

# Theravance Biopharma, Inc. (NASDAQ: TBPH)

Investor Presentation

June 2019



Medicines That Make a Difference<sup>®</sup>

# Forward Looking Statements

Under the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995, the company cautions investors that any forward-looking statements or projections made by the company are subject to risks and uncertainties that may cause actual results to differ materially from the forward-looking statements or projections.

Examples of forward-looking statements in this presentation may include the current dispute with Innoviva, Inc. and TRC LLC, statements relating to the company's strategies, plans and objectives, the company's regulatory strategies and timing of clinical studies (including the data therefrom), the potential characteristics, benefits and mechanisms of action of the company's product and product candidates, the potential that the company's research programs will progress product candidates into the clinic, the company's expectations for product candidates through development, potential regulatory approval and commercialization (including their differentiation from other products or potential products), product sales or profit share revenue and the company's expectations for its 2019 operating loss, excluding share-based compensation.

The company's forward-looking statements are based on the estimates and assumptions of management as of the date of this presentation and are subject to risks and uncertainties that may cause the actual results to be materially different than those projected, such as risks related to the nature of the current dispute with Innoviva and TRC LLC, the uncertainty of arbitration and litigation and the possibility that an arbitration award or litigation result involving the current dispute could be adverse to the company, delays or difficulties in commencing or completing clinical studies, the potential that results from clinical or non-clinical studies indicate product candidates are unsafe or ineffective (including when our product candidates are studied in combination with other compounds), delays or failure to achieve and maintain regulatory approvals for product candidates, risks of collaborating with third parties to discover, develop and commercialize products, risks associated with establishing and maintaining sales, marketing and distribution capabilities.

Other risks affecting the company are described under the heading "Risk Factors" and elsewhere in the company's Form 10-Q filed with the Securities and Exchange Commission (SEC) on May 10, 2019, and other periodic reports filed with the SEC.

# Insight and Innovation in Novel Organ-selective Medicine

## TRANSFORMING TREATMENT OF SINGLE ORGAN DISEASES

### Application of organ-selective expertise to biologically compelling targets

- ▶ Medicines designed to act locally at site of disease, with minimal systemic exposure, to expand therapeutic index
  - Improved efficacy and safety to offer transformational value to payers, patients and HCP's
  - Difficult-to-replicate design characteristics to provide sustainable competitive advantage

### Proven development expertise to deliver innovation

- ▶ Integrated R&D approach accelerates time to pivotal studies (TD-1473, ampreloxetine)
- ▶ Partnerships to complement and expand existing expertise (TD-1473, YUPELRI®)
- ▶ Established commercial infrastructure surrounds value proposition (YUPELRI®)

### Strong capital position

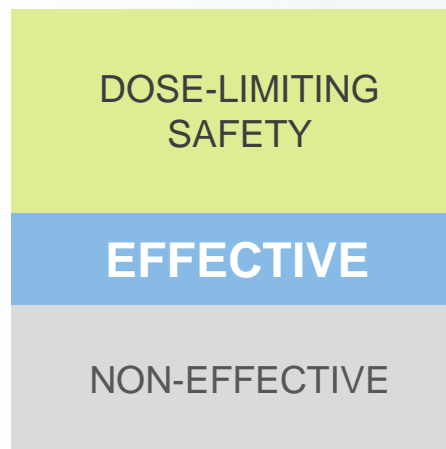
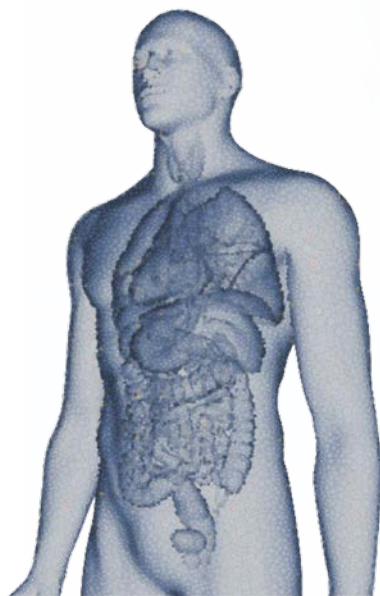
- ▶ Cash of \$434M as of March 31, 2019<sup>1</sup>
- ▶ Royalties for GSK's TRELEGY ELLIPTA, the first and only once-daily single inhaler triple therapy<sup>2</sup>
- ▶ Commercial launch of YUPELRI®, the first and only once-daily nebulized LAMA for treatment of COPD

# Organ-selective Approach

## COMPOUNDS DESIGNED TO FULLY HARNESS INTENDED BIOLOGY

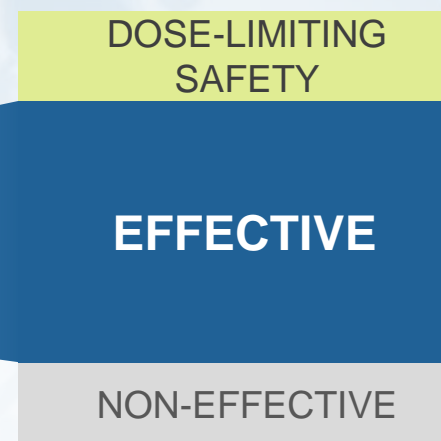
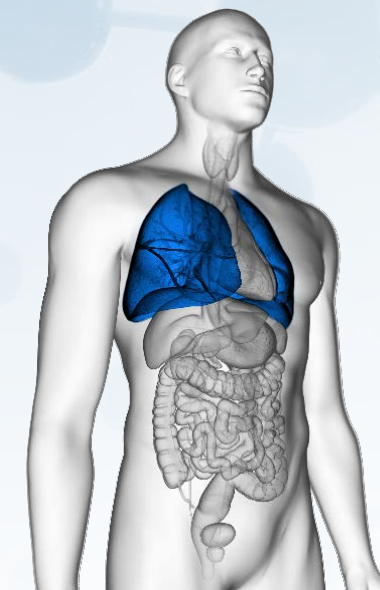
### Conventional Systemic Compound

- ▶ Often unable to achieve maximal efficacy due to dose limiting safety
- ▶ Narrow therapeutic index



### Theravance Biopharma Organ-selective Compound

- ▶ Opportunity to increase dose for improved efficacy, without cost of systemic safety risk
- ▶ Expanded therapeutic index



*Illustrated example: lung selectivity*

# Differentiated Pipeline to Drive Future Growth

Program	Pre-clinical	Early	Proof of Concept	Pivotal	Collaborator
<b>GI JAKi</b> <b>TD-1473 (gut-selective pan-JAK)</b> Ulcerative colitis Crohn's disease					
<b>NRI</b> <b>Amprexetine (TD-9855)</b> Symptomatic neurogenic orthostatic hypotension					
<b>Inhaled JAKi</b> <b>TD-8236 (lung-selective pan-JAK)</b> Serious respiratory diseases					
<b>Various</b> <b>New organ-selective projects advancing towards clinic</b> Multiple indications					

Clinical opportunities underpinned by economic interest in TRELEGY ELLIPTA, potential Janssen milestones and YUPELRI® launch



# Economic Interest

GSK's FDA-approved TRELEGY ELLIPTA (FF/UMECS/VI):  
First and only once-daily single inhaler triple therapy

# GSK's TRELEGY ELLIPTA

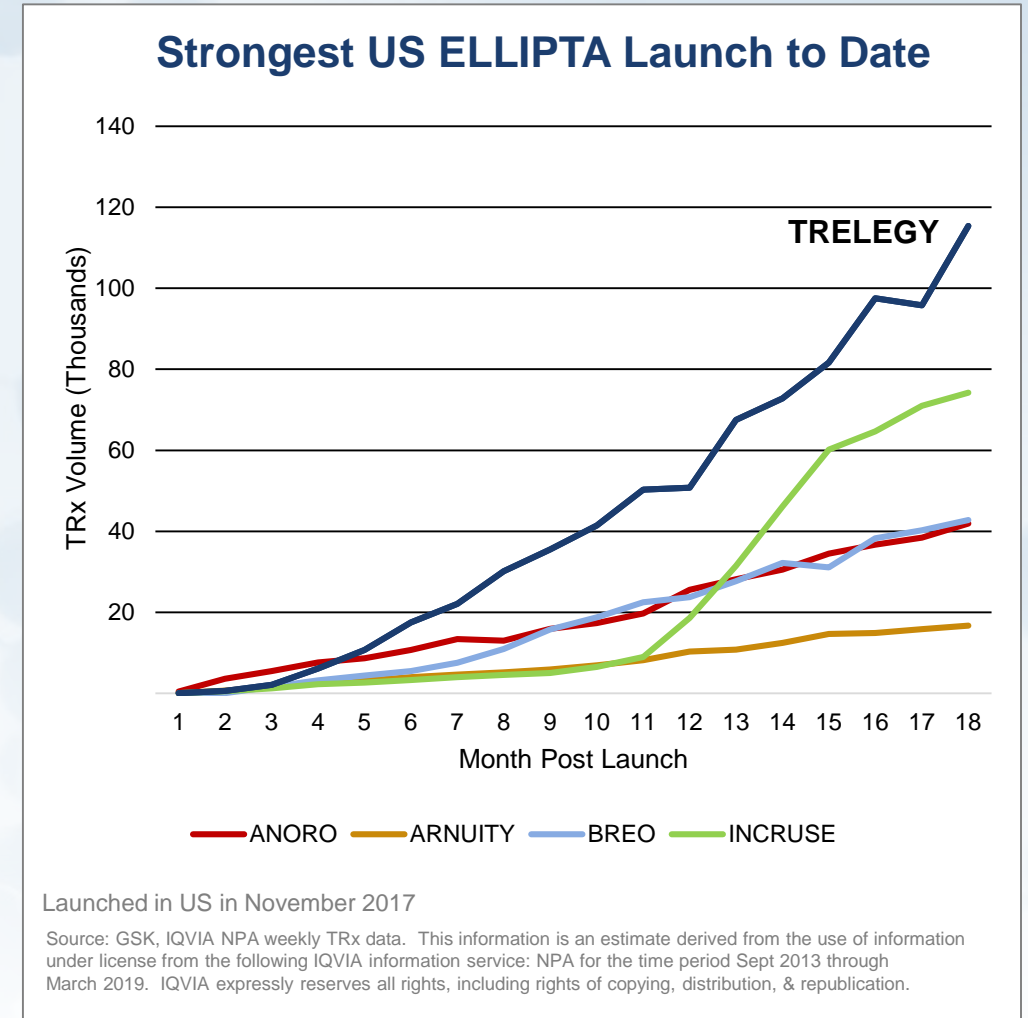
## FIRST AND ONLY ONCE-DAILY SINGLE INHALER TRIPLE THERAPY

### Economic interest in TRELEGY ELLIPTA

- ▶ Upward-tiering royalty of ~5.5% - 8.5% of worldwide net sales<sup>1</sup>
- ▶ Passive economic interest; no product cost obligations

### Growth continues after first full year on market

- ✓ Available in 30 markets, including recent Japan launch
- ✓ Additional geographies expected in 2019; potential for China approval and launch later this year
- ✓ Phase 3 asthma study met primary endpoint; data to be submitted for regulatory review once full dataset available



# Non-recourse PhaRMA<sup>SM</sup> 9% Fixed Rate Term Notes

## SECURITIZED BY ROYALTIES DUE ON NET SALES OF TRELEGY ELLIPTA

### Transaction generated cash with retained economics

- ▶ December 2018 TBPH executed a non-dilutive private placement of \$250M<sup>1</sup> PhaRMA<sup>SM</sup> 9% fixed rate term notes
- ▶ Debt payable by economic interest in TRELEGY ELLIPTA<sup>2</sup>
  - 75% of royalties pledged to repay debt
  - 25% of royalties retained by TBPH
- ▶ Proceeds support key strategic priorities
- ▶ Following repayment of notes, all TRELEGY ELLIPTA related cash flows revert to TBPH

### Non-recourse notes with flexible repayment terms

- ▶ Notes fully securitized by royalties due on net sales of TRELEGY ELLIPTA; no debt obligation to TBPH
- ▶ Quarterly interest obligations:
  - Through October 15, 2020, to the extent there are insufficient funds to satisfy quarterly interest payments, interest may be paid in-kind without a default or event of default occurring; or
  - At TBPH's option, quarterly interest payments may be satisfied by making a capital contribution for no more than 4 consecutive quarterly interest payment dates or for no more than 6 quarterly interest payment dates during the term of the notes



# Arbitration Against Innoviva, Inc. (INVA)

## TBPH INTENDS TO ENFORCE ALL RIGHTS TO TRELEGY ELLIPTA ROYALTIES<sup>1</sup>

### The Respiratory Company, LLC (TRC LLC)

- ▶ Upon our spin-off from INVA in 2014, TBPH and INVA entered into a binding limited liability company agreement
- ▶ TRC LLC is jointly owned by TBPH and INVA but managed by INVA
- ▶ TBPH entitled to 85% and INVA entitled to 15% of royalties paid to TRC LLC by GSK resulting from GSK's net sales of TRELEGY ELLIPTA
- ▶ Agreement imposes express fiduciary duties on INVA and significant limitations on INVA's authority as manager

### Arbitration underway

- ▶ In May 2019, we initiated arbitration against INVA and TRC LLC due to INVA's failure to disburse stipulated royalties to TBPH
  - INVA has caused TRC LLC to not remit royalty payments for 4Q18; and
  - INVA has stated it intends to cause TRC LLC to withhold cash distributions for the remainder of 2019
- ▶ TBPH intends to enforce all aspects of the agreement to ensure we continue receiving our 85% share of TRELEGY -related royalties
- ▶ Agreement stipulates parties shall use commercially reasonable best efforts to complete arbitration within 90 days after the arbitrator(s) is/are appointed
- ▶ We are confident that the arbitration process provides an expedient forum to resolving the dispute in our favor
- ▶ Confidentiality provisions limit what we can communicate publicly about this matter. We have and will continue to abide by those confidentiality provisions, which require all parties to keep this matter confidential, subject to any non-waivable disclosure obligations under applicable law

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# **YUPELRI<sup>®</sup> (revefenacin) inhalation solution**

Nebulized long-acting muscarinic antagonist (LAMA)

# YUPELRI®: Formal Commercial Launch Underway

## FDA-APPROVED FOR THE MAINTENANCE TREATMENT OF COPD

- ▶ *First and only once-daily bronchodilator delivered in a nebulizer*
- ▶ *Higher of two doses approved: 175 mcg once daily, for use with any standard jet nebulizer*

### Unmet need for nebulized LAMA therapy

- ▶ Once-daily LAMAs are first-line therapy for moderate to severe COPD <sup>1</sup>
- ▶ No once-daily nebulized LAMAs available previously; only available in handheld devices
- ▶ Nebulized therapy associated with reduced hospital readmissions in low PIFR patients <sup>2</sup>



# Compelling Need for Once-Daily Nebulized LAMA

## ENDURING PATIENT NICHE AND SIGNIFICANT MARKET OPPORTUNITY

### Enduring patient niche

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- ▶ 9% of COPD patients currently use nebulizers for ongoing maintenance therapy <sup>1</sup>
- ▶ >100M patient treatment days in nebulized COPD segment <sup>2</sup>
- ▶ 41% of COPD patients use nebulizers at least occasionally for bronchodilator therapy <sup>1</sup>
- ▶ Pricing in branded LA nebulized segment ~ 2x handheld Spiriva <sup>2</sup>

### Significant market opportunity

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- ▶ YUPELRI® may be complementary to existing nebulized LABA treatments
- ▶ Mylan partnership brings commercial strength in nebulized segment

# Partnership with Mylan Brings Commercial Strength in Nebulized Opportunity

Combined sales infrastructures cover  
Hospital, Hospital Discharge and Home Health settings



## Targeting HCPs at key intersections in the patient's disease management process

- ▶ Hospital is an important site of care for patients with worsening of COPD symptoms
- ▶ Theravance Biopharma's established hospital-focused sales force is targeting the inpatient setting
- ▶ Theravance Biopharma partners with institutions to transition appropriate patients from hospital to home on YUPELRI®
- ▶ Mylan's role is to ensure patients remain on YUPELRI® for maintenance therapy in the outpatient setting

# YUPELRI® Launch Update

## ENCOURAGING INITIAL MARKET RESPONSE

### FORMULARY

#### 33 Wins

(equates to 114 accounts)

**~80 Reviews Scheduled**  
(~320 potential accounts)

**100% medical support**  
requests **fulfilled** <30 days

### PATIENT

Field force productivity goals  
exceeded

**~4,500 patients** prescribed  
(*thru 1Q19*)

### ACCESS

**100% Medicare Part B** <sup>1</sup>

**~50% Commercial**

**Permanent J-CODE issued**  
(*effective July 1, 2019*)

- ▶ Majority of YUPELRI® volume flows through durable medical equipment (DME) channel <sup>2</sup>; remaining volume flows through hospitals, retail and long-term care pharmacies
- ▶ WAC: \$1,030 per month (or ~\$34 per day)

# Opportunity for YUPELRI<sup>®</sup> (revefenacin) in China

## POTENTIAL TO ADDRESS LARGE AND UNDERSERVED COPD PATIENT POPULATION

### Expansion of development and commercialization agreement

- ▶ Mylan granted exclusive development and commercialization rights to revefenacin in China and adjacent territories
- ▶ Theravance Biopharma eligible to receive:
  - \$18.5 million upfront payment
  - Up to \$54 million in additional potential development and sales milestones
  - Tiered royalties on net sales, if approved
- ▶ Mylan responsible for all aspects of development and commercialization in partnered regions

### Significant market opportunity

- ▶ COPD affects ~100 million individuals in China<sup>1</sup>
- ▶ ~43% of COPD patients suffer from moderate to very severe forms of disease<sup>2</sup>
- ▶ COPD is one of the top three causes of death in China<sup>3</sup> and presents significant financial burden to healthcare system<sup>2</sup>

### Theravance Biopharma and Mylan strategic collaboration

- ▶ In 2015, the companies established a strategic collaboration to develop and commercialize nebulized revefenacin products for COPD and other respiratory diseases
  - Theravance Biopharma eligible to receive up to \$259 million in potential development and sales milestone payments, as well as profit-sharing arrangement with Mylan on US sales and tiered royalties on ex-US sales
  - Theravance Biopharma retains worldwide rights delivered through other dosage forms, including metered dose inhaler and dry powder inhaler (MDI/PDI)

The background of the slide features a complex molecular structure, likely representing a chemical compound, rendered in shades of blue and white. The structure consists of numerous interconnected spheres (atoms) and lines (bonds), creating a dense, three-dimensional network. The overall color palette is a gradient of blues, from light to dark, with a prominent diagonal line separating the upper and lower sections of the image.

# Ampreloxetine (TD-9855)

Once-daily norepinephrine reuptake inhibitor (NRI) for neurogenic orthostatic hypotension (nOH)

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# Symptomatic nOH Represents a Significant Unmet Need

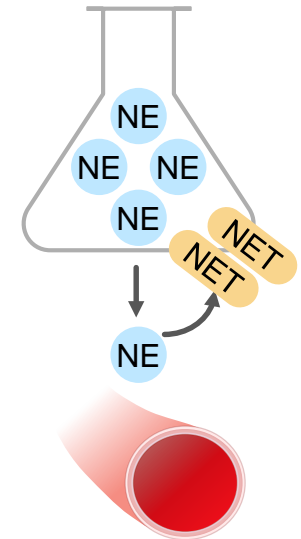
**nOH characterized by a sustained drop in blood pressure upon standing, due to body producing insufficient levels of norepinephrine (NE)**

- ▶ Associated with several autonomic disorders: MSA, PD, PAF
- ▶ Symptoms include dizziness, fainting, blurred vision and weakness
- ▶ Orphan indication with < 200k patients in US

## Opportunity exists for safe and effective treatment

- Only droxidopa (Northera) and midodrine FDA-approved for nOH
- Synthetic exogenous NE analogues impact disease by increasing vascular tone
- Limitations of current therapy: Supine hypertension, TID dosing, patients refractory or discontinue, lack of durability<sup>1</sup>
- Ideal therapy would target durable improvement in symptoms and daily function

Blood pressure key biological driver to nOH symptoms



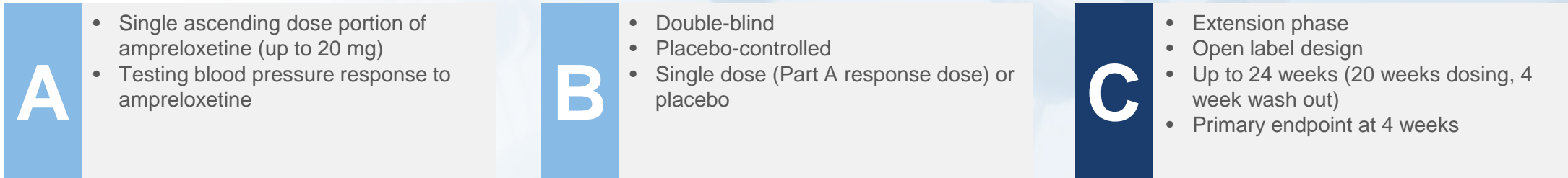
Vasodilation lowers blood pressure



# Overview of Phase 2 Study in nOH

## DESIGNED TO EVALUATE INITIAL AND DURABLE RESPONSE TO THERAPY

Three-part design in patients with nOH:



*Patients started on Part A, and responders moved to Part B and/or Part C (extension phase)*

**Purpose:** To evaluate the effect of ampreloxetine in improving blood pressure and key nOH symptoms

**Part C:** Responders in Part A eligible for open-label treatment for up to 5 months

- ▶ Designed to assess durability of effect
- ▶ Primary assessment at four weeks (Day 29)
- ▶ Efficacy evaluations: OHSA<sup>1</sup> #1, standing time duration, standing systolic blood pressure
- ▶ Also assessed safety and pharmacokinetics of ampreloxetine

# Top-line Phase 2 Results in nOH

## PARTS A and B: SINGLE ASCENDING DOSE, AMPRELOXETINE OR PLACEBO

### A

#### Initial responses observed

Responses reported in majority of patients treated

- ▶ 27 of 34 patients enrolled in Part A showed improvements in SBP and/or standing time
- ▶ Responses observed above 5 mg

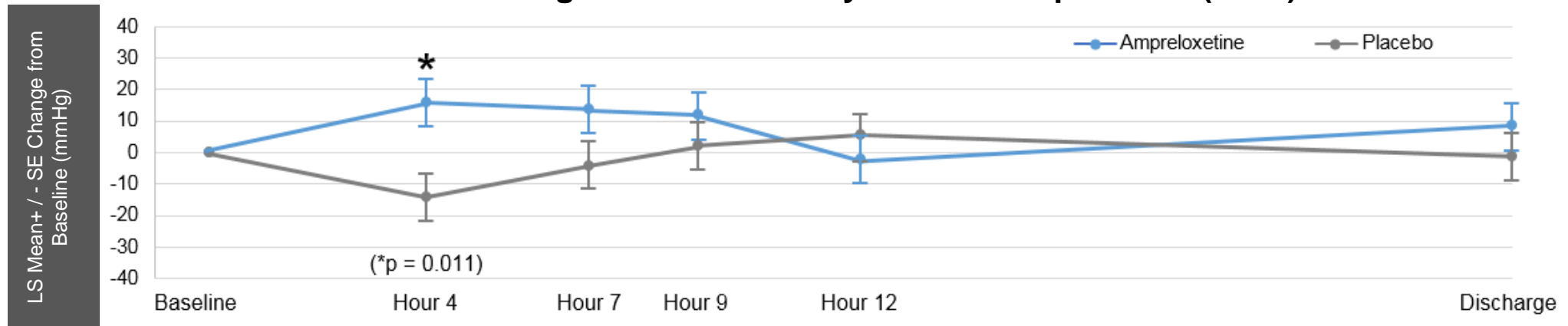
### B

#### Confirmation vs. placebo

Statistically significant difference of 30 mmHg at 4 hours post-dose ( $p = 0.011$ )

- ▶ Amprexetine increased SBP from a low baseline
- ▶ SBP dropped on placebo during day as expected, due to postural changes and eating
- ▶ No evidence of supine hypertension with amprexetine overnight

### Part B change from baseline systolic blood pressure (n=10)



# Top-line Phase 2 Results in nOH

## PART C: REPEAT DOSE EXTENSION PHASE

### C Durability of effect observed out to 4 weeks

16 of 21 patients (76%) completed four weeks of treatment

Reductions in symptom severity, with most pronounced benefit in patients with symptomatic nOH<sup>1</sup>

- ▶ Mean reduction in OSHA #1 = 2.4 points at four weeks (n=16)
- ▶ 13 completers had OSHA #1 > 4 points at baseline; **mean reduction in group = 3.8 points at four weeks**

Consistent increases in SBP through four weeks

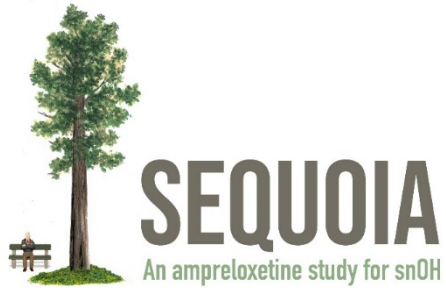
- ▶ Clinically meaningful increases in standing SBP (7 mmHg or greater) after standing for three minutes at all time points on all weekly clinic visits

Generally well tolerated; no serious adverse events assessed as drug-related

Registrational Phase 3 program in symptomatic nOH progressing

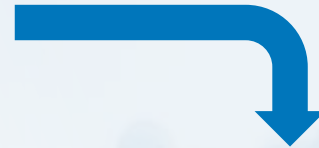
# Amprexetine Clinical Program

## PHASE 3 REGISTRATIONAL PROGRAM IN SYMPTOMATIC NOH

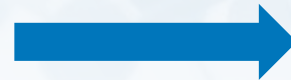


Study 0169  
4 weeks (N=188)

*Randomized, double-blind, placebo-controlled,  
parallel group study*

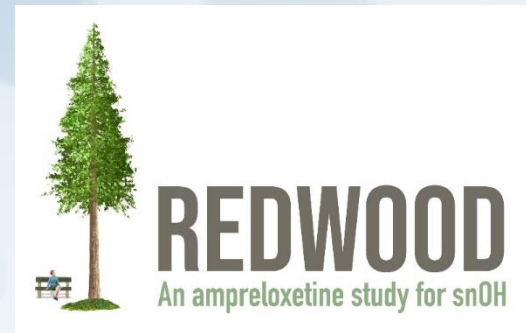


De Novo



Study 0170  
22 weeks (N=258)

*Randomized 6-week withdrawal phase  
(preceded by 4-month open label)*



Supportive 5-month treatment data from Phase 2 study to be presented at IAPRD and ENC

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# TD-1473 JAK Inhibitor Program

Oral gut-selective pan-Janus kinase (JAK) inhibitor for  
ulcerative colitis and other inflammatory intestinal diseases

# Differentiated and Potential Breakthrough Approach

## ADVANCING IN COLLABORATION WITH JANSSEN IN UC AND CROHN'S

TD-1473 program objectives: Oral pan-JAK inhibitor that distributes selectively throughout the intestines to treat inflammatory intestinal disease locally, with minimal systemic exposure or corresponding immunosuppressive effects, to enhance safety and efficacy



### Encouraging Phase 1b study in UC patients

- ▶ Data demonstrated localized biological target engagement with minimal systemic exposure
- ▶ Clinical responses after only 4 weeks of therapy

### Preclinical models of UC confirmed

- ▶ Improvements in diseases scores, local absorption and penetration of TD-1473 throughout intestinal tract

### Phase 2 in Crohn's progressing and Phase 2b/3 study in UC underway

- ▶ FDA and EMA concur on Phase 2b/3 study design in ulcerative colitis



# Encouraging Findings in Phase 1b Study

## 4-WEEK TREATMENT IN 40 PATIENTS WITH ULCERATIVE COLITIS

### Key Findings

<b>Favorable overall safety and tolerability</b>	No systemic or opportunistic infections (including herpes zoster)
	No evidence of reduce white cell counts
<b>Minimal systemic exposure</b>	Plasma levels of TD-1473 very low
	Consistent in all cohorts to levels observed in healthy volunteers
<b>Biologic activity in GI tract</b>	<b>Endoscopic improvements and mucosal healing</b> reported in all active arms; none reported in placebo arm
	<b>Rectal bleeding</b> scores improved above placebo at highest two doses
	Rates of <b>clinical response</b> higher for all active doses compared to placebo <sup>1</sup>
	Clinical responses matched by <b>dose-dependent reductions in surrogate biomarkers</b> <sup>2</sup>
Dose-related increases in local GI tissue drug concentrations; higher two doses produced mean concentrations above JAK IC50	

Detailed results presented in oral late-breaker at UEGW 2018

# TD-1473 Clinical Program

## LATE STAGE STUDIES IN ULCERATIVE COLITIS AND CROHN'S DISEASE

### Phase 2b/3 study in ulcerative colitis



**Phase 2b induction, 4 arms (N=240)**  
Dose-finding induction, 8 weeks

Responders



**Phase 3 maintenance**  
44 weeks

**Phase 3 induction, 2 arms (N=640)**  
Dose-confirming induction, 8 weeks

Responders



### Phase 2 study in Crohn's disease



**Phase 2 study, 3 arms (N=160)**  
Dose-finding induction, 12 weeks

**Active treatment extension, 2 arms**  
48 weeks

# Global Collaboration Agreement for TD-1473

## PURPOSED TO MAXIMIZE VALUE OF PROGRAM

**Theravance<sup>®</sup>**  
**Biopharma**   
Medicines That Make a Difference<sup>®</sup>


**janssen** 

- ▶ Shared belief in TD-1473 as gut-selective with potential to transform the treatment landscape in inflammatory intestinal disease
- ▶ Meaningful program enhancements
  - Accelerate clinical development and advance UC and Crohn's in parallel
  - Apply Janssen expertise in IBD to optimize clinical strategy and execution
  - Maximize worldwide commercial opportunity
- ▶ Attractive deal economics reducing overall financial risk
  - Deal value up to \$1B milestones, including \$100M upfront; additional profit-share in US

Collaboration with global leader in immunology represents milestone for TD-1473, our internally discovered pipeline and strategy to design organ-selective medicines

# TD-8236

Potential first inhaled non-steroidal  
anti-inflammatory for moderate-to-severe asthma  
regardless of Th2 phenotype



# High Medical and Economic Burden in Uncontrolled Asthma

## Patient population

- ▶ 4.9M moderate-to-severe diagnosed patients in US<sup>1</sup>

## Current treatments

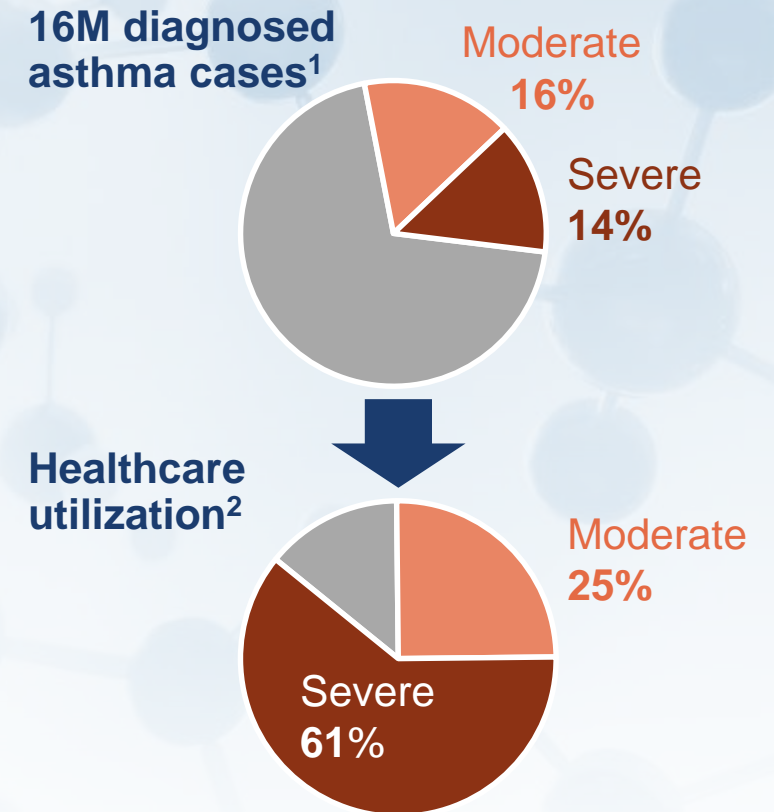
- ▶ Inhaled steroids, which often fail to control disease
- ▶ Approved biologics affect subsets of patients

## Burden of disease

- ▶ Acute exacerbations lead to ER visits
- ▶ Uncontrolled symptoms interfere with ability to sleep, work and QOL
- ▶ US medical costs estimated to be \$58B<sup>3</sup>
- ▶ Disproportionate healthcare utilization by severe and uncontrolled asthmatics
  - High frequency of hospitalizations and increased use of systemic medications

## Small portion of US patients cause high proportion of cost

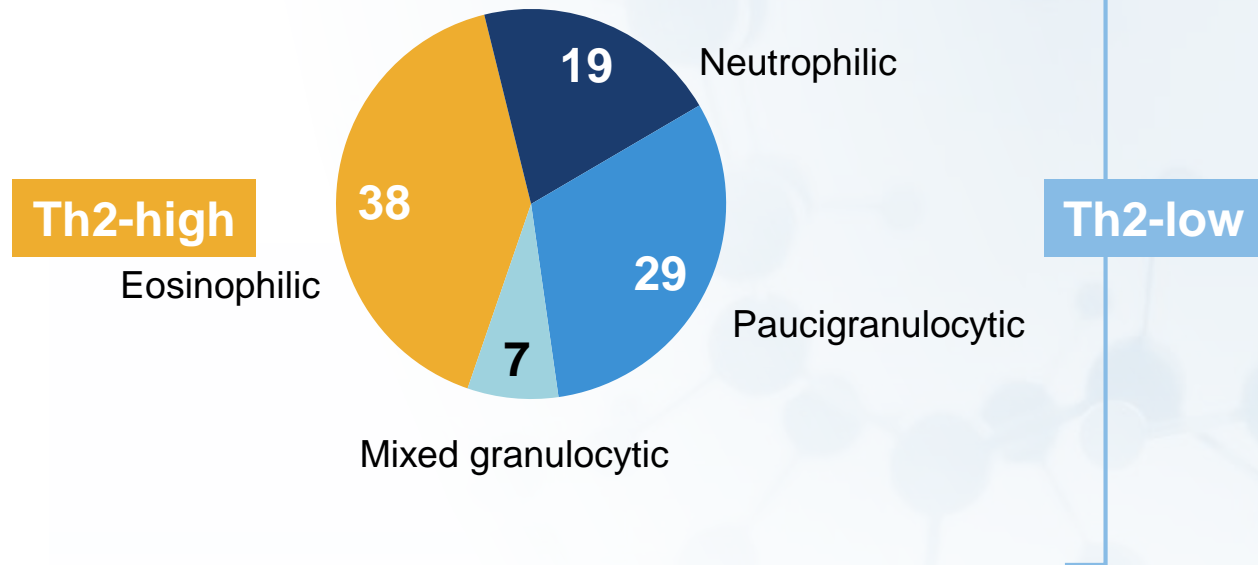
16M diagnosed asthma cases<sup>1</sup>



# TD-8236: Lung-selective pan-JAK Inhibitor

## POTENTIAL TO ADDRESS PATIENTS NEEDS REGARDLESS OF TH2 PHENOTYPE

### Patient heterogeneity in severe asthma



### JAK/STAT cytokines implicated in severe asthma

Th2-high	Th2-low
<b>IL-4</b>	<b>IL-23/IL-12</b>
<b>IL-13</b>	<b>IL-6</b>
<b>IL-5</b>	IL-27
<b>TSLP</b>	IFN- $\gamma$

*Bold denotes biologics in development or approved*

**TD-8236 shown to potently inhibit targeted mediators of Th2-high and Th2-low asthma in human cells in preclinical studies**

- ▶ Novel approved biologics address only Th2-high asthma
- ▶ Key treatment needs: Prevention of exacerbations and symptom control for patients regardless of Th2 phenotype

Phase 1 study data in healthy volunteers and mild asthmatics (including biomarker measures) expected 3Q19



# Opportunities for Value Creation

Upcoming milestones

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# Focus on Strategic Priorities

## COMMITMENT TO CREATING TRANSFORMATIONAL MEDICINES

Opportunities to Create Transformational Medicines	YUPELRI®	<b>Nebulized LAMA in COPD</b> <ul style="list-style-type: none"> <li>Formal commercial launch underway</li> </ul>
	TD-1473	<b>Intestinally-restricted JAKi for inflammatory intestinal diseases</b> <ul style="list-style-type: none"> <li>Phase 2 DIONE study in Crohn's disease underway</li> <li>Phase 2b/3 RHEA study in ulcerative colitis underway</li> <li>Supplemental Phase 1b data to be shared in oral presentation at DDW</li> </ul>
	Amprexetine	<b>NRI in symptomatic neurogenic orthostatic hypotension</b> <ul style="list-style-type: none"> <li>Registrational Phase 3 program progressing</li> <li>5-month data from Phase 2 in nOH to be shared at IAPRD and ENC</li> </ul>
	TD-8236	<b>Lung-selective inhaled pan-JAK inhibitor for serious respiratory diseases</b> <ul style="list-style-type: none"> <li>Safety and biomarker data from Phase 1 study in healthy volunteers and asthmatic patients expected 3Q19</li> </ul>

Economic Interest	TRELEGY ELLIPTA <sup>1</sup>	<b>(FF/UMEC/VI) Single inhaler triple therapy in COPD</b> <ul style="list-style-type: none"> <li>Product launched in 30 markets, including Japan; additional geographies expected throughout 2019 (incl. China)</li> <li>Positive results from Phase 3 CAPTAIN study in patients with asthma recently announced</li> <li>Potential sNDA in 2H 2019</li> </ul>
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Significant existing cash resources to fund strategic priorities<sup>2</sup>



# About YUPELRI® (revefenacin) inhalation solution

YUPELRI® (revefenacin) inhalation solution is a novel once-daily nebulized LAMA approved for the maintenance treatment of COPD in the US.

Market research by Theravance Biopharma indicates approximately 9% of the treated COPD patients in the US use nebulizers for ongoing maintenance therapy.<sup>1</sup> LAMAs are a cornerstone of maintenance therapy for COPD and YUPELRI is positioned as the first once-daily single-agent bronchodilator product for COPD patients who require, or prefer, nebulized therapy. YUPELRI's stability in both metered dose inhaler and dry powder device formulations suggest that this LAMA could also serve as a foundation for novel handheld combination products.

<sup>1</sup> TBPH market research (N = 160 physicians); refers to US COPD patients

# YUPELRI® (revefenacin) inhalation solution

## Important Safety Information (US)

YUPELRI is contraindicated in patients with hypersensitivity to revefenacin or any component of this product.

YUPELRI should not be initiated in patients during acutely deteriorating or potentially life-threatening episodes of COPD, or for the relief of acute symptoms, i.e., as rescue therapy for the treatment of acute episodes of bronchospasm. Acute symptoms should be treated with an inhaled short-acting beta2-agonist.

As with other inhaled medicines, YUPELRI can produce paradoxical bronchospasm that may be life-threatening. If paradoxical bronchospasm occurs following dosing with YUPELRI, it should be treated immediately with an inhaled, short-acting bronchodilator. YUPELRI should be discontinued immediately and alternative therapy should be instituted.

YUPELRI should be used with caution in patients with narrow-angle glaucoma. Patients should be instructed to immediately consult their healthcare provider if they develop any signs and symptoms of acute narrow-angle glaucoma, including eye pain or discomfort, blurred vision, visual halos or colored images in association with red eyes from conjunctival congestion and corneal edema.

Worsening of urinary retention may occur. Use with caution in patients with prostatic hyperplasia or bladder-neck obstruction and instruct patients to contact a healthcare provider immediately if symptoms occur.

Immediate hypersensitivity reactions may occur after administration of YUPELRI. If a reaction occurs, YUPELRI should be stopped at once and alternative treatments considered.

The most common adverse reactions occurring in clinical trials at an incidence greater than or equal to 2% in the YUPELRI group, and higher than placebo, included cough, nasopharyngitis, upper respiratory infection, headache and back pain.

Coadministration of anticholinergic medicines or OATP1B1 and OATP1B3 inhibitors with YUPELRI is not recommended.

YUPELRI is not recommended in patients with any degree of hepatic impairment.