



Strategic Actions and Fourth Quarter / Full Year 2022 Financial Results and Business Update

February 27, 2023

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Forward-Looking Statements

This presentation contains certain "forward-looking" statements as that term is defined in the Private Securities Litigation Reform Act of 1995 regarding, among other things, statements relating to goals, plans, objectives, expectations and future events. Theravance Biopharma, Inc. (the "Company") intends such forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in Section 21E of the Securities Exchange Act of 1934, as amended, and the Private Securities Litigation Reform Act of 1995.

Examples of such statements include statements relating to: the Company's repurchase of its ordinary shares by way of an open market share repurchase program, headcount reductions in connection with focusing investments in research, the Company's governance policies and plans, the Company's expectations regarding its allocation of resources and maintenance of expenditures, the Company's goals, designs, strategies, plans and objectives, the ability to provide value to shareholders, the Company's regulatory strategies and timing of clinical studies, and contingent payments due to the Company from the sale of the Company's TRELEGY ELLIPTA royalty interests to Royalty Pharma. These statements are based on the current estimates and assumptions of the management of the Company 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 of the Company to be materially different from those reflected in the forward-looking statements. Important factors that could cause actual results to differ materially from those indicated by such forward-looking statements include, among others, risks related to: whether the milestone thresholds can be achieved, delays or difficulties in commencing, enrolling or completing clinical studies, the potential that results from clinical or non-clinical studies indicate the Company's product candidates or product are unsafe, ineffective or not differentiated, risks of decisions from regulatory authorities that are unfavorable to the Company, dependence on third parties to conduct clinical studies, delays or failure to achieve and maintain regulatory approvals for product candidates, risks of collaborating with or relying on third parties to discover, develop, manufacture and commercialize products, and risks associated with establishing and maintaining sales, marketing and distribution capabilities with appropriate technical expertise and supporting infrastructure, ability to retain key personnel, the impact of the Company's recent restructuring actions on its employees, partners and others, the ability of the Company to protect and to enforce its intellectual property rights, volatility and fluctuations in the trading price and volume of the Company's shares, and general economic and market conditions.

Other risks affecting the Company are in the Company's Form 10-Q filed with the SEC on November 9, 2022, 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. No forward-looking statements can be guaranteed, and actual results may differ materially from such statements. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Theravance Biopharma assumes no obligation to update its forward-looking statements on account of new information, future events or otherwise, except as required by law.

Non-GAAP Financial Measure

Theravance Biopharma provides a non-GAAP profitability target in this presentation. Theravance Biopharma believes that the non-GAAP profitability target provides meaningful information to assist investors in assessing prospects for future performance as it provides a better metric for analyzing the future potential performance of its business by excluding items that may not be indicative of core operating results and the Company's cash position. Because non-GAAP financial targets, such as non-GAAP profitability, are not standardized, it may not be possible to compare this target with other companies' non-GAAP targets or measures having the same or a similar name. Thus, Theravance Biopharma's non-GAAP target should be considered in addition to, not as a substitute for, in isolation from, the company's actual GAAP results and other targets

Agenda

Introduction and Overview

Rick E Winningham
Chief Executive Officer

Commercial and Development Update

Rhonda F. Farnum
Senior Vice President, Chief Business Officer
Richard A. Graham
Senior Vice President, Research and Development

Financial Update

Aziz Sawaf
Senior Vice President, Chief Financial Officer

Closing Remarks

Rick E Winningham
Chief Executive Officer

Strategic Actions Focused on Continued Value Creation

Authorized \$325M Capital Return Program

Approved incremental \$75M to existing \$250M program initiated Sept'22, with goal to complete program by end of 2023

- Repurchased \$155M of stock to date, including \$27M in 2023
- \$170M remains in capital return program; **expected to complete by end of 2023**

Discontinuing Investments in Research

Prioritize resource allocation toward ampreloxetine Phase 3 study and YUPELRI® (revefenacin) PIFR-2 study

- **Discontinuing research activities**, including stopping inhaled Janus kinase (JAK) inhibitor program
- **~17% headcount reduction** by end of Mar 2023

Board and Governance Evolution

Appointed independent director Susannah Gray to Board of Directors

- Part of ongoing commitment to board refreshment

Lead Independent Director William D. Young will not stand for re-election at 2023 AGM

Company will put forth proposal to declassify the Board of Directors over time at 2023 AGM

2023 Targets



- ▶ **Continue YUPELRI Net Sales growth** by executing on targeted strategies to capture sizeable niche market
- ▶ Complete **PIFR-2 study** and provide top-line results in 2H'23

Amprexetine

- ▶ **Initiate Phase 3 CYPRESS trial** in MSA patients with symptomatic nOH in Q1'23
- ▶ Submit **orphan drug designation** request in early 2023

Financial

- ▶ **Expanded Capital Return Program to \$325M**, and expect to complete the remaining \$170M this year
- ▶ **Generate Non-GAAP¹ Profit** in 2H'23
- ▶ **\$50M potential milestone** for TRELEGY Net Sales of ~\$2.86B²



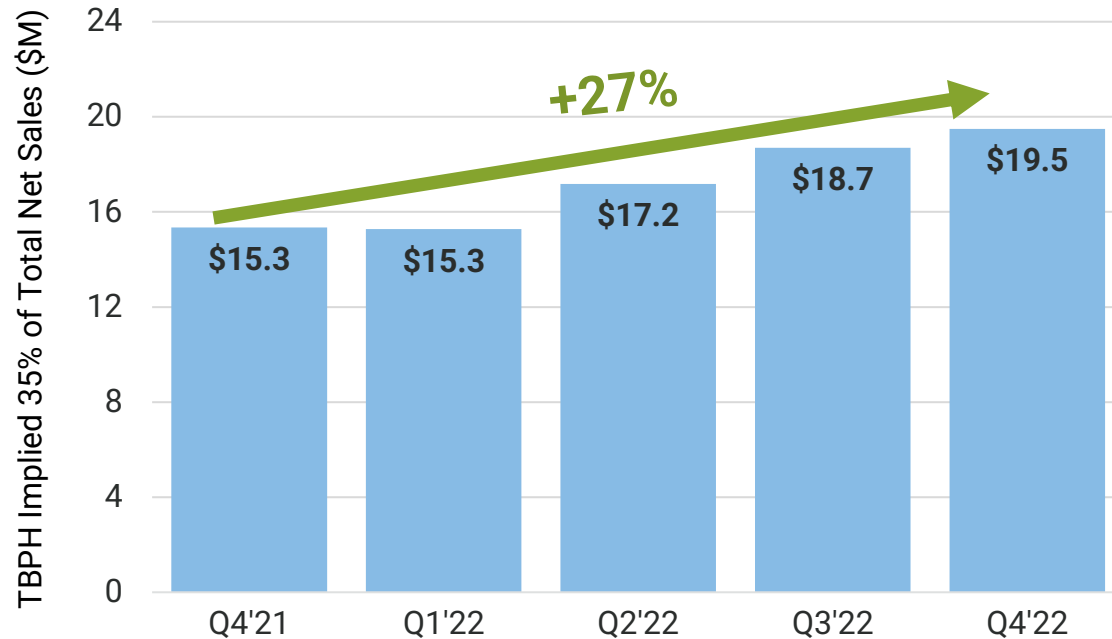
FDA-approved for maintenance treatment of COPD

First and only once-daily, LAMA (long-acting muscarinic agent) nebulized maintenance medicine for COPD

Co-promotion agreement with VIATRIS™ (35% / 65% Profit Share)

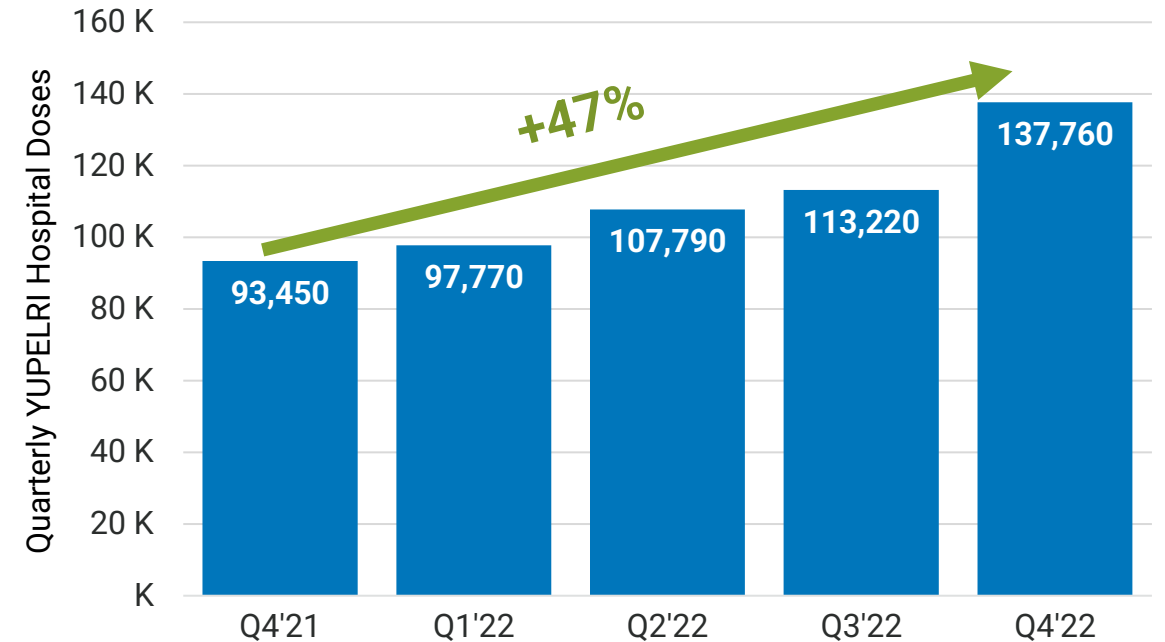
YUPELRI® | Growing Net Sales and Hospital Volume

Net sales increased 27% Q4'22 vs. Q4'21



25% year-over-year net sales growth in 2022

Hospital doses sold increased 47% Q4'22 vs. Q4'21

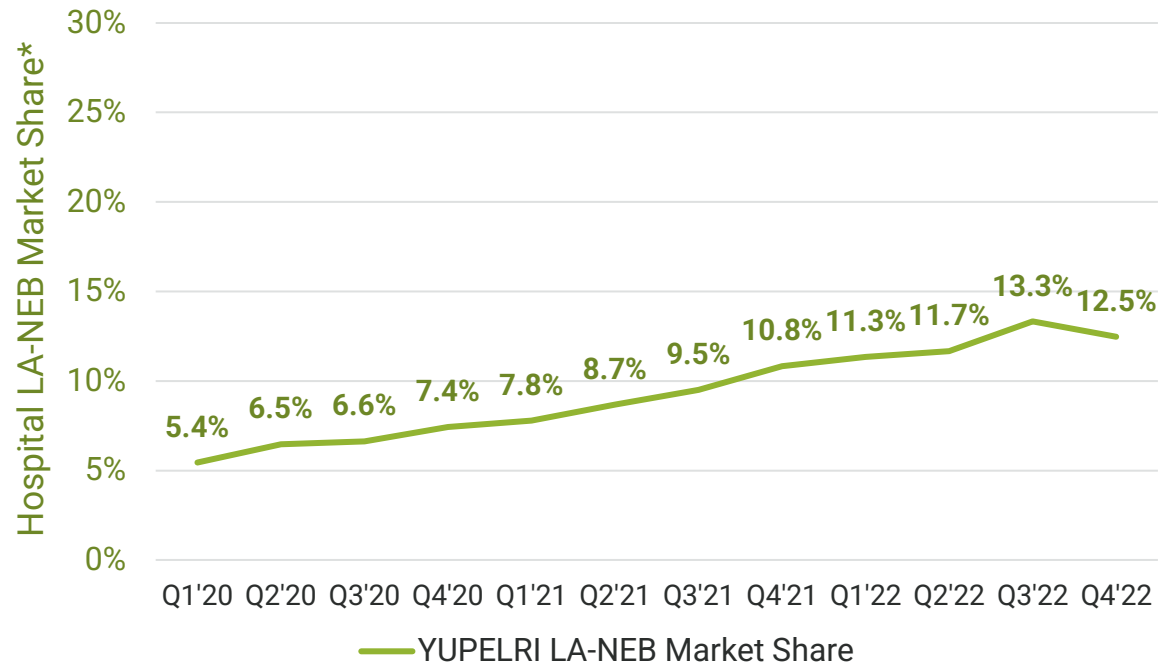


53% year-over-year volume growth in 2022

YUPELRI® Hospital Sales and Community TRx Trends

Hospital share dropped slightly due to largest Q/Q growth in market volume since YUPELRI launch

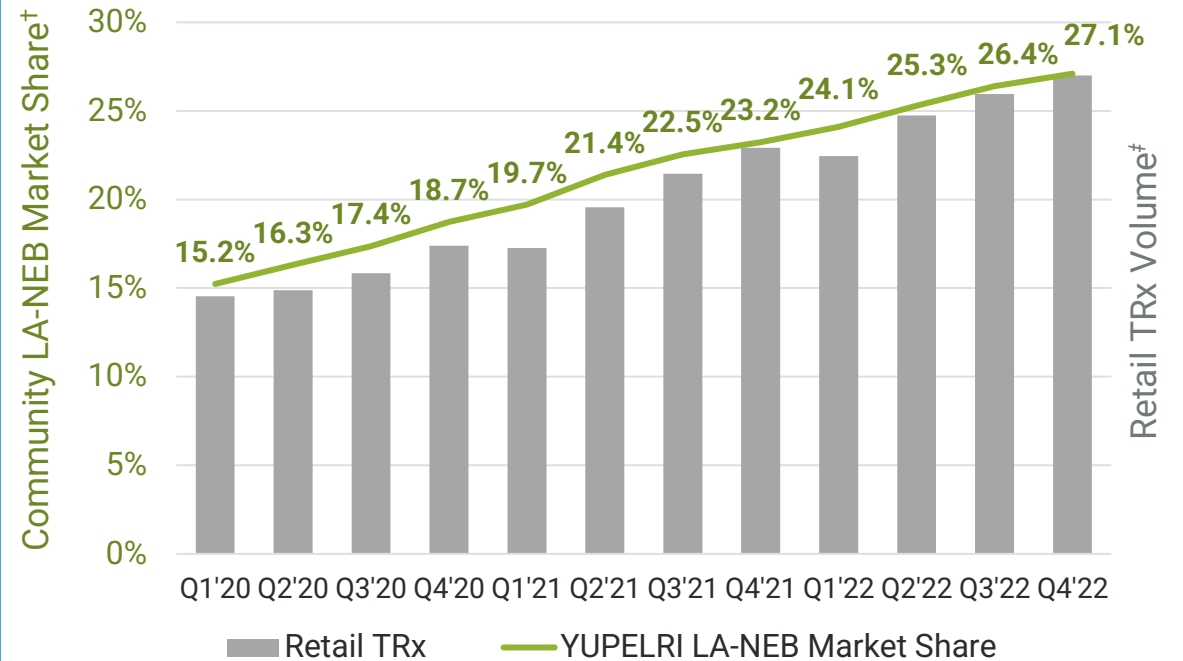
Hospital Market Share



Most patients who receive YUPELRI® in the hospital are discharged with an Rx¹

LA-NEB Market: YUPELRI, BROVANA, LONHALA, PERFOROMIST, arformoterol, formoterol

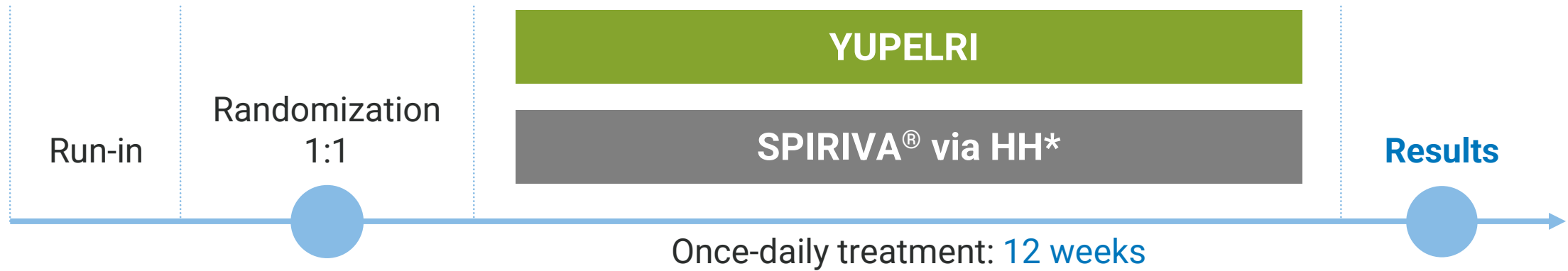
Community Market Share with TRx



TRx volume represents retail only which is typically 33% of Retail + DME Reported DME volume, while lagged, typically follows Retail volume trends

YUPELRI®:

Phase 4 Randomized, Double-Blind, Parallel-Group Study (PIFR-2)



Sample size

- ▶ N = Up to 488
- ▶ Top-line results 2H'23

Endpoints

- ▶ **Primary:** Change from baseline in trough FEV₁ (Day 85)
- ▶ **Key secondary:** Trough overall treatment effect on FEV₁

Ampreloxetine

Investigational once-daily norepinephrine reuptake inhibitor

For symptomatic neurogenic orthostatic hypotension (nOH)
in multiple system atrophy (MSA) patients

New Era in Treating MSA Symptoms: Product Positioning

| MSA Prevalence | | Prevalence of nOH in MSA Patients | Addressable Patient Population |
|---|---|--|--|
| ~50K MSA patients in U.S. ¹ (considered orphan disease) | | 70%-90% of MSA patients experience nOH symptoms ² | 35K – 45K MSA patients with nOH symptoms |
| Current Treatment Landscape | | | Unique Treatment Profile |
| Indication Efficacy / Durability Dosing Safety | Droxidopa ³ | Midodrine ⁴ | Ampreloxetine |
| | Symptomatic nOH | OH | Symptomatic nOH associated with MSA |
| | OHSA#1; clinical effectiveness >2 weeks not established | Increase in systolic blood pressure 1 min after standing | OHSA composite ; clinically meaningful and durable response >20 weeks |
| | 3x daily, titration to effect | 3x daily | Once-daily |
| Black box warning for supine hypertension | | | No signal for supine hypertension |

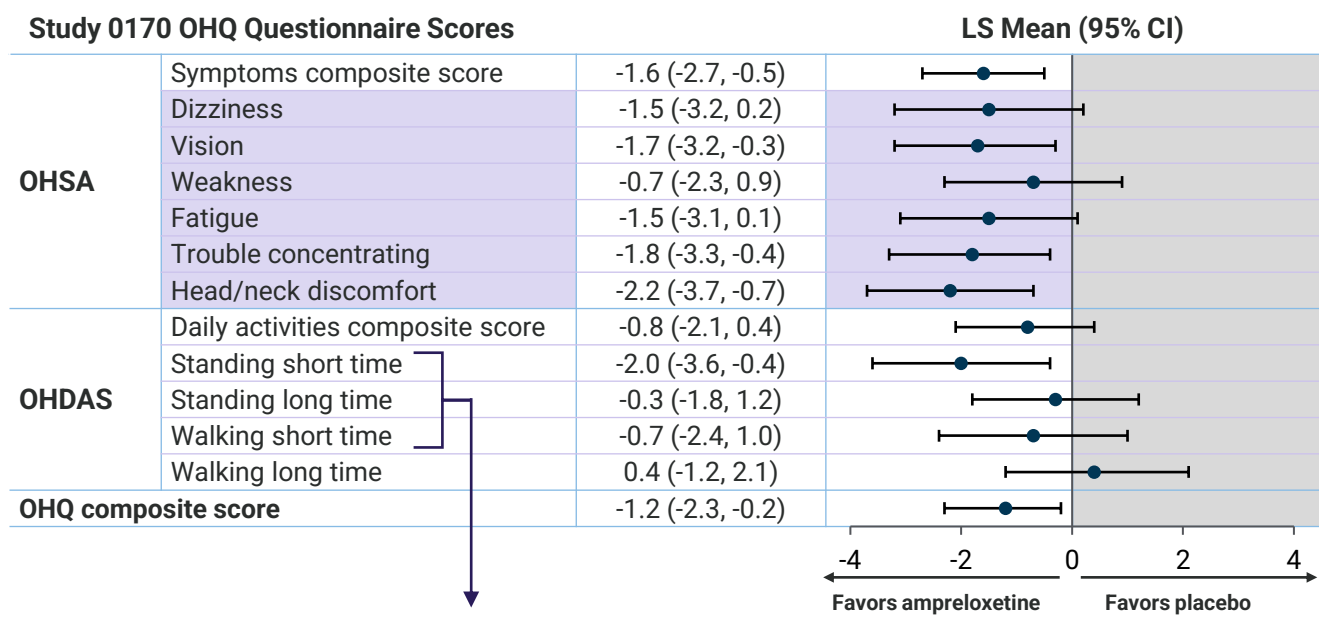
Reflects Theravance Biopharma's expectations for ampreloxetine based on clinical trial data to date. Ampreloxetine is in development and not approved for any indication. Data on file.
1. UCSD Neurological Institute (25K-75K, with ~10K new cases per year); NIH National Institute of Neurological Disorders and Stroke (15K-50K). 2. Delveinsight MSA Market Forecast (2023); Symptoms associated with orthostatic hypotension in pure autonomic failure and multiple systems atrophy, CJ Mathias (1999). 3. NORTHERA® (droxidopa) [package insert]. Deerfield, IL: Lundbeck. 2014. 4. ProAmatine® (midodrine hydrochloride) [Warning Ref 4052798]. Lexington, MA: Shire. 2017.
MSA, multiple system atrophy; nOH, neurogenic orthostatic hypotension; OHSA, Orthostatic Hypotension Symptom Assessment.

The Unique Benefits of Amprexetine Treatment



Unique efficacy and durability

First-in-class therapy effective in treating a **constellation of cardinal symptoms in MSA patients:**



Patient-friendly dosing

MSA patients may have **difficulty swallowing:**

- Once-daily dosing, single 10mg tablet
- Low dosing frequency improves compliance
- Decreases caregiver burden



Differentiated safety profile

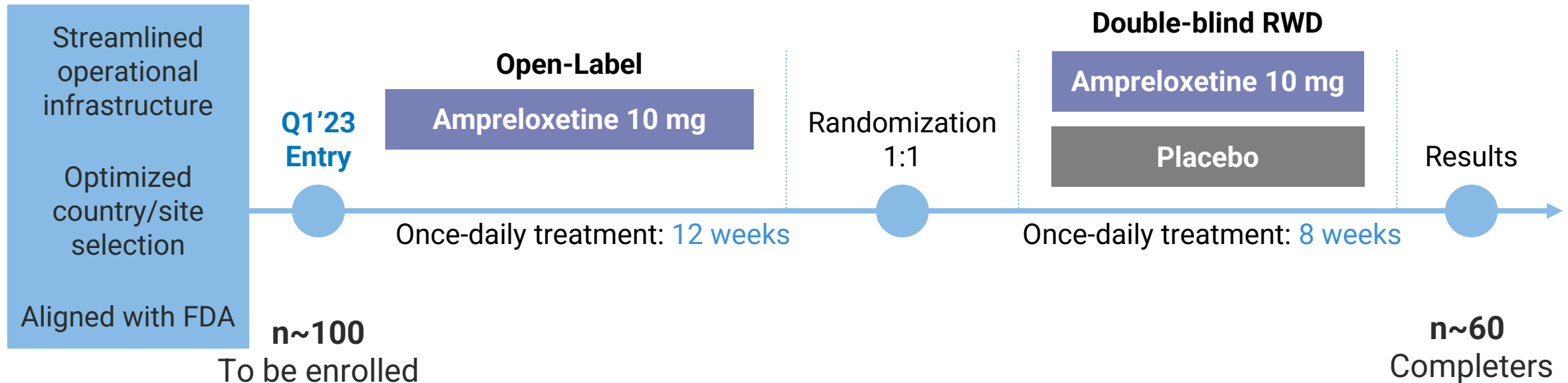
Supine hypertension with droxidopa and midodrine^{2,3}

Absence of a signal would be a differentiator:

- Available to patients with supine hypertension
- Can be taken anytime of day/night
- Potential to be combined with other drugs

Offering Hope to MSA Patients with Symptomatic nOH

Study 0197 (CYPRESS): Phase 3 randomized withdrawal study in patients with MSA
Primary endpoint: change in OHSA composite score



Financial Update

\$325 Million Capital Return Program

Complete

- ✓ ~\$95M: Purchased GSK's equity stake in Theravance (Sep'22) and completed Dutch auction tender offer (Nov'22)

Open Market Share Buybacks

- ✓ ~\$33M completed in Dec'22
- ✓ ~\$27M completed in 2023, through 2/27/23

~50% (or ~\$155M) of \$325M capital return program completed as of 2/27/23

\$170M remains in capital return program; expected to complete by end of 2023

Q4 2022 Financial Highlights

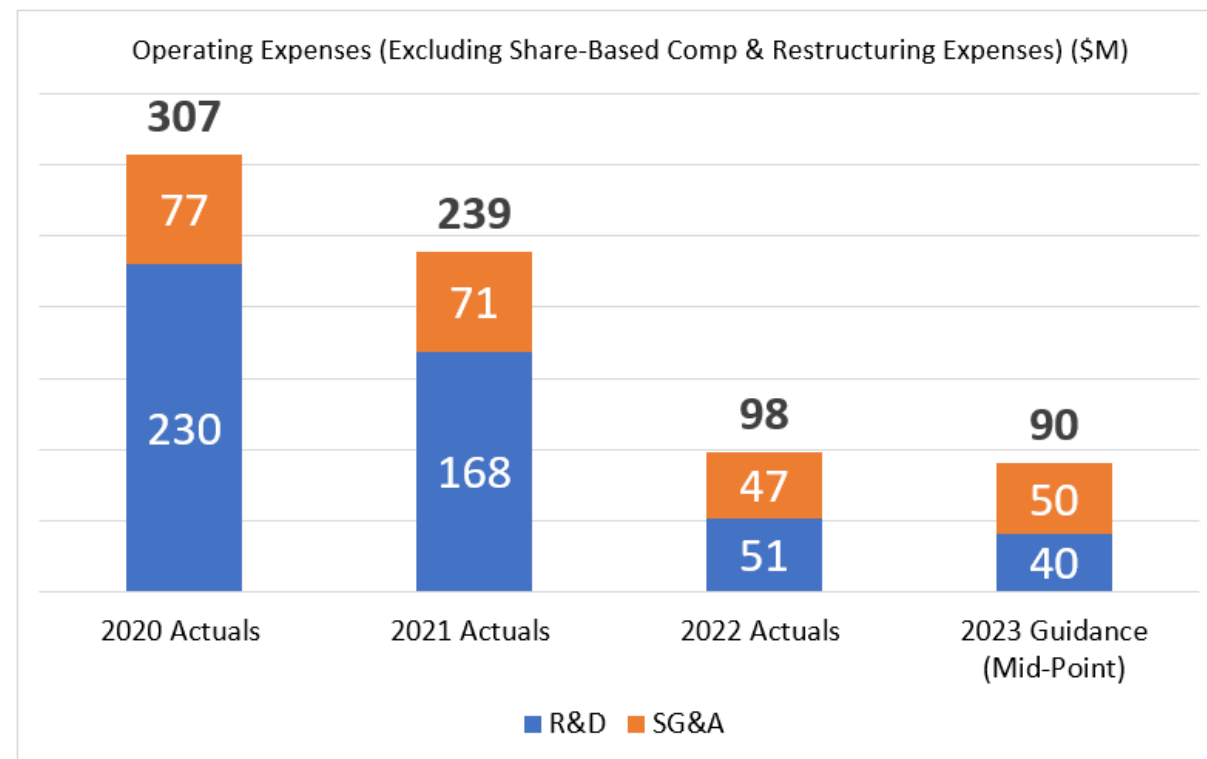
Beginning 2023 from a position of strength

| Metric | Amount (M) | Note |
|--|------------|--|
| Cash and Cash Equivalents¹ (as of December 31, 2022) | \$327.5 | <ul style="list-style-type: none"> \$118M taxes paid in Q4'22 for sale of TRELEGY royalty interests \$34M of share buybacks in Q4'22 \$7M of cash burn in Q4'22 |
| Shares Outstanding (as of December 31, 2022) | 65.2 | ~13M shares repurchased in 2022 |
| VIATRIS Collaboration Revenue (quarter ended December 31, 2022) | \$14.6 | |
| Operating Expenses (excluding SBC) (quarter ended December 31, 2022) | \$25.1 | |
| Share-Based Compensation (quarter ended December 31, 2022) | \$6.9 | |

2023 Financial Guidance

Expected to generate non-GAAP¹ Profit in 2H 2023

- 2023 OPEX Guidance Range:
 - R&D: \$35M - \$45M
 - SG&A: \$45M - \$55M
- Guidance Excludes:
 - Non-cash share-based compensation
 - One-time severance and termination costs associated with 2023 headcount reduction:
 - Expected to be \$1M - \$2M in Q1'23
- Share-Based Compensation:
 - Expected to decline materially in 2023 vs. 2022



TRELEGY ELLIPTA Milestones and Royalties

GSK’s TRELEGY ELLIPTA (FF/UMEC/VI): First and only once-daily single inhaler triple therapy

Mid-Term Value

Up to \$250M of Sales-based milestones^{1,2} between 2023–2026:

| Year | Royalties ₂ | Global Net Sales Equivalent | Milestone |
|-------------------|------------------------|-----------------------------|-----------|
| 2023 | \$240M | \$2,863M | \$50M |
| 2024 ₁ | \$240M | \$2,863M | \$25M |
| | \$275M | \$3,213M | \$50M |
| 2025 ₁ | \$260M | \$3,063M | \$25M |
| | \$295M | \$3,413M | \$50M |
| 2026 ₁ | \$270M | \$3,163M | \$50M |
| | \$305M | \$3,513M | \$100M |

Q4 Net Sales of \$537M | FY 2022 Net Sales of \$2.1B⁴

Long-Term Value

Outer-Year Royalties³ return in 2029:

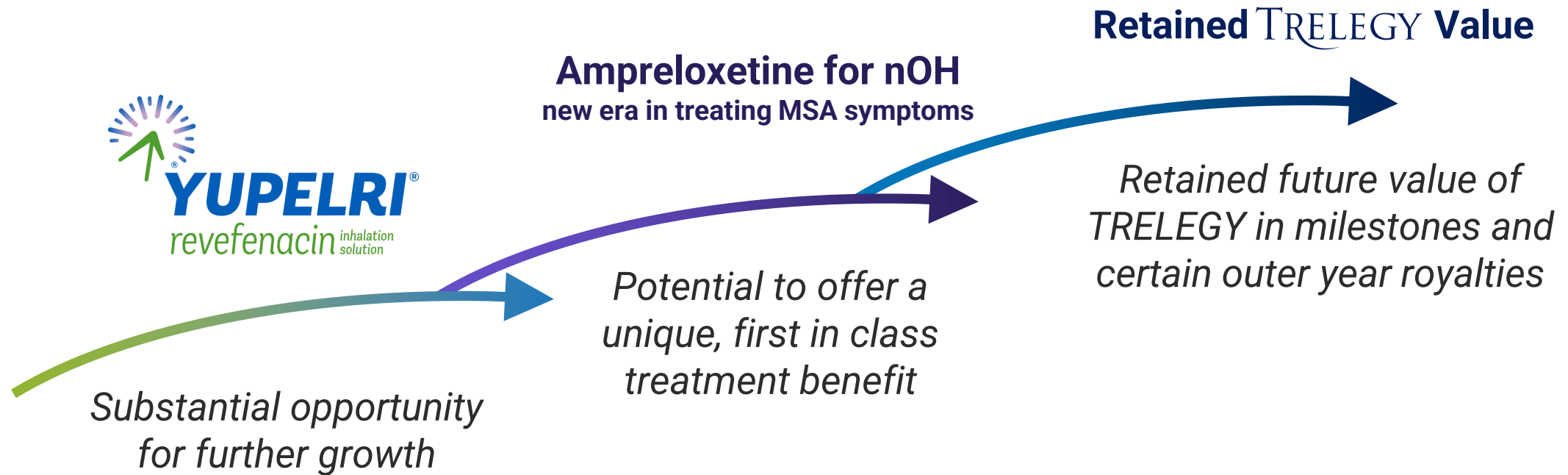
- Ex-US royalties return Jul. 1, 2029
- US royalties return after Jan. 1, 2031
- Paid directly from Royalty Pharma

GSK remains exclusively responsible for commercialization of TRELEGY ELLIPTA

1. If both milestones are achieved in a given year, Theravance Biopharma will only earn the higher milestone. 2. Based on 100% of TRELEGY ELLIPTA royalties. 3. 85% of TRELEGY ELLIPTA royalties return to Theravance Biopharma beginning July 1, 2029 for sales ex-U.S., and January 1, 2031 for sales within the U.S.; U.S. royalties expected to end late 2032; ex-U.S. royalties expected to end mid-2030s and are country specific. 4. Source: Bloomberg FF, Fluticasone Furoate; UMEC, Umeclidinium; VI, Vilanterol.

Theravance Biopharma: Positioned for Value Creation

Three distinct drivers of value over the near, mid, and long-term



Positioned to create value from a foundation of financial strength

Q&A Session

Rick E Winningham
Chairman and Chief Executive Officer

*Former CEO, Theravance, Inc. (now INVA)
Former President (Oncology/Immunology/Oncology
Therapeutics Network), Bristol Myers Squibb*



Aziz Sawaf, CFA
**Senior Vice President,
Chief Financial Officer**

*Former Theravance Biopharma, Vice President, Finance
Former Gilead Sciences, Finance*



Rhonda F. Farnum
**Senior Vice President,
Chief Business Officer**

*Former Executive Director of Marketing, Amgen
Former VP (Hematology), Onyx Pharmaceuticals &
Former Commercial Leadership, Genentech*



Richard A. Graham
**Senior Vice President,
Research and Development**

*Former Senior Director, Head of Translational Medicine,
Onyx Pharmaceuticals
Former Clinical Pharmacologist and Project Team Leader,
Genentech and GlaxoSmithKline*



YUPELRI® (revefenacin) inhalation solution

YUPELRI® inhalation solution is indicated for the maintenance treatment of patients with chronic obstructive pulmonary disease (COPD).

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.

About YUPELRI® (revefenacin) Inhalation Solution

YUPELRI® (revefenacin) inhalation solution is a 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.¹ 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.



Appendix

Appoints Susannah Gray to Board as new Independent Director



Susannah Gray served as the Executive Vice President and Chief Financial Officer of Royalty Pharma, the largest aggregator of pharmaceutical royalty interests worldwide, from January 2005 to December 2018. She was promoted to Executive Vice President of Finance and Strategy in December 2018 and retired from Royalty Pharma in September 2019. Prior to Royalty Pharma, Ms. Gray served as a managing director and senior analyst covering the healthcare sector in CIBC World Markets' high yield group from 2002 to 2004, and also previously served in similar roles at Merrill Lynch and Chase Securities (predecessor of J.P. Morgan Securities). She currently serves on the Boards of Directors of Maravai LifeSciences, 4D Molecular Therapeutics and Morpich Therapeutic. Previously, Ms. Gray served on the Board of Directors of Apria until its sale to Owens & Minor. Ms. Gray received a BA, with honors, from Wesleyan University and an MBA from Columbia University.

2022: A Year of Transformation



- ▶ **Three consecutive quarters** of all-time high Net Sales and Profit in Q2-Q4
- ▶ **Continued community market share growth** every quarter since launch
- ▶ **53% Y/Y growth in hospital volume**, a key driver of overall brand performance¹
- ▶ **Initiated PIFR-2 study**

Amprexetine

- ▶ In study 0170, **prevented blood pressure drop and symptoms worsening in MSA**²
- ▶ **Aligned with FDA on new Phase 3 study for NDA filing** with OHSA composite score as primary endpoint
- ▶ **Three scientific platform presentations** at American Autonomic Society meeting³
- ▶ **Secured up to \$40 million** from Royalty Pharma for funding amprexetine development; \$25M to fund majority of new P3 study

Financial

- ▶ **Sold TRELEGY ELLIPTA royalty interests for \$1.1B upfront**, while retaining value through milestones and certain outer-year royalties
- ▶ **Eliminated all debt, ~\$650 million**
- ▶ **Completed financial restructuring**
- ▶ **Initiated \$250 million capital return program**, of which ~62% was completed as of February 27, 2023

Patent Protection Into Late 2030s

| Compound | Invention | Granted / Pending Application | Estimated Patent Expiry |
|------------------------|---|-------------------------------|-------------------------------------|
| YUPELRI® / revefenacin | Composition of Matter | Granted US | 2028 (once PTE awarded) |
| | Polymorph | Granted US | 2030-2031 |
| | Method for the maintenance treatment of COPD patients | Granted US | 2039 |
| Amprexetine | Composition of Matter | Granted US | 2030 (plus PTE of up to 5 years) |
| | Method of Treating nOH | Granted US | 2037 |

Substantial Opportunity for Further YUPELRI® Growth

Once-Daily Nebulized LAMA COPD treatment represents a sizeable niche market

Estimated 2021 YUPELRI Patient Funnel (US)

~16M COPD Diagnosed¹
2% Annual Growth Rate²

~13M Drug Treated²
~81% of COPD Diagnosed (up to 83% by 2029)

~10M on Maintenance Therapy³
~80% of Drug Treated

~50–70K Patients on YUPELRI
<1% of Maintenance Therapy

Patent No 11,484,531, methods of treating COPD,
expiring in 2039, is now listed in the
Approved Drug Products with Therapeutic Equivalence Evaluations

- ▶ COPD is **under-diagnosed**¹
- ▶ COPD patients with or without symptoms may be treated with rescue and/or maintenance therapies
- ▶ Estimated patient counts from volume using average 'days of therapy' assumptions vary considerably across DME and retail channels

Growth opportunities within numerous patient segments

YUPELRI may be appropriate for COPD patients, including but not limited to:

- ▶ **Moderate-to-very-severe COPD** (73–92%⁴); once-daily LAMAs are first-line therapy for moderate-to-very severe COPD patients
- ▶ Patients with **suboptimal PIFR** (19–78% of COPD patients⁵)
- ▶ Patients with **cognitive or dexterity challenges**
 - ~36% of COPD patients present episodes of cognitive impairment;
 - ~33% of elderly patients have inadequate hand strength for inhalers⁶
- ▶ Patients inappropriately using **short-acting nebulized treatment as maintenance therapy**
- ▶ Patients **transitioning from hospital to home care** after being stabilized on nebulized treatment during hospitalization

1. American Lung Association.

2. Clarivate COPD Disease Landscape & Forecast US 2021.

3. Revefenacin COPD Joint Venture Research 2016.

COPD, chronic obstructive pulmonary disease; DME, durable medical equipment; LAMA, long-acting muscarinic antagonist; PIFR, peak inspiratory flow rate.

4. Safka KA, et al. Chronic Obstr Pulm Dis 2017.

5. Mahler DA, et al. Chronic Obstr Pulm Dis 2019.

6. Armitage JM, Williams SJ. Inhaler technique in the elderly. Age Ageing 1988 17:275-278.

Offering Hope to MSA Patients with Symptomatic nOH



**33rd International Symposium on the Autonomic Nervous System
November 2–5, 2022: Sheraton Maui, Hawaii**

Platform Presentations, Session 1, November 2, 2022

Biaggioni I, et al. Abstract 34 / Virtual Poster 106

A phase 3, 22-week, multi-center, randomized withdrawal study of ampreloxadine in treating symptomatic nOH

Kaufmann H, et al. Abstract 33 / Virtual Poster 117

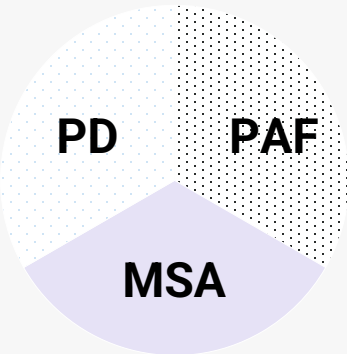
Blood pressure and pharmacodynamic response of ampreloxadine, a norepinephrine reuptake inhibitor, in patients with symptomatic nOH

Freeman R, et al. Abstract 30 / Virtual Poster 4

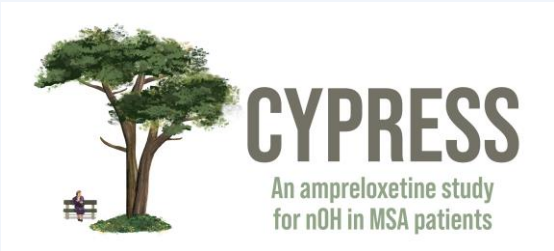
Longitudinal analysis of ampreloxadine for the treatment of symptomatic nOH in subset of patients with MSA

Shift Toward Broad Symptomatic Improvement for MSA Patients

“Old” Ampreloxadetine Program



“New” MSA-focused Ampreloxadetine Program

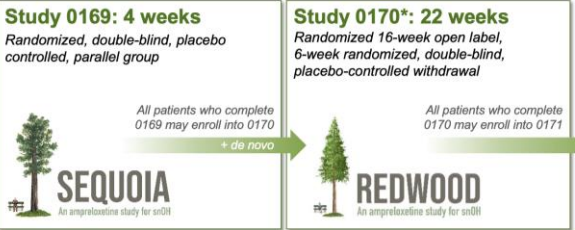


In study 0170, ampreloxadetine prevented blood pressure drop and symptoms worsening in MSA₁

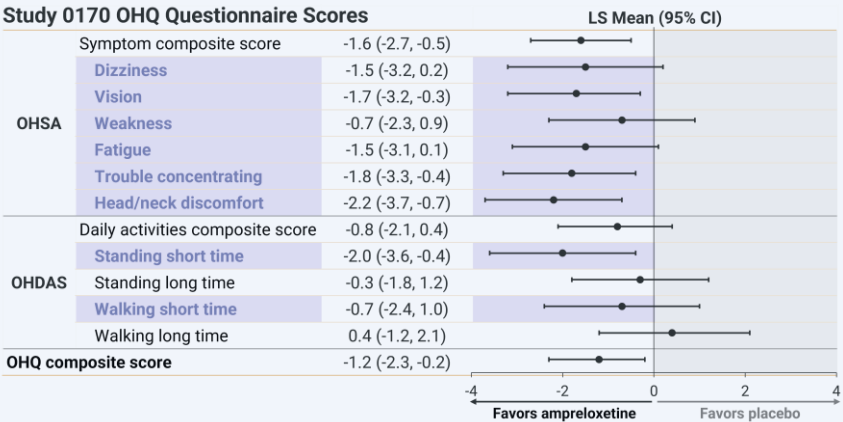
Support from the scientific and medical community with 3 scientific presentations presented at the American Autonomic Society meeting₂

Aligned with FDA on new Phase 3 study for approval with OHSA composite as primary endpoint

“Dizziness” based indication for short-term effectiveness



Constellation of symptoms-based indication



Durable effectiveness



Theravance Biopharma and Royalty Pharma Deal Summary

TRELEGY ELLIPTA

- Upfront: \$1.1B (Received)
- Milestones: Up to \$250M

| Year | Royalties ₂ | Global Net Sales Equivalent | Milestone |
|-------------------|------------------------|-----------------------------|-----------|
| 2023 | \$240M | \$2,863M | \$50M |
| 2024 ₁ | \$240M | \$2,863M | \$25M |
| | \$275M | \$3,213M | \$50M |
| 2025 ₁ | \$260M | \$3,063M | \$25M |
| | \$295M | \$3,413M | \$50M |
| 2026 ₁ | \$270M | \$3,163M | \$50M |
| | \$305M | \$3,513M | \$100M |

- Outer Year Royalty (“OYR”): 85% of royalties for TRELEGY ELLIPTA return to Theravance Biopharma:
 - On and after January 1, 2031 for U.S. sales³
 - On and after July 1, 2029 for ex-U.S. sales³

Amprexetine (Unsecured Royalty)

- Upfront payment: \$25M (Received)
- 1st Regulatory approval milestone: \$15M
 - Approval by either FDA or first of the EMA or all four Germany, France, Italy and Spain
- Future royalties paid to Royalty Pharma:
 - 2.5% on annual global net sales up to \$500M
 - 4.5% on annual global net sales > \$500M

Fourth Quarter 2022 Financials

\$327.5 million cash¹ as of December 31, 2022

(\$, in thousands)

| | <u>Three Months Ended December 31,</u> | | <u>Year Ended December 31,</u> | |
|--|--|-----------------|--------------------------------|------------------|
| | <u>2022</u> | <u>2021</u> | <u>2022</u> | <u>2021</u> |
| | <u>(Unaudited)</u> | | <u>(Unaudited)</u> | |
| Revenue: | | | | |
| Viatis collaboration agreement | \$ 14,613 | \$ 12,132 | \$ 48,624 | \$ 43,848 |
| Viatis royalties (Non-US) | 30 | - | 30 | - |
| Collaboration revenue | 6 | 2,813 | 192 | 11,463 |
| Licensing revenue | - | - | 2,500 | - |
| Total revenue | 14,649 | 14,945 | 51,346 | 55,311 |
| Costs and expenses: | | | | |
| Research and development (2) | 15,347 | 31,225 | 63,392 | 193,657 |
| Selling, general and administrative (2) | 16,734 | 21,516 | 67,073 | 99,296 |
| Restructuring and related expenses (2) | - | 18,371 | 12,838 | 20,142 |
| Total costs and expenses | 32,081 | 71,112 | 143,303 | 313,095 |
| Loss from continuing operations (before tax and other income/expense) | (17,432) | (56,167) | (91,957) | (257,784) |
| Income from discontinued operations (before tax) | - | 25,780 | 1,143,930 | 65,645 |
| Share-based compensation expense: | | | | |
| Research and development | 2,825 | 3,442 | 12,888 | 25,634 |
| Selling, general and administrative | 4,123 | 5,113 | 19,848 | 28,065 |
| Restructuring and related expenses | - | 8,362 | 6,998 | 8,362 |
| Total share-based compensation expense | 6,948 | 16,917 | 39,734 | 62,061 |
| Operating expense excl. share-based compensation and one-time expenses: | | | | |
| R&D operating expense (excl. share-based comp and restructuring exp.) | 12,522 | 27,783 | 50,504 | 168,023 |
| SG&A operating expense (excl. share-based comp and restructuring exp.) | 12,611 | 16,403 | 47,225 | 71,231 |