
Change in 6MWD, by Functional Class

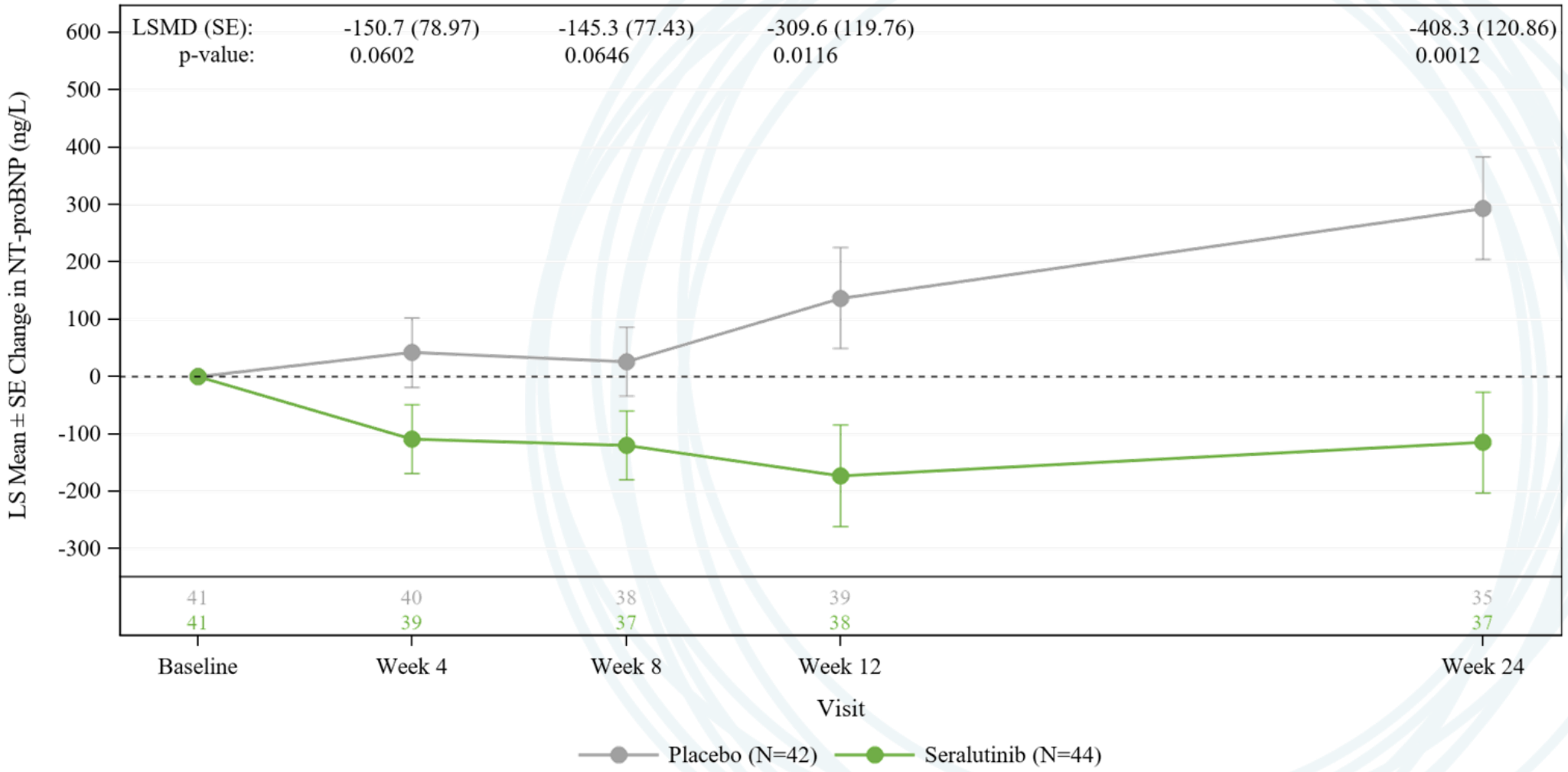


REVEAL 2.0 Risk Score
Change in 6MWD, by Risk Score



6MWD = six-minute walk distance; FC = Functional Class; LS = least squares; LSMD = least squares mean difference; MMRM = mixed-effects model with repeated measures; WHO = World Health Organization.
Based on MMRM modelling. Source: Data on file.

Seralutinib Treatment Led to Statistically Significant Reduction in NT-proBNP (ITT Population)



FC = functional class; LS = least squares; LSMD = least squares mean difference; MMRM = mixed-effects model with repeated measures; NT-proBNP = N-terminal pro B-type natriuretic peptide.
Based on a MMRM model. Source: Data on file.

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^2)	**-1.99 (-3.783, -0.206)**	✓	✓	**0.0293***
RV Free Wall Strain (%)	**-2.64 (-5.172, -0.098)**	✓	✓	**0.0420***
PA Compliance (mL/mmHg)	**0.22 (0.009, 0.423)**	✓	✓	**0.0410***
RV Systolic Pressure (mmHg)	-8.10 (-13.877, -2.317)	✓	✓	0.0067*
PA Systolic Pressure (mmHg)	-6.98 (-12.774, -1.187)	✓	✓	0.0189*
PA Diastolic Pressure (mmHg)	-3.43 (-6.211, -0.643)	✓	✓	0.0165*
RV Fractional Area Change	2.62 (-1.405, 6.652)		✓	0.1983
PVR index (dyne*s/cm^5/m^2)	-160.42 (-333.970, 13.138)		✓	0.0695
mRAP (mmHg)	-0.99 (-2.350, 0.367)		✓	0.1503
Stroke Volume Index (mL/m^2)	2.19 (-0.917, 5.299)		✓	0.1644
Cardiac Index (L/min/m^2)	0.13 (-0.100, 0.359)		✓	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.
Source: Data on file.

Top AEs From Imatinib IMPRES Study Not Observed at High Incidence in TORREY

Preferred Term [a]	IMPRES Study (Phase 3) Imatinib		TORREY Study (Phase 2) Seralutinib	
	Placebo (N=98)	Imatinib (N=103)	Placebo (N=42)	Seralutinib (N=44)
Nausea	23 (24)	57 (55)	6 (14)	5 (11)
Peripheral edema [b]	20 (20)	45 (44)	1 (2)	2 (5)
Diarrhea	19 (19)	36 (35)	3 (7)	6 (14)
Vomiting	10 (10)	31 (30)	3 (7)	2 (5)
Periorbital edema [c]	7 (7)	30 (29)	0 (0)	1 (2)
Dyspnea	13 (13)	19 (18)	5 (12)	4 (9)
Hypokalemia	3 (3)	16 (16)	1 (2)	2 (5)
Anemia	3 (3)	14 (14)	0 (0)	1 (2)
Face edema [d]	1 (1)	10 (10)	0 (0)	1 (2)
Muscle spasms	2 (2)	10 (10)	0 (0)	1 (2)

AE = adverse event; MedDRA = Medical Dictionary for Regulatory Activities; PT = preferred term.
Note: AEs in IMPRES with an incidence ≥ 10% in Imatinib and ≥5% higher in Imatinib than Placebo are summarized for both IMPRES and TORREY.
Note: The above tables are for illustrative purposes only and are not a head-to-head comparison. Differences exist between study designs and methodologies, and caution should be exercised when comparing data across studies.
[a] Coded using MedDRA (v 24.0 in TORREY).
[b] Includes AE PTs of oedema, oedema peripheral, and peripheral swelling in TORREY.
[c] Includes AE PT of periorbital edema in IMPRES and AE PT of periorbital swelling in TORREY.
[d] Includes AE PT of face edema in IMPRES and AE PT of swelling face in TORREY.
Source: Data on file.

Incidence of TEAEs by Preferred Term: ≥ 5% in Seralutinib (Safety Population)

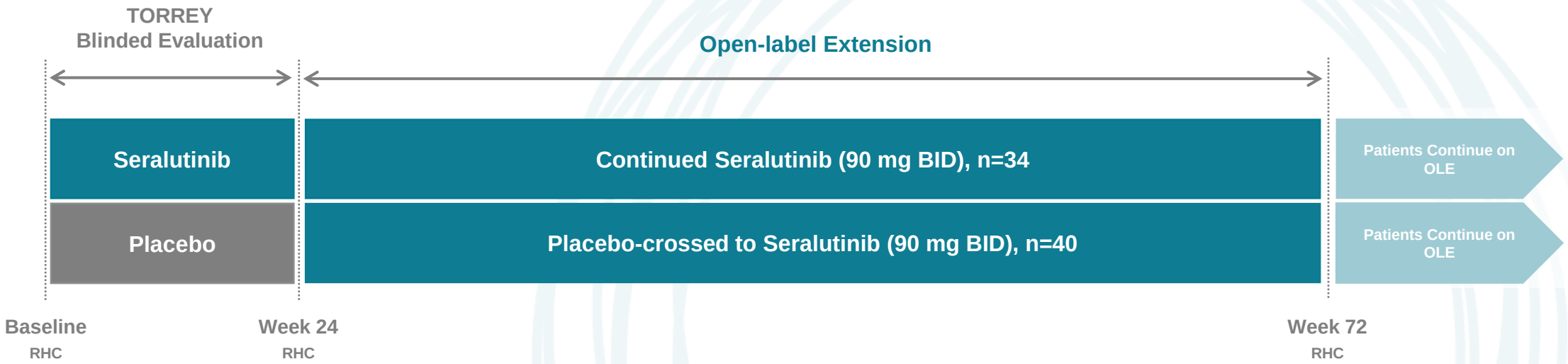
Preferred Term[a]	Placebo (N=42)	Seralutinib (N=44)
Number of subjects with a TEAE	36 (85.7)	41 (93.2)
Cough	16 (38.1)	19 (43.2)
COVID-19	7 (16.7)	6 (13.6)
Diarrhea	3 (7.1)	6 (13.6)
Headache	8 (19.0)	6 (13.6)
Dizziness	2 (4.8)	5 (11.4)
Fatigue	3 (7.1)	5 (11.4)
Nausea	6 (14.3)	5 (11.4)
Dyspnea	5 (11.9)	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.
[a] Coded using MedDRA v 24.0
Source: Data on file.

III. Ongoing TORREY OLE Trial

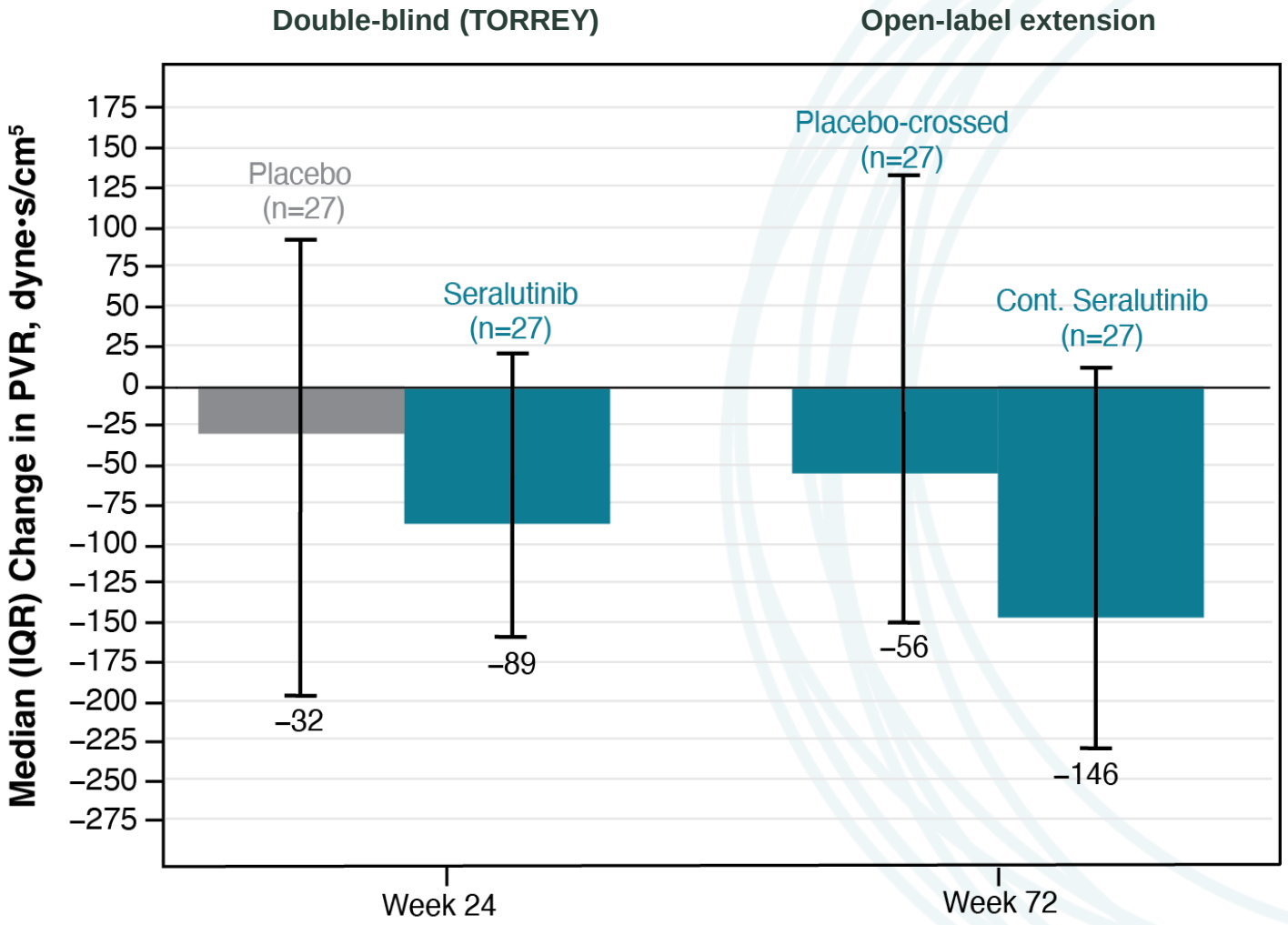
Ongoing TORREY Open-Label Extension



- 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

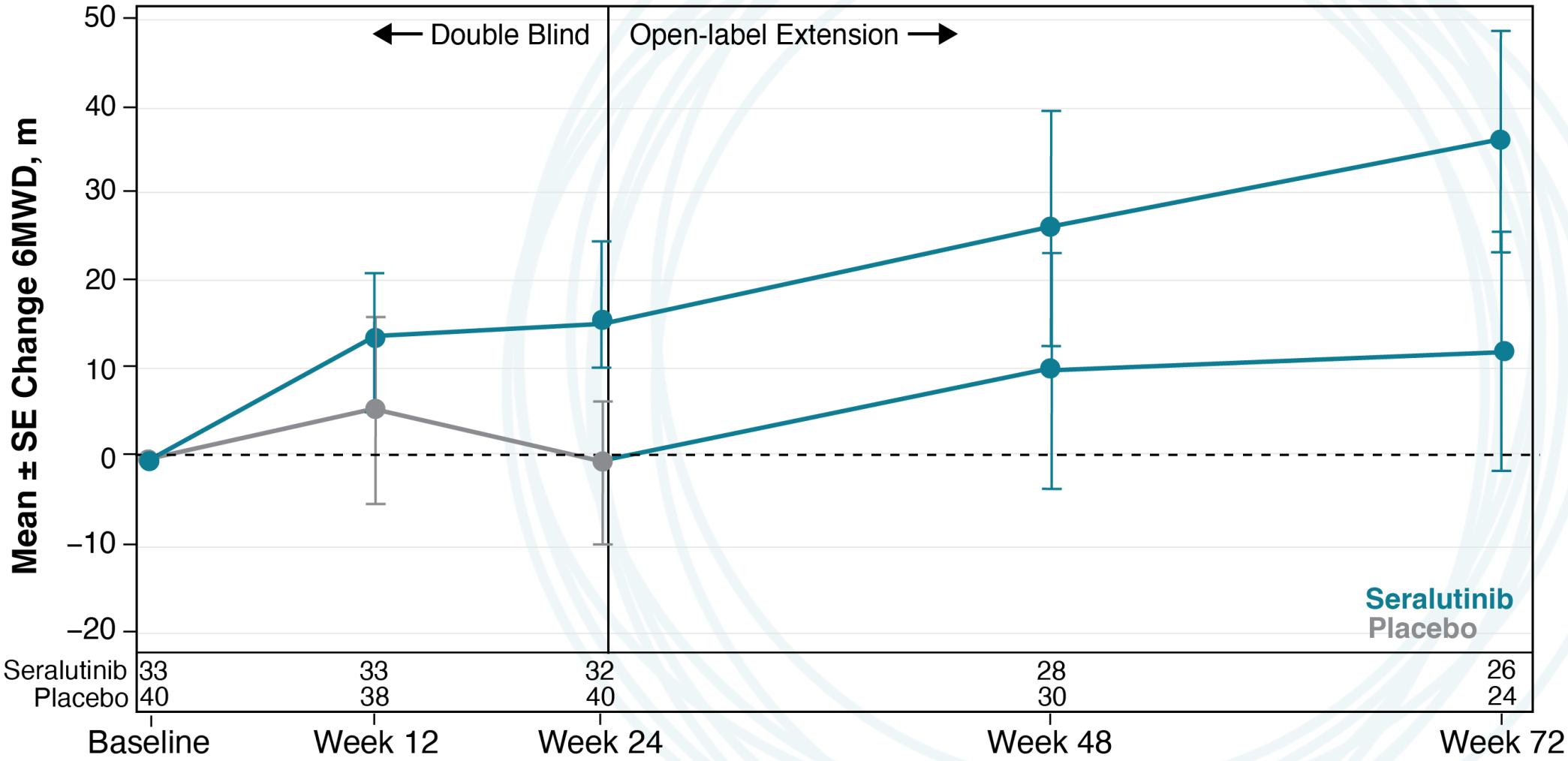


Median PVR Values, dyne*s/cm^5

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

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

Favorable Safety and Tolerability Observed

- No new safety signals associated with TKIs
- Seralutinib was generally well tolerated during the OLE treatment period

Incidence of TEAEs by preferred term: ≥ 10%

	Total (N=74)
Subjects with a TEAE, n (%)	**71 (95.9)**
Headache	19 (25.7)
Cough	18 (24.3)
COVID-19	17 (23.0)
Diarrhoea	15 (20.3)
Dyspnoea	13 (17.6)
Nausea	13 (17.6)
Nasopharyngitis	10 (13.5)
Arthralgia	9 (12.2)
Fatigue	8 (10.8)
Pyrexia	8 (10.8)
Rash	8 (10.8)

Note: OLE study is ongoing. Data are reflective of the database as of March 4, 2024.
AE = adverse event; OLE = open-label extension; TEAE = treatment-emergent adverse event; TKI = tyrosine kinase inhibitor.
Source: https://www.gossamerbio.com/wp-content/uploads/Poster-ATS24b.pdf

IV. Ongoing Phase 3 PROSERA Study

Ongoing PROSERA Phase 3 Study

PROSERA STUDY

Screening (up to 4 weeks)

Double Blind Placebo-Controlled Treatment Period (24 weeks)

Extended Double Blind Treatment Period (up to an additional 24 weeks)*

Seralutinib 90mg BID + Background PAH Therapy
N = 175

Placebo BID + Background PAH Therapy
N = 175

Week 24

Week 48

Primary Endpoint (6MWD) Evaluated at Week 24

Open-Label Extension (OLE)

Subjects who complete Week 24 who experience a clinical worsening event may proceed directly to OLE

PROSERA Key Inclusion Criteria

- Adults ≥ 18 and ≤ 75 years old
- WHO Group 1 PAH
- WHO Functional Class II or III
- PVR ≥ 400 dyne•s/cm^5
- Baseline 6MWD 150 - 475m*
- Either REVEAL Lite 2 Risk Score ≥ 5 **or** NT-proBNP ≥ 300 ng/L **or** PVR ≥ 800 dyne•s/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

V. Seralutinib in PH-ILD

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

- WHO Group 3 PH is pulmonary hypertension due to 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[2])**

~60-100K PH-ILD patients in US[(1)]

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 et al, J Heart Lung Transplant 2017.
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

TORREY STUDY

- 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
  - No approved therapies in EU or Japan
- 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

PH-ILD = pulmonary hypertension due to instertital lung disease; PAH = pulmonary arterial hypertension; PVR = pulmonary vascular resistance; NT-proBNP = N-terminal pro b-type natriuretic peptide; 6MWD = six-minute walk distance; BL = baseline. *TORREY Study pre-specified subgroup.

Seralutinb MoA Aligned with Underlying Pathophysiology of Group 3 PH

Disease Process	Cell Type / Mechanism	Potentially Relevant Pathway
Vascular Inflammation	Macrophages & ECs	• CSF1R • KIT
Vascular fibrosis	Fibroblasts / myofibroblasts	• PDGFR
Pulmonary vasculopathy (plexiform lesions)	Endothelial-to-mesenchymal transition	• PDGFR
Pulmonary arteriolar hypertrophy / hyperplasia	Pulmonary arteriole vascular smooth muscle cells	• PDGFR • BMPR2
Parenchymal interstitial lung inflammation & fibrosis	Fibroblasts	• PDGFR • CSF1R
	Epithelial-to-mesenchymal transition	• PDGFR
Shunt/hypoxia	V/Q mismatch	• Multiple

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

Source: Dotan, et al., BMC Open Res 2020; Yang, et al., Cell 2006; Song, et al., Cellular Signaling 2016; Wynn, J Pathol 2008; Tsutsumi, et al., PLoS One 2019.

PH-ILD Presents a Significant Market Opportunity

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

Patients living with PH-ILD are deeply underserved

1. Kirson, et al 2011, prevalence estimates vary widely across sources; 2. Chang et al, J Amer Heart Assoc 2022; 3. Based on internal company estimates. Prevalence estimates of PH-ILD indicate the patient population is likely to be 1-2 times that of PAH. 4. Gall et al, J Heart Lung Transplant 2017

Financial Overview

Financial Overview

Cash, Cash Equivalents and Marketable Securities *(As of 6/30/24)*	~$354mm
Principal of Convertible Notes Outstanding *(As of 6/30/24; 5% annual interest; matures May 2027; conversion price: $16.23)*	~$200mm
Common Shares Outstanding *(As of 8/7/24)*	~226mm

mm = millions.

Appendix

gossamerbio

FLUIDDA CT Sub-Study in Phase 2 TORREY Study: Assessing Pulmonary Vascular Remodeling in Patients Treated on Seralutinib

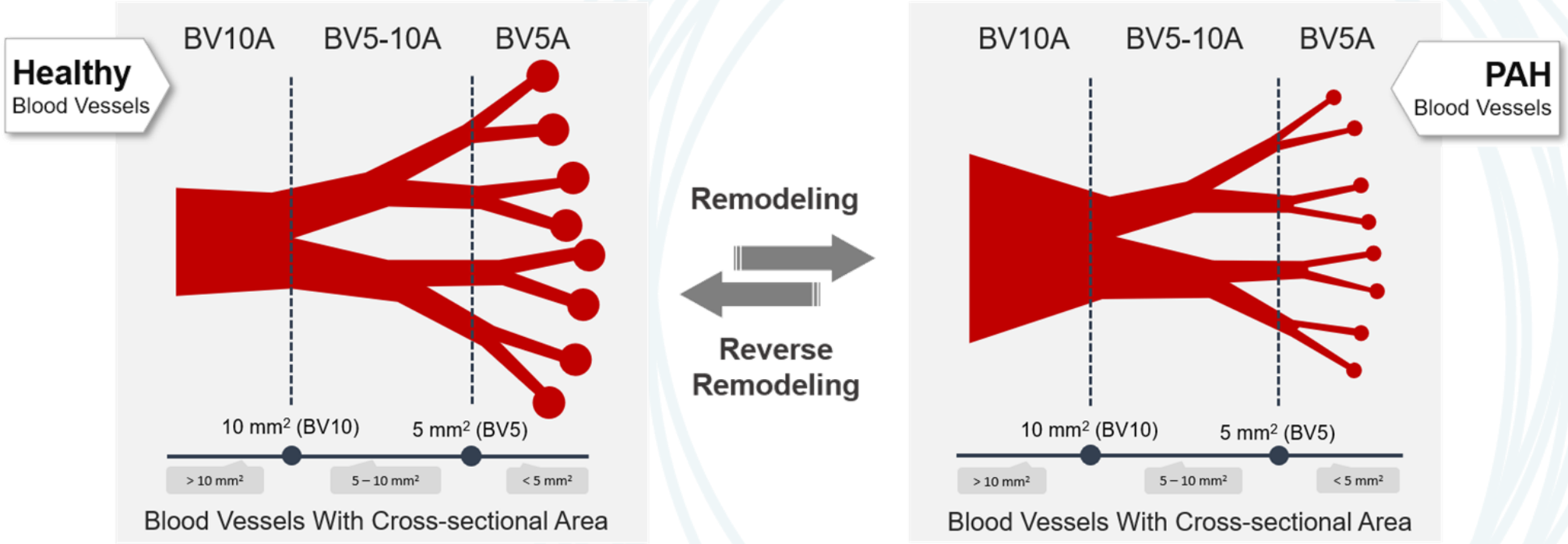
- **Purpose:** Provide evidence consistent with a reverse remodeling effect of seralutinib
- **Hypothesis:** volume of distal pulmonary arteries relative to volume of proximal pulmonary arteries will be increased by seralutinib as expressed by the ratio of BV5A to BV10A (BV510ARatio)
- **Available data:** Baseline and Week 24 HRCTs with pulmonary vascular reconstruction in 7 seralutinib-treated subjects and 12 placebo subjects

Thin Slice CTs with Pulmonary Vascular Segmentation at Baseline and Week 24

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"

CT = computerized tomography; HRCT = high resolution computerized tomography

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



CT imaging can quantify these changes: BV5A: BVV of pulmonary arteries with a CSA < 5 mm2; BV5-10A: BVV of pulmonary arteries with a CSA between 5-10 mm2; BV10A: BVV of pulmonary arteries with a CSA > 10 mm2; BV510ARatio: BV5A/BV10A

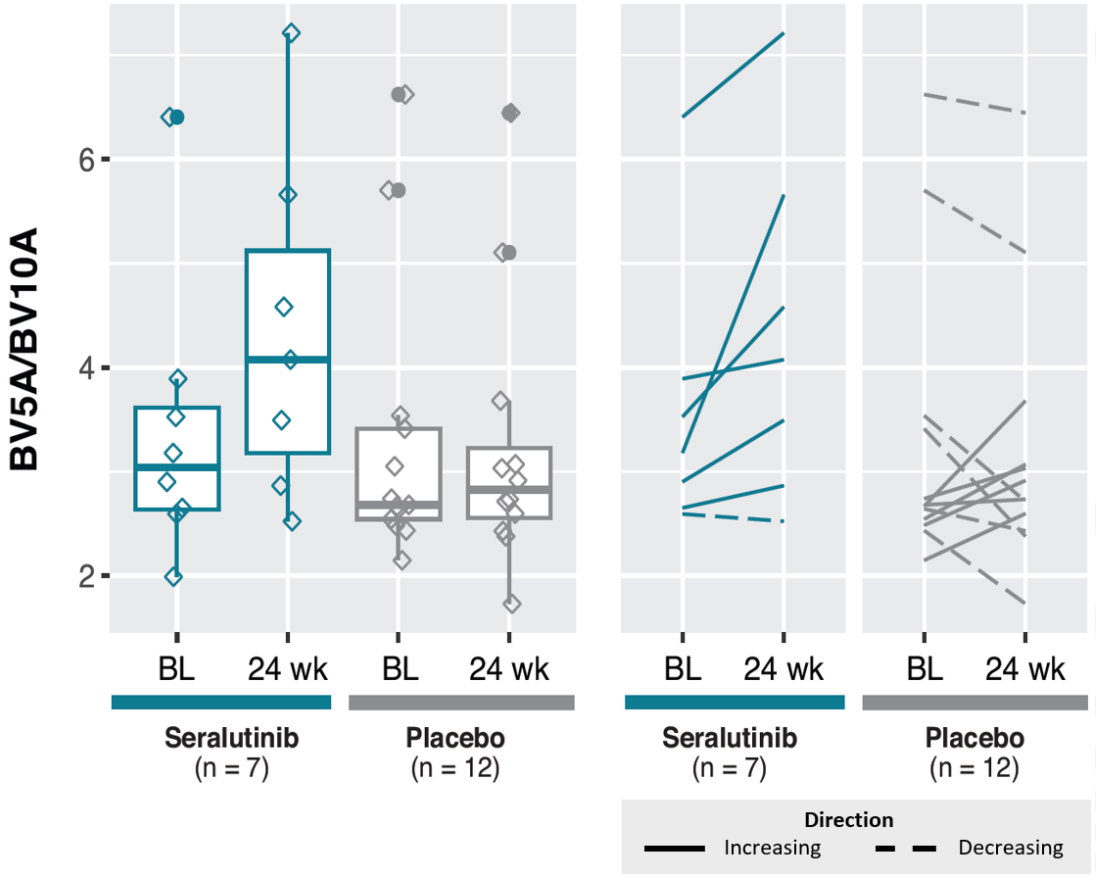
- Pulmonary vascular pruning on CT correlates with histologic pulmonary vascular remodeling[1]

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.[1] Illustration adapted from FLUIDDA, Inc.
BV5A, blood vessel volume (BVV) of pulmonary arteries with a cross-sectional area (CSA) < 5 mm²; BV5-10A: BVV of pulmonary arteries with a CSA between 5-10 mm²; BV10A: BVV of pulmonary arteries with a CSA > 10 mm²; BV510ARatio: BV5A/BV10A; CT, computed tomography; PAH, pulmonary arterial hypertension.

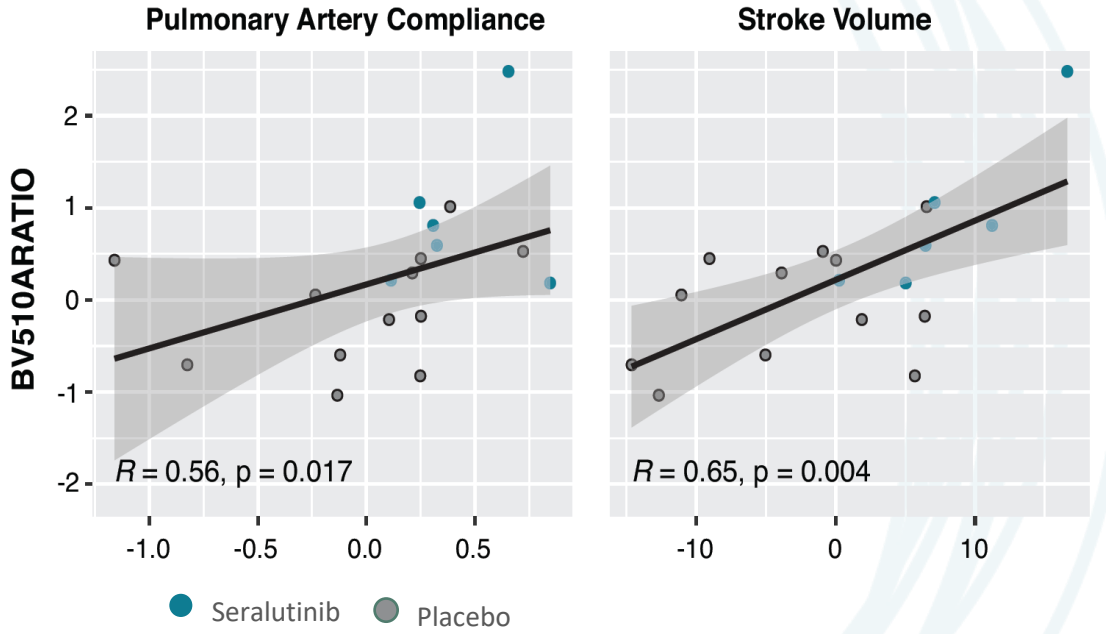
Seralutinib Treatment Increases the BV5A/BV10A Ratio & Supports Blood Volume Redistribution Hypothesis

Seralutinib increases BV5A/BV10A ratio

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

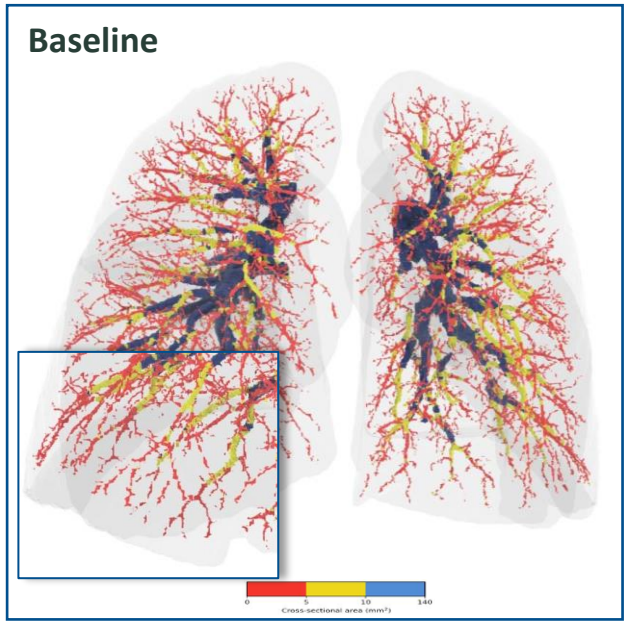


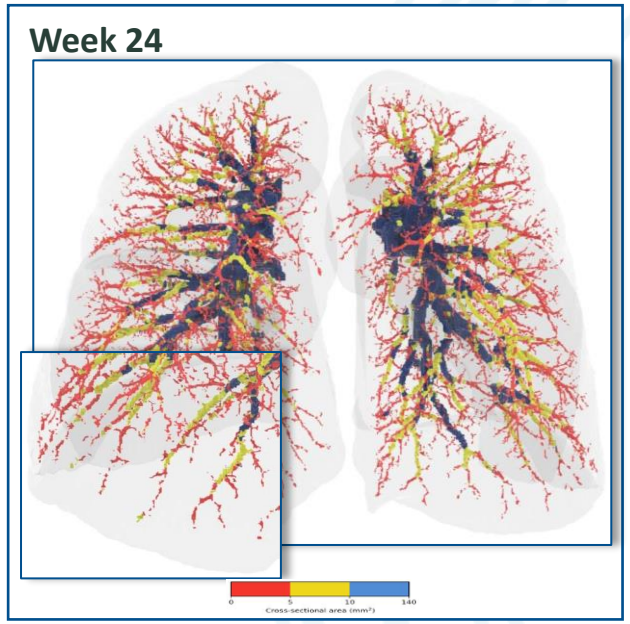
Change in BV5A/BV10A ratio from BL to Week 24 correlates with change in hemodynamics

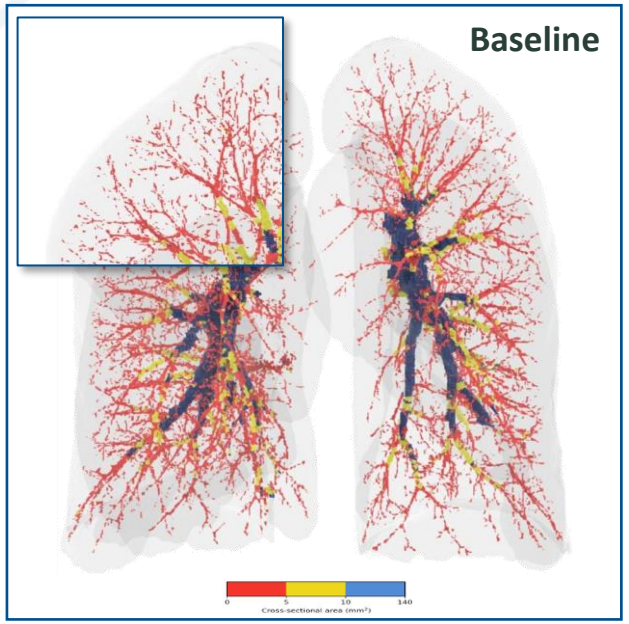


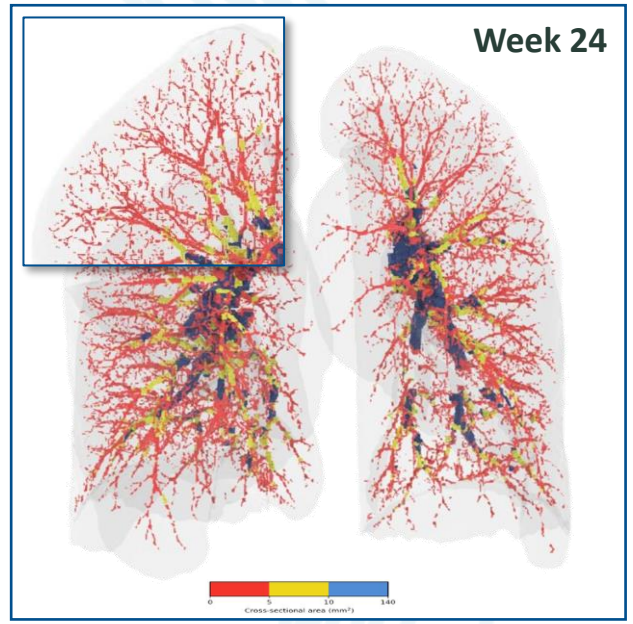
Linear regression models adjusted for BL values and treatment arm. BL = baseline; LSMD = least squares mean difference.

Examples of Imaging: Placebo vs. Seralutinib









Placebo patient	
Female, 24 y, iPAH, FC II, treated with PDE5-i + prostacyclin	
PVR change, dyne*s/cm^5 (%)	283 (+65.4)
ΔBV510ARatio (% change)	-0.70 (-28.9)

Seralutinib patient	
Female, 58 y, iPAH, FC II, treated with ERA + PDE5-i + prostacyclin	
PVR change, dyne*s/cm^5 (%)	-159 (-39.0)
ΔBV510ARatio (% change)	+2.5 (+78.0)

Insets represent 1.3x magnification. ΔBV510ARatio = change in BV5A/BV10A ratio; ERA = endothelin receptor antagonist; FC = Functional Class; iPAH = idiopathic pulmonary arterial hypertension; PDE5-i = phosphodiesterase 5 (PDE5) inhibitor; PVR = pulmonary vascular resistance.

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/Prostacycin 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)

ITT = Intention-to-treat.

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^5) – 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)

	Baseline WHO FC Class II			Baseline WHO FC Class III		
Characteristic	**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)
REVEAL 2.0 Risk Score ≥ 6 – n (%)	**4 (20.0)**	**11 (36.7)**	**15 (30.0)**	**13 (59.1)**	**9 (64.3)**	**22 (61.1)**
PVR (dyne*s/cm^5) – 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)
6MWD (m) – mean (SD)	**455.5 (63.96)**	**425.5 (62.98)**	**437.5 (64.45)**	**363.2 (120.05)**	**372.4 (87.97)**	**366.8 (107.43)**
NT-proBNP (ng/L) – mean (SD)	**406.8 (798.39)**	**609.9 (715.31)**	**525.3 (749.58)**	**873.0 (1403.06)**	**613.3 (742.17)**	**773.7 (1187.34)**
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.