Updated TORREY Interim OLE Results

December 2023

Study Ongoing – Final Results Subject to Change

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 risks, uncertainties and other factors include, without limitation: interim results of a clinical trial are not necessarily indicative of final results and one or more of the clinical outcomes may materially change as patient enrollment continues, following more comprehensive reviews of the data and as more patient data becomes available; potential delays in the commencement, enrollment, data readouts and completion of clinical trials; later developments with and / or feedback from global regulatory authorities or the FDA that may differ from prior feedback which may alter our PROSERA Phase 3 clinical trial design; our PROSERA Phase 3 trial may not support the registration of seralutinib; our dependence on third parties in connection with product manufacturing, research and preclinical and clinical testing; the results of clinical trials and preclinical studies are not necessarily predictive of future results; the success of our clinical trials for seralutinib is uncertain; regulatory developments in the United States and foreign countries; unexpected adverse side effects or inadequate efficacy of seralutinib that may limit its development, regulatory approval and/or commercialization, or may result in clinical holds, recalls or product liability claims; our ability to obtain and maintain intellectual property protection for seralutinib; our ability to comply with our obligations in collaboration agreements with third parties or the agreements under which we license intellectual property rights from third parties; we may use our capital resources sooner than we expect; and other risks described in our prior press releases and our filings with the Securities and Exchange Commission (SEC), including under the heading "Risk Factors" in our annual report on Form 10-K and any subsequent filings with the SEC. 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.

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.

Presenters on Today's Call

Speaker	Title
Faheem Hasnain	Chief Executive Officer, Chairman, Co-Founder
Richard Aranda, MD	Chief Medical Officer
Rob Roscigno, PhD	VP, Clinical Development
Bob Smith	Chief Commercial Officer
Bryan Giraudo	Chief Financial Officer, Chief Operating Officer

Notable New Gossamer Additions

John Quisel, PhD, JD

New Gossamer Bio Board Member

- **Current CEO of Disc Medicine**
- **Former EVP, Chief Business Officer of Acceleron Pharma**

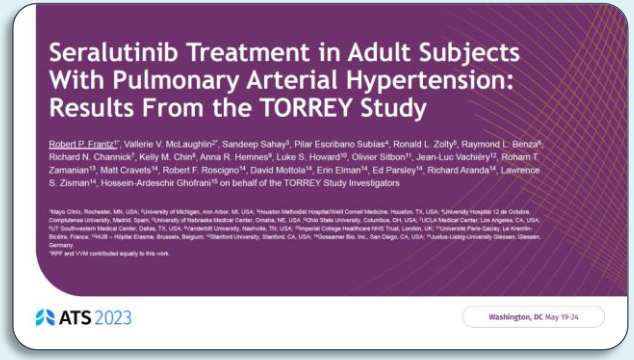
Bob Smith

Gossamer Bio Chief Commercial Officer

- **Former Sotatercept National Sales Lead at Merck**
- **Former SVP of Sales and Executive Leadership Team Member of Actelion**

Seralutinib Profile Continues to Mature

TORREY Topline Results

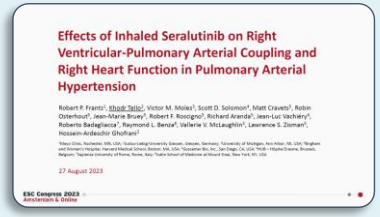


- ✓ Met Primary Endpoint of PVR reduction in overall study population
- ✓ Concordance of benefits across pre-specified subgroups
- ✓ Enhanced effects in pre-specified sub-groups with more severe disease
- ✓ Seralutinib was generally well-tolerated

December 2022 / May 2023

For More Information:
December 2022 Topline Readout
2023 ATS Presentation

Positive Impact on Right Heart



- ✓ Treatment effects support improved RV-PA coupling and right heart function

August 2023

For More Information:
2023 ESC Presentation

Potential Pulmonary Vasculature Remodeling

- ✓ Significant redistribution of PA blood vessel volume to smaller vessels

September 2023

For More Information:
2023 ERS Presentation

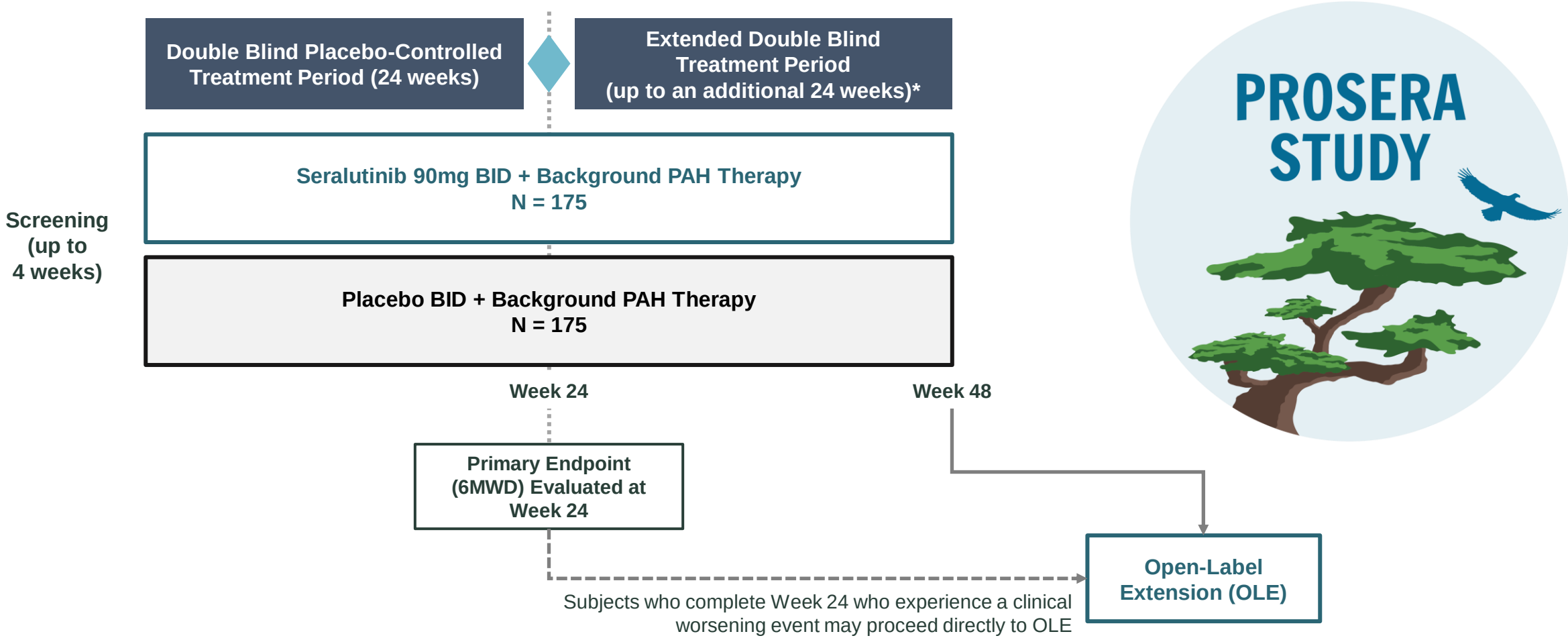
Continued Improvement in OLE

- ✓ Continued hemodynamic & 6MWD improvements
- ✓ No new safety signals with longer-term exposure
- ✓ DPI delivery well accepted

December 2023

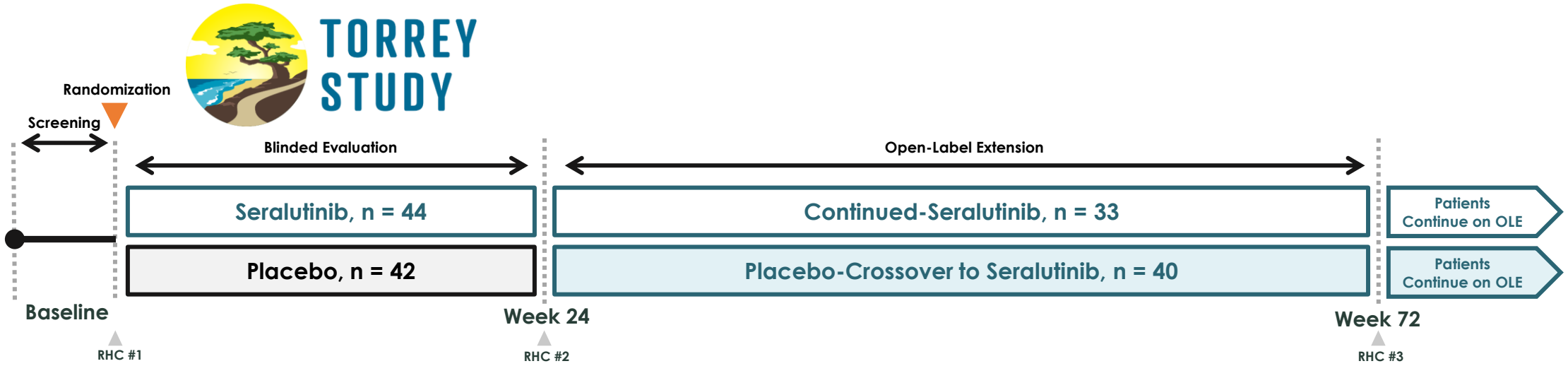
Focus of Today's Webinar

The Phase 3 PROSERA Study in PAH



*Patients to remain blinded until week 48, until the last patient completes 24-week primary endpoint, after which time the study will be unblinded.
BID = twice daily dosing; 6MWD = six-minute walk distance.

TORREY Open-Label Extension Interim Update



- Of 80 TORREY completers (38 seralutinib arm, 42 placebo arm), 73 (91.3%) elected to rollover into the open-label extension
  - 1 additional PAH patient from Phase 1b, who remains on drug as data cutoff, included in safety data
- PVR measured via right heart catheterization (RHC) at Baseline, Week 24, and Week 72 (approximately 1 year into OLE)
- **As of interim data cutoff date, Week 72 PVR data available for 52 patients**
  - **27 continued-seralutinib, 25 placebo-crossover**

RHC = right heart catheterization (PVR measurement); OLE = open-label extension; PVR = pulmonary vascular resistance.

Executive Summary of TORREY OLE Data to Date

- **PVR:** Updated results show consistent and continued deepening of PVR improvement
  - Roughly 3 out of every 4 “continued seralutinib” (“sera-cont.”) patients showing improvement in PVR at Week 72 (vs. 2 out of every 3 at end blinded study)
  - 72% of placebo-crossed (“pbo-cross”) patients show Week 72 PVR improvement vs. pre-TORREY baseline
- **6MWD:** Continued improvement in both treatment groups at Week 72
  - Driven by patients with elevated risk at TORREY baseline
- **Safety:** Profile is consistent with previously demonstrated profile
- ~60% of OLE patients continue on OLE study (as of data cutoff date)

Additional Week 72 PVRs Support Deepening Improvement with Long-Term Seralutinib Use

Baseline

- Week 72 PVRs available for 27 continued seralutinib patients

Median Baseline PVR:

620

dyne*s/cm^5

- Mean PVR at baseline: 621 dyne*s/cm^5
- 17 WHO Functional Class II, 10 WHO Functional Class III

End of TORREY

Week 24

Median Change in PVR vs. Baseline:

-89

dyne*s/cm^5

67% (18/27) with PVR improvement*

33% (9/27) with ≥ 20% PVR improvement*

22% (6/27) with ≥ 30% PVR improvement*

0% (0/27) with ≥ 50% PVR improvement*

OLE PVR Data Point

Week 72

Median Change in PVR vs. Baseline:

-146

dyne*s/cm^5

74% (20/27) with PVR improvement*

56% (15/27) with ≥ 20% PVR improvement*

37% (10/27) with ≥ 30% PVR improvement*

15% (4/27) with ≥ 50% PVR improvement*

Week 72 Median PVR: 475 dyne*s/cm^5

* Versus TORREY baseline PVR value

Majority of Placebo-Cross Patients Show PVR Improvement to Pre-TORREY Baseline at Week 72

- Week 72 PVRs available for 25 placebo-crossed patients
  - 11 WHO Functional Class II, 14 WHO Functional Class III
- Median PVR at Week 24 RHC: **647 dyne*s/cm^5**
  After 24 weeks of blinded placebo in TORREY (n = 25)
- Median PVR at Week 72 RHC: **603 dyne*s/cm^5**
  After 48 weeks of seralutinib treatment in TORREY OLE, preceded by 24 weeks of blinded placebo in TORREY (n = 25)
- 72% (18/25) had improved PVR at Week 72 vs. TORREY baseline
- 60% (15/25) had stable (no change) or improved PVR after starting seralutinib

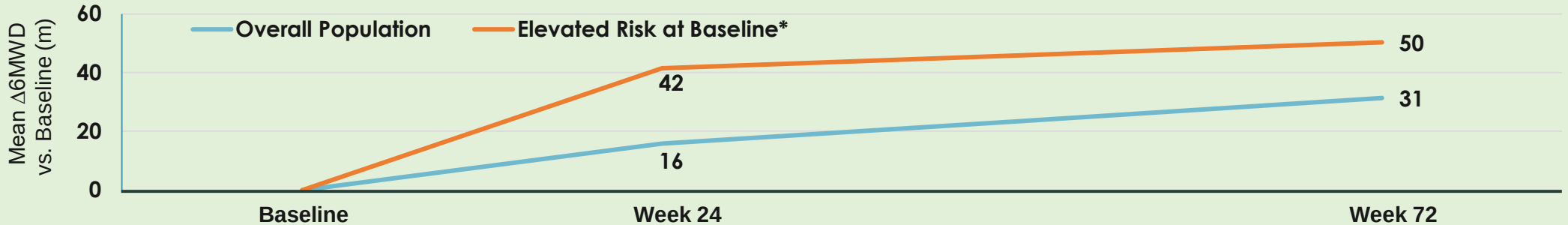
RHC = Right Heart Catheterization.

Further Improvements Seen in 6MWD during OLE, Driven by Patients with Elevated Risk at TORREY Baseline

Change in 6MWD at End of TORREY

Change in 6MWD at Week 72

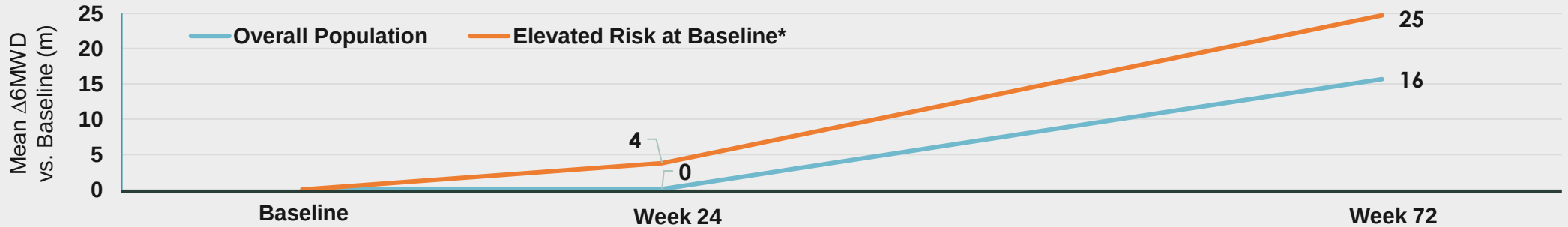
Seralutinib to Seralutinib



	Overall	Elevated Risk
N =	32	20
Baseline (m) =	409	389

	Overall	Elevated Risk
N =	26	15
Baseline (m) =	398	368

Placebo to Seralutinib



	Overall	Elevated Risk
N =	40	17
Baseline (m) =	408	337

	Overall	Elevated Risk
N =	23	10
Baseline (m) =	403	328

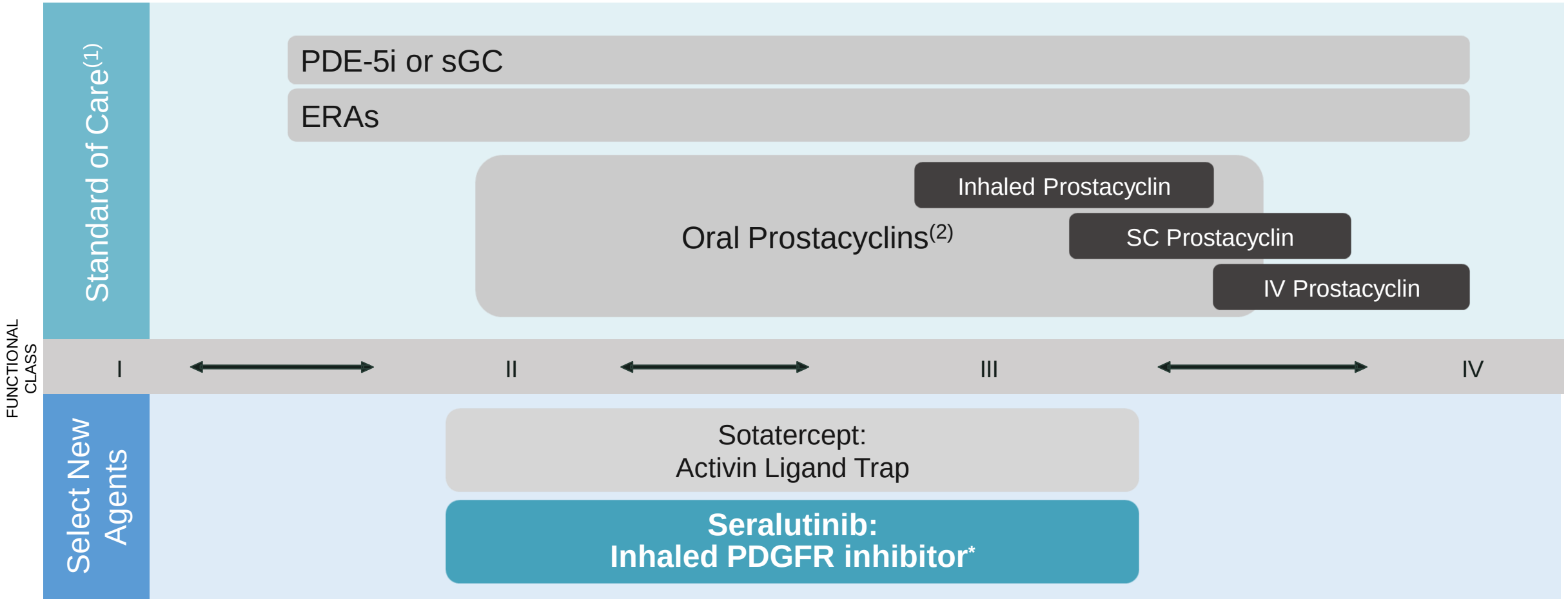
* REVEAL Lite 2 Risk Score ≥ 5 at TORREY baseline.
6MWD = six-minute walk distance.

Incidence of TEAEs by Preferred Term *(≥ 10%, Safety Population)*

Preferred term[a]	Total (N=74)
Number of subjects with a TEAE	71 (95.9)
Headache	18 (24.3)
COVID-19	16 (21.6)
Cough	16 (21.6)
Diarrhoea	13 (17.6)
Nausea	12 (16.2)
Dyspnoea	10 (13.5)
Arthralgia	9 (12.2)
Nasopharyngitis	8 (10.8)

Abbreviations: MedDRA, Medical Dictionary for Regulatory Activities; TEAE, treatment-emergent adverse event.
[a] Coded using MedDRA v 24.0

Promising Safety, Tolerability and a Potential Remodeling Mechanism of Action Differentiate Seralutinib from other PAH Therapies



Seralutinib is being evaluated on-top of background PAH therapy, including prostacyclins

*Seralutinib is an inhaled PDGFR, c-KIT and CSF1R inhibitor.

1) Galiè N et al. Eur Respir J 2015; 46(4):903-75;
2) Klinger JR et al. Chest 2019; 155(3): 565-586 (Klinger et al 2019 [CHEST guidelines] removed oral prostacyclin treatments in all FCs).

FC = Functional Class; SC = subcutaneous.

Thank You