Bloom Burton & Co Healthcare Conference 2017

Corporate Presentation (TSX: BLU)

May 1, 2017

Roberto Bellini
President and Chief Executive Officer
Twitter: @rbellini

r

Forward Looking Statements

Certain statements contained in this news release, other than statements of fact that are independently verifiable at the date hereof, may constitute "forward-looking statements" within the meaning of Canadian securities legislation and regulations. Such statements, based as they are on the current expectations of management, inherently involve numerous important risks, uncertainties and assumptions, known and unknown, many of which are beyond BELLUS Health Inc.'s control. Such risks factors include but are not limited to: the ability to obtain financing, the impact of general economic conditions, general conditions in the pharmaceutical industry, changes in the regulatory environment in the jurisdictions in which BELLUS Health Inc. does business, stock market volatility, fluctuations in costs, changes to the competitive environment due to consolidation, achievement of forecasted burn rate, potential payments/outcomes in relation to indemnity agreements and contingent value rights, achievement of forecasted pre-clinical and clinical trial milestones and that actual results may vary once the final and quality-controlled verification of data and analyses has been completed. In addition, the length of BELLUS Health Inc.'s drug candidates development process, their market size and commercial value, as well as the sharing of proceeds between BELLUS Health Inc. and its potential partners from potential future revenues, if any, are dependent upon a number of factors. Consequently, actual future results and events may differ materially from the anticipated results and events expressed in the forward-looking statements. The Company believes that expectations represented by forward-looking statements are reasonable, yet there can be no assurance that such expectations will prove to be correct. The reader should not place undue reliance, if any, on any forward-looking statements included in this news release. These forward-looking statements speak only as of the date made, and BELLUS Health Inc. is under no obligation and disavows any intention to update publicly or revise such statements as a result of any new information, future event, circumstances or otherwise, unless required by applicable legislation or regulation. ***Please see BELLUS Health Inc.'s public filings with the Canadian securities regulatory authorities, including the Annual Information Form, for further risk factors that might affect BELLUS Health Inc. and its business.***

Identifying and Developing Innovative Drugs

- BLU-5937: potentially best-in-class drug for multi billion dollar market
  - Chronic cough affects ~10% of adults in U.S., large unmet need
  - Clinically validated target, clear and efficient development path
- Balanced portfolio: partner in three mid-stage programs
- Strong record of execution
  - Completed multiple transactions (in/out-licensing, partnering); attracted >$100M in funding
  - Conducted global clinical studies, including Phase 3
- Cash runway to end of 2018

Core capability: generating value by advancing drug candidates

BLU-5937: Best-in-Class Potential

P2X3: Validated target for chronic cough	Merck acquired a P2X3 antagonist program in 2016 for US$500M based on positive Phase 2 data Problematic side effect profile with 50% patients experiencing taste disturbance
BLU-5937: Potentially best-in-class P2X3 antagonist	Potential for differentiated product profile with improved efficacy and reduced/no taste disturbance Clear, efficient path to demonstrate superiority
BLU-5937 History	Developed at Astra Zeneca and then NEOMED Institute Global rights licensed by BELLUS in February 2017

Low risk and superior profile targeting potential multi billion dollar drug class

Chronic Cough

Characteristics

Cough lasting ≥ 8 weeks, associated with:

- Pulmonary diseases (asthma, COPD, IPF)
- Extra-pulmonary disorders (post-nasal drip)
- Use of certain drugs (ACE inhibitors)
- No identifiable cause

Implications

Time and resource intensive for the healthcare system

- 38% of pulmonologist outpatient practice
- Resource intensive diagnosis for persistent/unexplained chronic cough

Chronic cough affects ~10% of the adult population

Major Impact on Patients

Physical complications	Social complications	Psychosocial complications
Sleep deprivation	Interference with lifestyle, work & leisure	Anxiety
Vomiting	Difficulty conversing	Anger
Incontinence	Embarrassment of coughing in public	Depression
Headache		Distress
Chest pain		
Rib fracture		

Chronic cough has significant impact on patient quality of life

Few Treatment Options

Opioids	Gabapentin/Pregabalin	OTC Products
Some efficacy	Limited and variable efficacy	Very limited efficacy
Sedation/confusion	Sedation/confusion	
Constipation and nausea	Poor memory	
Potential for addiction	Weight gain	

No novel treatment approved for chronic cough in 50 years

Cause: Hypersensitive Cough Reflex

Coughing trigger
(ex. asthma attack)

↓

Cellular damage activates
P2X3 receptors in airway

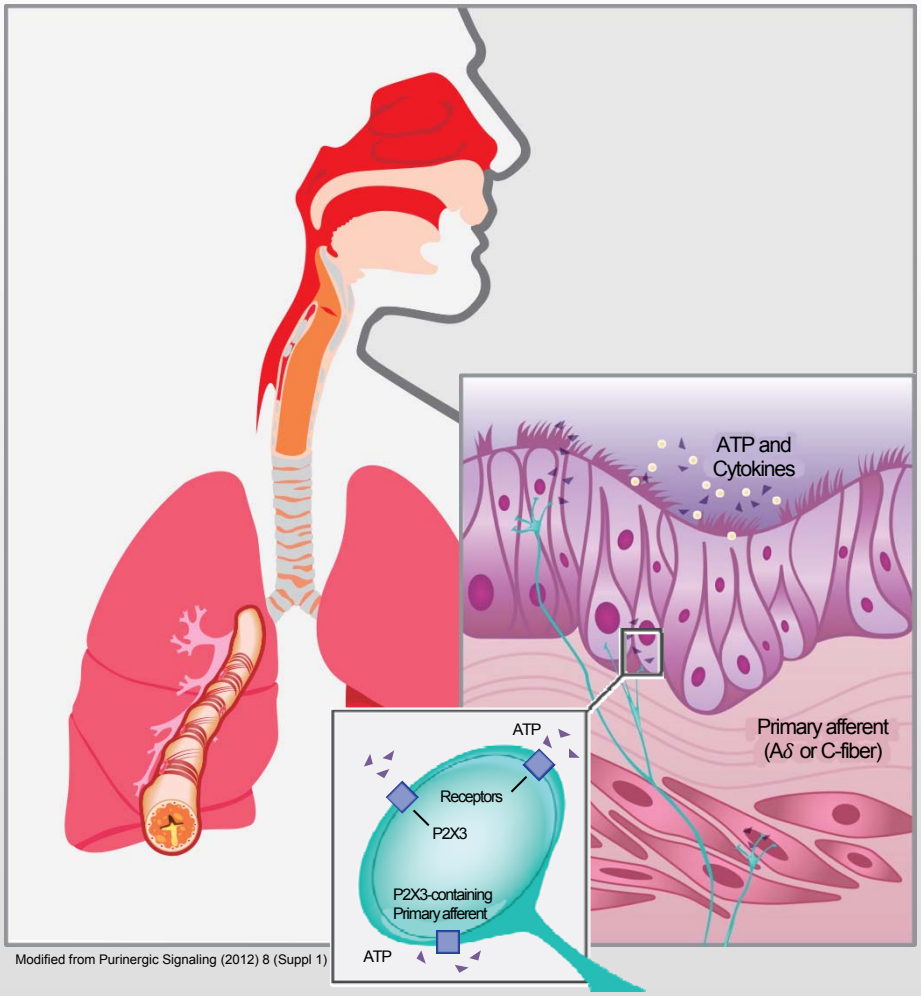
↓

Airway hyper-excitability

↓

Chronic cough

Cell injury



Modified from Purinergic Signaling (2012) 8 (Suppl 1)

P2X3 receptors found in peripheral nervous system, involved in cough as well as pain and taste

P2X3 Receptor: Clinically Validated Target

Mildly selective P2X3 benchmark compound AF-219 (acquired by Merck) has sub-ideal profile :

Meaningful Effect

50 to 75%

reduction in cough frequency

Problematic Side Effect

50 to 100%

of patients experience taste disturbance (likely due to low P2X3 selectivity)

Adbulqawi et al., 2016. P2X3 receptor antagonist (AF-219) in refractory chronic cough: a randomised, double-blind, placebo-controlled phase 2 study. Lancet. Vol 385, No 9974 pp. 1198-1205.
Kitt et al., 2016. A Phase 2 Dose-Escalation Study with AF-219, a P2X3 Antagonist for the Treatment of Chronic Cough. American Thoracic Society 2016 International Conference - San Francisco.

Opportunity for *highly selective* P2X3 antagonist with better efficacy/safety profile to become class leader

BLU-5937: Best-in-Class Profile

Dosed
Orally

High
Potency and Selectivity for P2X3

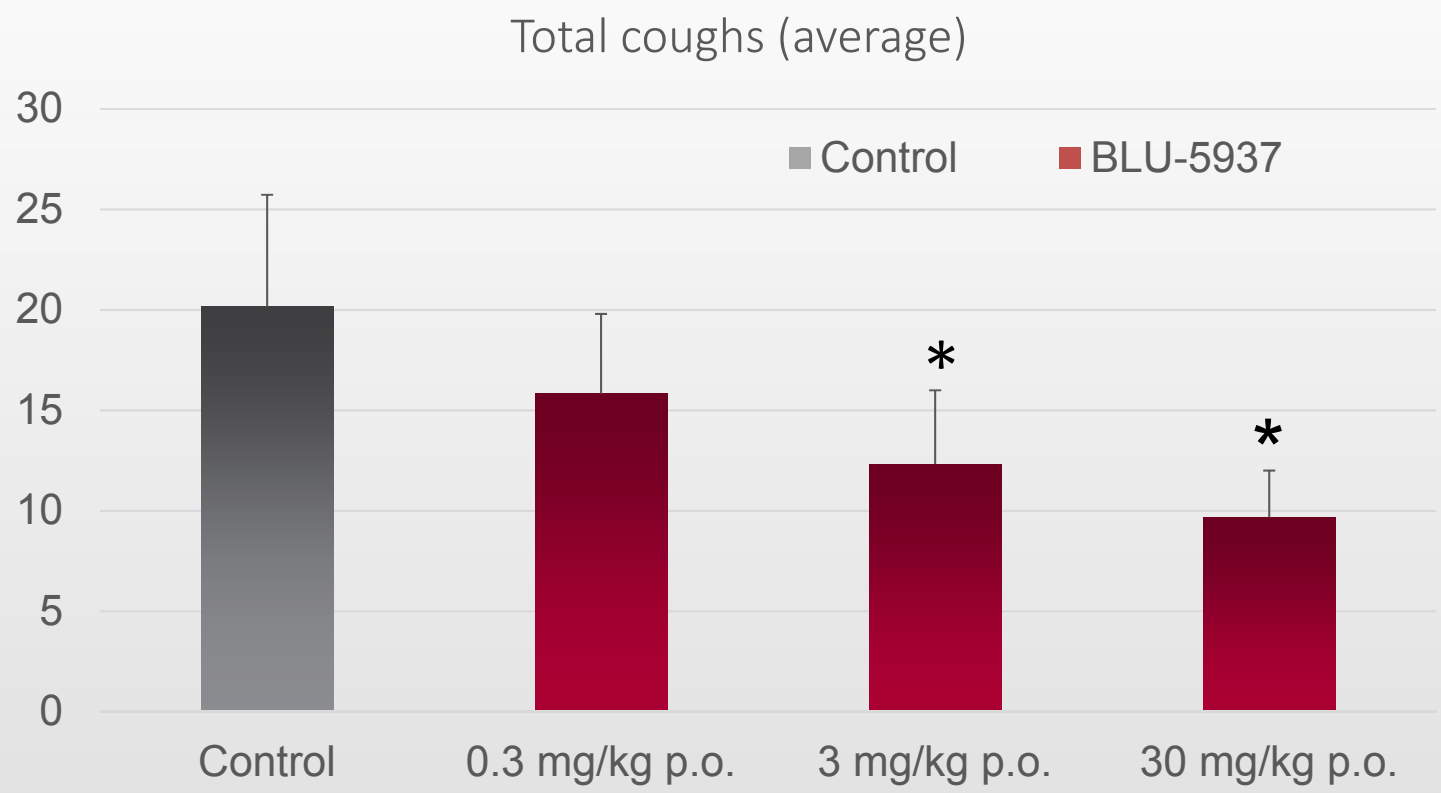
Zero
safety findings of concern

Broad and comprehensive IP to
2034

Kg
scale CMC

Strong drug candidate profile with potential to be best in P2X3 class

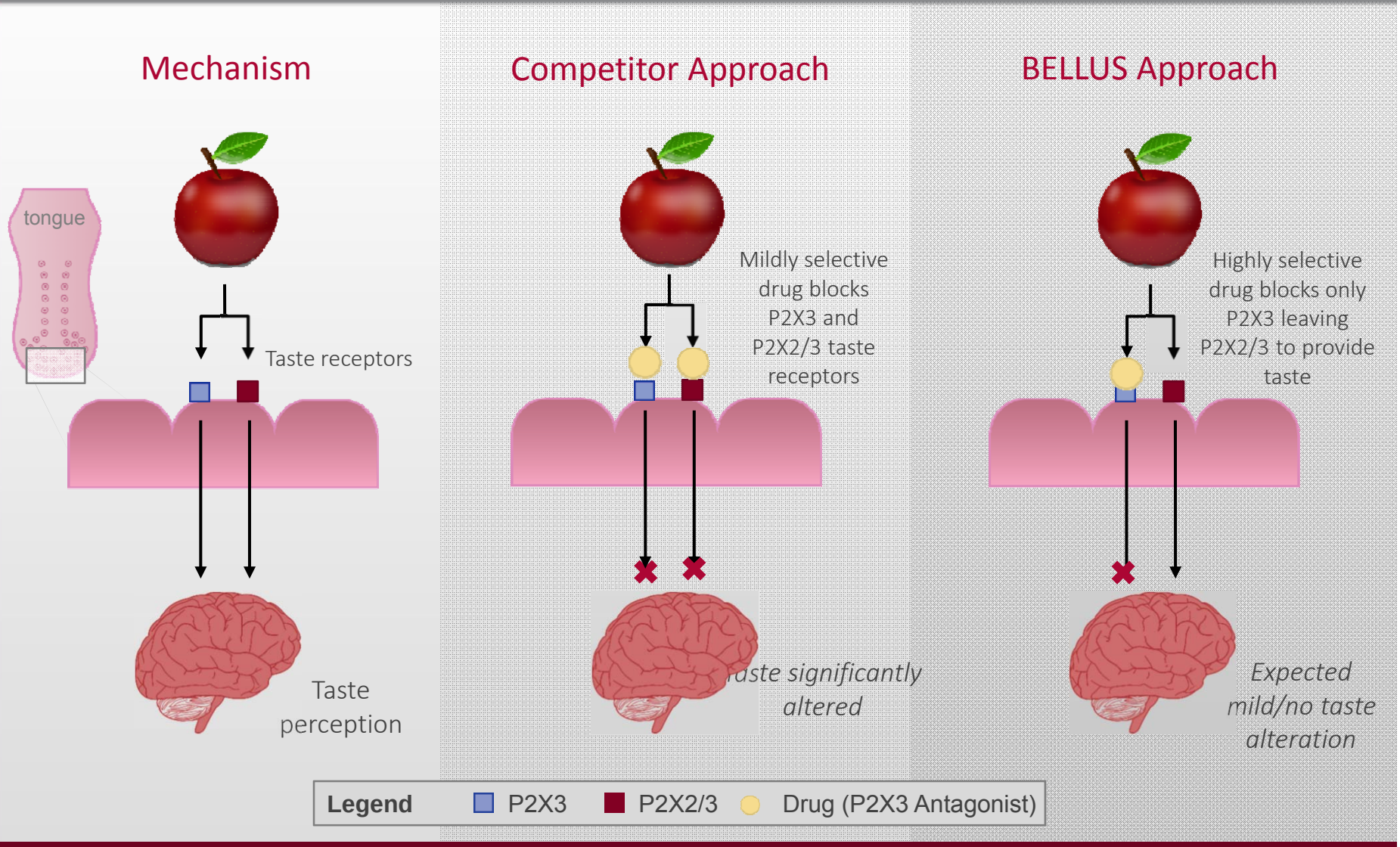
Preclinical Efficacy: Cough Response



Treatments (control, BLU-5937) were administered orally (p.o.) two hours prior to tussive agent exposure: citric acid (0.1 M, aerosol) and histamine (0.6 mM, aerosol); n=6 animals (guinea pig) per group *p<0.05

Dose-dependent reduction in cough frequency in guinea pig model

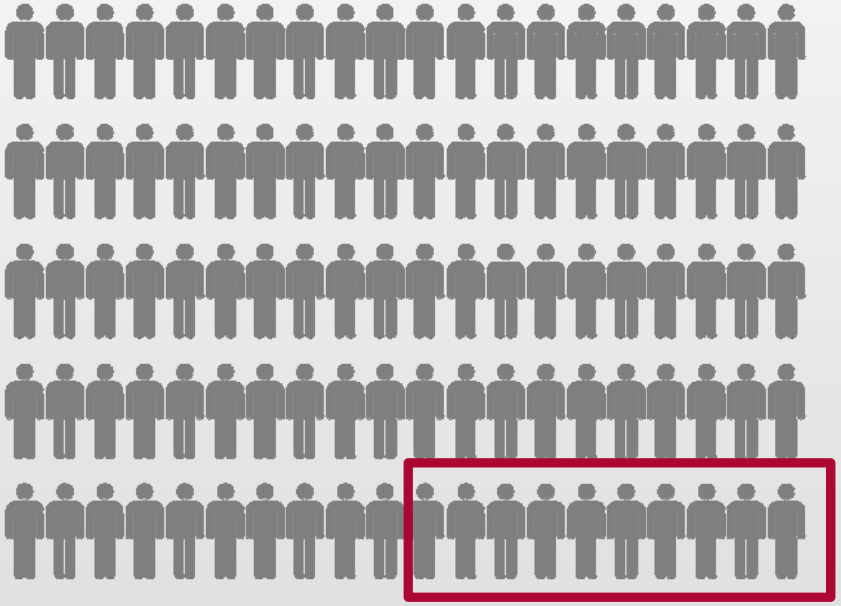
Importance of Selectivity on Taste



High selectivity of BLU-5937 for P2X3 could limit or eliminate taste alteration side effect without compromising effect on cough

Large Addressable Market

275M U.S. adults



27.5M
patients

2.75M
have unexplained/ refractory chronic cough

6.3M
estimated addressable patients in major pharma markets

Major pharma markets include the U.S., Europe top five countries and Japan

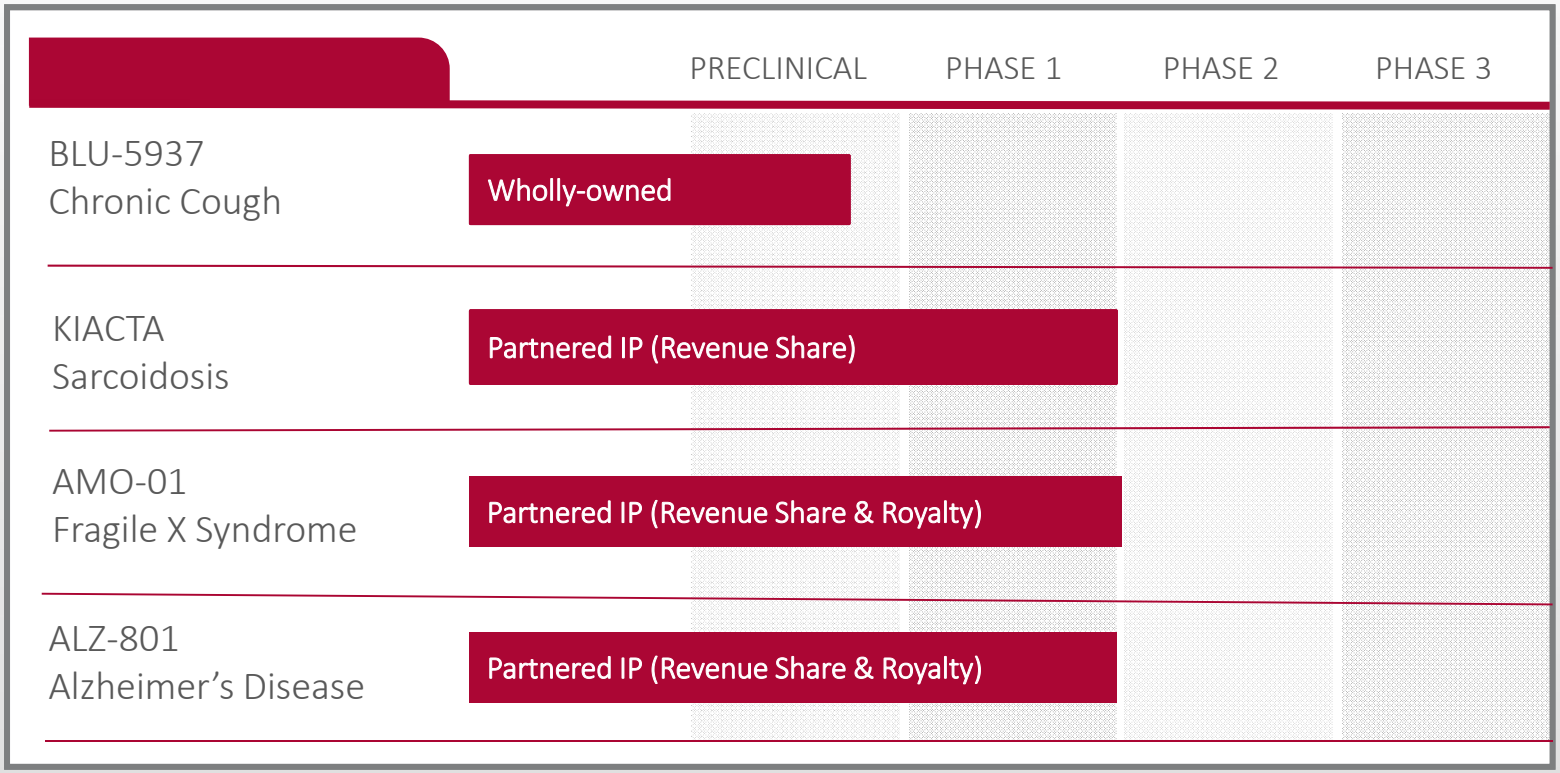
Song et al., 2015. The global epidemiology of chronic cough in adults: a systematic review and meta-analysis. Eur Respir J. Vol 55 pp. 1479-1481
Zanasi et al., 2014. Chronic and unexplained cough. (Published online) Vol 4, No 3 pp. 159-164

BLU-5937: Key Development Milestones

2017	2018	2019/2020
IND-enabling studies	**Phase I: assess dose and taste effect**	**Phase II: demonstrate anti-cough effect**
Complete preclinical study package for regulatory submission to start dosing patients	Assess safety, tolerability, PK, effect on taste in healthy subjects Single ascending dose and multiple ascending dose studies	Assess safety, PK and anti-cough effects in patients suffering from chronic refractory cough Dose response study with crossover design

Value creating milestones throughout development path

Pipeline Overview



Strong core project, balanced pipeline, multiple prospects

Partnered Programs

KIACTA™ for Sarcoidosis (Auven Therapeutics)	Principally respiratory disease affecting ~100K in U.S. IP licensed in 2009 with double digit revenue share Reduces key inflammatory markers mediated by amyloid A Auven to confirm plans to enter Phase 2/3 study in 2017
AMO-01 for Fragile X Syndrome (AMO Pharma)	Genetic disorder affecting ~180K in U.S. IP licensed in 2014 for single-digit royalty/small revenue share Reverses disease abnormalities in preclinical model Start of Phase 2 expected in 2017
ALZ-801 for Alzheimer's disease (AD) (Alzheon Inc)	IP licensed in 2013 for mid single-digit royalty/revenue share Inhibitor of amyloid aggregation Preparing for Phase 3 for homozygous Apo E AD patients

Financial Highlights

Stock Information (April 28, 2017)	
Ticker	TSX: BLU
Shares (basic)	66.9M
Shares (fully diluted)	71.7M
Market Capitalization	~$20M
Key Financials[1]	
Cash	$7.5M
Cash Runway	Q4 2018
Fully Diluted Shareholder Ownership	
Bellini Family	~25%
Power Corporation	~25%

[1]as at December 31, 2016 and *pro forma* to upfront considerations of Thallion and NEOMED transactions

Governance and Shareholders

Board Slate			
Dr. Francesco Bellini (Chair)	Franklin Berger	Pierre Larochelle	
Youssef Bennani	Joseph Rus	Dr. Martin Tolar	Roberto Bellini

Management
Roberto Bellini, President and Chief Executive Officer
Dr. Denis Garceau, Senior Vice President, Drug Development
François Desjardins, Vice President, Finance
Tony Matzouranis, Vice President, Business Development

Multiple Upcoming Milestones to Drive Value

Past Execution

- ✓ Attracted >$100M to funding projects
- ✓ Executed multiple global clinical studies including Phase 3
- ✓ Completed multiple transactions (in-licensing, partnering, out-licensing)

Milestones (12 months)

Execution of BLU-5937 plan in chronic cough:

- IND-enabling studies
- Market assessment
- Further animal POC data

Progress in other projects

- KIACTA™ Phase 2/3, Sarcoidosis
- AMO-01 Phase 2 in Fragile X
- Alzheon financing

Developing promising candidates to value inflection points