Verona Pharma

Breathtaking science

Developing respiratory drugs to improve health and quality of life

17th Annual Needham Healthcare Conference
New York
March 27, 2018

www.veronapharma.com

Forward-Looking Statements

Verona Pharma

This presentation contains "forward-looking" statements that are based on the beliefs and assumptions and on information currently available to management of Verona Pharma plc (together with its consolidated subsidiaries, the "Company"). All statements other than statements of historical fact contained in this presentation are forward-looking statements. Forward-looking statements include information concerning the initiation, timing, progress and results of clinical trials of the Company's product candidate, the timing or likelihood of regulatory filings and approvals for any of its product candidates, and estimates regarding the Company's expenses, future revenues and future capital requirements. In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "expects," "plans," "anticipates," "believes," "estimates," "predicts," "potential" or "continue" or the negative of these terms or other comparable terminology.

Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. These risks, uncertainties and other factors include those under "Risk Factors" in our annual report on Form 20-F filed with the Securities and Exchange Commission (the "SEC") on February 27, 2018, and in its other reports filed with the SEC. Forward-looking statements represent the Company's beliefs and assumptions only as of the date of this presentation. Although the Company believes that the expectations reflected in the forward-looking statements are reasonable, it cannot guarantee future results, levels of activity, performance or achievements. Except as required by law, the Company assumes no obligation to publicly update any forward-looking statements for any reason after the date of this presentation, or to conform any of the forward-looking statements to actual results or to changes in its expectations.

Verona Pharma

Clinical-stage biopharma focused on developing & commercializing **innovative therapeutics** for treatment of **respiratory diseases** with significant **unmet need**

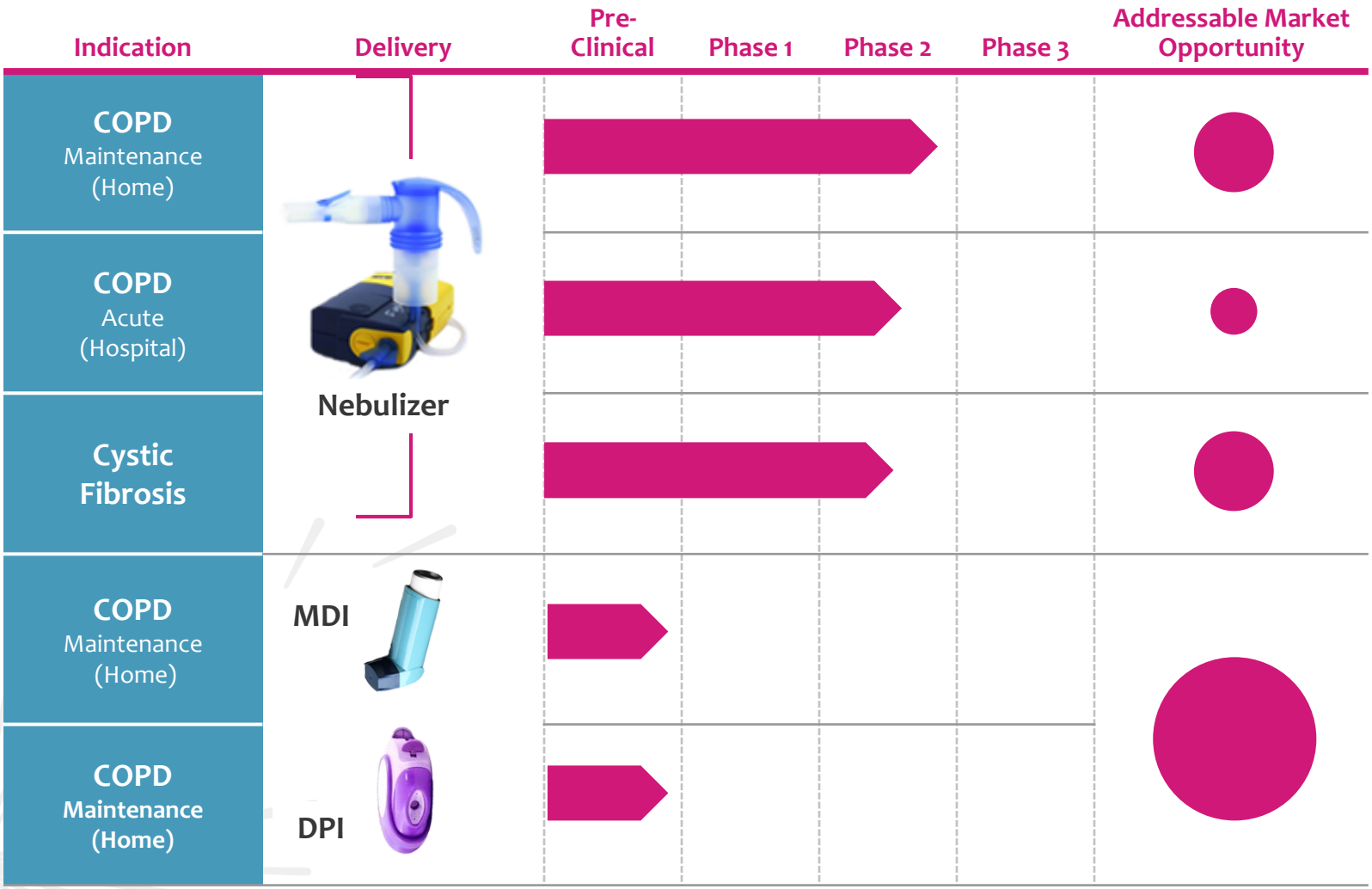
Inhaled dual inhibitor of enzymes PDE3 and PDE4	**RPL554**	**Current Focus: COPD and CF**

Potential first novel class of bronchodilator in decades
Bronchodilator + anti-inflammatory agent in single compound

RPL554: Rich Product Pipeline

12 completed Phase 1, 2a & 2b clinical trials with >730 subjects

Verona Pharma



RPL554 also has applications in other significant respiratory diseases such as asthma.

COPD Sufferers Require Maintenance and Acute Treatment

Verona Pharma

Maintenance (Home)

U.S. alone: 24M living with COPD

- 15M diagnosed and under treatment
- Approximately 2M severe/very severe

Treatment goals:

- Improved lung function
- Improved quality of life
- Prevent exacerbations

Acute (Hospital)

687K
Hospitalizations

20%
Rehospitalized within 30 days of discharge

20%
Die within 1 year of hospitalization

129K
Deaths annually

Despite new therapies, the number of COPD patients and hospitalizations remains high

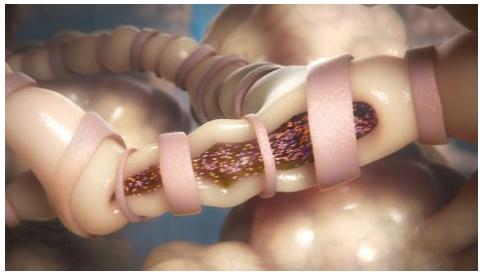
Note: U.S. only data

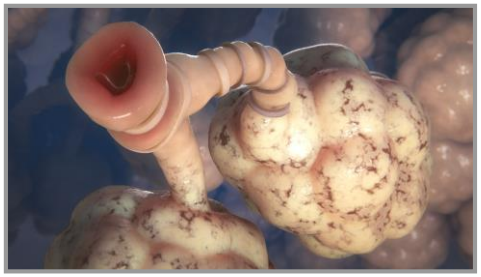
RPL554 First-in-Class Candidate: Bronchodilator and Anti-inflammatory in a Single Compound

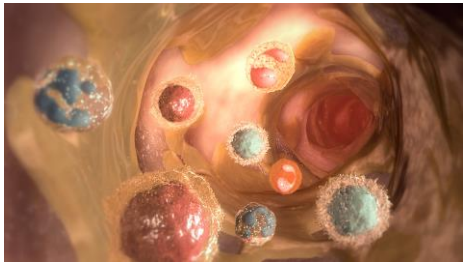
Verona Pharma

RPL554
Dual **PDE3** and **PDE4** enzyme inhibitor

Impacts 3 Key Mechanisms in Respiratory Disease:







Airway Smooth Muscle

PDE3, PDE4

Relaxation

↓

Increased bronchodilation

Inflammatory Cells

Neutrophils
PDE4

Epithelial cells
PDE3, **PDE4**

Macrophages
PDE3, **PDE4**

Eosinophils
PDE4

Lymphocytes
PDE3, **PDE4**

Fibroblasts
PDE4

↓

Increased anti-inflammatory effects

Epithelial Cells

PDE3, **PDE4**

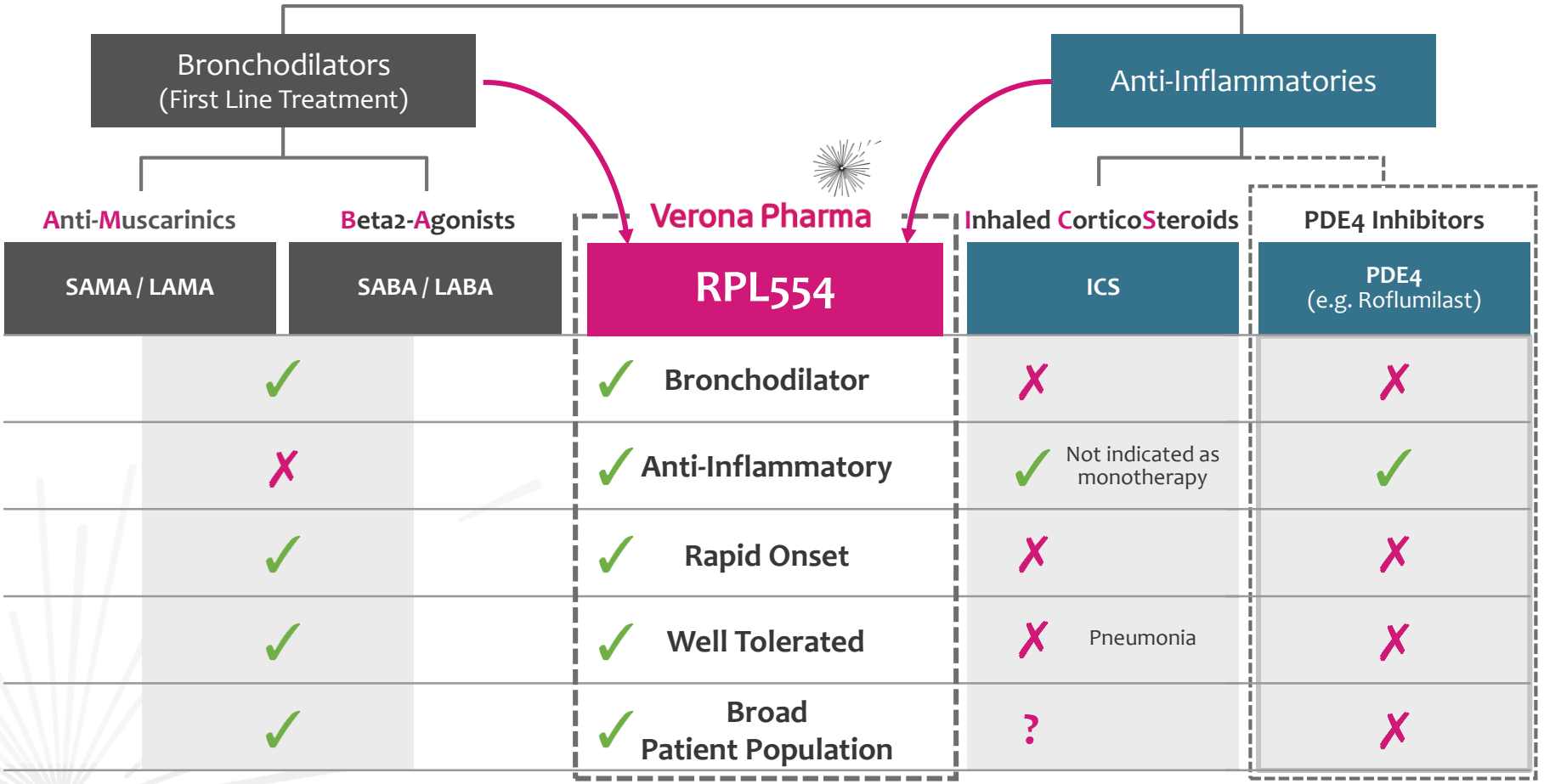
CFTR Activation

↓

Increased mucociliary clearance

RPL554: Potential to Address Limitations of Current Therapies

Verona Pharma

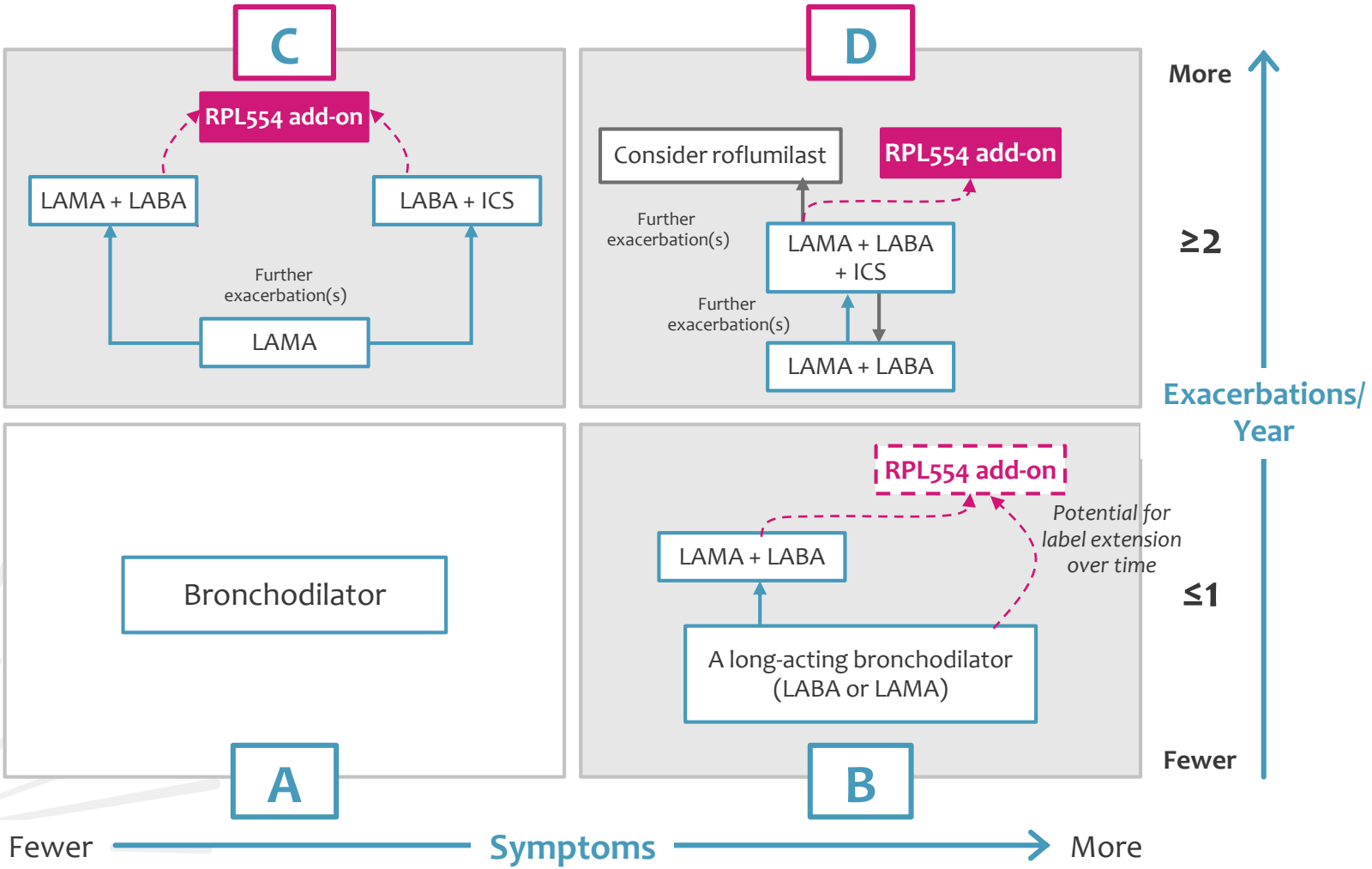


Eventually patients will have "exhausted" all available drug therapies

RPL554: Potential to Improve Standard of Care Treatment for More Severe Patients

Verona Pharma

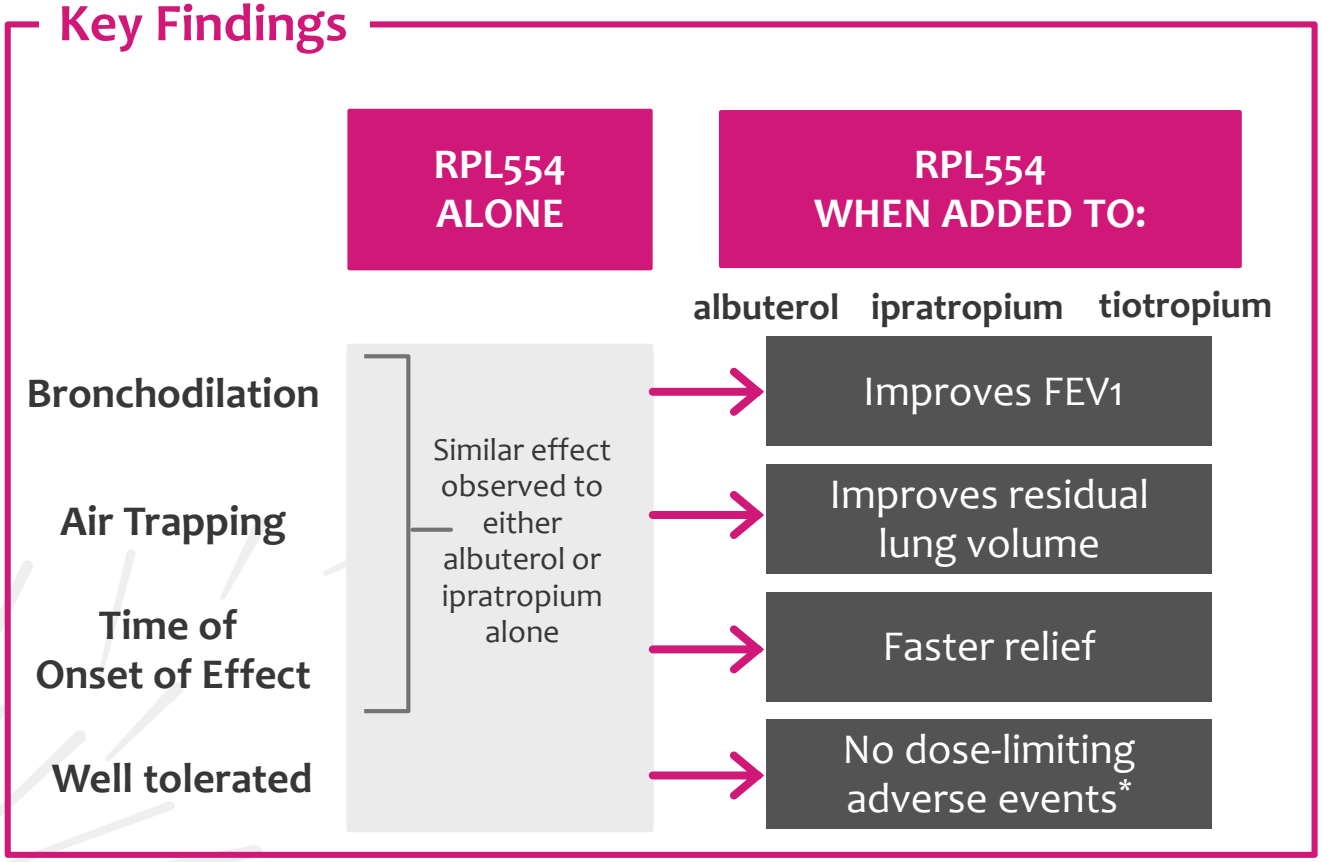
Based on GOLD COPD Guidelines 2017



RPL554: Significantly De-Risked Add-on Effect Reproduced in Independent Study

Verona Pharma

Key Findings



*in completed clinical trials
Source: RPL554-009-2015; RPL554-CO-202

RPL554 – Four Week Phase 2b Study in 403 Patients with Moderate to Severe COPD

Verona Pharma

Trial Overview

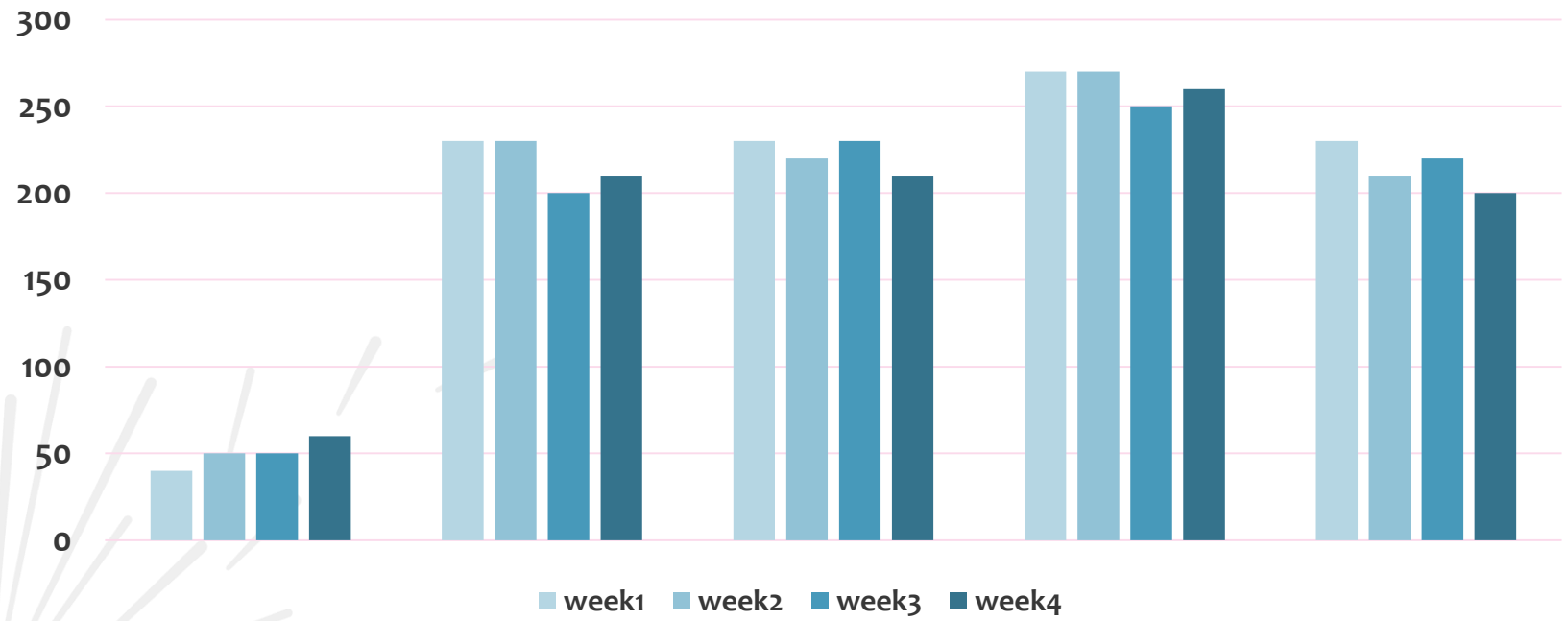
- **Trial Description:** Phase 2b randomized, double blind, placebo controlled, dose ranging study to assess the effect of nebulized RPL554 in patients with moderate to severe COPD in the outpatient setting
- **Patient Population:** 403 moderate-to-severe COPD patients diagnosed >12 months previously, males and females, age 40-75
- **Location:** approx. 45 centres in Western & Eastern Europe
- **RPL554 Dosage:** Four week, five arm parallel design twice daily dosing with RPL554 at 0.75 mg, 1.5 mg, 3 mg, 6 mg or placebo treatment

RPL554 Provides Significant, Clinically Meaningful Bronchodilator Response Maintained over Four Weeks

Verona Pharma

Peak Change from Day 1 in Baseline in FEV_1 (mL) on week 4 ($p<0.001$)

N=403

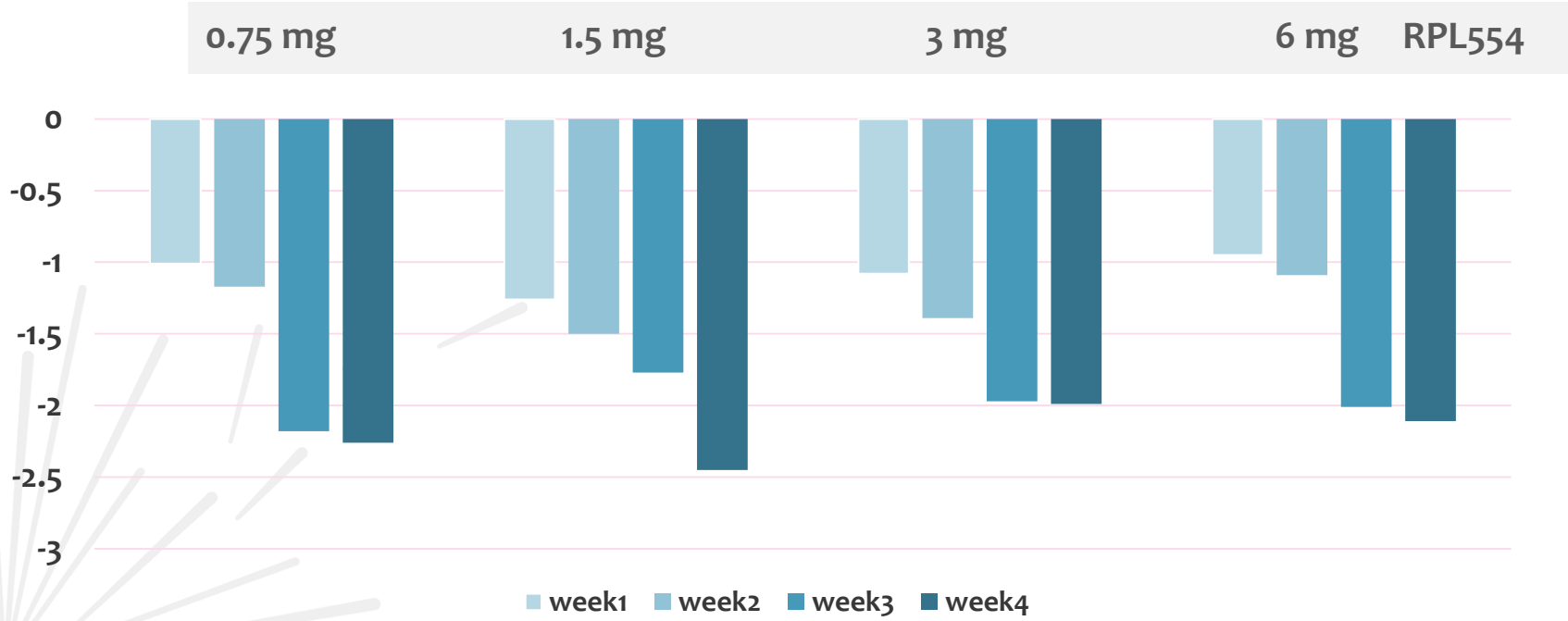


RPL554 Produced Progressive Improvement of COPD Symptoms with all Doses from Weeks 1 to 4

Verona Pharma

Total score (0-40) E-RS: COPD by week (placebo corrected, p<0.02)

N=403



RPL554 Shown to be Effective and Well Tolerated over Four Weeks when Treating COPD Patients in Outpatient Setting

Verona Pharma

Primary endpoint:

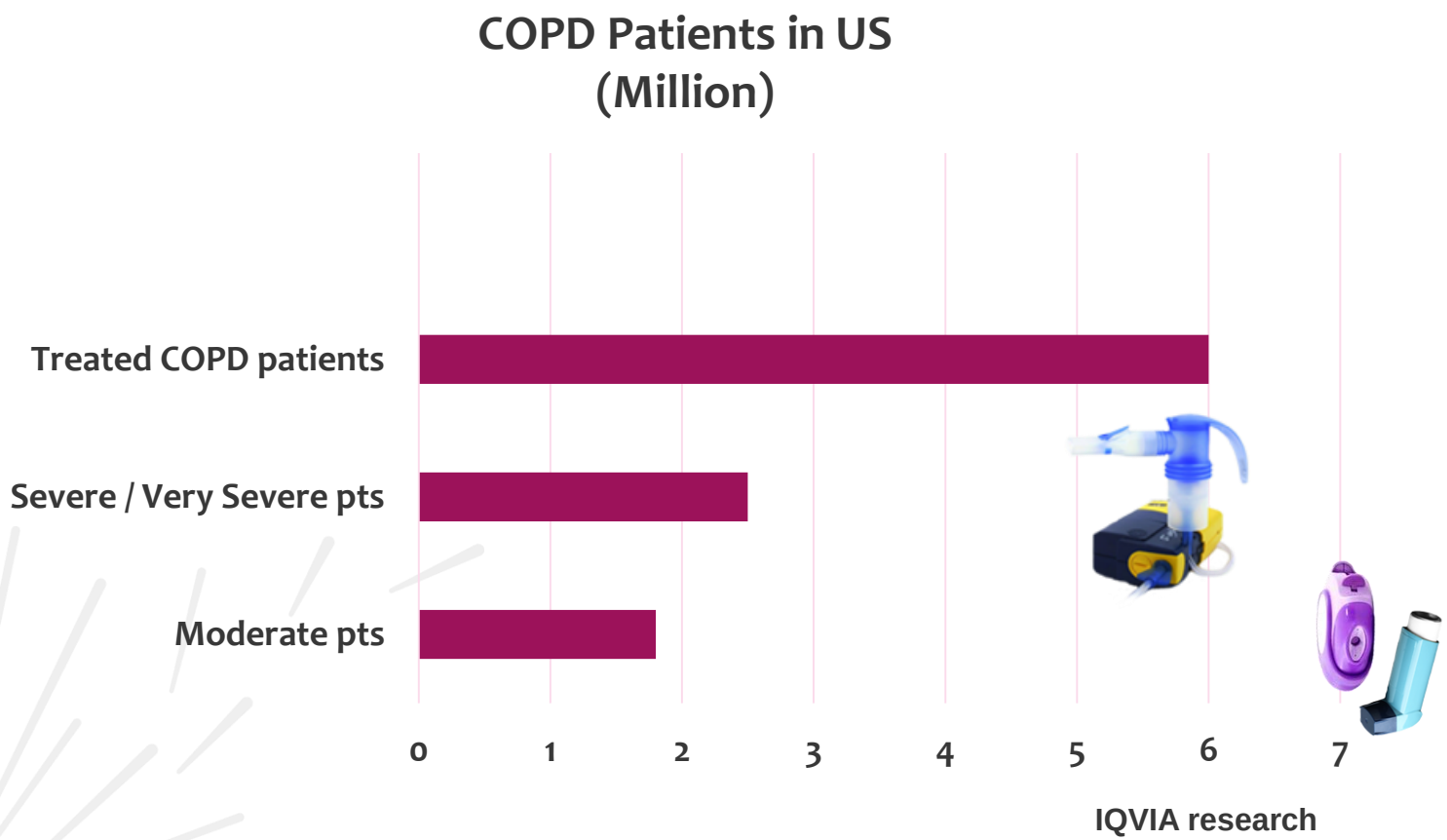
- RPL554 met the primary endpoint, peak FEV1; all doses showed a statistically significant difference vs. placebo ($p<0.001$)
- Peak bronchodilator effect observed at first dose, sustained over four weeks ($p<0.001$)

Secondary endpoints include:

- Statistically significant improvement in average FEV1 over 12 hours was observed at all dose levels at the first dose, and the effect was sustained over the four weeks of dosing
- This study did not demonstrate consistent improvements in trough FEV1
- Statistically significant and progressive improvements in daily COPD symptoms, using E-RS ($p<0.02$ improvements in all sub domains of EXACT-PRO)
- RPL554 was well tolerated at all doses with an adverse event profile similar to placebo

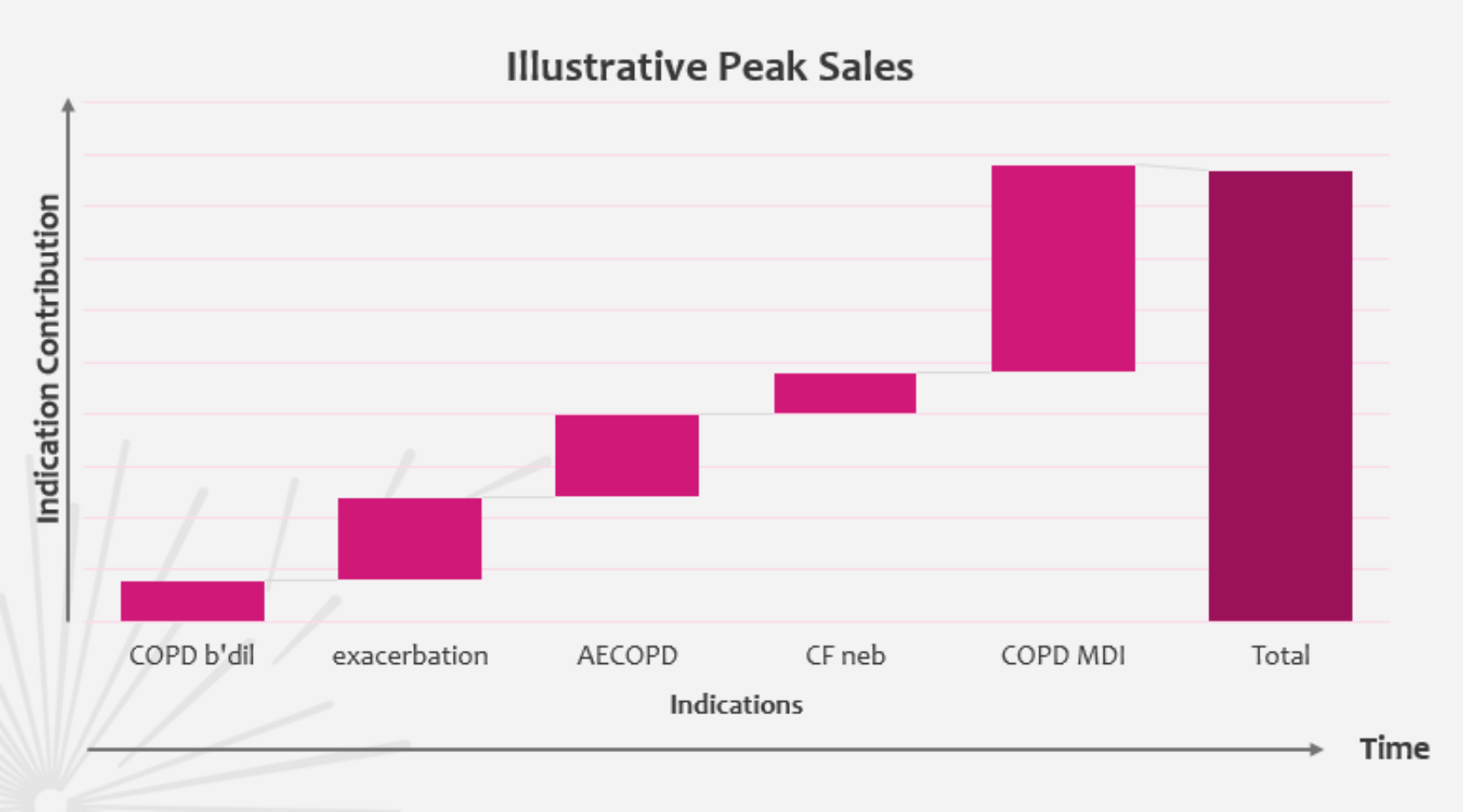
RPL554: Potential to Improve Standard of Care Treatment for Millions of Patients

Verona Pharma



RPL554: Targeting Multiple Indications Allows Earlier Access to Large Markets

Verona Pharma



CF: A Devastating Orphan Disease

Verona Pharma

- Most common fatal inherited disease in U.S.
- Mutations in gene that encodes CFTR protein
- Inability to clear thickened mucus, impaired lung function and persistent lung infection
- Frequent exacerbations and hospitalization
- No cure
- Median age of death – 37 years
- RPL554 has potential to provide treatment independent of CF mutation status
  - Reduce airway obstruction and inhibit inflammation

Phase 2a study data reported March 2, 2018

RPL554 Demonstrates Favorable PK and PD Profile in CF Patients

Verona Pharma

- Randomized, double blind, cross-over trial comparing 1.5 mg and 6.0 mg doses with RPL554 to placebo in 10 patients with CF
- Patients displayed a range of CF genotype mutations in the CFTR

- Primary endpoint:
  - PK profile was consistent with that observed in patients with COPD, although with lower peak serum levels of RPL554 in CF patients; and
  - Serum half-life was dose-dependent; 7.5 to 10.1 hours for 1.5 mg and 6 mg, respectively.
- Secondary endpoints:
  - Statistically significant increase in average FEV1 in treated patients for 1.5 mg (all $P<0.01$) and 6 mg (all $P<0.05$) at 4, 6 and 8 hour time points;
  - Drug was well-tolerated in this patient group with an adverse event profile consistent with other studies with RPL554

Results support further development in CF

RPL554 IP Summary

Verona Pharma

Patent Portfolio:

- Composition of Matter – granted US, EU, Japan, other; expires 2020
- Polymorphs – granted US, EU, Japan, other; expires 2031
- Formulations, combinations, salt forms, use, manufacturing: granted and pending in US, EU, and other territories; expiries 2031 – 2037
- Additional IP opportunities being explored

Verona Pharma has global rights

Financial Overview and Shareholder Register

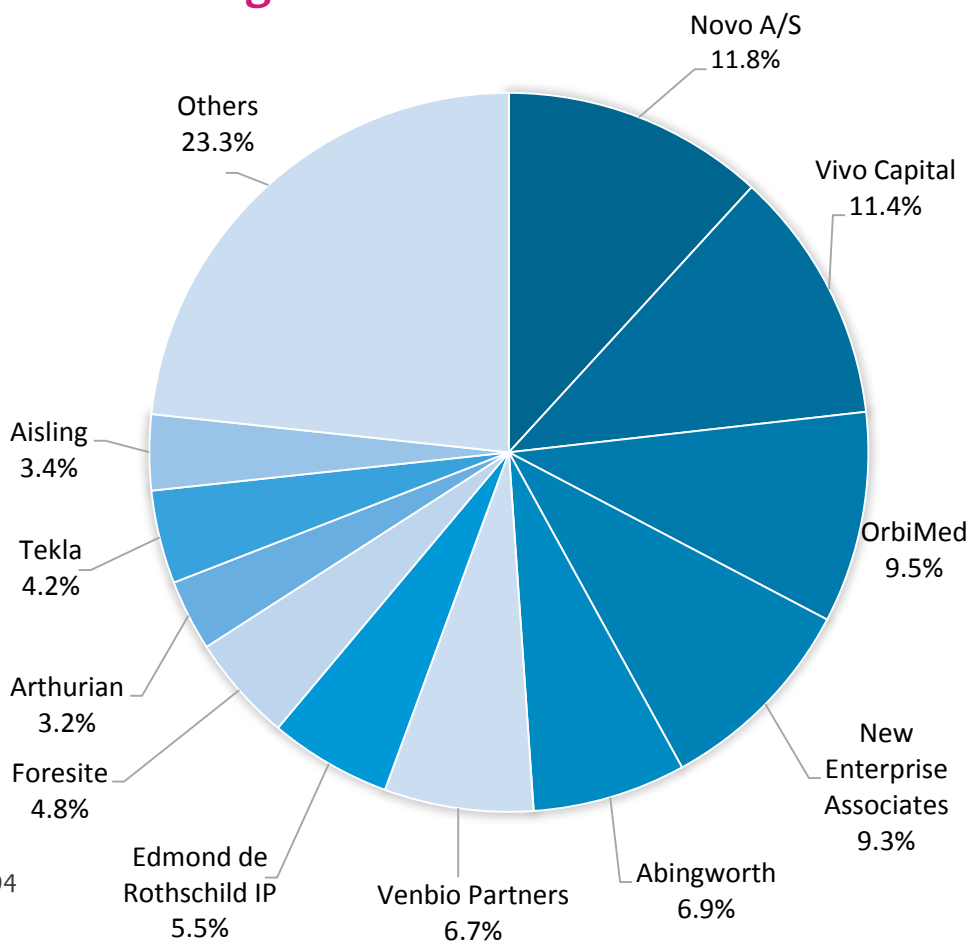
Verona Pharma

Financial Overview 31 Dec 2017

Cash and Cash Equivalents	$108.6M[1]
Operating Expenses	$40.3M[1]
Total Equity	$108M[1]

[1]Exchange rate used (US dollars per pound sterling): December 31, 2017 $1.35294

Shareholdings



Next Steps – Focused Development in Attractive Market Segments

Verona Pharma

Key activities leading up to Phase 3 in maintenance treatment in COPD with nebulized RPL554:

- Positioning study: RPL554 in addition to established combination treatments
- Market research and evaluation of optimal positioning
- “End of Phase 2” meeting to discuss regulatory path
- Pivotal clinical trials in the COPD maintenance setting expected to start in 2019

Development of pMDI and DPI formulations of RPL554:

- Expected start of pre-clinical studies 2H 2018

Development as anti-inflammatory treatment in Cystic Fibrosis:

- Following positive Phase 2a results, KOL and regulatory discussion ahead of clinical proof-of-concept study