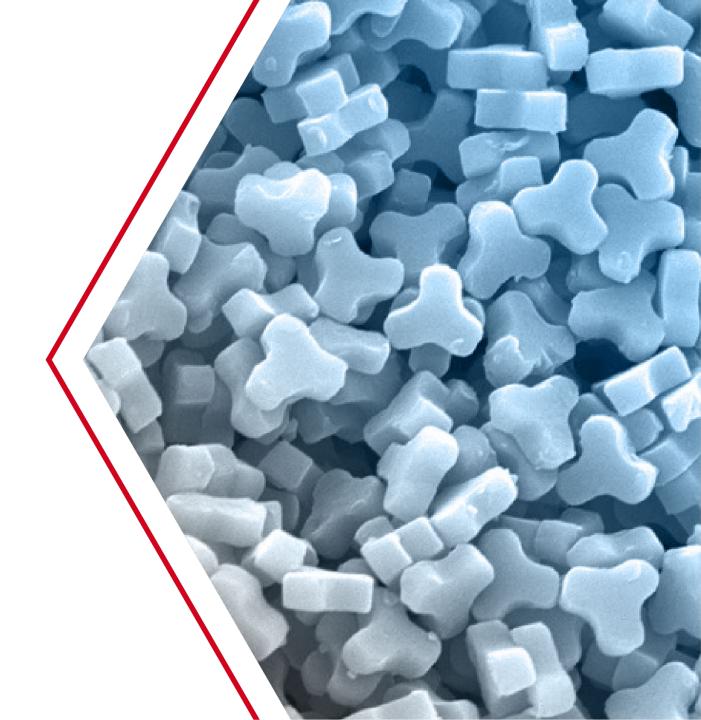


Corporate Overview

August 1, 2022

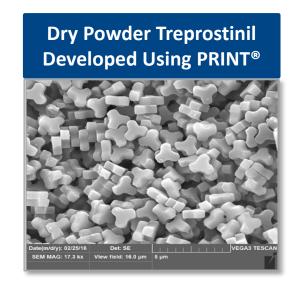


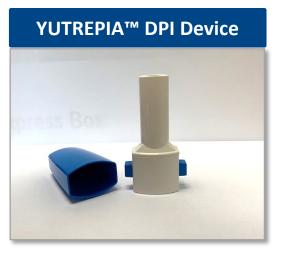
Forward-Looking Statements

This presentation includes, and our response to questions may include, forward-looking statements within the meaning of the federal securities laws, including Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. All statements contained in this presentation other than statements of historical facts, including statements regarding our future results of operations and financial position, our strategic and financial initiatives, our business strategy and plans and our objectives for future operations, are forward-looking statements. The words "anticipate," "believe," "continue," "estimate," "expect," "intend," "may," "will" and similar expressions are intended to identify forward-looking statements. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy, short-term and long-term business operations and objectives and financial needs. These forwardlooking statements include statements regarding our operating results, clinical trials, clinical studies and other clinical work (including the funding therefor, anticipated patient enrollment, safety data, study data, trial outcomes, timing or associated costs), regulatory applications and NDA submission contents and timelines, the potential for FDA final approval of the NDA for YUTREPIA™ (treprostinil) inhalation powder, previously referred to as LIQ861, the timeline or outcome related to our patent litigation pending in the U.S. District Court for the District of Delaware or the interpartes review with the PTAB or any appeals related thereto, the issuance of patents by the USPTO, our ability to execute on our strategic or financial initiatives and the impact of the coronavirus (COVID-19) pandemic on our Company. Moreover, we operate in a very competitive and rapidly changing environment and our industry has inherent risks. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the future events and trends discussed in this presentation may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that future results, levels of activity, performance, achievements or events and circumstances reflected in the forward-looking statements will occur. We are under no duty to update any of these forward-looking statements after the date of this presentation to conform these statements to actual results or revised expectations, except as required by law. 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. This presentation includes long-term goals that are forward-looking, are subject to significant business, economic, regulatory and competitive uncertainties and contingencies, many of which are beyond our control and are based upon assumptions with respect to future decisions, which are subject to change. Actual results will vary, and those variations may be material. Nothing in this presentation should be regarded as a representation by any person that these goals will be achieved, and we undertake no duty to update our goals.

Becoming a Leading Biotech Company in the Field of Pulmonary Hypertension

- Preparing for launch of YUTREPIA™ (treprostinil) inhalation powder
 - Growing market >\$2 Billion with renewed focus on inhaled delivery
 - Received Tentative Approval from FDA for PAH indication
 - Gating decision from Hatch-Waxman litigation by Oct. 27th
- Checked all the boxes for preferred PAH product
 - Engineered to enhance alveolar deposition in the lung
 - Can request PH-ILD indication in 2024 without additional studies
- Established commercial presence with Treprostinil Injection
 - Acquired RareGen to build on key stakeholder relationships
- Deep experience within PAH, PH-ILD and rare disease
- Strong balance sheet to enable launch upon final FDA approval







YUTREPIA Checks All the Boxes for a Preferred Product Profile

We believe YUTREPIA is positioned to become the prostacyclin of first-choice

Portability	Replace burden of nebulizers with palm-sized, simple device; potential for earlier use
Tolerability	Reduce systemic toxicity when adding prostacyclin to naïve patients or escalating dose
Titratability	Demonstrate safe titration to doses comparable to 24 breaths Tyvaso® per dose
Durability	Potential to prolong duration of treatment given broad dose range
Usability	Store at room temperature for product lifetime Accommodate wide range of lung capacities with low resistance device Avoid product spillage by using capsule-based drug and trusted device

Deep Experience Within PAH, Rare Disease and Inhaled Products



Roger Jeffs
Chief Executive
Officer

- Former UTHR Executive (18 yrs) including President/COO (2001-14) & co-CEO (2015-16)
- Led R&D, secured FDA approval of 6 rare diseases products at United Therapeutics



Rajeev Saggar, M.D. Chief Medical Officer

- 20+ yrs practicing pulmonologist with 60+ peer-reviewed publications incl. PAH & PH-ILD
- Former Medical Director of PH & Fibrosis Programs and Lung Transplant at Banner Univ.
- Former VP Clinical Development at Theravance focused on inhaled respiratory products



Scott Moomaw Senior VP Commercial

- Former UTHR VP Marketing (5 yrs) responsible for Remodulin®, Tyvaso® & Orenitram®
- Co-founded RareGen as COO (2018) launching generic Treprostinil Injection



Matt Snow Vice President National Sales

- Former UTHR commercial leader (7 yrs) in multiple roles in sales leadership and training
- Launched rare disease products for SOBI (National Sales Dir.) & INSMED (Regional Lead)

Existing Commercial Presence in PAH with Treprostinil Injection

Specialty field sales team & co-pay programs replicate experience with branded drug



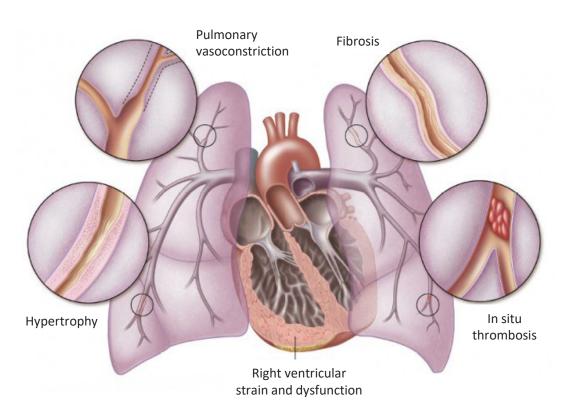
- ✓ Equivalent product
- ✓ Reliable Supply
- ✓ Seamless Service
- **✓ Lower Price**

- 400+ unique prescribers switched patients from brand to generic
- More than doubled active patients after SC route added (Apr'21)
- 500+ active treprostinil injections patients in 1Q 2022
- Planning for growth as payer generic mandates enforced
- Additional larger payers plan to implement mandates in 2022 and 2023



Currently Focused On Maximizing the Benefits of Prostanoid Treatment of PAH

WHO Group 1 (Pulmonary Arterial Hypertension)



Abnormal changes in arteries of the lungs increase pressure in pulmonary arteries that leads to remodeling of the right ventricle (RV)

Multiple pathways are involved in pathogenesis

Prostacyclin Deficiency

 Prostacyclin inhibits platelet aggregation, relaxes smooth muscle, and vasodilates the pulmonary arteries

Nitric Oxide Deficiency

 Nitric Oxide (NO) leads to vasodilation by increasing cGMP levels

Endothelin Overexpress Endothelin (ET-1) mediates vasoconstriction, fibrosis, proliferation, hypertrophy, and inflammation

Current Options Are Suboptimal and Potentially Delay Benefit of Prostacyclin



Route	Key Benefit	But known issues	Notes
Oral	+ Convenient	Systemic toxicitiesDifficult to titrate	 Increases side effects in GI, nervous, and vascular systems, making up-titration challenging^{1,2}
Infused	+ Effective	 Systemic toxicities Site pain Lifestyle limitations Infection risk¹⁻³ 	 Up to 63% of PAH patients describe side effects as impairing therapeutic function⁶
Nebulized	+ Targeted	 Many breaths to achieve therapeutic doses 	 Limits max dose due to throat irritation and adverse events³ Requires water, power, supplies, cleaning, time to administer⁴ For example, Tyvaso target dose of 36-48 breaths per day

NET IMPACT

Many patients <u>never</u> experience the benefit of prostacyclin analogs

- Only 34% of patients enrolled in the REVEAL registry received a Prostacyclin analog⁷
- 30% of patients with a PAH-related death did not receive any prostacyclin therapy⁸

Image from 2015 publication²

GI, gastrointestinal; IV, intravenous.

1. Garcia A, et. al. *J Drug Deliv*. 2012;2012:941243. 2. Coons JC, et al. *Pulm Circ*. 2016 Mar;6(1):132-135. 3. Lang IM, Gaine SP. *Eur Respir Rev*. 2015;24(138):630-641. 4. Hill NS, et al. INSPIRE: A Phase 3, Open-Label, Multicenter Study to Evaluate the Safety and Tolerability of LIQ861 in Pulmonary Arterial Hypertension (PAH) (Investigation of the Safety and Pharmacology of Dry Powder Inhalation of Treprostinil NCT03399604). Poster presented at: The American Thoracic Society (ATS) Conference 2019; May 21, 2019; Dallas, TX. 5. Klinger JR, et al. Chest. 2019 Mar;155(3):565-586. 6. Burger CD, et al. Psychosocial and Financial Burden of Medical Treatment in Pulmonary Artery Hypertension. Poster presented via: Pulmonary Vascular Research Institute, February 15, 2020. 7.Badesch DB, Raskob GE, Elliott CG, et al. Pulmonary arterial hypertension: baseline characteristics from the REVEAL Registry. Chest. 2010;137(2):376-387. doi:10.1378/chest.09-1140 8.Farber HW, Miller DP, Meltzer LA, McGoon MD. Treatment of patients with pulmonary arterial hypertension at the time of death or deterioration to functional class IV: insights from the REVEAL Registry. J Heart Lung Transplant. 2013;32(11):1114-1122. doi:10.1016/j.healun.2013.08.010

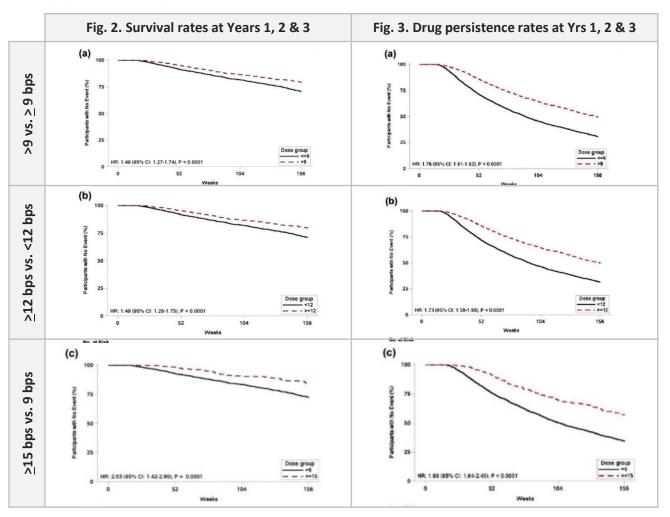


Higher Doses of Inhaled Treprostinil Resulted in Improved Disease Control

Retrospective study of 5,000 patients from specialty pharmacy records

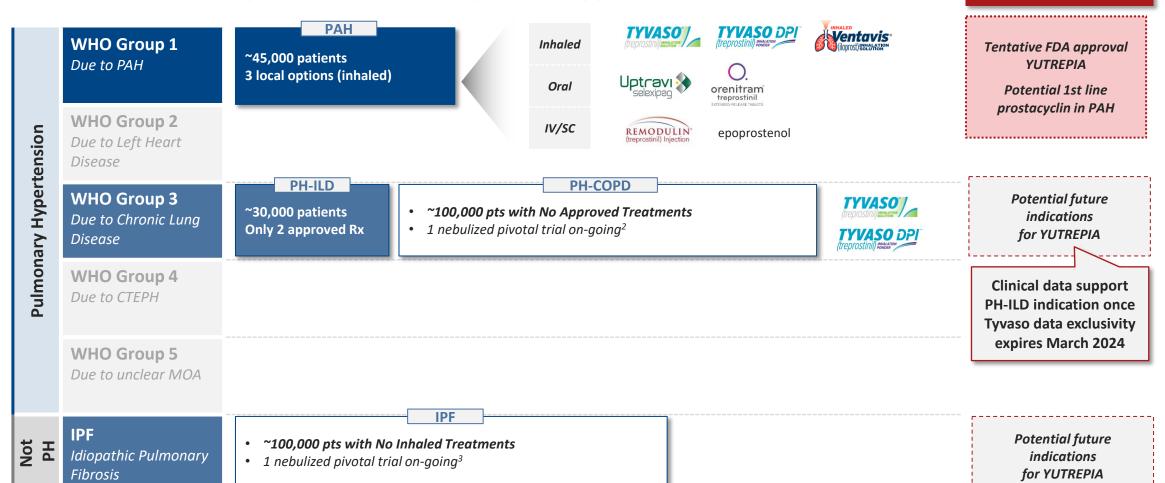
Higher dosed patients (>9 breaths)...

- Improved survival rates were seen in each time period analyzed (yrs. 1 thru 3)
- Longer time to transition to parenteral therapy (17.5 months vs 9.5 months)
- Greater drug persistence was seen in each time period analyzed (yrs. 1 thru 3)



WHO Group 1 (PAH) Represents a Significant Initial Market Opportunity

Additional WHO Groups Provide Market Expansion Opportunities



Pulmonary Arterial Hypertension (PAH); Pulmonary Hypertension (PH); Interstitial Lung Disease (ILD); Chronic Obstructive Pulmonary Disorder (COPD); Idiopathic Pulmonary Fibrosis (IPF); Patient estimates sourced by combination of Liquidia internal estimate and public statements by United Therapeutics (Feb 2022);

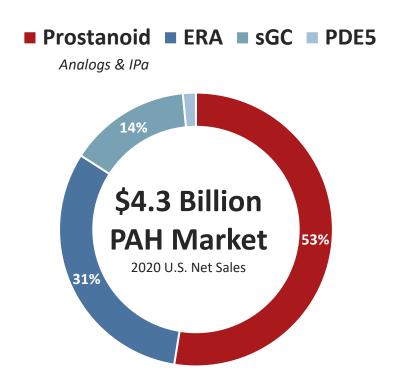




Our Portfolio

YUTREPIA Has Potential to Rapidly Garner Significant Market Share

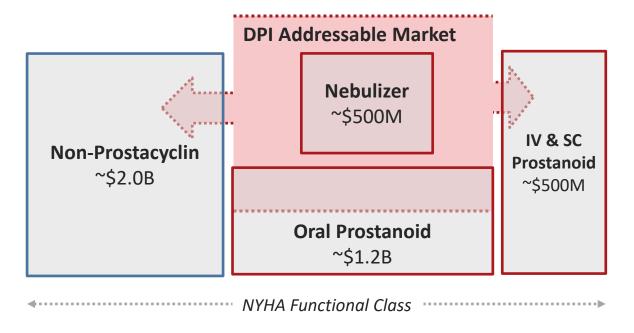
Goal of prostanoid therapy is to dose to highest tolerable level to provide symptomatic benefit



>50% of prostanoid market included treprostinil formulations (\$1.2 billion)

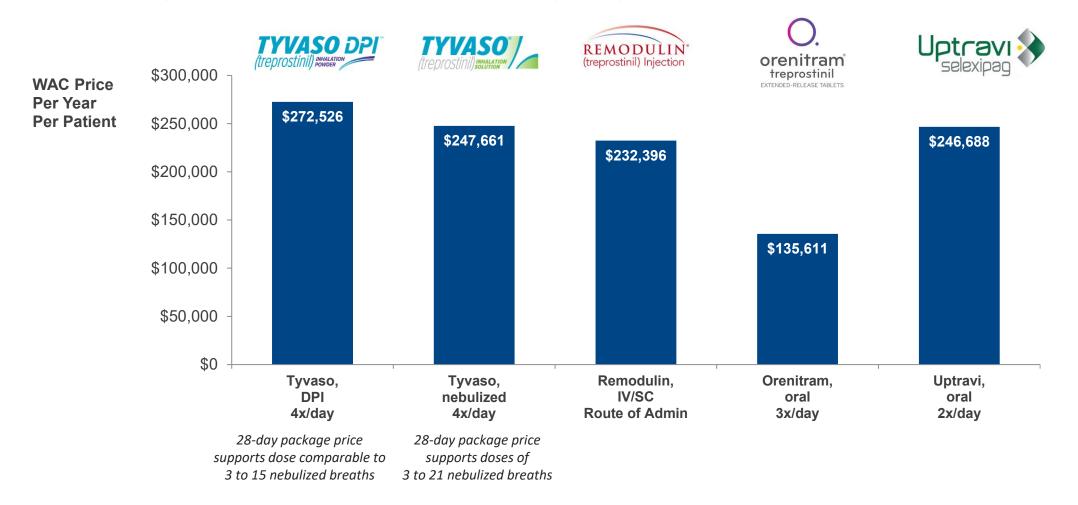
Expect paradigm shift in treatment as DPIs grow inhaled market in PAH

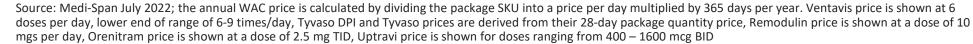
- Fewer systemic toxicities with targeted lung deposition
- Portability, Tolerability, Titratability, Durability
- + Cannibalize nebulizers, capture oral share, earlier use, & delay parenteral

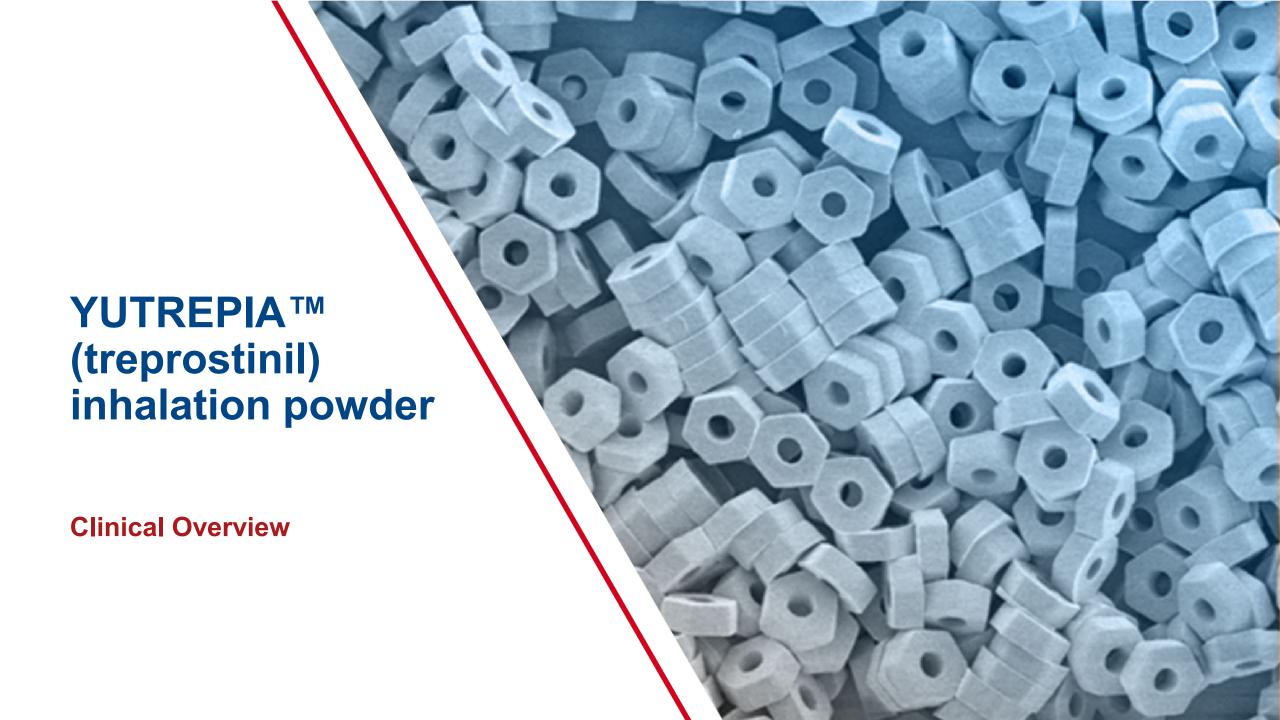


Tyvaso WAC Price Within the Branded Prostanoid Class Supports Market Value

Wholesale Acquisition Cost Per Year in 2022 of fully compliant annual course of treatment







Engineered Particles to Enhance Delivery to Lower Lung

Monodisperse Particles with Precise Geometries for Inhalation

Shape influences <u>aerodynamic performance</u>

Inspired by nature

Pollen Particle



Eperua schomburgkiana

YUTREPIA PRINT particles

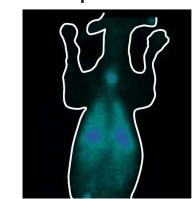


- 1.3 μm in size
- Trefoil shape

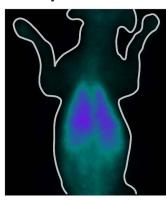
Size influences alveolar deposition

Particle sizes $\leq 5 \mu m$ are respirable but deposit differently

4.6 µm MMAD particle



1.3 µm MMAD particle



Tc99 scintigraphy of PRINT particles in canine model1

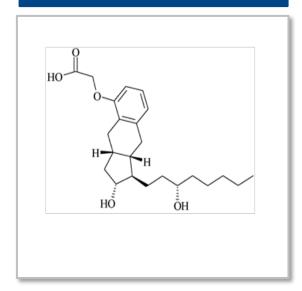


Provides preferential delivery to alveolar region and less upper airway deposition

YUTREPIA Leverages PRINT Technology to Enhance Deep Lung Deposition

Each particle has a uniform size and shape¹

Treprostinil



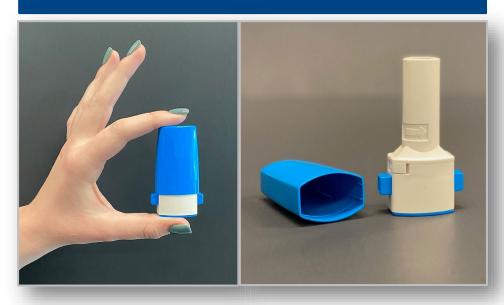
Treprostinil (prostacyclin analog)

YUTREPIA Dry-Powder Formulation



Particles are 1.3 μm in size with trefoil shape

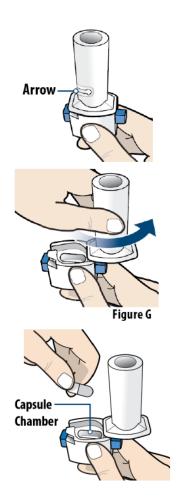
Dry-Powder Inhaler



Compact, disposable inhaler previously approved by FDA and EMEA

Inhaled Device Design Trusted for Decades Across Diseases

Plastiape sells millions of units globally of the RS00 & RS01 devices to deliver generic and branded drugs



Examples of Plastiape devices (not exhaustive)						
Company	Program (Stage)	Disease				
U NOVARTIS	Foradil Aerolizer® FDA Approved 2001	COPD & Asthma	CANDALIS CAN			
⊙ Chiesi	Bronchitol® FDA Approved 2020	Cystic Fibrosis	00000 southed Ocher			
insmed	TPIP, pro-drug Phase 2a & 2b 2022	PAH & PH-ILD				
gossamerbio	GB-002, seralutinib Phase 2b 2022	PAH & PH-ILD				

Well-Tolerated in Phase 1 Studies with Dose Proportional Pharmacokinetics

Observed dose proportionality & no MTD in Phase 1¹

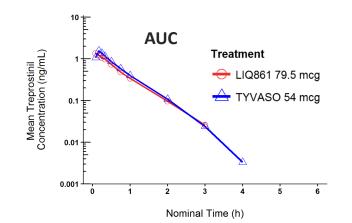
- Conducted multiple Phase 1 studies in healthy volunteers to establish safety and PK
- All Treatment Emergent Adverse Events (TEAEs)
 were expected based on the known safety profile
 of inhaled treprostinil
- Well-tolerated with no Serious Adverse Events
- No observed Maximum Tolerated Dose (MTD)
- Treprostinil exposure was dose proportional across
 5 doses administered

Established comparable PK to Tyvaso (9 breaths)²

Table 3. Summary of statistical assessment of comparative bioavailability results

Agent	Parameter	GMR	90% CI	Within Subject % CV
LIQ861 79.5 μg vs Tyvaso® 54 μg	AUC _{inf}	0.923	0.802, 1.064	14.6
LIQ861 79.5 μg vs Tyvaso® 54 μg	AUC _{last}	0.947	0.812, 1.103	15.8
LIQ861 79.5 μg vs Tyvaso® 54 μg	C _{max}	0.931	0.819, 1.059	13.3

CI, confidence interval; CV, coefficient of variation; GMR, geometric least-squares mean ratio

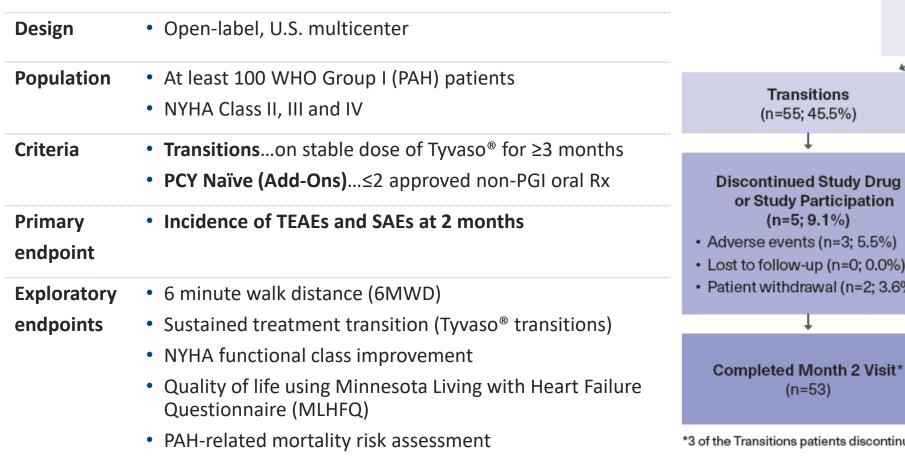


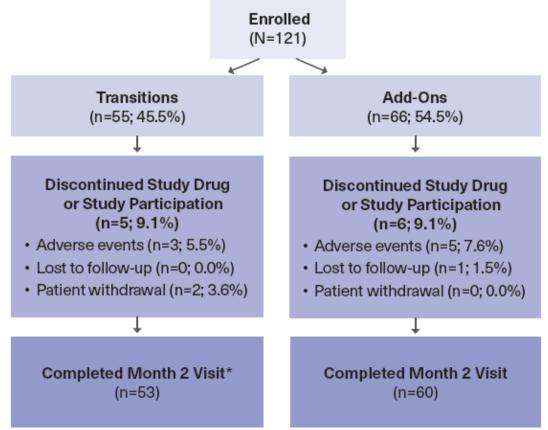
"...the 90% CIs for these ratios were within the acceptable equivalence limits of 0.80 to 1.25 (Table 3)."

[©] Liquidia[™]

INSPIRE Study was Informed by FDA and 505(b)(2) Regulatory Pathway

<u>In</u>vestigation of the <u>Safety and Pharmacology of Dry Powder Inhalation of Treprostinil</u>





^{*3} of the Transitions patients discontinued after the Month 2 timepoint.

Enrollment Driven Primarily By Functional Class II & Faster Than Expected

Suggests potential interest to use as a first-line prostacyclin

		Transitions (n=55)	Prostacyclin Naïve (n=66)	Overall (n=121)
Sex	Female	47 (85.5%)	52 (78.8%)	99 (81.8%)
Age (years)	Mean ± SD	53 ± 14.1	55 ± 14.6	54 ± 14.3
BMI (kg/m²)	Mean ± SD	30.07 ± 7.9	29.31 ± 7.8	29.66 ± 7.8
NYHA Functional	Class II	43 (78.2%)	37 (56.1%)	80 (66.1%)
Class at Screening	Class III	12 (21.8%)	29 (43.9%)	41 (33.9%)
PAH Duration (years) Mean ± SD		7.25 ± 5.1	4.71 ± 5.1	5.87 ± 5.2
Sustained Therapy a	at Month 2	53 (96%)	60 (91%)	113 (93%)

Established Favorable Safety Profile Across Doses Studied Without Seeing MTD

Primary endpoint at Month 2

TEAEs at Month 2 ¹ in ≥ 4% of Patients	Transitions n (%) n=55	Naïve n (%) n=66
Cough	15 (27)	36 (55)
Headache	14 (25)	18 (27)
Throat irritation	5 (9)	14 (21)
Dizziness	6 (11)	7 (11)
Diarrhea	3 (6)	8 (12)
Chest discomfort	5 (9)	5 (8)
Nausea	4 (7)	5 (8)
Dyspnea	3 (6)	3 (5)
Flushing	1 (2)	5 (8)
Oropharyngeal pain	1 (2)	4 (6)

- No SAEs related to study drug
- TEAEs mostly mild to moderate & during first 2 weeks
- Titrated most patients ≥ 79.5 mcg doses by Month 2
- Have not yet reached an MTD
- No important adverse safety outcomes at Year 12

Positive Trends in Exploratory Endpoint Data at Month 2 Primary Endpoint

Exploratory endpoints from INSPIRE study, not controlled, open-label



Maintained or improved NYHA Functional Class at Month 2¹

98% for Transition pts 95% for Naïve pts



Increased
Median 6MWD
at Month 2¹

+ 18.9m for Transition pts + 6.5m for Naïve pts



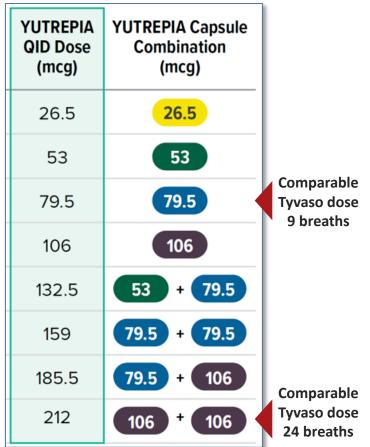
Significant improvement in QoL as measured by MLHFQ^{2,3}

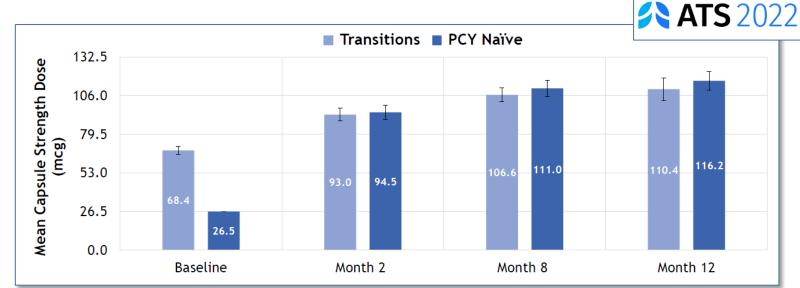
Emotional and Physical Dimensions scored

- Greater percentage of subjects met 2 or 3 PAH low-risk criteria
- Did not observe clinically meaningful change in NT-proBNP
- Majority of transition patients preferred dry powder inhaler to Tyvaso® Inhalation System

Patients safely titrated YUTREPIA throughout INSPIRE & Extension studies

Has Been Studied at Doses Comparable to 24 Breaths of Tyvaso® (YUTREPIA 212 mcg)





- In INSPIRE study, median dose at 1 year was 106mcg QID across all patients
- Physicians were directed to escalate dose to manage PAH symptoms, not MTD
- 280+ patient years exposure between INSPIRE & Extension studies with no significant change in important AE outcomes



Legal Events are Gating to Final FDA Approval of YUTREPIA™

	Q1 2022	Q2 2022			Q3 2022		Q4 2022	
Key Dates		Hatch-Waxman Trial △ Mar 28-31 st	'793 IPR oral arguments △ May-13 th	Submit H-W Post-trial briefs △ Jun-15 th	Decision	Hatch-Waxman Decision ──────	30-Mo Stay Expires Oct-27	

Proceeding	Patents	Status	Timing	Comments
<i>Inter Partes</i> Review	' <u>901</u>	✓Invalidated	Oct 2021	 PTAB stated 7 of 9 claims unpatentable in IPR decision; denied UTHR's re-hearing request¹
	' <u>793</u>	✓Invalidated	Jul 2022	 PTAB stated all claims unpatentable and obvious based on a review of the prior art² Would not override Court Order in H-W case unless PTAB decision is appealed & affirmed
Hatch- Waxman Litigation ^{3,4}	' <u>901</u>	✓ Withdrawn	Dec 2021	 UTHR stipulated LQDA's non-infringement with appellate rights reserved⁵
	' <u>066</u>	Await Decision	By Oct 27 th	 Product-by-process claims similar to those invalidated by IPR in '393 patent⁶ Method claim requires storage of treprostinil salt at ambient temperature
	' <u>793</u>	Await Decision	By Oct 27 th	 Argued points of non-infringement & invalidity that could not be made in IPR Judge Andrews not obligated to consider recent PTAB ruling in rendering his decision

- **U.S. Patent numbers**: *Product-by-Process patents*: No. 9,593,066; No. 9,604,901; No. 8,497,393; *Method of Use patent*: No. 10,716,793
- Under Hatch-Waxman Act: FDA is automatically precluded from granting final approval of YUTREPIA for up to 30 months or earlier favorable resolution of Hatch-Waxman lawsuit
- PACER: Civil Docket For Case#: 1:20-cv-00755-RGA-JLH on https://ecf.ded.uscourts.gov/; PTAB: IPR2021-00406 on https://ptab.uspto.gov/#/external/search

Well Capitalized Through Potential Value Creating Events In 2022 and beyond

\$100+ million cash on-hand in April after equity raise

Positive contribution from Treprostinil Injection

- 50:50 profit split with Sandoz
- \$15.5 million cash contribution 2021 EOY
- \$12.9 million revenue 2021 EOY, net of amortization of contract acquisition costs from Sandoz agreement
- \$3.5 million revenue for 1Q'2022

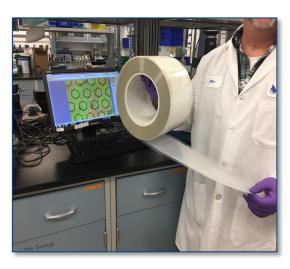
Preparing to launch YUTREPIA™ into PAH market

- Pre-commercial activity with key stakeholders
- R&D activity to increase future value proposition
- Early-stage program for life-cycle management

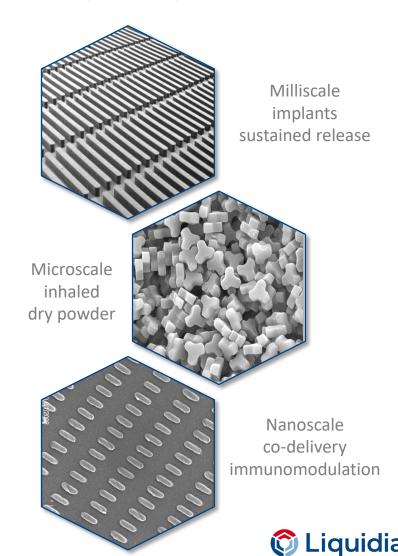
Cash & Equivalents Q1 2022	\$57.8 million as of 31-Mar-2022
Equity Raise April 2022	~\$53.7 million in net proceeds
SVB Debt Facility January 2022	\$20.0 million drawn +\$5.0 million available now +\$15.0 million on future milestones
Shares Outstanding	64.4 million shares

Proprietary PRINT® Technology Platform Not Limited to Inhaled

<u>Particle Replication In Non-wetting Templates (PRINT®) for precise particle engineering</u>



- Applicable to any therapeutic area, molecule, and route
- Proven science and scalable manufacturing
- FDA approved In-House GMP Facility
- Utilizes manufacturing techniques from the microelectronics industry to manufacture drug product particles with precise size, shape, weight, and chemical composition to target minute absorptive lung surfaces





Thank You

