Theravance Biopharma®

Medicines That Make a Difference®

Appendix Slides to Investor Presentation

January 2022

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 Company's goals, designs, strategies, plans and objectives, the impact of the Company's restructuring plan, ability to provide value to shareholders, 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 and the market for products being commercialized, the Company's expectations regarding its allocation of resources, potential regulatory actions and commercialization (including differentiation from other products or potential products and addressable market), product sales or profit share revenue and the Company's expectations for its expenses, excluding share-based compensation and other financial results.

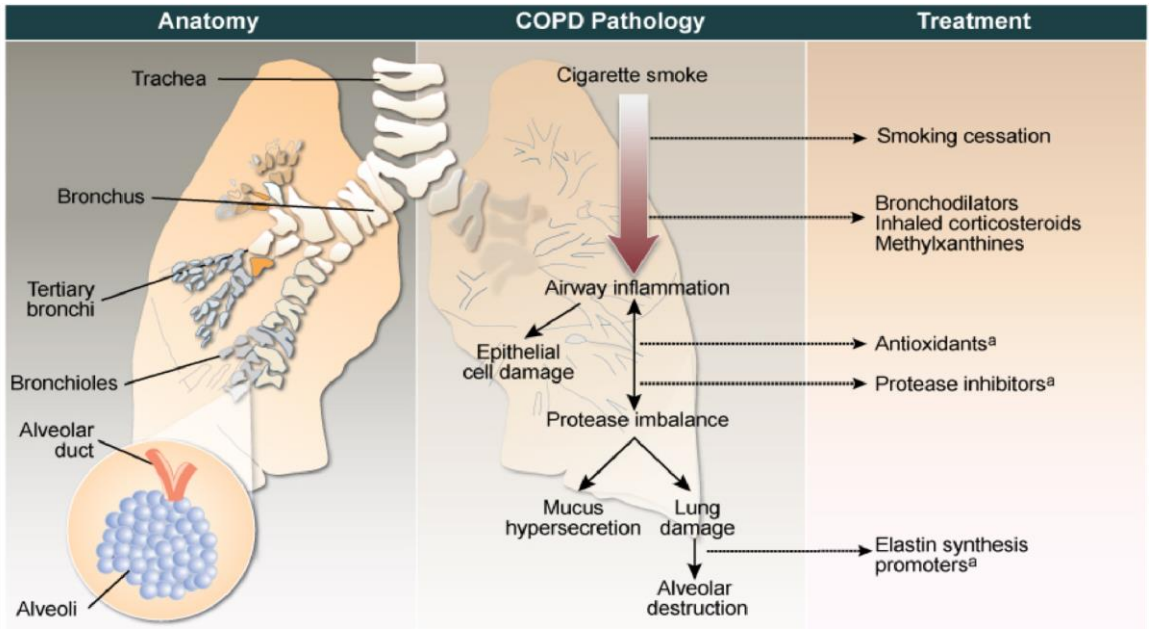
The company's forward-looking statements are based on the estimates and assumptions of management as of the date of this presentation and are subject to risks and uncertainties that may cause the actual results to be materially different than those projected, such as risks related to the impacts on the COVID-19 global pandemic on our business, disagreements with Innoviva, Inc. and TRC LLC, the uncertainty of arbitration and litigation and the possibility that the results of these proceedings could be adverse to the Company, additional future analysis of the data resulting from our clinical trial(s), delays or difficulties in commencing, enrolling or completing clinical studies, the potential that results from clinical or non-clinical studies indicate the Company's compounds, products or product candidates are unsafe, ineffective or not differentiated, risks of decisions from regulatory authorities that are unfavorable to the Company, the feasibility of undertaking future clinical trials based on policies and feedback from regulatory authorities, 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 restructuring actions on its employees, partners and others.

Other risks affecting Theravance Biopharma are in the company's Form 10-Q filed with the SEC on November 8, 2021, and other periodic reports filed with the SEC.

COPD and Asthma Background

COPD is characterized by persistent airflow limitation that is not fully reversible

- Progressive, partially irreversible airway damage
  - Chronic bronchitis: Chronic inflammation of bronchi with mucus hypersecretion, leading to airway narrowing and obstruction of airflow
  - Emphysema: Destruction of alveolar walls, leading to fewer, larger alveoli and loss of lung elastic recoil, causing chronic lung hyperinflation and compromising expiratory flow
- Clinically defined as post-bronchodilator FEV_1:FVC ratio <70% in a spirometry test
- Symptoms, which can become acute and lead to exacerbation, include chronic cough, shortness of breath, and chronic sputum production
  - Symptoms typically progress slowly
  - Environmental stimuli including pollutants and bacterial / viral infections can cause acute worsening
- Most common risk factor is tobacco smoking; others include occupational exposure to dusts and chemicals



Source: DRG.
COPD, chronic obstructive pulmonary disease; FEV_1, forced expiratory volume in 1 second; FVC, forced vital capacity.

Three classes of inhaled medicines form backbone of long-term maintenance therapy for both COPD and asthma

Class	Mechanism of Action	Key Brands* (Mfg., 2020 Global Net Sales)
LABA Long-acting beta agonists	Activate beta$_2$-adrenergic receptors to reduce free intracellular calcium, thereby relaxing smooth muscle, reducing mucus secretion, and increasing mucociliary function.	Brovana (Sunovion, $273 M) Perforomist (VTRS, $213 M) Serevent (GSK, $62 M)
LAMA Long-acting muscarinic antagonists	Also known as anticholinergics. Bind to muscarinic receptors and inhibit bronchoconstriction and mucus secretion stimulated by the interaction of acetylcholine with these receptors.	Spiriva (BI, $2.0 B) Incruse (GSK, $283 M) YUPELRI (VTRS/TBPH, $143 M)
ICS Inhaled corticosteroids	Bind to glucocorticoid receptors, reducing transcription of genes involved in inflammatory response, reducing number of immune cells in mucosa, inhibiting T-cell activation, promoting eosinophil apoptosis, inhibiting nitric oxide synthase, reducing mucus secretion, and increasing beta$_2$-adrenergic receptor production.	Pulmicort (AZ, $1.0 B) Flovent (GSK, $535 M) Asmanex (Merck, $231 M)

Types of Delivery Devices

MDI (metered dose inhaler)

DPI (dry powder inhaler)

SMI (soft mist inhaler)

Nebulizer

Source: IQVIA Analytics Link (MNFG Reported Sales when publicly disclosed, MIDAS Value when not)
Note: short-acting beta agonists and muscarinic antagonists are widely used for rescue therapy and occasionally on a regular basis for maintenance. Also, a variety of biologics are increasingly used as add-on therapy in severe asthma. *See specific prescribing information for each product for specific use in COPD and/or asthma. Some agents are not approved for COPD (e.g. Asmanex by MERCK).
COPD, chronic obstructive pulmonary disease.

Dual combinations – and more recently triple combinations – have become market leaders

Dual Combinations	Key Brands (Mfg., 2020 Global Net Sales)
ICS / LABA Indicated for both COPD & asthma	Symbicort (AZ, $2.7 B) Advair (GSK, $2.0 B) Breo (GSK, $1.4 B) Generics ($930 M)
LABA / LAMA Indicated only for COPD	Stiolto (BI, $730 M) Anoro (GSK, $713 M) Ultibro (Novartis, $623 M) Bevespi (AZ, $48 M)

Triple Combos	Dosing & Components	COPD Status	Asthma Status
Trelegy GSK $1.1 B	QD Multi-dose DPI Vilanterol, umeclidinium & fluticasone furoate	Approved • US, Sep-17 • EU, Jul-17 • Japan, Nov-20 • China, Nov-19	Approved • US, Sep-20 • Japan, Nov-20 Rejected in EU with no plans to pursue further
Trimbow Chiesi $281 M	BID HFA-pMDI Formoterol, glycopyrrolate & beclometasone	Approved • EU, Jul-17 US Phase 3 trial listed in Mar-20 but has not yet started	Approved • EU, Feb-21
Breztri AstraZeneca $28 M	BID HFA-pMDI Formoterol, glycopyrronium & budesonide	Approved • US, Jul-20 • EU, Dec-20 • Japan, Jun-19 • China, Dec-19	Phase 3 on-going with expected completion in Q3 2023
Enerzair Novartis $3 M	QD Single-dose DPI Indacaterol, glycopyrronium & mometasone	Not in development for COPD	Approved • EU, Jul-20 • Japan, Jun-20 Not in development for US (would not be QD)

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Source: IQVIA Analytics Link.
BID, twice a day; COPD, chronic obstructive pulmonary disease; DPI, dry powder inhaler; HFA-pMDI, hydrofluoroalkane pressurized metered dose inhaler; ICS, inhaled corticosteroids; LABA, long-acting beta$_2$ agonists; LAMA, long-acting muscarinic antagonist; QD, once a day.

Overview of nebulized products for maintenance therapy

Nebulized Products Used for Maintenance Therapy	Class	Dosing & Components	Launch / Gx Status
YUPELRI Viatris (formerly Mylan)	LAMA	QD (1x per day) Revefenacin	• US, Nov-18
Lonhala Sunovion	LAMA	BID (2x per day) Glycopyrrolate	• US, Feb-18
Brovana Sunovion	LABA	BID (2x per day) Arformoterol Tartrate	• US, Mar-07 • Gx, Jun-21
Perforomist Viatris (formerly Mylan)	LABA	BID (2x per day) Formoterol Fumarate	• US, Aug-07 • Gx, Jun-21
DuoNeb Viatris (formerly Mylan)	SABA/ SAMA	QID (4x per day, up to 6x) Ipratropium Albuterol	• US, Jun-01 • Gx, Jul-07

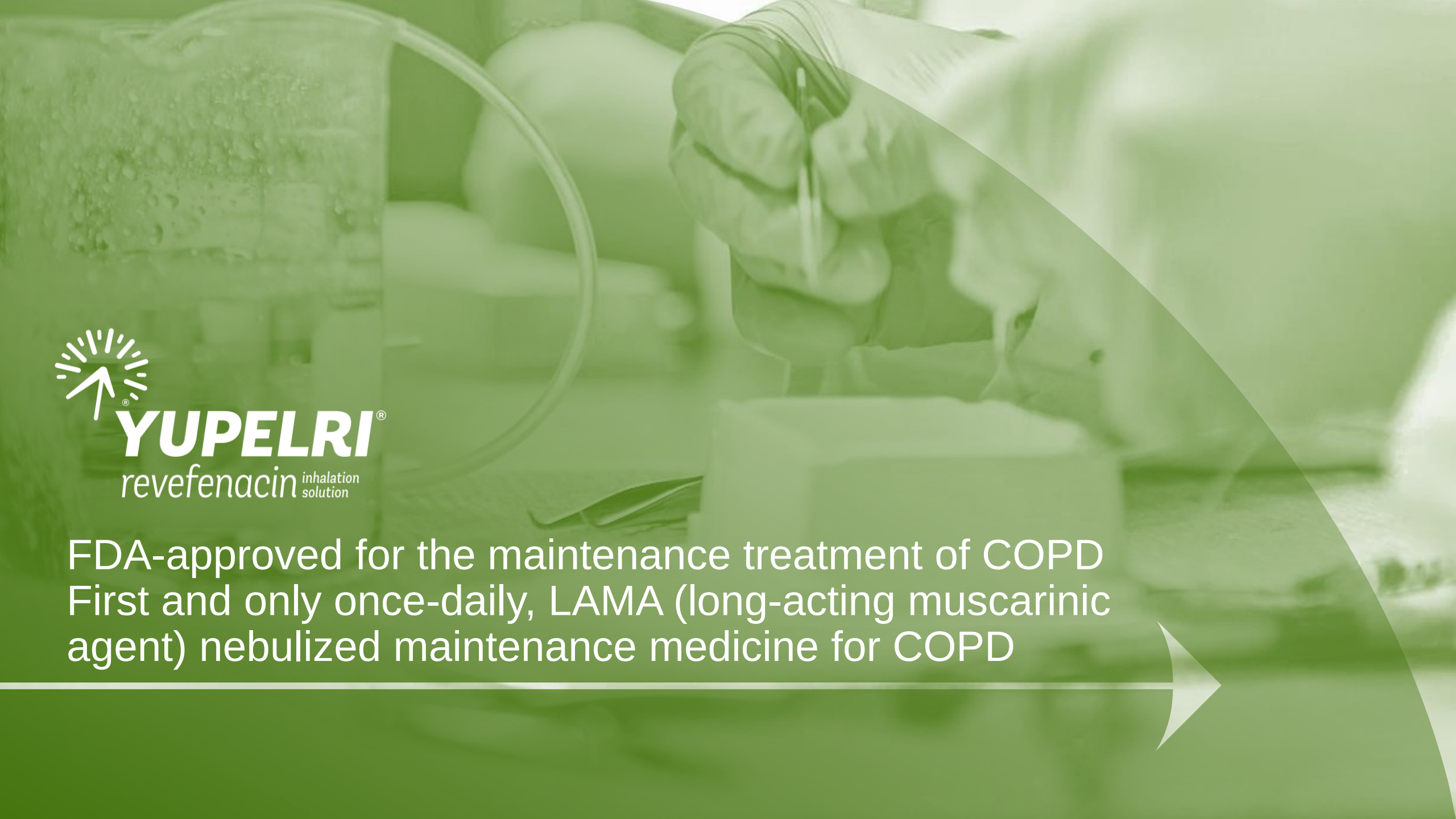
Long-Acting Neb Market:
Indicated for Long-Acting, Nebulized Maintenance Therapy

Short-Acting (rescue) which is used for regular daily (maintenance) therapy

Nebulizers provide a user-friendly option for providers and their COPD patients:

- Require only normal tidal breathing and do not require extra effort generating adequate inspiratory flow rate
- No hand-breath coordination is needed
- Many patients are 100% covered as durable medical equipment (DME) through Medicare Part B

COPD, chronic obstructive pulmonary disease; DME, durable medical equipment; LABA, long-acting beta$_2$ agonists; LAMA, long-acting muscarinic antagonist; SABA, short-acting beta-agonists; SAMA, short-acting muscarinic-antagonist.



YUPELRI®
revefenacin inhalation solution

FDA-approved for the maintenance treatment of COPD
First and only once-daily, LAMA (long-acting muscarinic agent) nebulized maintenance medicine for COPD

YUPELRI® (revefenacin) is the first and only once-daily, nebulized maintenance medicine for COPD

Unmet Need for Nebulized LAMA therapy

- Once-daily LAMAs are first-line therapy for moderate-to-severe COPD patients
- YUPELRI is the only once-daily nebulized LAMA available

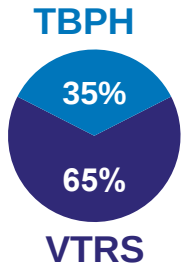
Enduring Patient Niche

- ~45% of COPD patients in the US have a nebulizer at home
- Nebulized therapy associated with reduced hospital readmissions in low PIFR patients
- Patients with cognitive or dexterity challenges may be candidates for nebulized therapy

Growing Market Opportunity

- Viatris partnership brings commercial strength in nebulized segment
- YUPELRI complementary to existing nebulized LABA treatments
- Planned PIFR-2 clinical study aimed at helping to better inform decisions when physicians are designing a personalized COPD treatment plan with their patients.
  - Success in this study is intended to capture more of YUPELRI's addressable market and further strengthen its competitive advantage

Theravance Biopharma + VIATRIS

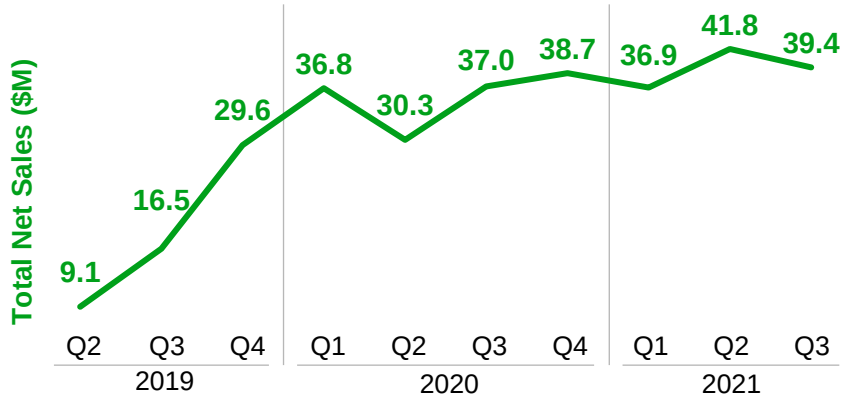


Companies co-promote under US profit/loss share

COPD, chronic obstructive pulmonary disease; LABA, long-acting beta$_2$ agonists; LAMA, long-acting muscarinic antagonist; PIFR, peak inspiratory flow rate.

Where the market has been

COVID-19 outbreak coincided with critical period of YUPELRI® launch



- Universal brand challenges
  - Reduced office visits
  - Reduced/limited new treatment starts

COVID-19 placed unprecedented demands on pulmonologists

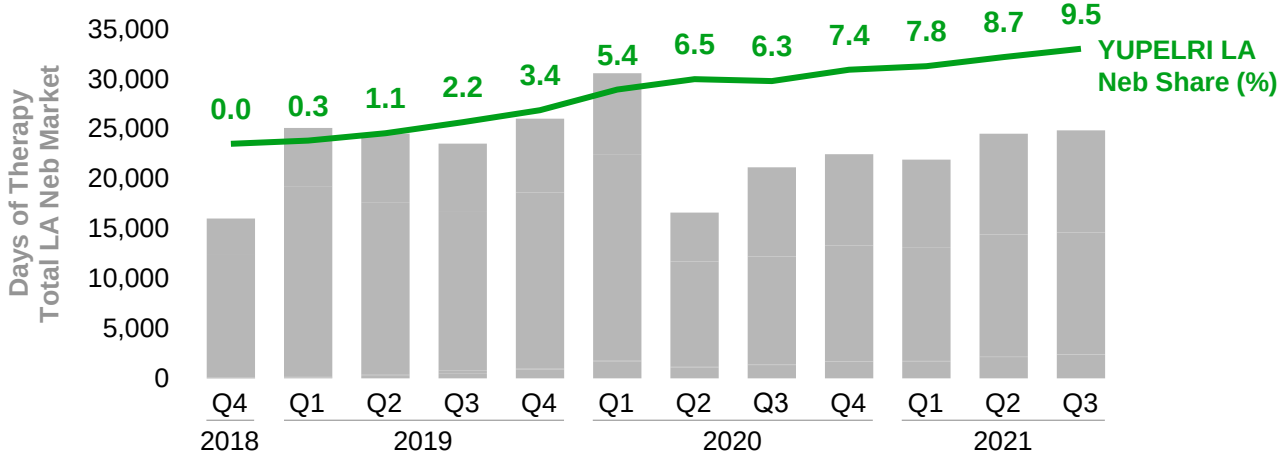
- Pulmonologists enlisted for ER, ICU, hospital, COVID outpatient evaluation
- Overall new product starts for pulmonologists still down vs 2019; lag behind other specialties[1]

-17% New-to-product Rx growth

-8% TRx growth

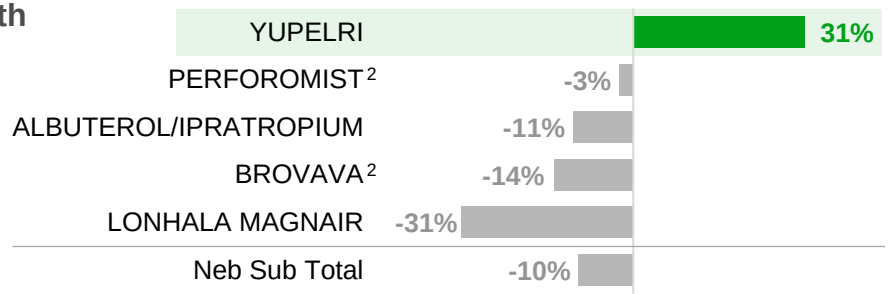
Despite impact, YUPELRI® sales still increasing[2]

Hospital Purchasing Trends: COPD Long-Acting Nebulized Market



- Hospital purchasing for the entire LA-NEB market declined markedly in Q1 2020 and remains below 2019 levels
- Despite down market, YUPELRI shows steady market share and volume growth

Nebulized Product Growth
YoY TRx Growth[1]
12 Months Ending Jul'21 vs Same Time Last Year



Source: SHA METYS through Q3'21 ; 2. Source: IQVIA DDD through Sep'21.
COPD, chronic obstructive pulmonary disease; LA-NEB, long-acting nebulizer.

YUPELRI® more likely to be added to Neb LABA than be a conversion from long-acting Neb competitors

YUPELRI Source of Business

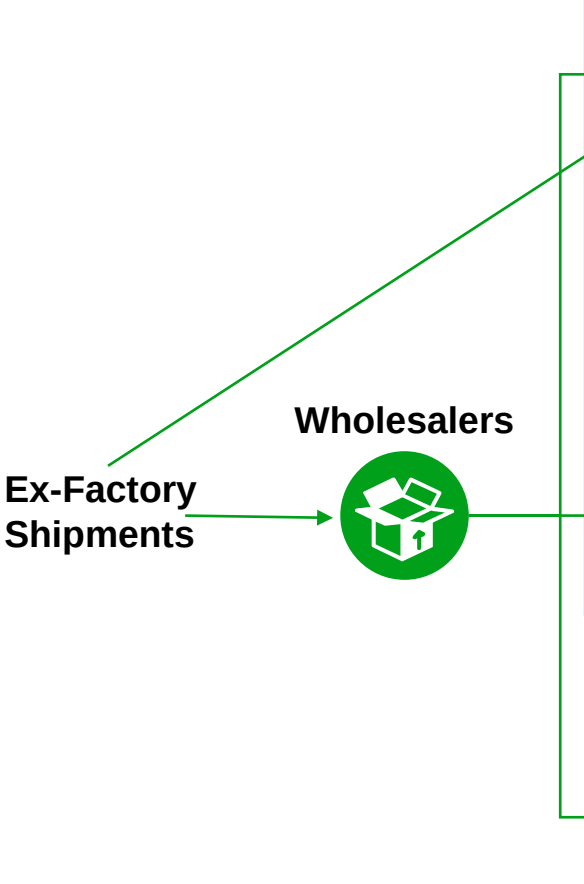
- Budesonide (ICS), Perforomist and Brovana are the products most often used in combination with YUPELRI
  - 40–50% of YUPELRI patients are also on Neb LABA
  - 35–40% of YUPELRI patients are on open triple therapy (LAMA/LABA/ICS) with the majority being all nebulized
- Conversions mostly come from SA Nebs and LA Handhelds with fewer conversions from Neb LABAs
- Generic availability of Neb LABAs allows for cheaper patient OOP costs with combo use
- Drivers to nebulized therapy continue to be:
  - Cognitive/dexterity challenges
  - Patient preference based on prior experience
  - Access and low out of pocket costs for Medicare Part B patients
  - Transition from hospital to home care
  - Suboptimal PIFR

Source: IQVIA LAAD Patient-Level Claims Data through Jun'21.
ICS, inhaled corticosteroid; LABA, long-acting beta$_2$ agonists; LAMA, long-acting muscarinic antagonist; OOP, out of pocket; PIFR, peak inspiratory flow rate.

DME channel hinders visibility into tracking performance

Traditional ‘Retail’ data vendors do not fully capture DME volume

YUPELRI® Product Flow



Not Fully Captured by IQVIA & SHA Prescription Data

- **Majority** of YUPELRI business flows through the DME channel
- Data available via **SolutionsRx Management Group**
  - Captures **the DME claims not captured by IQVIA and SHA** (doesn’t capture Medicare Advantage volume)
- **~2 month data lag exists** with SolutionsRx data
- **SolutionsRx (Med B / DME)** used in combination with **IQVIA XPO (Retail)** to get **‘Total Community’** and calculate market share

Captured by IQVIA & SHA Prescription Data

- Only includes **~33% of YUPELRI ‘Total Community’ volume**
- Useful for insights into **directional trend** of total community and is more **real-time** with little lag
- IQVIA NPA’s mail channel projections for YUPELRI are typically overstated; SHA’s methodology has been more consistent and reliable

Total Community

Hospital Purchases Captured by IQVIA DDD

- Shipments from wholesalers to outlets; Does not include filled Rxs
- Outlet sub-categories allow for distinction between inpatient and outpatient entities
- Additional hospital volume in VA and outlets that do not report to DDD

DME, durable medical equipment.

Educating health-care providers via publications

Publication	Audience	Summary
Nebulized Treatments and the Possible Risk of Coronavirus Transmission: Where is the Evidence?[1]	Pulmonology	"The data should not lead to the conclusion that AGP's are without risk but point out the need to have a balanced approach towards the use of nebulizers."
Nebulized Therapy in the COVID-19 Era: The Right Tool for the Right Patient[2]	Respiratory therapists	At a time when public health information is in a state of rapid flux, rather than using a "one size fits all" policy, **the more sensible approach would be to use "the right tool for the right patient"** strategy based on what we know. Thus, nebulizers may remain the preferred option for some patients who require this treatment, especially in light of the severe shortage of MDIs. This approach does not conflict with recent COVID-19 guidance
Evidence-based treatment during the SARS-CoV-2 pandemic: Identifying the knowns and unknowns of nebulization[3]	Pharmacy	Lack of evidence to suggest that nebulization can transmit viral particles. HCPs across all settings should take the necessary precautions to minimize the risk of infection
The use of nebulized pharmacotherapies during the COVID-19 pandemic[4]	All HCPs	Challenges the data currently available on nebulization and viral transmission
Publications pending from Nebulization Task Force clinical research		1) Porcine Lung Model on Nebulization 2) Fluorescent visualization during nebulization 3) Measure of viral spread in COVID-19 patients

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1. Tashkin DP, Barjaktarevic IZ. Chronic Obstr Pulm Dis 2020;7:136-8. 2. Hess MW. Int J Chron Obstruct Pulmon Dis 2020;15:2101-2. 3. Woods JA. J Am Pharm Assoc 2021;61:e55-6.
4. Sethi S, et al. Ther Adv Respir Dis 2020;14:1753466620954366.
AGI, aerosol-generating procedures; MDI, metered dose inhalers.

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.

1. TBPH market research (N=160 physicians); refers to US COPD patients.
COPD, chronic obstructive pulmonary disease; LAMA, long-acting muscarinic antagonist.

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.

OATP, organic anion transporting polypeptide.