



# ASCENT TO WEEK 16

Safety and Exploratory Efficacy Data of LIQ861  
Dry Powder Inhaled Treprostinil in PH-ILD Patients





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**Financial Disclosure:** Received consulting fees from Liquidia.

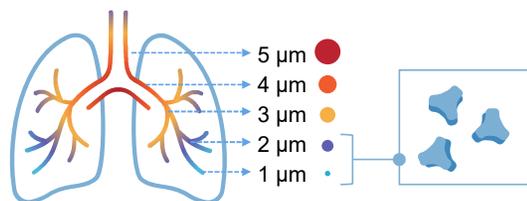
Also received consulting fees from Merck, United Therapeutics, Johnson and Johnson, Bayer, and Gossamer.

# YUTREPIA™ (LIQ861) Engineered with PRINT® Technology

YUTREPIA™ (treprostinil) Inhalation Powder

## Deep-lung Delivery<sup>2,3</sup>

PRINT® technology engineers monodispersed particles in the respirable range<sup>3</sup>



- ~1 µm sized trefoil shape<sup>1</sup>
- Free flowing<sup>1,4</sup>

## Convenient Design<sup>1</sup>

Plastiapie RS00 DPI is a portable, simple-to-use, robust, and low-effort inhaler<sup>1,4,6</sup>



## Low Burden on Patients

Low inspiratory effort is required from the patient because formulation, particle size, and device improve aerosolization<sup>1</sup>  
Device is not position-dependent<sup>4</sup>



PRINT® is a registered trademark of Liquidia Technologies, Inc.

PRINT® = Particle Replication in Nonwetting Templates.

1. Hill NS, et al. *Pulm Circ.* 2022;12(3):e12119. doi:10.1002/pul2.12119 2. Roscigno RF, et al. *Vascul Pharmacol.* 2021;138:106840. doi:10.1016/j.vph.2021.106840 3. Garcia A, et al. *J Drug Deliv.* 2012;2012:941243. doi:10.1155/2012/941243 4. Patel S, et al. Robustness of YUTREPIA™, a dry-powder inhaled formulation of treprostinil, in patient misuse scenarios. Poster presented at: CHEST 2022 Annual Meeting; October 16-19, 2022; Nashville, TN. 5. Maynor B, et al. *Digit Respir Drug Deliv.* 2020;2:371-374. 6. YUTREPIA. Prescribing information. Liquidia Technologies, Inc; 2022.

# Cohort A

## Open-label, Multicenter Study to Evaluate Safety and Tolerability of LIQ861 in Patients with Newly Diagnosed PH-ILD

### Inclusion Criteria

WHO Group 3 PH-ILD, including CPFE



- Prostacyclin naïve
- Stable dose of ILD medications
- **18-75 years** of age; conditional 76-80
- **6MWD  $\geq$ 125m**
- **FEV<sub>1</sub>/FVC  $\geq$ 70%**

<b>PVR</b>	<b><math>\geq</math>3 WU</b>
<b>PCWP</b>	<b><math>\leq</math>15 mmHg</b>
<b>mPAP</b>	<b><math>\geq</math>30 mmHg</b>

**ILD LIMITED SUBSET (NO CPFE):**

<b><math>\geq</math>3 WU</b>
<b>OR</b>
<b><math>\leq</math>15 mmHg</b>
<b><math>\geq</math>21 - <math>\leq</math>29 mmHg</b>

### Exclusion Criteria

WHO Groups 1, 2, 4, or 5



PAH oral therapy in **last 60 days** (PDE5-I)

Uncontrolled hypertension **160/100 mm Hg**

Chronic therapy new start **30 days**

**> 8 L/min** O<sub>2</sub> at baseline

Recent respiratory infection in **last 30 days**, ILD from SARS-CoV-2

Renal impairment eGFR  **$\leq$ 40 mL/min/1.73m<sup>2</sup>**

Initiated pulmonary rehab **within 12 weeks**

Acute PE (**90 days**), TIA (**6 months**)

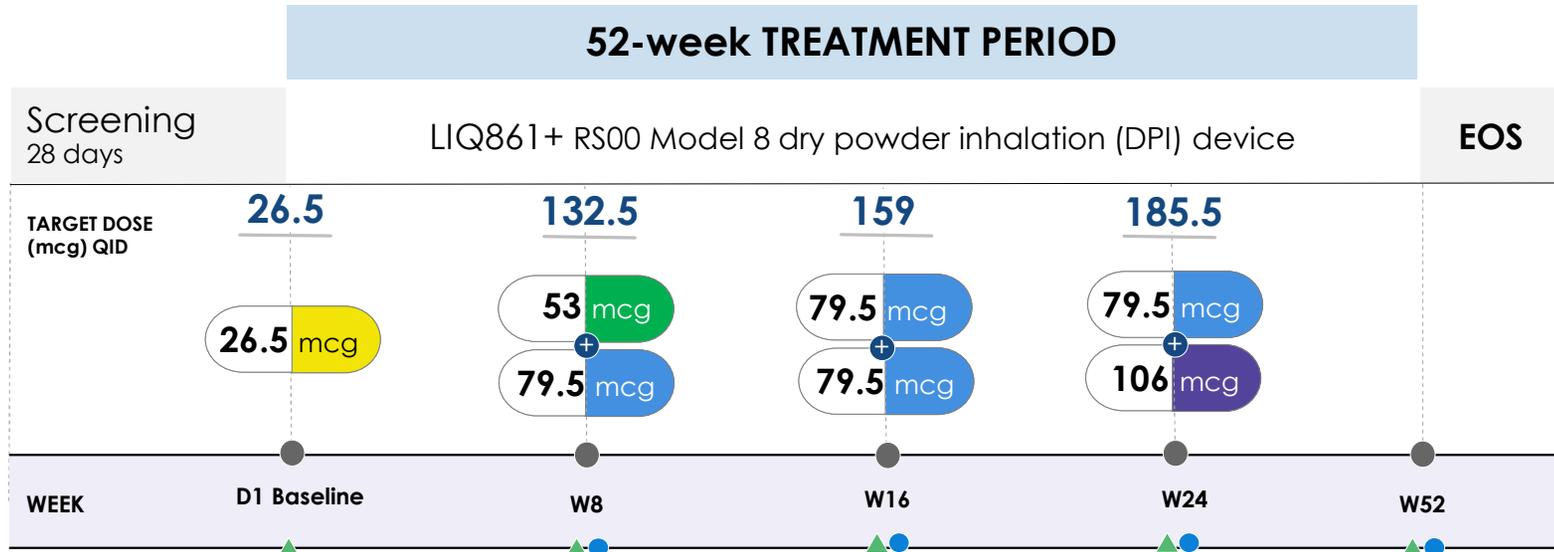
- On prostacyclin therapy
- History of prostacyclin intolerance
- Atrial septostomy
- History of left sided heart disease
- Hypersensitivity to IV contrast
- Pregnancy
- Sepsis

6MWD=6-Minute Walk Distance; CE=cardiac effect; CT=computed tomography; CPFE=combined pulmonary fibrosis and emphysema; FEV1/FVC=forced expiratory volume in 1 second to forced vital capacity; ILD=interstitial lung disease; WU=wood units; PH-ILD=pulmonary hypertension associated with interstitial lung disease. Reference: LTI-401 Protocol, p.20-22.

\*Limited subset of patients  
ASCENT (NCT06129240)

# Cohort A

## Open-label, Multicenter Study to Evaluate Safety and Tolerability of LIQ861 in Patients with Newly Diagnosed PH-ILD



### ▲ PRIMARY SAFETY ENDPOINTS

- Incidence of treatment-emergent drug- or device-related AEs and serious AEs
- Changes from study drug initiation to week 24 in clinical laboratory and vital signs

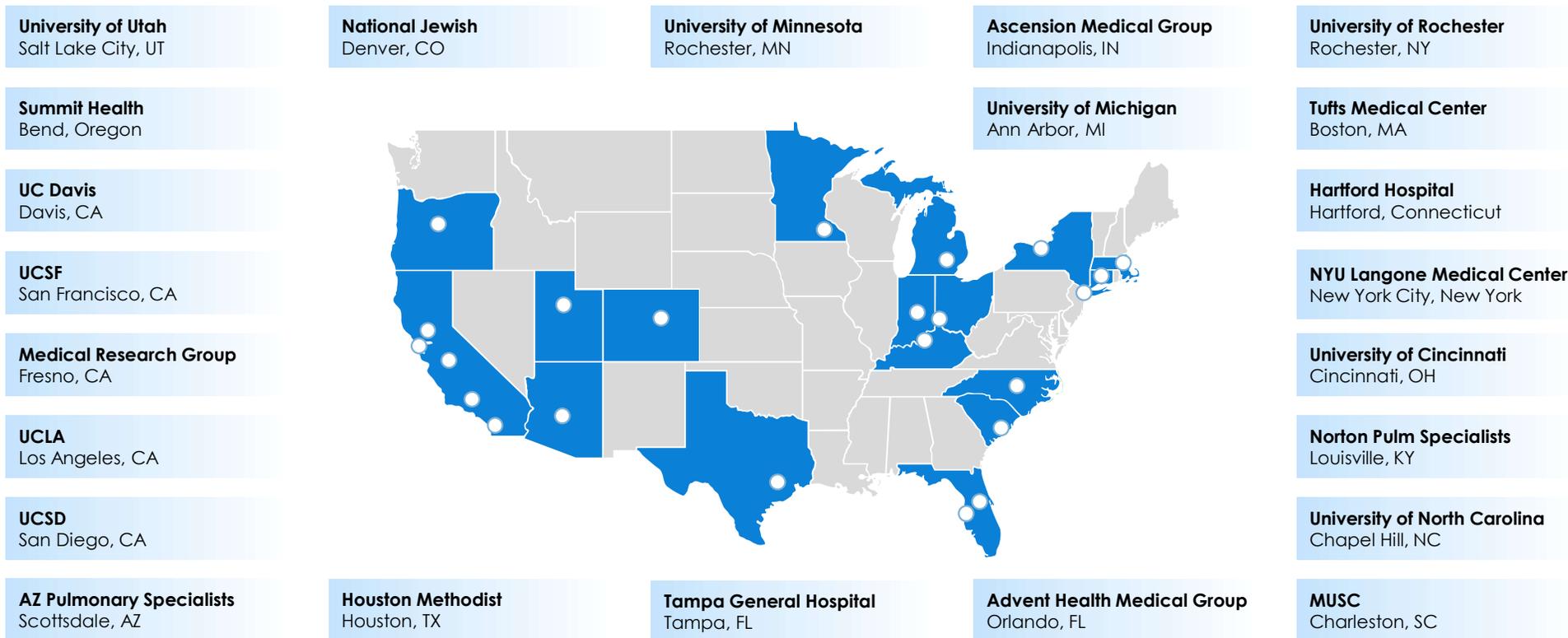
### ● EXPLORATORY ENDPOINTS

- Echocardiogram
- Dyspnea-12, Emphasis 10, simplified cough score
- 6MWD & cardiac effect
- CT CHEST

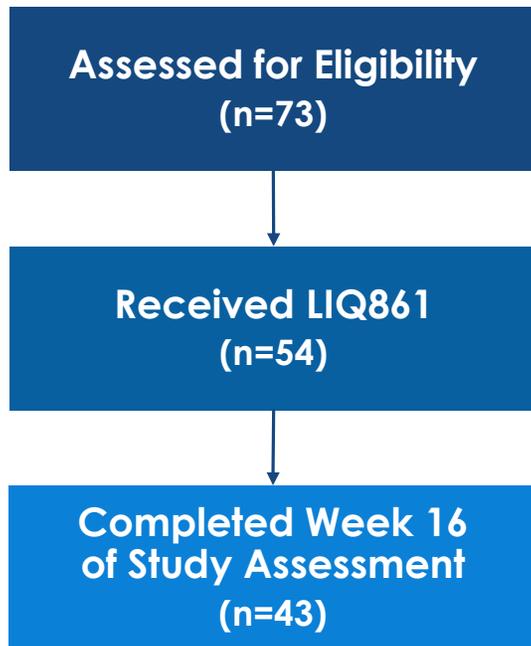
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# ASCENT Site Map



# Patient Disposition



Patients Completed Week 16 Visit, n (%)		
<b>Completed</b>	<b>43</b>	<b>(79.6)</b>
<b>Missed Study visit</b>	<b>1</b>	<b>(1.9)</b>
<b>Discontinued</b>	<b>10</b>	<b>(18.5)</b>
Physician Decision	1	(1.9)
Withdrawal of Patient	2	(3.7)
Protocol Violation	1	(1.9)
Adverse Event	3	(5.6)
Other	3	(5.6)

chronic pancreatitis, coronavirus, lung neoplasm  
lung transplant

\*Lung transplant listing was approved upon enrollment per agreement with Sponsor; transplantation was expected to occur ~ 3 months pending donor availability; Liquidia Data on File.

## Baseline Demographics

Naïve PH-ILD	N=54
Age, mean $\pm$ SD, y	68.5 $\pm$ 8.9
Sex, Female (%)	28 $\pm$ 51.9%
Duration of PH Diagnosis, y	0.5 $\pm$ 0.8
Duration of ILD Diagnosis, y	5.1 $\pm$ 5.7
<i>ILD Subtypes (%)</i>	
IIPs	26 (48.1%)
Autoimmune ILDs	19 (35.2%)
HP	1 (1.9%)
Other ILDs	3 (5.6%)
CPFE	5 (9.3%)
<i># Background antifibrotics, n (%)</i>	
Nintedanib	19 (35.2%)
Pirfenidone	4 (7.4%)
<i>Background PH Drugs, n (%): PDE5i</i>	7 (13%)

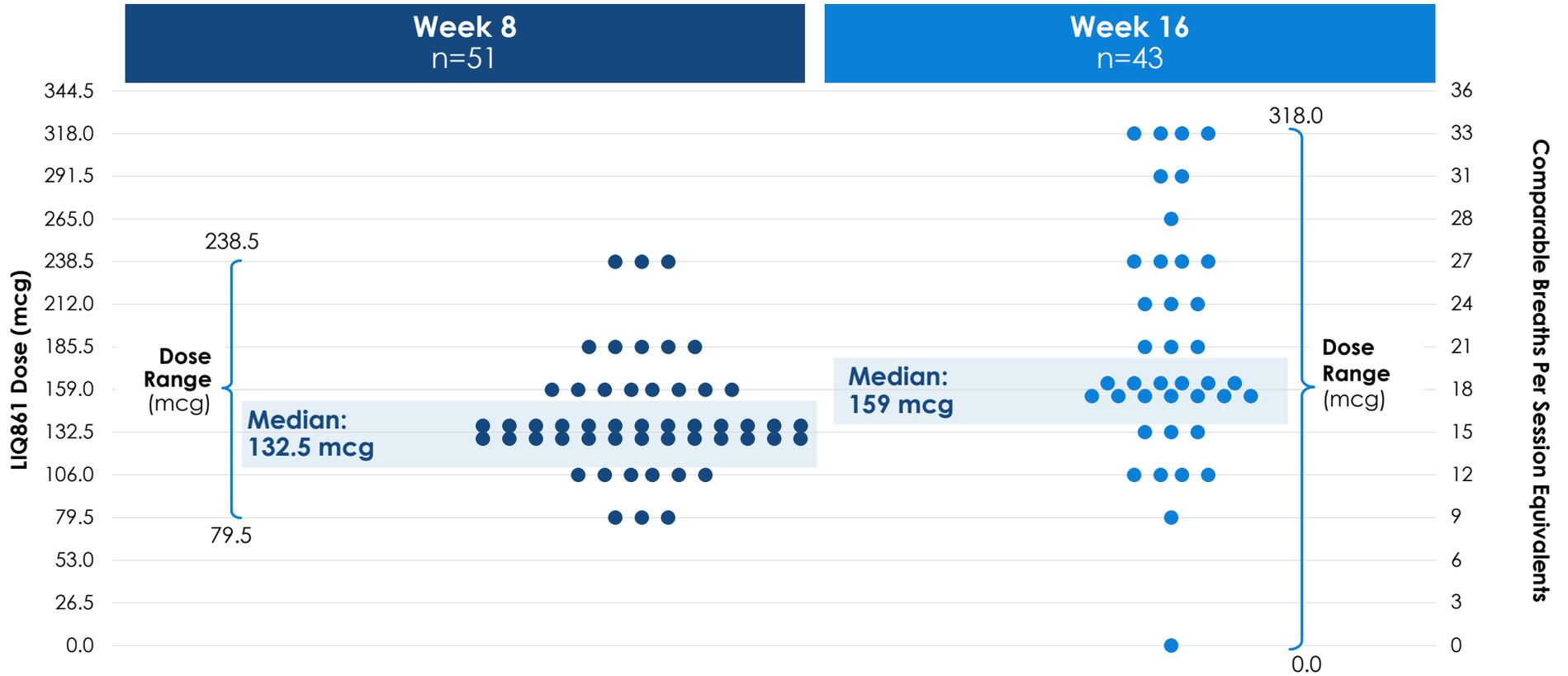
<b>Peak Inspiratory Flow Rate (L/min)</b>	<b>Mean = 90.6 <math>\pm</math> 22.3</b> Median = 90.0 Range = 39-120
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Hemodynamics	Mean $\pm$ SD
mPAP (mmHg)	33.4 $\pm$ 8.4
PCWP (mmHg)	8.6 $\pm$ 3.3
Cardiac Output (L/min)	4.5 $\pm$ 0.9
PVR (WU)	6.0 $\pm$ 2.9

Pulmonary Function Test	Mean $\pm$ SD
FVC, L	2.07 $\pm$ 0.767
FVC (% predicted)	65.9 $\pm$ 20.7
FEV1/FVC Ratio	79.6 $\pm$ 17.1
DLCO (% predicted)	36.2 $\pm$ 13.9

Clinical Characteristic	Mean $\pm$ SD
6MWD (Meters), $\pm$ SD	298.1 $\pm$ 80.3
NTPro-BNP (pg/ml)	611.0 $\pm$ 1246.0 [GM=210.5]
Dyspnea-12	11.7 $\pm$ 6.8
EmPHasis-10	24.6 $\pm$ 9.7
Simplified Cough Score	1.3 $\pm$ 0.8

# LIQ861 Dosing QID



Liquidia Data on File



## ASCENT Safety: PH-ILD Week 16

<u>Treatment-related TEAEs</u>	ASCENT Naïve n=54 (n %)
Cough	26 (48.1)
Headache	10 (18.5)
Oropharyngeal pain	4 (7.4)
Fatigue	4 (7.4)
Diarrhea	3 (5.6)
Throat Irritation	3 (5.6)
Dry Throat	3 (5.6)

No discontinuations due to cough at 16 weeks

Cough  
24 (92.3%): mild  
2 (7.7%): moderate

1 (1.9%) severe respiratory tract irritation

No treatment related SAEs

AE reported if ≥ 5%  
TEAE=treatment-emergent adverse event.  
Liquidia Data on File

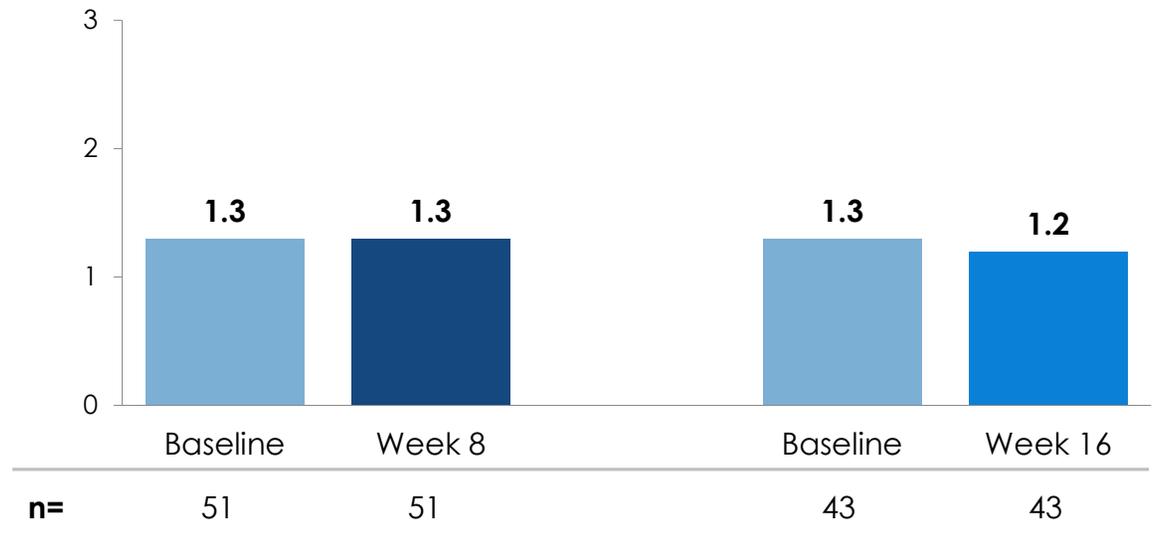
# LIQ816 Simplified Cough Score

**Instructions:** The patient should circle the score that best describes their cough over the past two weeks

Score	Daytime Cough
0	No cough
1	Transient cough occasionally during the daytime
2	Frequent cough mildly affecting daily life
3	Frequent cough severely affecting daily life

Mean Daytime Cough Scores Remained **Stable from Baseline Through Week 8 And 16** with LIQ861 Treatment

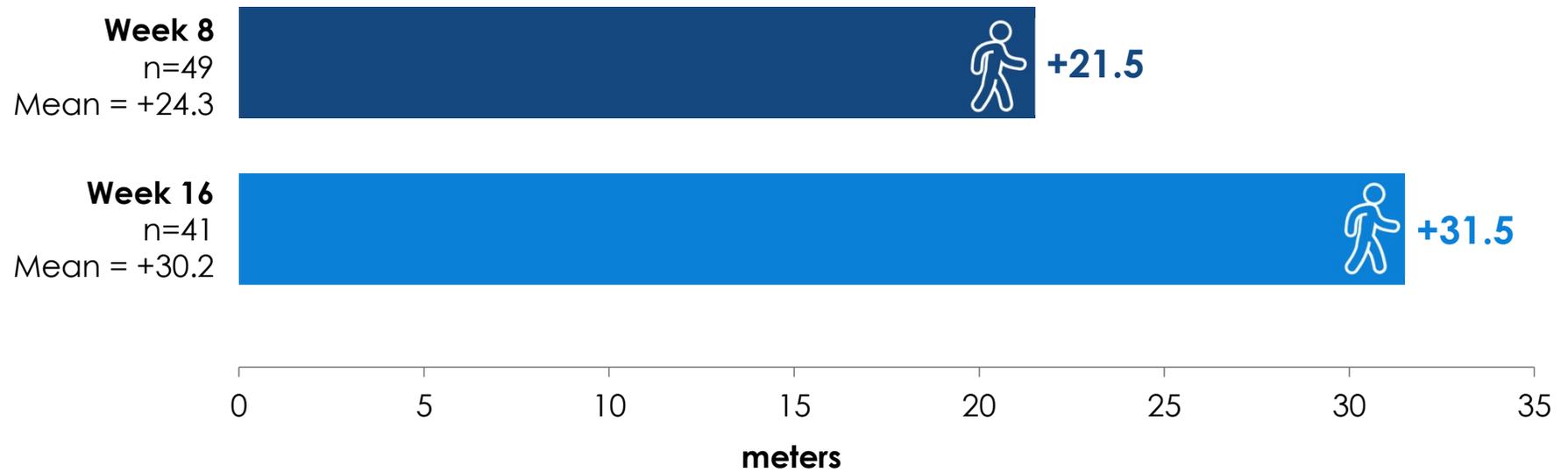
**Mean Cough Score**



Wang Z, Wang M, Wen S, Yu L, Xu X. Types and applications of cough-related questionnaires. J Thorac Dis. 2019 Oct;11(10):4379-4388. Liquidia Data on File

# Median Change from Baseline in 6MWD in meters

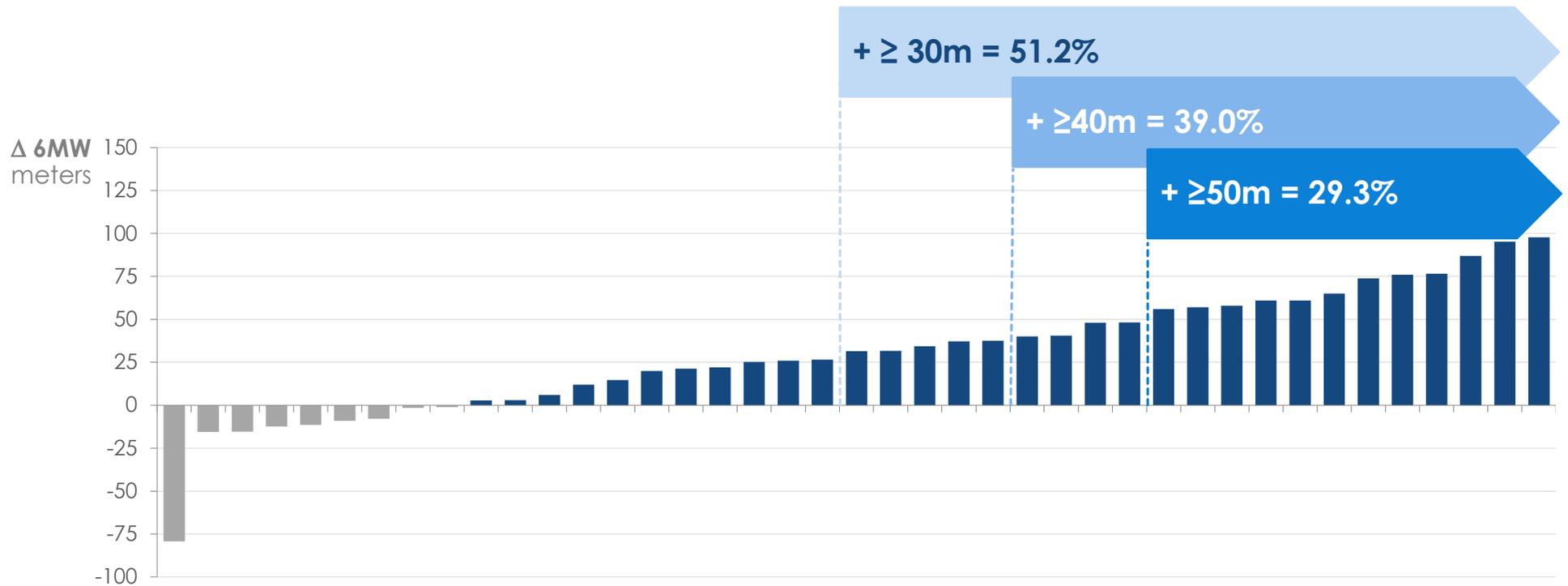
## ASCENT LIQ861



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# Week 16: $\Delta$ 6MWD by Individual Patient

78% of patients maintained or improved from baseline



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## ASCENT LIQ861 – Summary

**1** The treatment-related TEAEs observed are consistent with the known safety profile of inhaled treprostinil

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**2** The median dose at Week 8 was 132.5mcg QID (15 nebulized breath equivalent), increasing to 159mcg QID (18 nebulized breath equivalent) by Week 16

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**3** 92.3% of treatment related cough was mild. No worsening in patient-perceived cough score was observed despite higher LIQ861 dosing

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**4** By Week 16, median improvement in 6MWD was +31.5 meters above baseline. 29.3% improved by +50 meters or more.