CSE:AGN | OTCQB:AGNPF | XFRA:AGW0

Q3, 2023

DISCLAIMER

Certain statements in this presentation (the "Presentation") are forward-looking statements, which are made as of the date of this Presentation or as of the date of the effective date of information described in this presentation, as applicable. Forward-looking statements relate to future events or future performance and reflect current estimates, predictions, expectations or beliefs regarding future events and include, without limitation, statements with respect to: (i) Algernon Pharmaceuticals Inc. ("Algernon" or the "Company") obtaining the necessary regulatory approvals; (ii) that regulatory requirements will be maintained; (iii) general business and economic conditions; (iv) the Company's ability to successfully execute its plans and intentions; (v) the availability of financing on reasonable terms; (vi) the Company's ability to attract and retain skilled staff; (vii) market competition; (viii) the products and technology offered by the Company's competitors; (ix) the maintenance of the Company's current good relationships with its suppliers, service providers and other third parties; (x) financial results, future financial position and expected growth of cash flows; (xi) business strategy, including budgets, projected costs, projected capital expenditures, taxes, plans, objectives, potential synergies and industry trends; (xii) research and development; (xiii) expectations concerning the size and growth of the global medical technology market; and (xiv) the effectiveness of the Company's products compared to its competitors' products.

Forward-looking statements relate to future events or the future performance of Algernon and involve known and unknown risks, uncertainties and other factors that may cause the actual results, levels of activity, performance or achievements of the Company or its industry to be materially different from those expressed or implied by any forward-looking statements. Generally, forward-looking information can be identified by the use of forward-looking terminology such as "plans", "expects", or "does not expect", "is expected", "budget", "scheduled", "estimates", "projects", "targets", "forecasts", "intends", "anticipates", or "does not anticipate", or "believes" or variations (including negative and grammatical variations) of such words and phrases or state that certain actions, events or results "likely", "may", "could", "would", "might", or "will be taken", "occur", or "be achieved". Forward-looking information is based on the opinions and estimates of management at the date the information is made, and is based on a number of assumptions and is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward looking information, including without limitation: (i) the availability and continuation of financing; (ii) the effectiveness of the Company's technology and the Company's ability to bring its technology to commercial production; (iii) any statements regarding the Company's intention to seek additional indications for its products; (iv) continued growth of the global medical technology market; (v) the Company's limited operating history, difficulty in forecasting sales and limited market for the securities; and (vi) a continued minimal regulatory/legal burden concerning the development, production, sale and use of the Company's technology. While the Company believes the expectations, assumptions, estimates and projections are reasonable, such forward-looking statements are only predictions and involve known and unknown risks and uncertainties, many of which are beyond the Company's control. These and other important factors may cause actual results, performance or achievements to differ materially from those expressed or implied by these forward-looking statements. For a list and description of the risk and uncertainties inherent in the forward-looking statements, see the

Registration Statement on Form F-1 as amended (File No. 333-262878), filed with the United States Securities and Exchange Commission (the "SEC"). including the preliminary prospectus dated May 9, 2022,. The forward-looking statements in this Presentation are made only as of the date hereof. Except as required by law, the Company assumes no obligation and does not intend to update these forward-looking statements or to conform these statements to actual results or to changes in the Company's expectations.

All forward-looking information is expressly qualified in its entirety by this cautionary statement.

DISCLAIMER (cont.)

This Presentation provides general background information about the activities of Algernon. The Presentation also contains projections and other statistical data made by independent parties and by us relating to market size and growth and other data about our industry and our business. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. All information is derived solely from management of Algernon and otherwise publicly available third-party information that has not been independently verified by the Company. Further, it does not purport to be complete nor is it intended to be relied upon as advice (legal, financial, tax or otherwise) to current or potential investors. Each prospective investor should contact his, her or its own legal adviser, independent financial adviser or tax adviser for legal, financial or tax advice.

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ALGERNON MODEL

Algernon is a Clinical Stage Drug Development Company

Global Disease Indications – Unmet Needs

Algernon Pharma is Advancing 2 Drugs

NP–120 (Ifenprodil): Refractory Chronic Cough

Repurposed

NP-251 (Repirinast): – Chronic Kidney Disease

Repurposed

ALGERNON MODEL

*Drug Repurposing is the Process of Discovering New Therapeutic Uses for Approved Drugs

RISK REDUCTION – CAPITAL EFFICIENT – SHORTER DEVELOPMENT PATHWAY

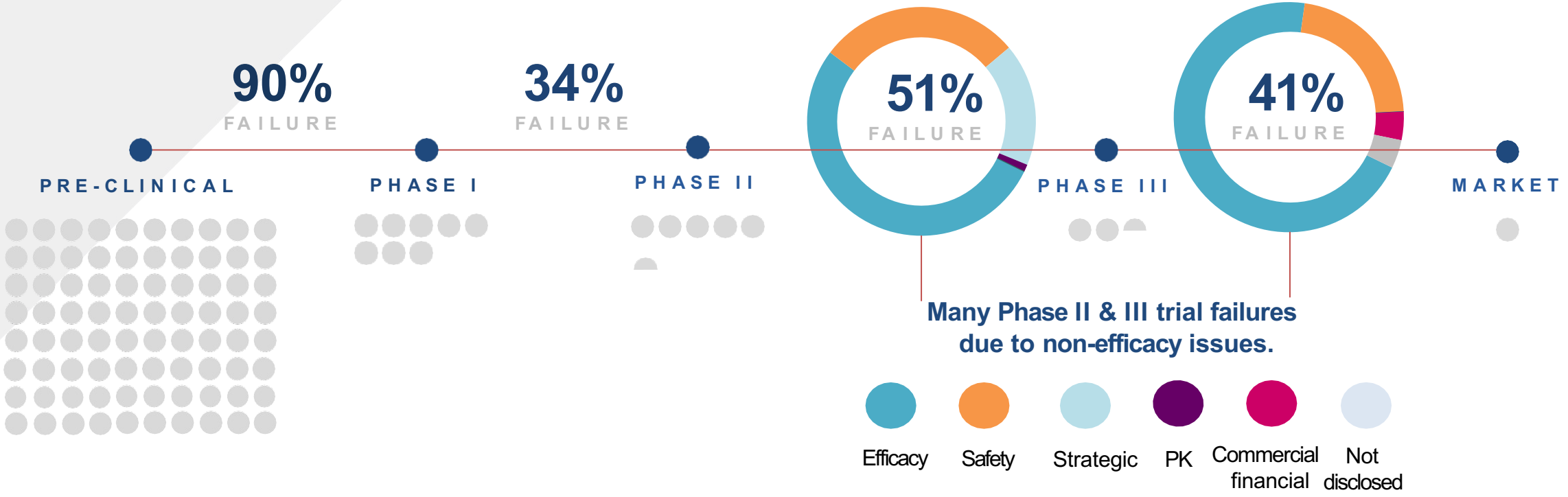
*** Drugs Not Approved or Marketed in U.S. or Europe.**

ALGERNON MODEL

New Intellectual Property:

- Method of Use
- Dosing
- Formulation
- New Composition of Matter: Novel Salt Forms

New Chemical Entity (NCE) Development Pathway And Failure Rates

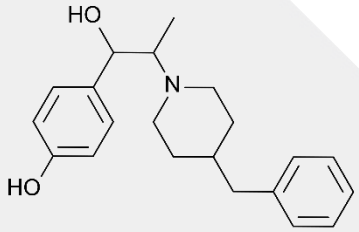


Biostatistics (2019) 20:273-6
Nature (2011) 477:526-8

DRUG REPURPOSING: CASE STUDIES

COMPANY	DRUG	OLD INDICATION	NEW INDICATION	NOTES
BIOGEN	**Tecfidera**	Psoriasis	Multiple sclerosis	• Drug Only Approved in Germany (50 yrs) • Blockbuster (>US$1B in Sales)
CELGENE	**Thalidomide**	Morning sickness	Cancer	• Drug was Withdrawn from the Market • Blockbuster (>US$1B in Sales) • Purchased EntreMed's Thalidomide Analogues

Lead Drug: NP-120 (Ifenprodil)

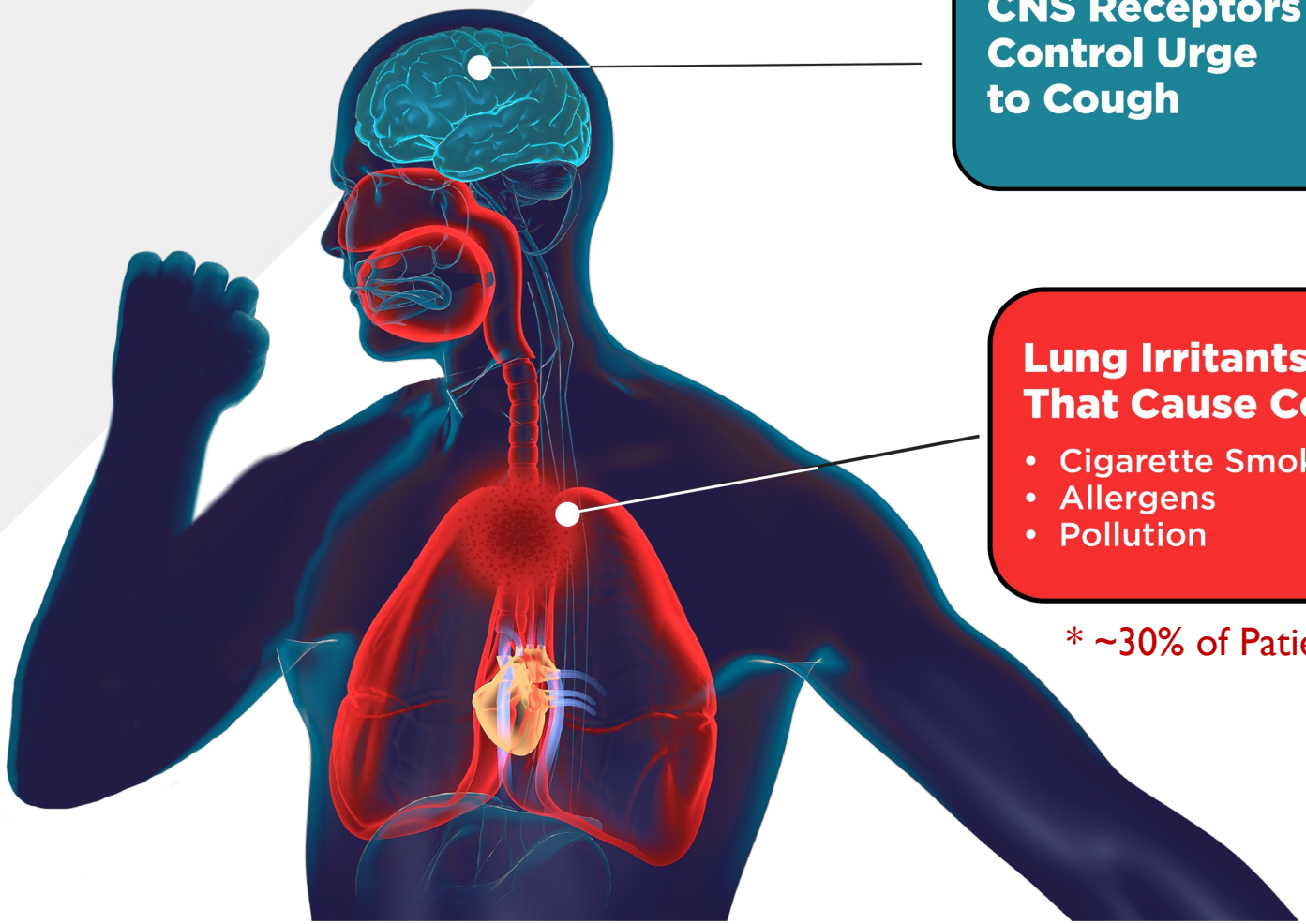


ALGERNON PHARMACEUTICALS™

Prior / Existing Indications	Our Indication	Current Therapies	Sales / Market Size
• Peripheral Arterial Obstructive Disease (France until 2015) • Vertigo (Japan | South Korea)	 Phase 2	• No Regulatory Approved Treatment in the U.S.	• Est. Market Size $6.15B in 2021; Projected to Grow to 11.38B by 2029 (1)

(1) https://www.pharmiweb.com/press-release/2023-07-18/chronic-cough-market-to-witness-outstanding-growth-of-usd-1138-billion-by-2029#:~:text=Data%20Bridge%20Market%20Research%20analyses,in%20the%20mentioned%20forecast%20period.

Mechanism of Action – Cough Clinical Candidates



CNS Receptors Control Urge to Cough

Drug Candidates Acting on CNS Receptors

- Ifenprodil (Algernon)
  - ➢ NMDAR Antagonist

Lung Irritants That Cause Cough

- Cigarette Smoke
- Allergens
- Pollution

Drug Candidates Acting on Nerves in Lung/Airway Tissue

- Gefapixant (Merck)
- BLU-5937 (Bellus)
  - ➢ Both P2X3R Antagonists *

* ~30% of Patients with Chronic Cough will not Respond to Treatment

Public Company Comparables For Chronic Cough

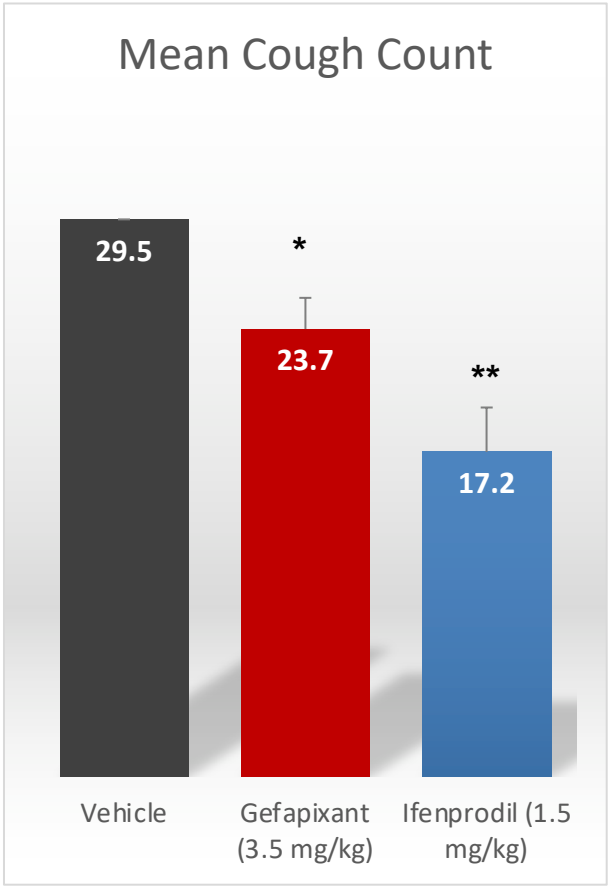
- Announced Positive Interim Phase 2b Results: Acquired by Merck and Co. for US $1.25B
- Positive Phase 2b Results: Acquired by GSK for US $2B (July 2023)
- Phase 2b Planned (Estimated US $10M Clinical Trial Cost)

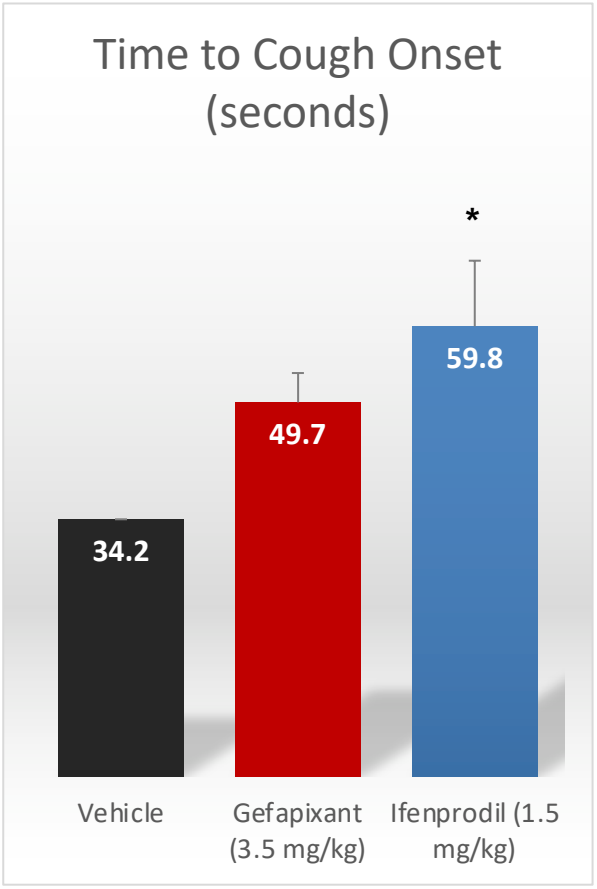
Ifenprodil Reduces Acute Cough – Preclinical Study

- Ifenprodil was Tested in an Acute Guinea Pig Citric Acid Model Using Clinically Relevant Doses with Gefapixant as a Positive Control

- Ifenprodil *Reduced* Cough by ***42%***
- Gefapixant *Reduced* Cough by 20%

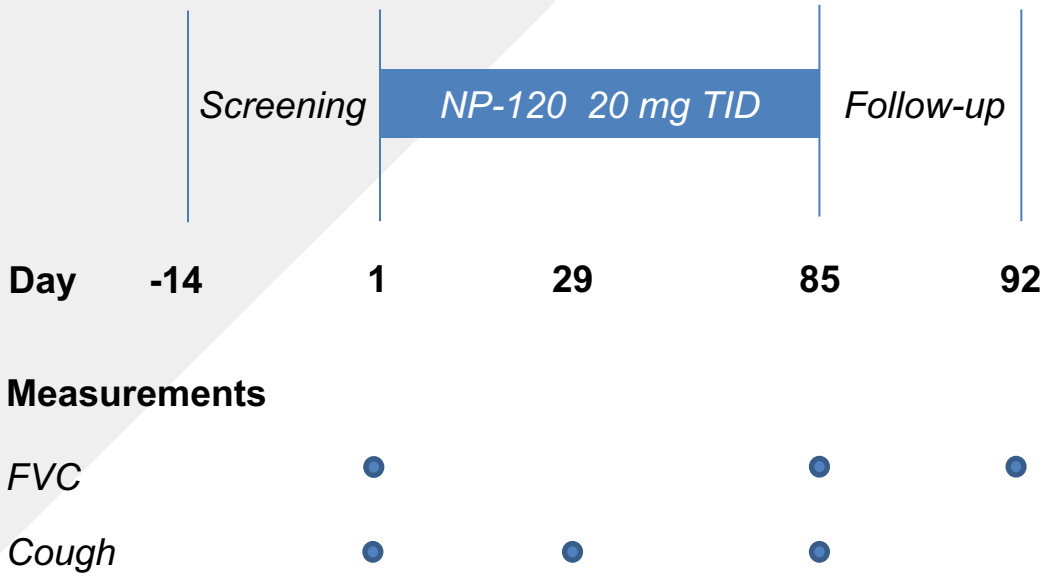
- Ifenprodil *Delayed* the First Cough by ***75%***
- Gefapixant *Delayed* the First Cough by 45%





*p<0.05, **p<0.01 compared to placebo

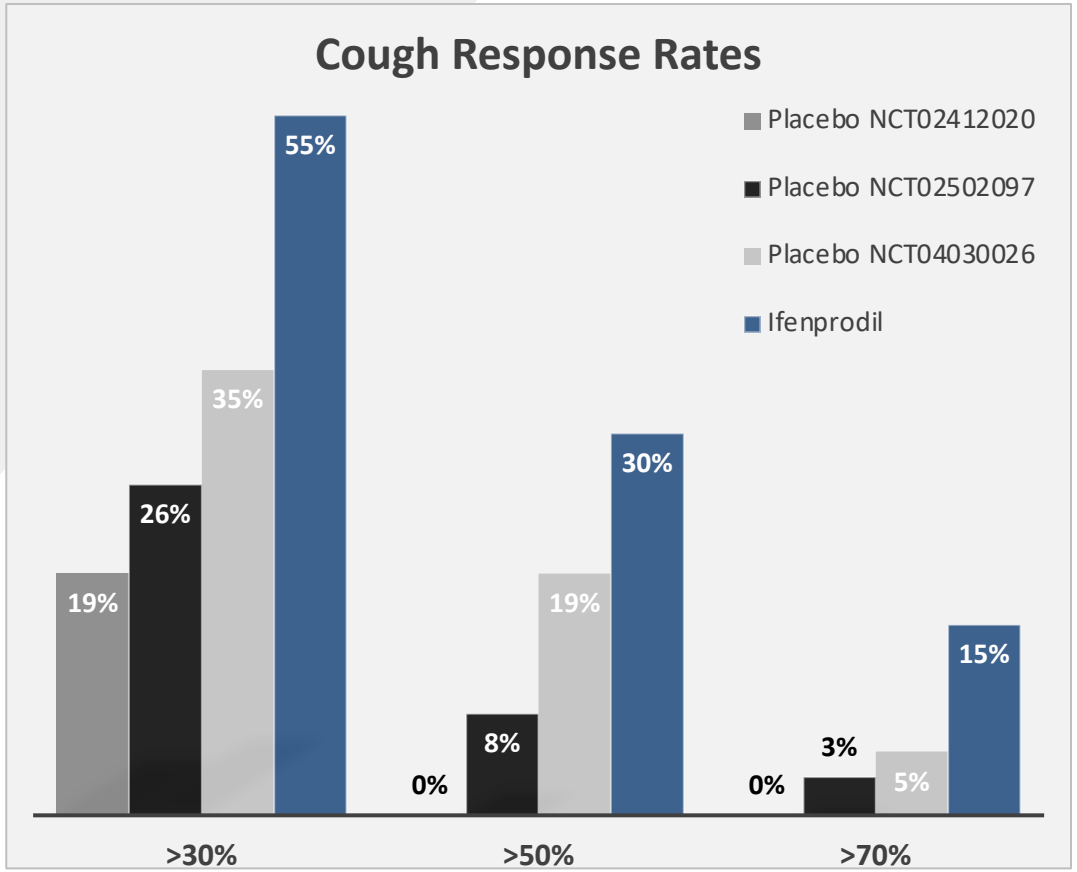
AGN-120-1: Phase 2a Clinical Trial In IPF & Chronic Cough



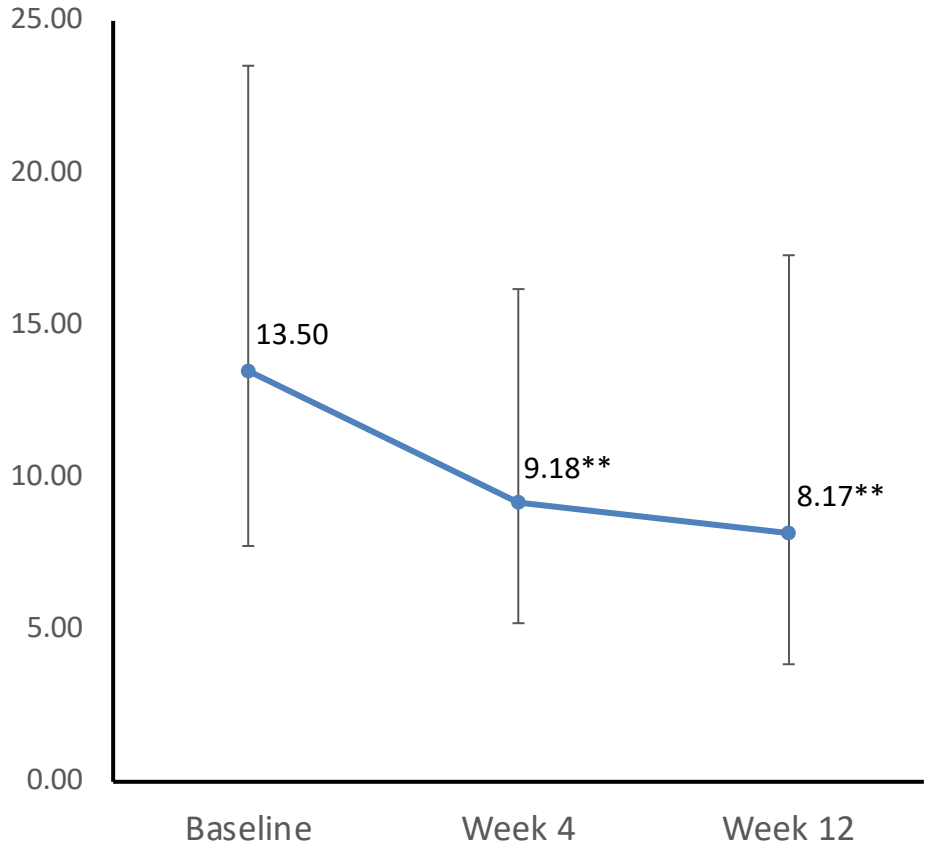
- 20 Subject Open-Label Study in **IPF patients with cough**
  - Reported September 2022
- Primary Endpoints (responder analyses):
  - ✓ Cough: 50% Reduction in 24-hour Cough Count vs. Baseline
  - ✓ Lung Function: No worsening of Forced Vital Capacity (FVC) vs. Baseline
- Secondary Endpoints:
  - ✓ DLCO
  - ✓ Patient-Reported Outcomes of Cough Severity and QOL
  - ✓ Biomarkers of Fibrosis
  - ✓ **Safety**

Efficacy – Cough Counts

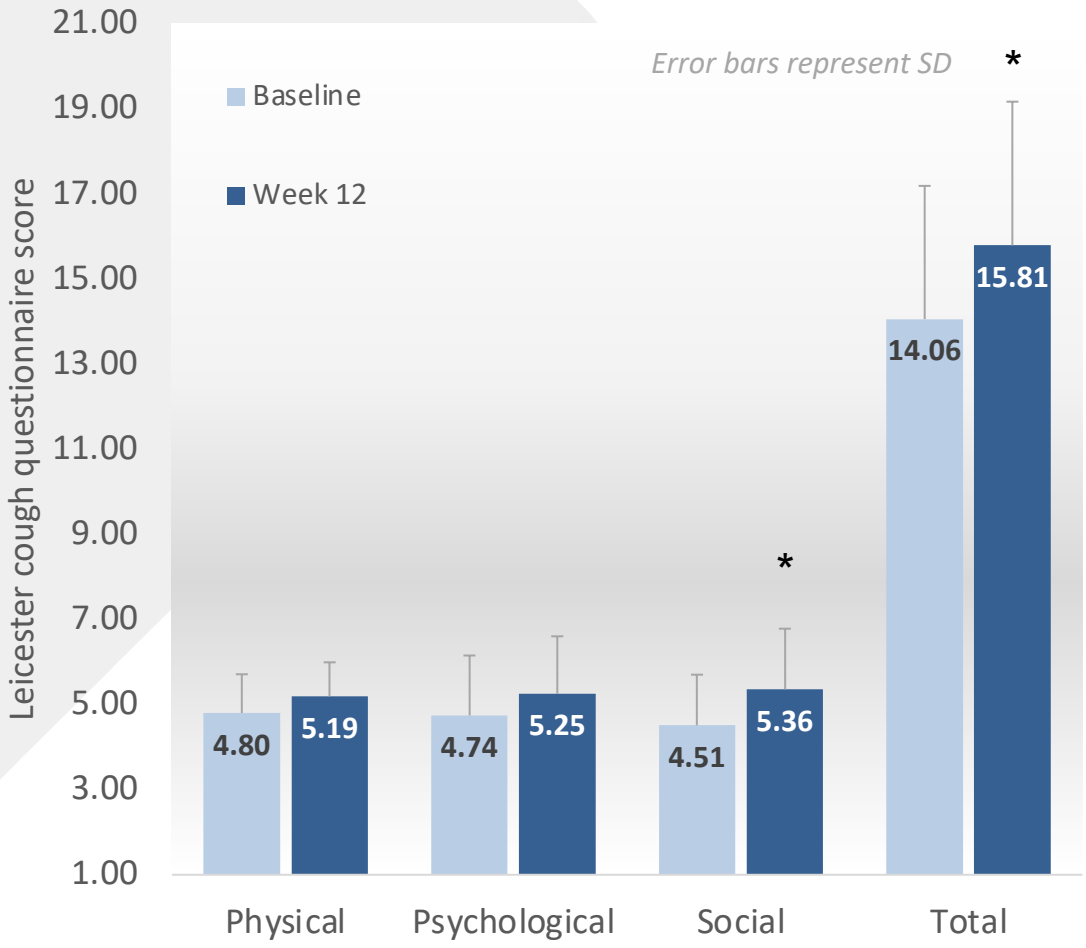
- 6/20 Patients (30%) in the Intent-to-Treat set Experienced a >50% Reduction in 24-hr Cough at 12 Weeks (Primary Cough Endpoint; Placebo Rates From Other Trials in IPF Cough Included for Comparison)



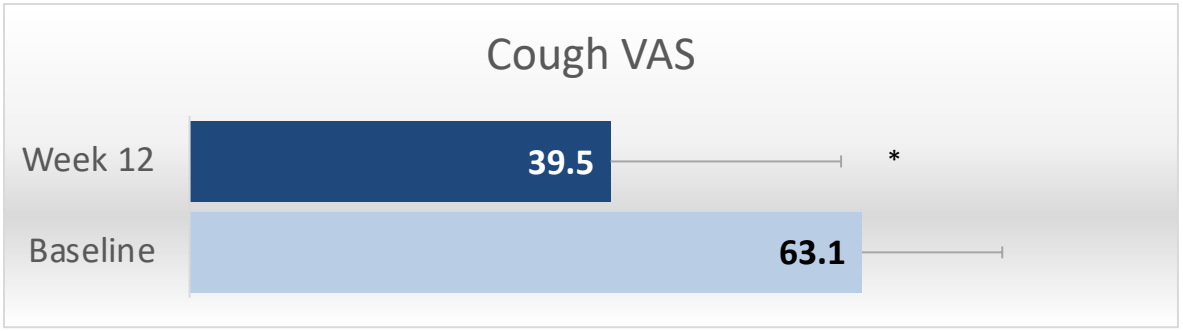
- In a Post-Hoc Analysis, Reductions in Geometric Mean Cough Count Were Observed:
  - ***32%*** at 4 weeks (Nominal p-value = 0.023)
  - ***40%*** at 12 weeks (Nominal p-value = 0.001)



Cough – Quality Of Life



- Quality of Life was Measured with the Leicester Cough Questionnaire (higher numbers are better).
- Scores Improved over 12 Weeks by 1.75 Points (p = 0.017). Scores were Improved in Each Domain.
- Cough VAS, a Patient-Reported Measure of Cough Severity, was Improved by 37.4% (23.6 mm, p = 0.001).

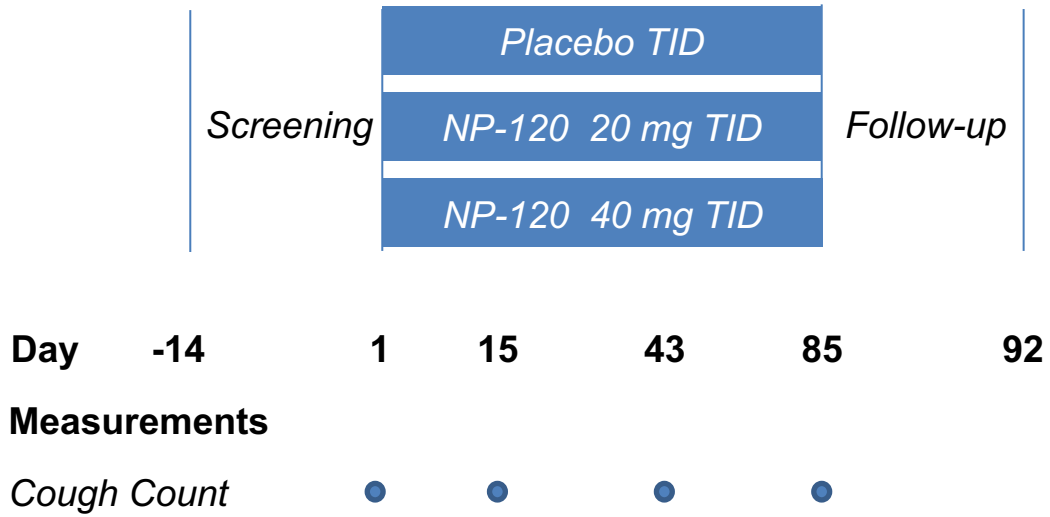


Birring SS et al. *Thorax* 2003; 58: 339-343.

SAFETY

- The Adverse Events Observed in this Trial were Consistent with the Clinical History of NP-120, Established in Post-Marketing Surveillance of over 8,000 Patients.
- The Majority of AEs were Mild or Moderate in Severity.
- The Most Commonly Observed Treatment Related TEAEs in the Study were GI Disorders (25.0%) and Decreased Appetite (10.0%).
- Treatment Compliance was Excellent (>90% for the study).

Next Step: Phase 2b Refractory Cough Trial



- Design Mirrors Previous Phase 2b Studies in Chronic Cough (NCT02612610 and NCT04678206); FDA in Agreement with the Protocol
- Estimated Trial Size: 60 Patients per Arm (3); 24 Trial Sites; Approximate Cost US $10M

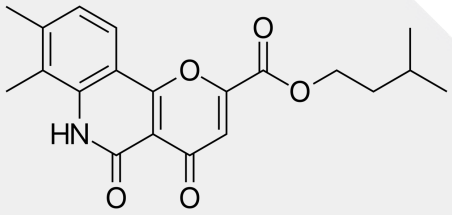
Chronic Cough Advisors

Dr. Jacky Smith, MB, ChB, FRCP, PhD

Jacky Smith is a Professor of Respiratory Medicine at the University of Manchester and an Honorary Consultant at Manchester University NHS Foundation Trust. She is also a Consultant to Merck, Astra Zeneca and Bellus Health.

Dr. Peter Dicpinigaitis, MD

Dr. Dicpinigaitis is Board-Certified in Internal Medicine, Pulmonary Diseases and Critical Care Medicine. He is a Faculty Member of the Division of Critical Care Medicine at Montefiore Medical Center and is the Founder and Director of the Montefiore Cough Center.



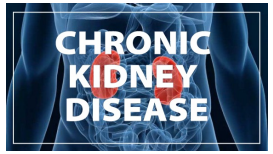
NP-251 (REPIRINAST)

ALGERNON PHARMACEUTICALS™

Prior / Existing Indications

- Sold for 25 years in Japan under Romet™ for Asthma
- Pediatric formulation approved in 1990

Our Indication



Current Therapies

- Focus on managing symptoms and complications that include high blood pressure, swelling and anemia

Sales / Market Size

- CKD market opportunity expected to reach $15.8B by 2024(11)

(11) https://www.transparencymarketresearch.com/chronic-kidney-disease.html

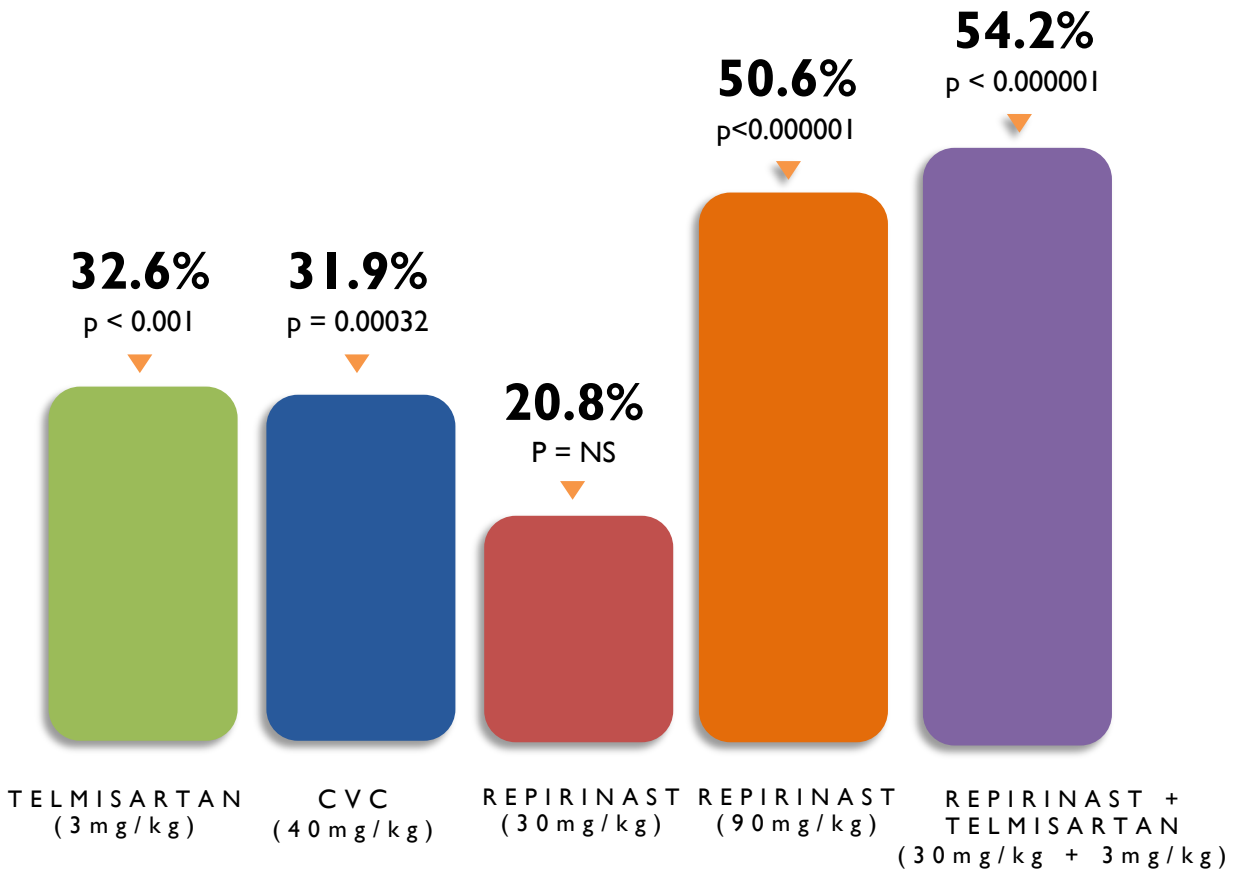
CHRONIC KIDNEY DISEASE – UUO MODEL STUDY

UNILATERAL URETER OBSTRUCTION MODEL

- N=10 / Arm
- Start Treatment Day 0-14
- Post Bonferroni Corrected
- Reduction in Fibrosis vs Negative Control
- Once a Day (QD) Treatment
- Clinically Relevant Doses
- Independent 3rd Party Stats Review
- CVC = Cenicriviroc

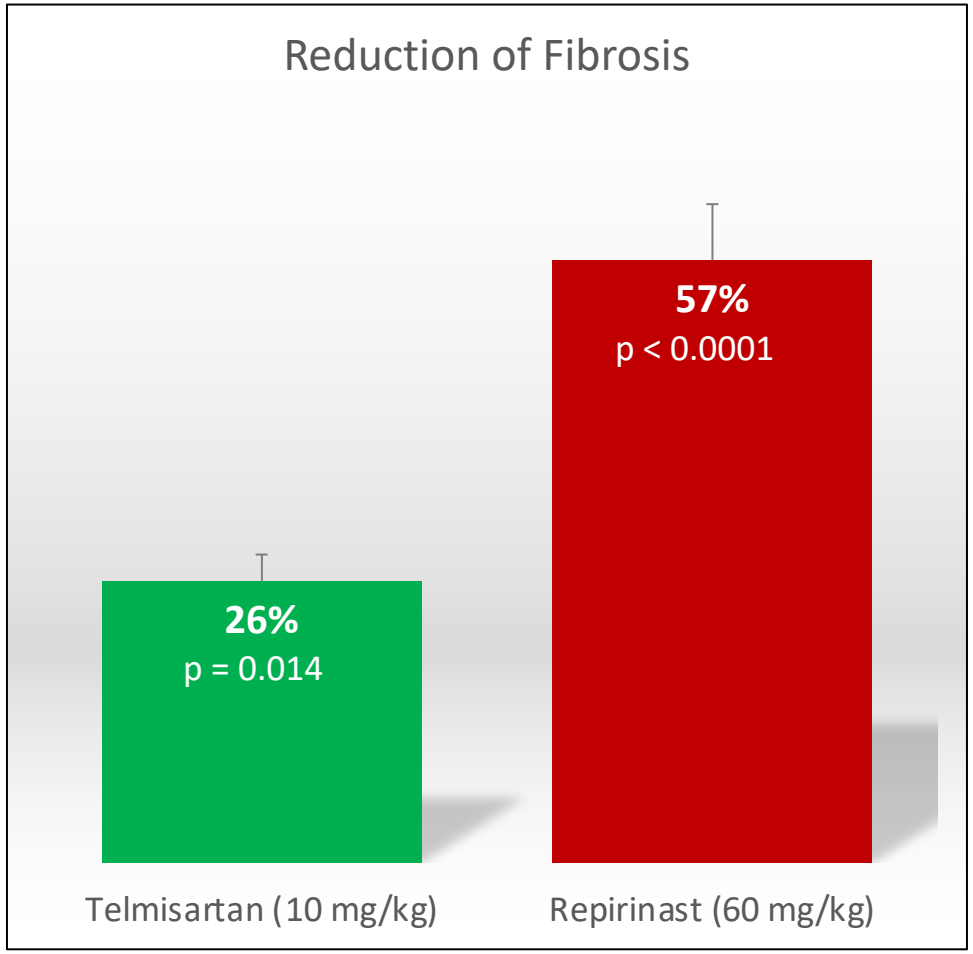
- In Addition, the Mass of the Fibrotic Kidney was Lower Than the Negative Control in the Combined Treatment Group (p<0.001)

FIBROSIS REDUCTION(SIRIUS RED)



REPIRINAST REDUCES FIBROSIS IN A MURINE MODEL OF NASH

- Repirinast Was Evaluated in a Mouse STAM Model of NASH Using Telmisartan as a Positive Control
- Fibrosis was Measured Histopathologically Using Sirius Red Staining.
  - Repirinast Reduced Fibrosis by ***57%***
  - Telmisartan Reduced Fibrosis by 26%
- Repirinast also Reduced the NAFLD Score (Composite Measure of Steatosis, Inflammation & Hepatocellular Ballooning) by ***31%*** (Not Shown)
- Risk of CKD is Higher in Patients with NASH (OR: 2.12)[1]



1. Musso G *PLoS Med.* 11:e1001680, 2014.

CKD Program Next Steps

- Since the Drug was Discontinued in Japan, Algernon is Manufacturing its own Supply
- Phase 1a/1b Planned in Australia (no Further Preclinical Data Required)
    - Phase 1a: Healthy Volunteer Cohort (Safety and PK)
    - Phase 1b: CKD Patients (Safety and PK)
- Algernon has Filed Method of use Patents for Repirinast for CKD and NASH Giving Protection Through 2038
    - Notice of Allowance for NASH Received From the USPTO
- IND to be Filed Once Phase 1 data are Available

UPCOMING MILESTONES & POTENTIAL CATALYSTS

	Q4 2023	Q1 2024	Q2 2024	Q3 2024	Q4 2024
CHRONIC COUGH	US FDA IND Filing	Begin Phase 2b Study			Phase 2b Interim Results
CKD	Complete Manufacture	Begin Phase 1 Study		Phase 1 Study Results	

CLINICAL TRIAL EXPERIENCED MANAGEMENT TEAM

Christopher J. Moreau

CHIEF EXECUTIVE OFFICER

- President, CEO & director of a TSX:V listed R&D company in the life sciences sector for over nine years
- Experienced with startups, licensing, mergers & acquisitions, and integration
- Over 30 years of Senior Management experience in private/publicly traded company environments

Dr. Christopher Bryan, PhD

VP RESEARCH AND OPERATIONS

- Graduated from the University of Toronto, with a PhD in organic chemistry
- Has synthesized hundreds of novel small molecules as potential therapeutic agents
- Management experience in R&D, manufacturing, sales, clinical trial, IP and regulatory affairs
- Has extensive experience in scientific writing, data analysis and literature review.

James Kinley, CPA CA

CHIEF FINANCIAL OFFICER

- Mr. Kinley is a Certified Professional Accountant (“CPA, CA”) with over 15 years of experience in building, leading, and advising corporations through their daily operations
- Is well versed on complex restructurings, mergers, acquisitions, and capital markets transactions.
- Is accomplished in structuring and negotiating favorable terms with commercial and investment banks.

Board of Directors

Harry Bloomfield, KC
Christopher J.Moreau
Dr. Mark Williams
Dr. Raj Attariwala
Ambassador (Rtd) Howard Gutman

Chronic Cough Advisors

Dr. Jacky Smith
Dr. Peter Dicpinigaits

Algernon Summary

- ✓ 2 Clinical Stage Assets (Billion Dollar Markets)
  - Ifenprodil: Chronic Cough Phase 2b-Ready
  - Repirinast: CKD Phase 1-Ready
- ✓ Comprehensive Intellectual Property Suite
- ✓ Capital-Efficient Business Model
- ✓ Experienced Senior Management Team
  - Public Company/ Capital Markets
  - FDA (Global) Clinical Trials
- ✓ Previous Conditional Approval for Nasdaq/SEC

CSE:AGN | OTCQB:AGNPF | XFRA:AGW0