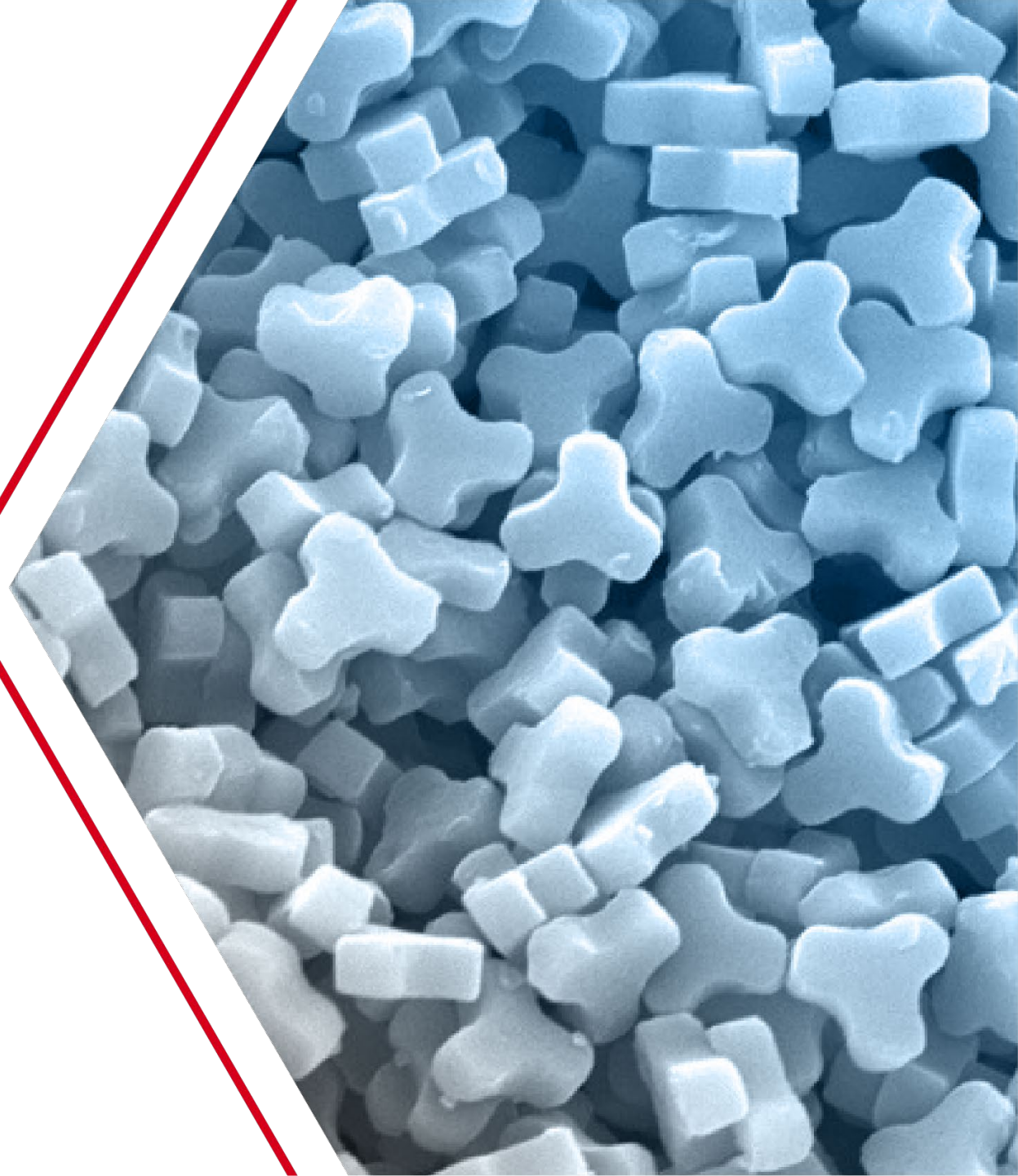
Liquidia® CORPORATION

Corporate Overview

March 2021

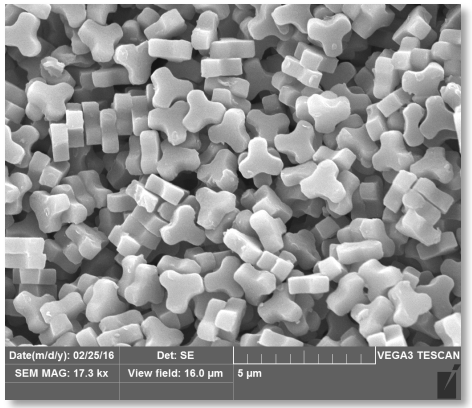


Forward-Looking Statements

This presentation includes, and our response to various 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 forward-looking statements, including 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, including our potential response to the Complete Response Letter received in November 2020, the potential for eventual FDA approval of the NDA for LIQ861, the timeline or outcome related to our patent litigation pending in the U.S. District Court for the District of Delaware or its *inter partes review* with the PTAB, the issuance of patents by the USPTO, and 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 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 the control of us and our management 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.

Building on expertise in pulmonary hypertension & PRINT® Technology

Program	Indication	Formulation	Phase 1	Phase 2	Phase 3	NDA	Marketed
Treprostinil Injection*	**PAH**	treprostinil, injection					
LIQ861	**PAH**	treprostinil, inhalation powder					
LIQ865	**Local, post-surgical pain**	bupivacaine, sustained-release					



Example of inhaled dry powder particles

PRINT® Technology

- Precisely engineered, uniform drug particles to improve performance
- Broadly applicable across therapeutic areas, modalities, delivery routes
- Fully scaled manufacturing platform offers multiple product advantages

Pulmonary Arterial Hypertension (PAH); *Commercializing Treprostinil Injection in partnership with Sandoz in the United States

Commercializing Treprostinil Injection in partnership with Sandoz

Fully substitutable AP generic for Remodulin®

- **Employs experienced, national salesforce calling on pulmonologists and cardiologists at top PAH centers**
- **Offers the same active ingredient and dosage forms with same level of service and support, but at a lower price than the branded drug**
- **Provides immediate access to more PAH centers, beyond those from LIQ861 clinical collaborations**

Commercial presence and relationships will bolster commercial readiness for LIQ861

Remodulin® (treprostinil) is a registered trademark of United Therapeutics; Sandoz Press release, Mar 25, 2019; Treprostinil Injection Package Insert,

LIQ861 poised to maximize treprostinil delivery to lungs of PAH patients

LIQ861 is an investigational, inhaled dry powder formulation of treprostinil

- **First DPI with goal to enhance deep-lung delivery** using convenient, disposable device
- **Favorable safety and tolerability profile** as demonstrated by INSPIRE trial with no maximum tolerated dose identified yet
- **Potential to optimize inhaled treprostinil therapy**, dosing to patient benefit vs. tolerability
- **Strong IP position with patent claims into 2037** that cover use of dry-power treprostinil in Pulmonary Hypertension[1]
- **Subject to resolution of CRL and lawsuit filed by UTHR[2,3]**

1. Aug 28, 2020 press release; 2. Nov 25, 2020, press release ; 3. Under Hatch-Waxman Act, the FDA is automatically precluded from approving the LIQ861 NDA for up to 30 months or until resolution of the lawsuit filed by United Therapeutics on June 4, 2020; Jun 5, 2020 press release;

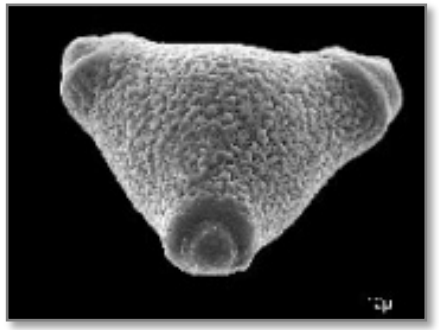
LIQ861 for PAH

PRINT® treprostinil, dry powder inhalation

Particle size, shape, composition and weight are critical to aerodynamics

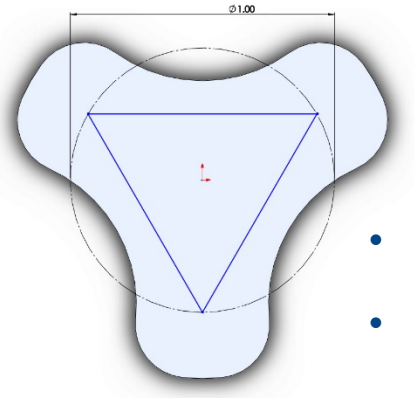
LIQ861 PRINT particles have a trefoil shape, inspired by naturally occurring pollen

Micrograph of pollen particle



Eperua schomburgkiana

Precise PRINT particles



- PRINT particles are 1.3 µm MMAD particle
- Respirable particles are < 5 µm in diameter

In vitro studies suggest that the **uniformity of size and shape** allow our inhaled particles to **target delivery into the lungs** with **less deposition in the upper airways**

Median mass aerodynamic diameter (MMAD)

The first dry powder inhaled therapy for PAH upon timely approval of LIQ861

- Dry powder inhaler
- Blister cards with capsules
- Brush to clean DPI at the end of the day
- Carrying case

Met primary endpoint at Month 2 in pivotal INSPIRE study

Final data as presented at ISHLTv 2020

TEAEs at Month 2[1] in ≥ 4% of Patients Receiving LIQ861	LIQ861 (tresprostinil)		
	Transitions (n=55)	Add-ons (n=66)	All Treated (n=121)
Cough	27.3%	54.5%	**42.1%**
Headache	25.5%	27.3%	**26.4%**
Throat irritation	9.1%	21.2%	**15.7%**
Dizziness	10.9%	10.6%	**10.7%**
Diarrhea	5.5%	12.1%	**9.1%**
Chest discomfort	9.1%	7.6%	**8.3%**
Nausea	7.3%	7.6%	**7.4%**
Flushing	1.8%	7.6%	**5.0%**
Dyspnea	5.5%	4.5%	**5.0%**
Oropharyngeal pain	1.8%	6.1%	**4.1%**

- **TEAEs mostly mild to moderate**
- **No SAEs related to LIQ861**
- **Most TEAEs observed during first 2-weeks**
- **93% of patients completed 2-months**
- **Most patients titrated to doses of 79.5 mcg or higher**
  - 79.5 mcg LIQ861 is comparable to 54 mcg (9 breaths) Tyvaso
- **Have not yet reached an MTD**
  - At Month 2, dosed up to 159 mcg capsule strength
  - Have dosed patients at 212 mcg beyond Month 2

1. Hill N. S., et al. INSPIRE: Final Results from a Phase 3, Open-Label, Pivotal Study to Evaluate the Safety and Tolerability of LIQ861 in Pulmonary Arterial Hypertension [virtual presentation]. ISHLTv 2020; 2020 Apr 22; Serious Adverse Events (SAEs); Treatment Emergent Adverse Events (TEAEs) deemed related to LIQ861; Maximum Tolerated Dose (MTD);

Positive exploratory endpoint data at Month 2

More than 75 patients have been treated with LIQ861 for longer than 2 years

- **Maintained (75.9%) or improved (20.5%) NYHA Functional Class overall**
- **Increased median 6MWD by 10.1 m overall**
- **Improved quality of life overall as measured by MLHFQ, as well as in emotional & physical dimensions**
- **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 LIQ861 dry-powder inhaler to Tyvaso® Inhalation System**

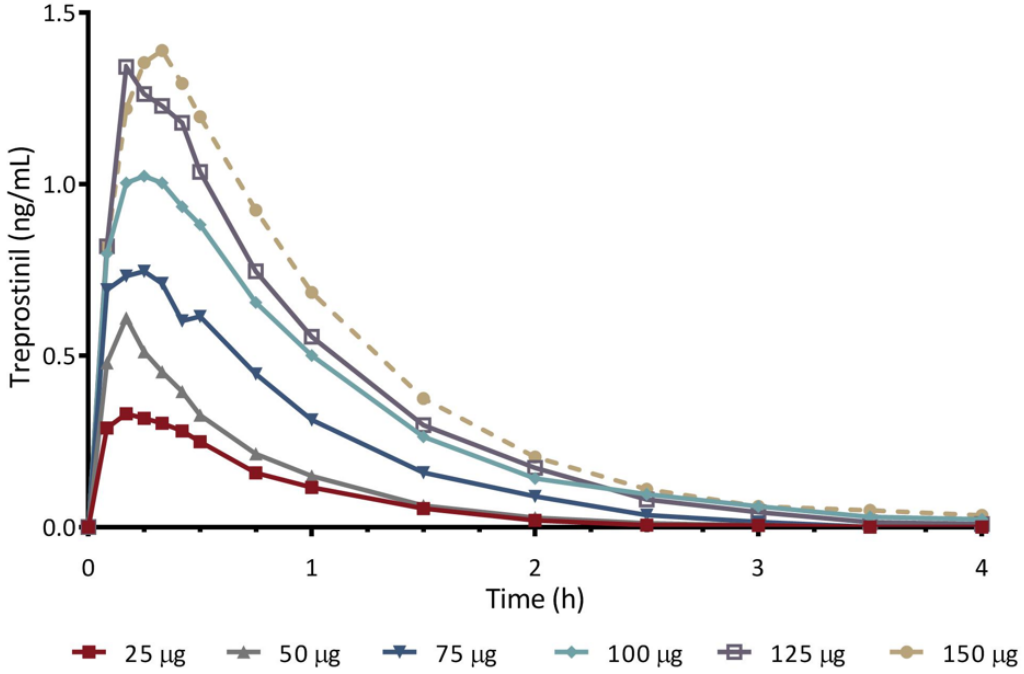
Hill N. S., et al., INSPIRE: A Phase 3 Open-Label, Multicenter Study to Evaluate the Safety and Tolerability of LIQ861 in Pulmonary Arterial Hypertension (PAH) – Exploratory Efficacy Endpoints Analysis at Month 2; ATS 2020 [ePoster] ; New York Heart Association (NYHA); Six Minute Walk Distance (6MWD); Minnesota Living with Heart Failure Questionnaire (MLHFQ); N-terminal pro b-type natriuretic peptide (NT-proBNP); Tyvaso® is a registered trademark of United Therapeutics

LIQ861 was well-tolerated in two Phase 1 studies, no reported SAEs, no MTD

TEAEs related to treatment were mild

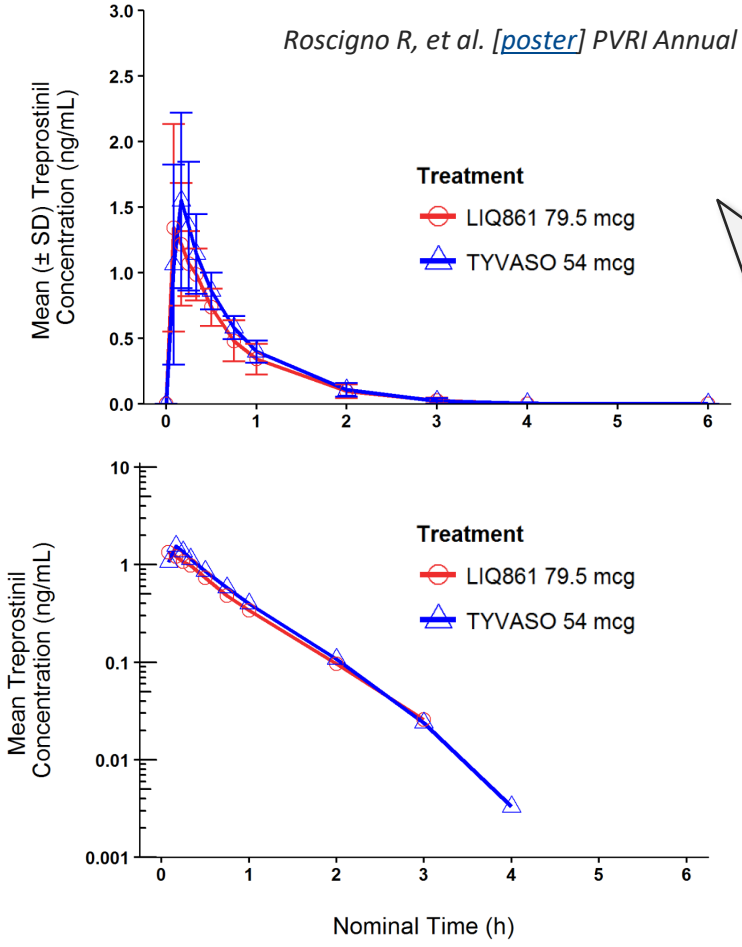
LTI-101 showed PK dose proportionality, no MTD

Royal M, Roscigno R, et al. [poster] PVRI Annual World Congress 2018 January



LTI-102 demonstrated comparable PK to Tyvaso

Roscigno R, et al. [poster] PVRI Annual World Congress 2020 January



"…the geometric mean ratios (LIQ861/Tyvaso®) were 0.923, 0.947, and 0.931 for AUCinf, AUClast, and Cmax, respectively, and the 90% CIs for these ratios were within the acceptable equivalence limits of 0.80 to 1.25 (Table 3)."

Treatment Emergent Adverse Event (TEAE), Serious Adverse Event (SAE), Maximum Tolerated Dose (MTD)

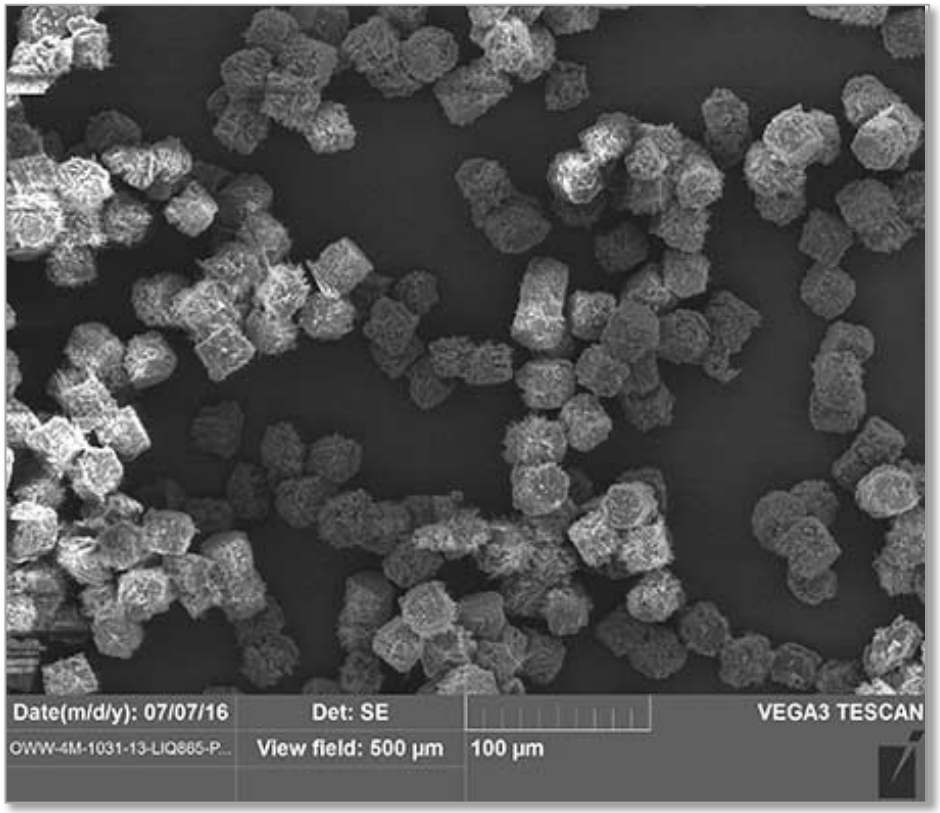
LIQ865 for Local Post-Operative Pain

PRINT® bupivacaine, sustained-release injectable

LIQ865 program demonstrates proof of principle

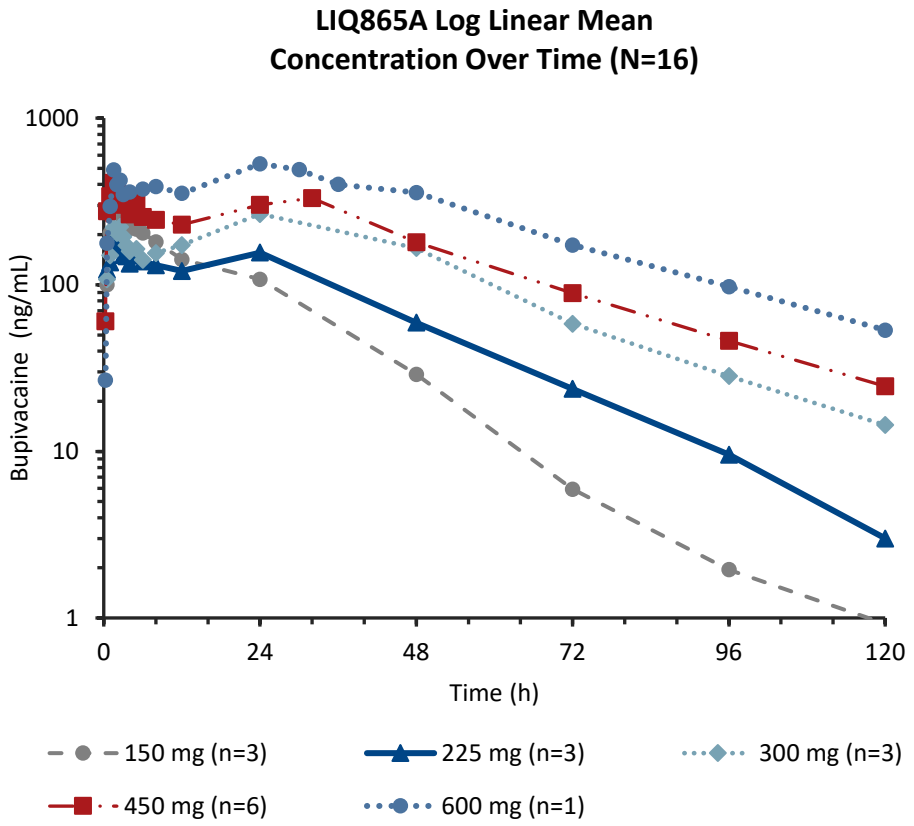
Single-dose infiltration to produce postsurgical local analgesia

- **Target 3 to 5 days duration of action**
  - Provides extended duration analgesia
  - Supported by PK & PD data from Ph 1 studies
- **Simple, uniform particles of a single active**
  - Easy reconstitution from a powder
- **Flexible application at the surgical site**
  - Adjustable concentration range to deliver the dose
  - Enables instillation or injection around incision
- **Limited potential for dose dumping**
  - Compatible with co-administration of instant-release lidocaine



LIQ865 was well-tolerated at all doses with dose proportional PK

- Ph1a, healthy volunteers in Denmark
- Single, ascending dose
- No dose-limiting toxicities
- All adverse events were mild to moderate
- C_{max} well below reported thresholds for neurotoxicity and cardiotoxicity



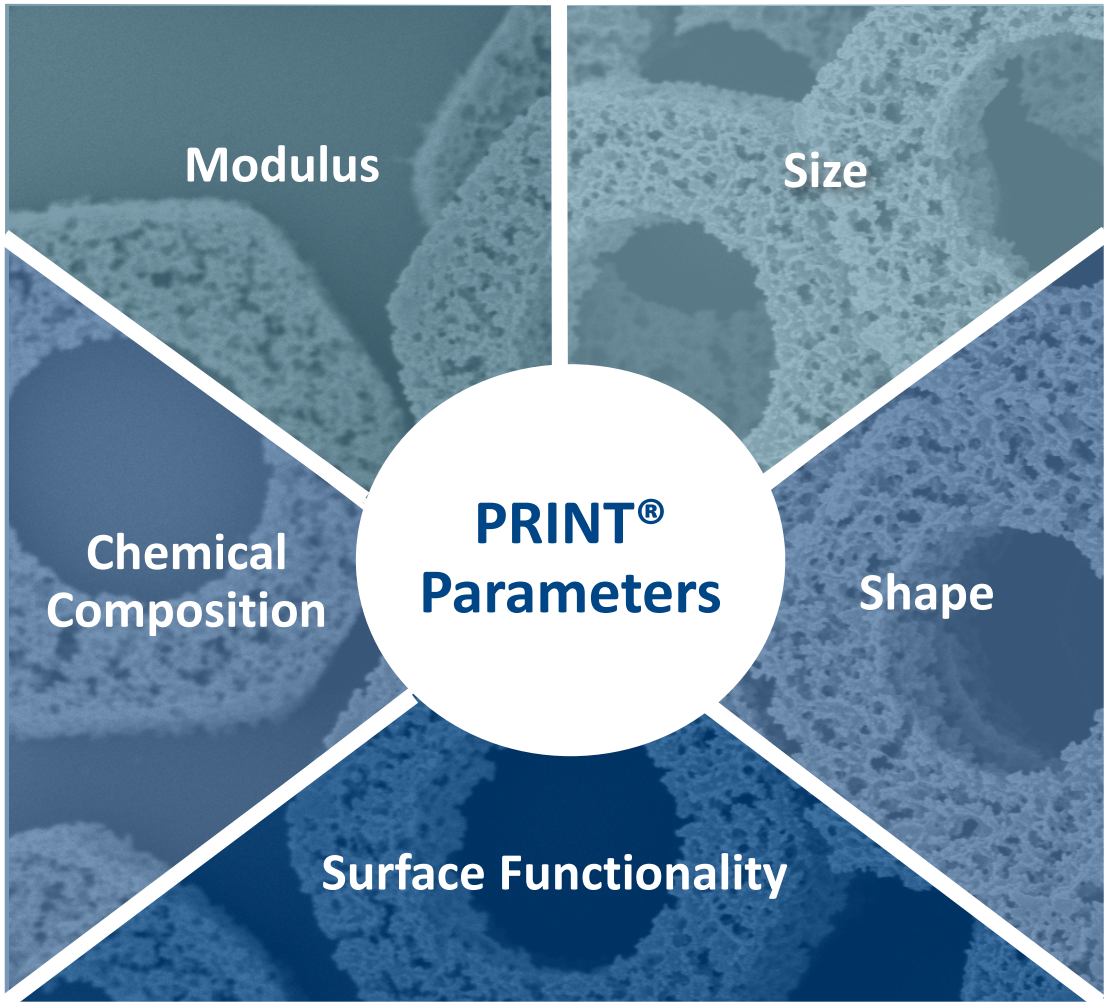
Seeking a partner to advance LIQ865 into Phase 2 through a strategic collaboration

Quantitative Sensory testing (QST)

Source: Vaughn T, et al. A Phase 1 Randomized, Controlled, Double-Blind, Single Ascending Dose Safety and Pharmacokinetic/Pharmacodynamic Study in Healthy Adult Males after LIQ865 Injection [poster]. In: ASRA's Annual Pain Medicine; 2018 Nov 15-18; San Antonio, TX.

PRINT® Technology

Independent and precise design of each particle feature

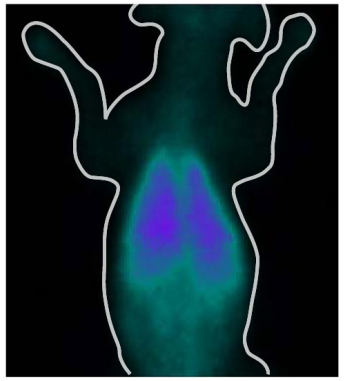


Particle geometry predictably affects in vivo lung deposition

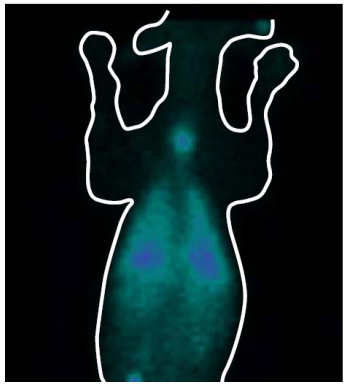
PRINT® particles enhance inhaled delivery

Tc^{99} scintigraphy of PRINT particles

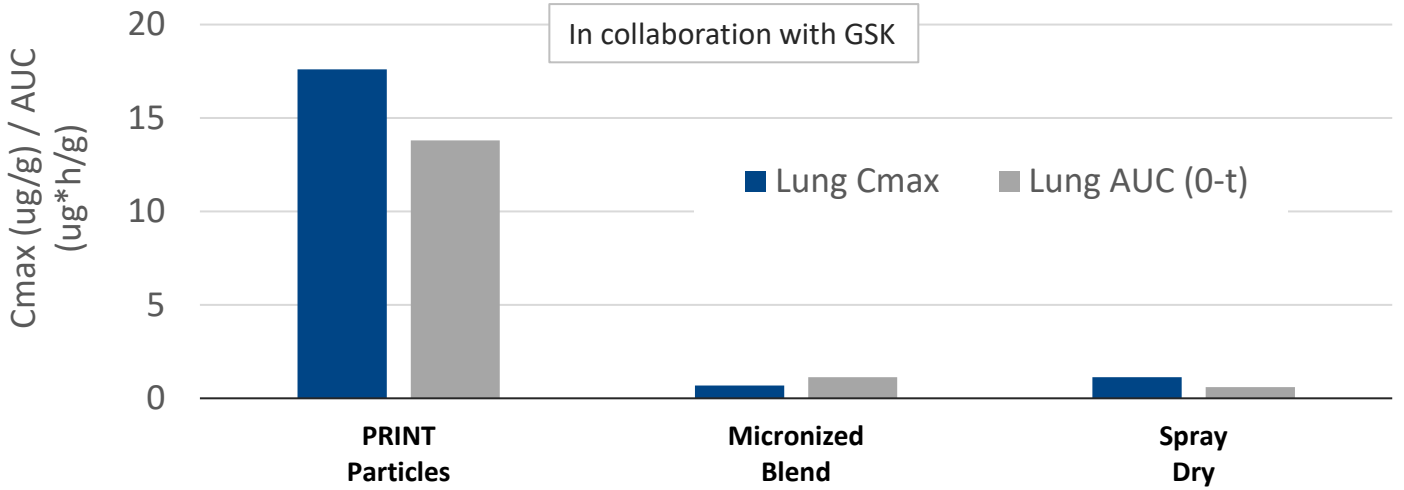
1.3 µm MMAD particle



4.6 µm MMAD particle



20x greater exposure of ribavirin with PRINT



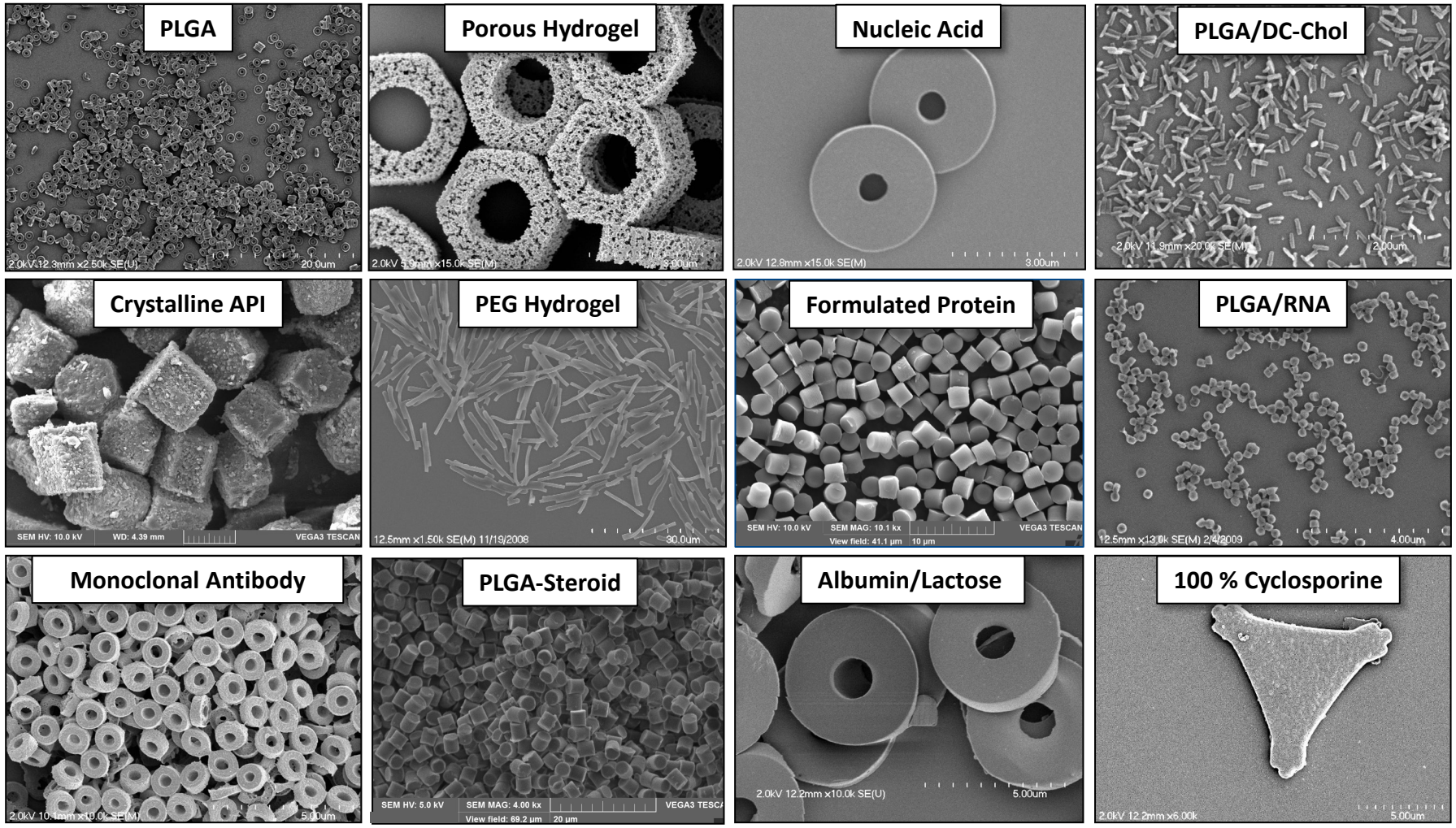
Ribavirin formulations	MMAD (GSD)	Lung Cmax ug/g	Fold change in lung Cmax	Lung AUC (0-t) ug*h/g	Plasma Cmax ug/mL	Plasma AUC (0-t) ug*h/mL
PRINT	0.9 (3.4)	17.6	**26x**	13.8	0.199	0.502
Micronized (lactose blend)	2.9 (2.6)	0.683	**1x**	1.14	0.0878	0.356
Spray Dried	1.3 (3.02)	1.14	**2x**	0.600	0.077	0.122

Garcia A, et al., Journal of Drug Delivery Volume 2012, Article ID 941243

Maynor BW, Respiratory Drug Delivery 2018. Volume 1, 2018: 211-220.

Compatible with nearly any material, payload and route of delivery

Examples, not exhaustive



PRINT® production has been scaled for clinical and commercial demands

Preclinical and R&D
Highly versatile, flexible

Lab Line 2

- Highly agile platform enabling process experimentation
- Ideal for early-stage process development

cGMP Process Development
Optimization, scale-up

Lab Line 3

- Capable of larger batches with increased process control
- We believe Lab Line 3 is fully cGMP compliant to support product launch

cGMP Production
Repeatable and deployable

Commercial Line 1

- Optimized drug substance production process
- Designed for continued market supply and scale

Liquidia® CORPORATION

Thank You