Theravance® Biopharma®

Medicines That Make a Difference®

Theravance Biopharma, Inc. (NASDAQ: TBPH)

1Q 2018 Financial Results and Business Update

May 8, 2018

Cautionary Statement Regarding Forward-Looking Statements

Under the safe harbor provisions of Section 21E of the Securities Exchange Act of 1934 and the 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 include statements relating to the company's the Company's strategies, plans and objectives, including financial and operating results, sales targets, the Company's regulatory strategies, timing and results of clinical studies, the potential characteristics, benefits and mechanisms of action of the Company's product and product candidates and the Company's expectations for product candidates through development, potential regulatory approval and commercialization.

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, uncertainties, changes in circumstances, assumptions and other factors that may cause the actual results to be materially different than those from those reflected in the forward-looking statements, such as risks related to delays or difficulties in commencing, enrolling or completing clinical studies, the potential that results from clinical or non-clinical studies indicate product candidates are unsafe or ineffective, risks that product candidates do not obtain approval from regulatory authorities, the feasibility of undertaking future clinical trials for our product candidates based on policies and feedback from regulatory authorities, delays or failure to achieve and maintain regulatory approvals for product candidates, risks of collaborating with or relying on third parties to discover, develop, conduct clinical studies, manufacture and commercialize products and 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-K filed with the Securities and Exchange Commission (SEC) on February 28, 2018, and other periodic reports filed with the SEC. In addition to the risks described above and in Theravance Biopharma's filings with the SEC, other unknown or unpredictable factors also could affect Theravance Biopharma's results.

Portfolio Advancements in Early 2018

TD-1473 (JAK Inhibitor)

Pact with global leader in Immunology

Global collaboration with Janssen Biotech in inflammatory intestinal disease

Revefenacin (LAMA)

Progress towards approval

NDA accepted by FDA
Assigned PDUFA date November 13, 2018

Economic interest in Trelegy serves as an important strategic asset[1]

- ✓ Promising initial launch by GSK following approvals in US and EU in late 2017
- ✓ Expanded indication approved by FDA, supported by data from IMPACT study
- ✓ Entitled to upward-tiering royalty of 5.5% - 8.5% of worldwide net sales

[1] All statements based on publically available information. Approved in US for the treatment of COPD and for the treatment of appropriate patients with COPD in EU. TBPH holds 85% economic interest in upward tiering royalty stream of 6.5% – 10% payable by GSK

JAK = Janus kinase. LAMA = long-acting muscarinic antagonist. PDUFA = Prescription Drug User Fee Act

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Velusetrag in Gastroparesis

- Partnered with Alfasigma, which funded majority of Phase 2 program for gastroparesis velusetrag
- Dialogue with US and EU regulatory authorities complete
- Alfasigma has exercised its option to develop and commercialize velusetrag

Decisions within existing collaboration agreement

Alfasigma *Opts in to continue development*	Theravance Biopharma *Will not pursue development*
As a result of decision: • $10M payment to Theravance Biopharma • Plus right to receive future potential milestones and royalties	Decision driven by: • Planned pipeline investment strategy • Current FDA requirement for a large Phase 3 safety study for chronic use

- Theravance Biopharma transferring global rights for velusetrag to Alfasigma under terms of existing collaboration agreement

Enhancing Focus on Strategic Priorities in 2018

Commitment to developing transformational medicines

Opportunities to Create Transformational Medicines	**Revefenacin**	**Nebulized LAMA in COPD (PDUFA date November 13, 2018)**
	TD-1473	**Intestinally-restricted JAK inhibitor for inflammatory intestinal diseases**
	TD-9855	**NSRI in symptomatic nOH, an orphan condition**
	Research	**Inhaled JAK inhibitor for serious respiratory diseases**
Strategic Asset	**Trelegy Ellipta**	**(FF/UMEC/VI) Single inhaler triple therapy in COPD**

Managed by GSK and Innoviva[1]

[1] Economic interest. FF/UMEC/VI= Fluticasone Furoate/Umeclidinium/Vilanterol. Innoviva formerly Theravance, Inc.
NSRI = norepinephrine serotonin reuptake inhibitor; COPD = chronic obstructive pulmonary disease nOH = neurogenic orthostatic hypotension

TD-1473: Global Collaboration Agreement with Janssen Biotech

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Janssen | Pharmaceutical Companies of Johnson & Johnson

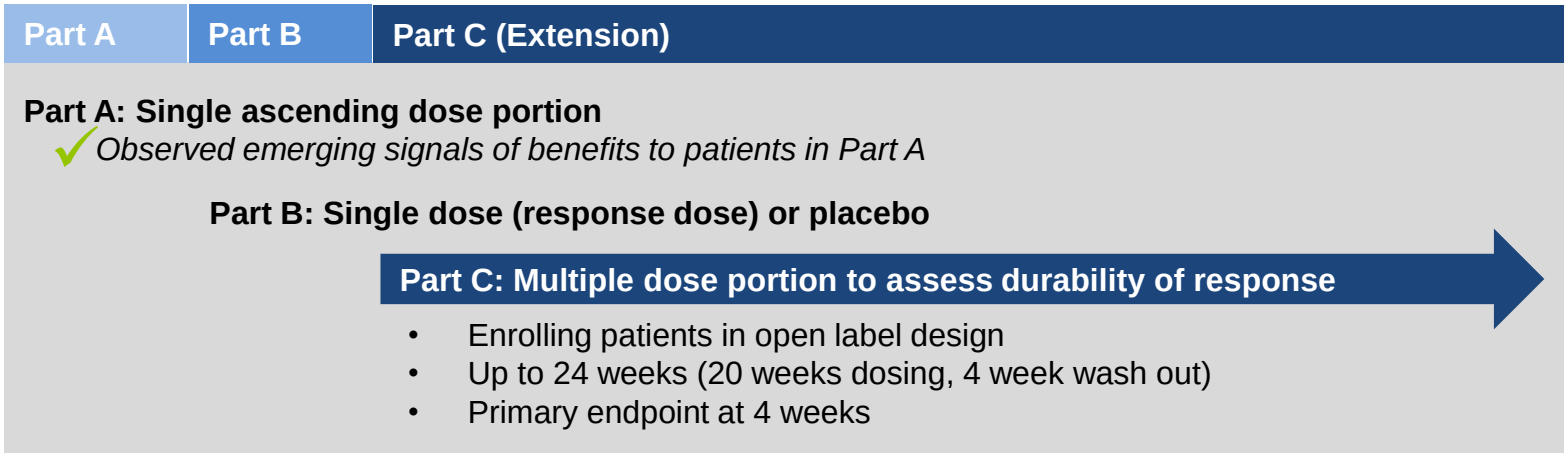
- Shared belief in TD-1473 as a localized medicine with potential to transform the treatment landscape in inflammatory intestinal disease
- Meaningful program enhancements for TD-1473
  - Apply Janssen expertise in IBD to optimize clinical strategy and execution
  - Accelerate clinical development; plan to advance UC and Crohn's in parallel
  - Maximize worldwide commercial opportunity of TD-1473
- Attractive deal economics reducing overall financial risk

Phase 2b/3 study in ulcerative colitis and Phase 2 study in Crohn's disease expected to initiate in 2H18

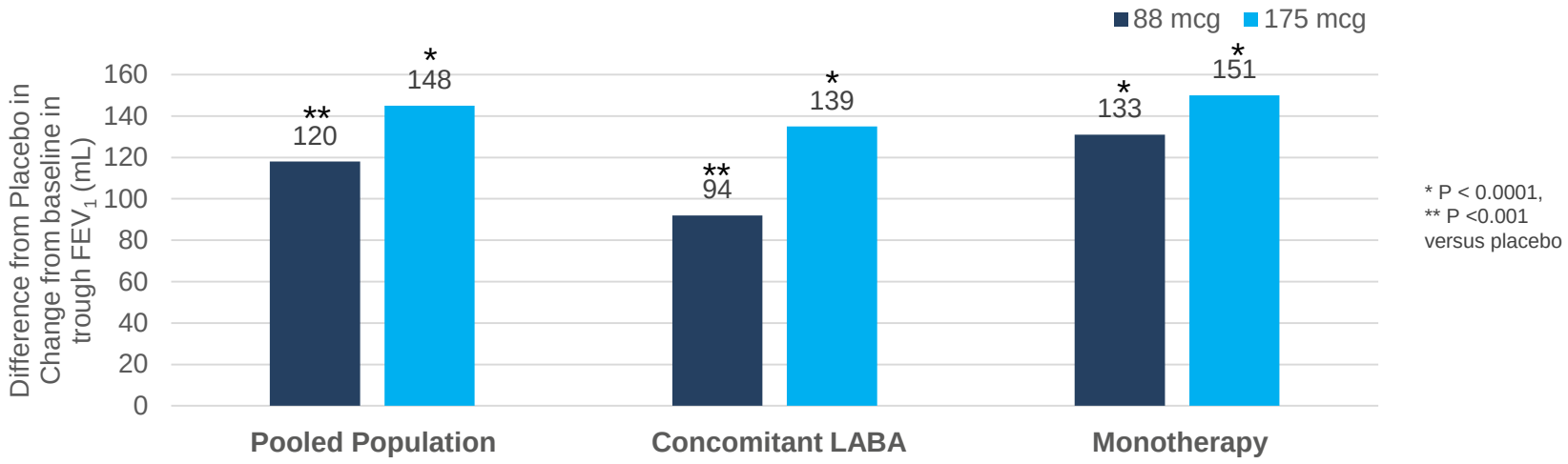
TD-9855: Exploratory Results Expected Mid-Year

Intention to seek expedited development path

- **Purpose:** Phase 2a study to evaluate the effect of TD-9855 in improving symptoms of orthostatic intolerance
- Understanding totality of symptoms encompasses tests of function, orthostatic hypotension status, and other measures
  - Dizziness a cardinal symptom
  - Interest in patients who fail to accomplish 10-minute standing time at baseline



Revefenacin: NDA for Treatment of COPD in FDA Review with PDUFA Date of November 13, 2018



- NDA supported by Phase 3 efficacy and safety studies
- Primary endpoint achieved for both doses in replicate efficacy studies
  - ✓ Robust and sustained improvements in FEV_1
  - ✓ Effective as monotherapy and as add-on to LABA or LABA/ICS
- Generally well tolerated in 12-month safety study

FEV_1 = forced expiratory volume in one second; pooled analysis

1Q 2018 Financial Highlights

	Three Months Ended, March 31,	
	2018	**2017**
	($, in thousands) Unaudited	
Total Revenue	**8,319**	**3,087**
Cost of Goods Sold	826	565
Research and Development[1]	47,765	40,565
Selling, General and Administrative[1]	24,704	20,786
Total Costs and Expenses	**73,295**	**61,916**
Operating Loss	**(64,976)**	**(58,829)**
[1]Amounts include share-based compensation expense below		
Research and Development	6,559	5,101
Selling, General and Administrative	7,439	5,168
Total Share-based Compensation Expense	**13,998**	**10,269**
Operating Loss excluding Share-based Compensation	**(50,978)**	**(48,560)**
Cash, Cash Equivalents and Marketable Securities as of March 31, 2018	**435,530**	

GSK's Trelegy Ellipta Offers Significant Potential

First and only once-daily single inhaler triple therapy

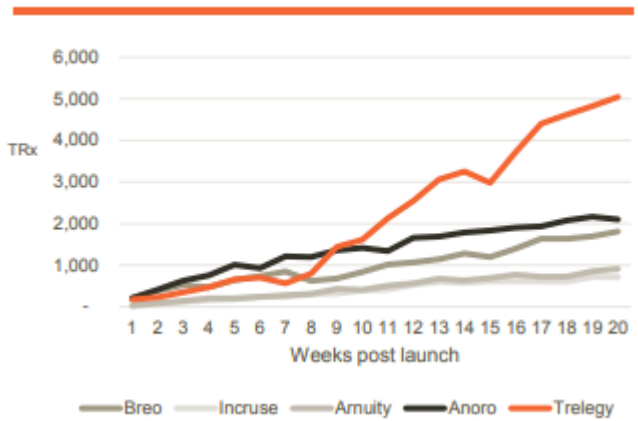
Economic interest in Trelegy Ellipta serves as an important strategic asset

- Upward-tiering royalty 5.5% - 8.5% of worldwide net sales[1]
- Passive economic interest; no product cost obligations

Program Summary

- Approved for COPD in US and EU[2]
- FF/UMEC/VI: Comprise of ICS, LAMA, and LABA, active components of Breo® (FF/VI) and Anoro® (UMEC/VI)
- Phase 3 CAPTAIN asthma study in progress

Strongest US Ellipta launch to date



Launched in US in November 2017

Source: GSK; IQVIA NPA weekly TRx data

US label expanded to include landmark IMPACT study data

- ✓ 15% reduction in annual rate of exacerbations compared with Relvar/Breo Ellipta
- ✓ 25% reduction compared with Anoro Ellipta
- ✓ Significant improvements in lung function vs. same dual therapies and improvements in SGRQ

All statements based on publically available information. Trelegy Ellipta jointly managed by GSK and Innoviva (formerly Theravance, Inc.) [1] TBPH holds 85% economic interest in upward tiering royalty stream of 6.5% – 10% payable by GSK. [2] Approved in EU for treatment of appropriate patients with COPD.
ICS = Inhaled corticosteroids. LABA = long-acting beta2-adrenergic agonist. SGRQ = St. George's Respiratory Questionnaire

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Advancing Multiple Opportunities for Value Creation

Programs in Focus in 2018

Managed by Theravance Biopharma:

TD-1473 Intestinally restricted JAK inhibitor	• Initiation of Phase 2b/3 induction and maintenance study in UC • Initiation of Phase 2 induction study in Crohn's disease
TD-9855 NSRI in nOH	• Phase 2a results in symptomatic nOH • Seeking an expedited development pathway
Revefenacin (TD-4208) Nebulized LAMA in COPD	• Potential FDA approval (PDUFA date November 13, 2018)
Inhaled JAK inhibitor Serious respiratory diseases	• Progressing into the clinic in late 2018 or early 2019

Managed by GSK and Innoviva[1]:

Trelegy Ellipta (FF/UMEC/VI) Single inhaler triple therapy	• Ramp in promotional activities expected, following expanded label in US • Potential inclusion of IMPACT data in label in EU • Completion of Phase 3 study in asthma (CAPTAIN)

[1] Economic interest. Regulatory and clinical milestones as reported by GlaxoSmithKline. Approved for the treatment of COPD in US and for the treatment of appropriate patients with COPD in EU. Innoviva formerly Theravance, Inc.

Submissions, filings, and approvals are subject to preclinical and clinical data and regulatory interactions.