# Corporate Overview

## Developing New Therapies *for* Rare Respiratory Diseases

August 2023

SAVARA

# Safe Harbor Statement

Savara Inc. (“Savara” or the “Company”) cautions you that statements in this presentation that are not a description of historical fact are forward-looking statements which may be identified by the use of words such as “expect,” “intend,” “plan,” “anticipate,” “believe,” and “will,” among others. Such statements include, but are not limited to, statements regarding the nature, strategy and focus of Savara; the Savara investment thesis; the timing, design and other matters related to clinical trials of our product candidate; the safety, efficacy and projected development timeline of our product candidate; the potential health benefits of our product candidate; our anticipated corporate milestones; the potential market size, commercial opportunity, and competitive landscape for our product; Savara’s plans regarding disease awareness and anti-GM-CSF antibody testing, and the potential impact of those programs; and the sufficiency of our resources to fund the advancement of our development program and potential sources of additional capital. Savara may not actually achieve any of its plans or product development goals in a timely manner, if at all, or otherwise carry out its current intentions or meet the expectations or projections disclosed in its forward-looking statements, and you should not place undue reliance on these forward-looking statements. Because such statements are subject to risks and uncertainties, actual results may differ materially from those expressed or implied by such forward-looking statements. These forward-looking statements are based upon Savara's current expectations and involve assumptions that may never materialize or may prove to be incorrect. Actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of various risks and uncertainties, which include, without limitation, the risks and uncertainties related to the impact of widespread health concerns impacting healthcare providers or patients and geopolitical conditions on our business and operations; risks and uncertainties associated with the ability to project future cash utilization and reserves needed for contingent future liabilities and business operations; the availability of sufficient resources for our operations and to conduct or continue planned clinical development programs; the timing and ability of Savara to raise additional capital as needed to fund continued operations; the ability to successfully conduct clinical trials for our product candidate; the ability to successfully develop our product candidate; and the risks associated with the process of developing, obtaining regulatory approval for and commercializing drug candidates that are safe and effective for use as human therapeutics. The risks and uncertainties facing Savara are described more fully in Savara's filings with the Securities and Exchange Commission including our filings on Form 8-K, our Annual Report on Form 10-K for the fiscal year ended December 31, 2022, and our Quarterly Report on Form 10-Q for the quarter ended June 30, 2023.

You are cautioned not to place undue reliance on our forward-looking statements, which speak only as of the date on which they were made. Savara undertakes no obligation to update such statements to reflect events that occur or circumstances that exist after the date on which they were made, except as may be required by law. Third-party information included herein has been obtained from sources believed to be reliable, but the accuracy or completeness of such information is not guaranteed by, and should not be construed as a representation by, the Company.

The trademarks included herein are the property of the owners thereof and are used for reference purposes only. Such use should not be construed as an endorsement of such products.



SAVARA

# Executive Leadership Team

**Matthew Pauls, J.D., M.B.A.**
*Chair & Chief Executive Officer*

**Dave Lowrance**
*Chief Financial & Administrative Officer*

**Ray Pratt, M.D. FACP**
*Chief Medical Officer*

**Rob Lutz, M.B.A.**
*Chief Operating Officer*

**Anne Erickson**
*Chief Business Officer*

**Peter Clarke, Ph.D.**
*EVP, Global Technical Operations*

**Scott Wilhoit**
*EVP, Global Commercial*

**Charles LaPree**
*SVP, Global Regulatory Affairs and Quality Assurance*

**Kate McCabe, J.D.**
*SVP, General Counsel*

ACUCELA · astex pharmaceuticals · BAYER · iBio · Bristol Myers Squibb · CUMBERLAND PHARMACEUTICALS · EDGEMONT PHARMACEUTICALS

WILSON SONSINI · insmed · Johnson & Johnson · SAVIENT PHARMACEUTICALS, INC. · Shire · STRONGBRIDGE BIOPHARMA

MIRATI THERAPEUTICS · Jazz Pharmaceuticals · Pfizer · ANNEXON biosciences · Halozyme · BIOVAIL

Marathon Pharmaceuticals · QUINTILES · AUXILIUM Innovations for Life® · Eisai · ROCKWELL MEDICAL · PTC THERAPEUTICS · NPS Pharma



SAVARA

# Pursuing Transformative Therapies for Rare Respiratory Diseases

**Focused** on single Phase 3 program: molgramostim nebulizer solution (molgramostim) in autoimmune pulmonary alveolar proteinosis (aPAP)

- Recombinant form of human granulocyte-macrophage colony-stimulating factor (GM-CSF)
- Favorable efficacy and safety data generated from the first IMPALA trial
- Pivotal Phase 3 trial underway – builds on key learnings from IMPALA

**Seasoned** management team

- Deep experience in the development and commercialization of rare respiratory therapeutics and pulmonary medicines

**Capitalized** through major clinical and regulatory milestones

- July 2023 offering: Raised ~$80M in equity with high quality new and existing investors
- ~$180M in pro forma cash*

*Pro Forma for cash, cash equivalents, and short-term investments as of 6/30/23, including July equity offering





SAVARA

# Investment Thesis

**The molgramostim in aPAP clinical program has a high probability of success**

**As a novel inhaled biologic, molgramostim has the potential for a long-term, durable revenue stream**

**Significant global commercial opportunity**

**Strong balance sheet – ~$180M in cash***

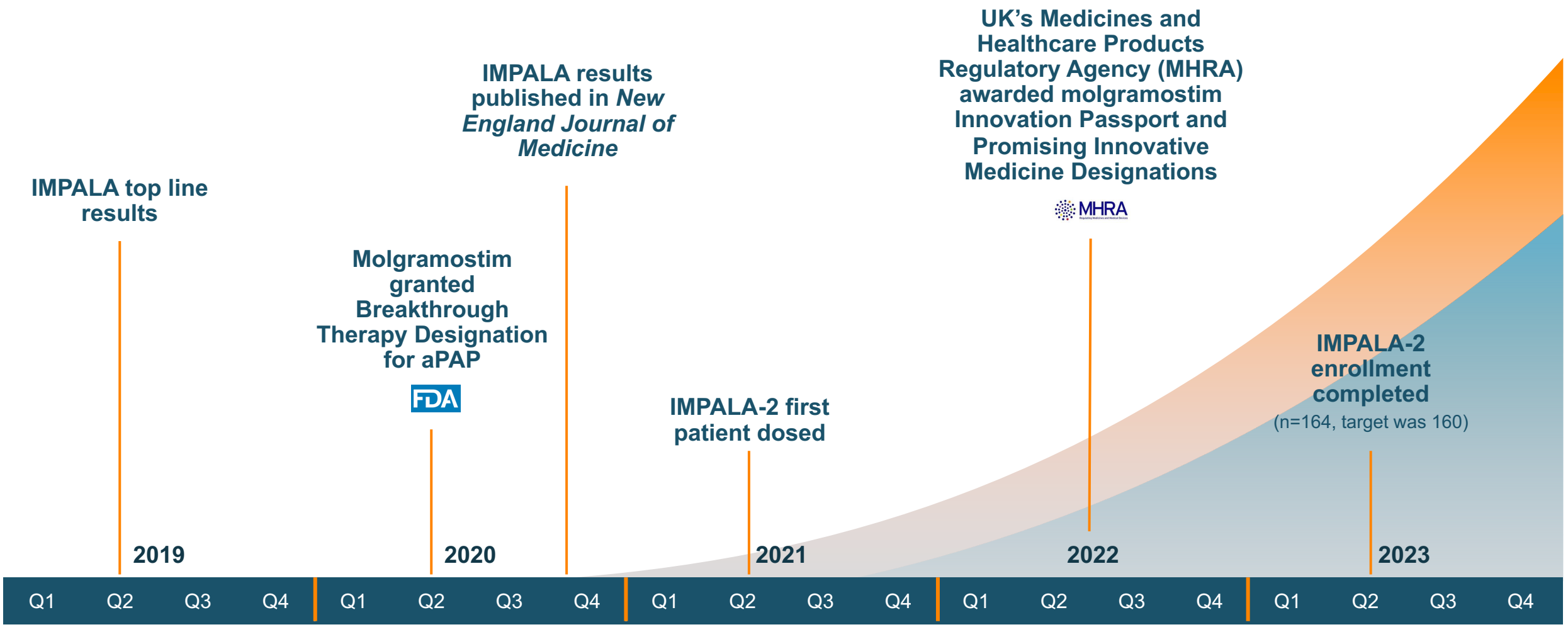




*Pro Forma for cash, cash equivalents, and short-term investments as of 6/30/23, including July equity offering

SAVARA

# Molgramostim Key Highlights







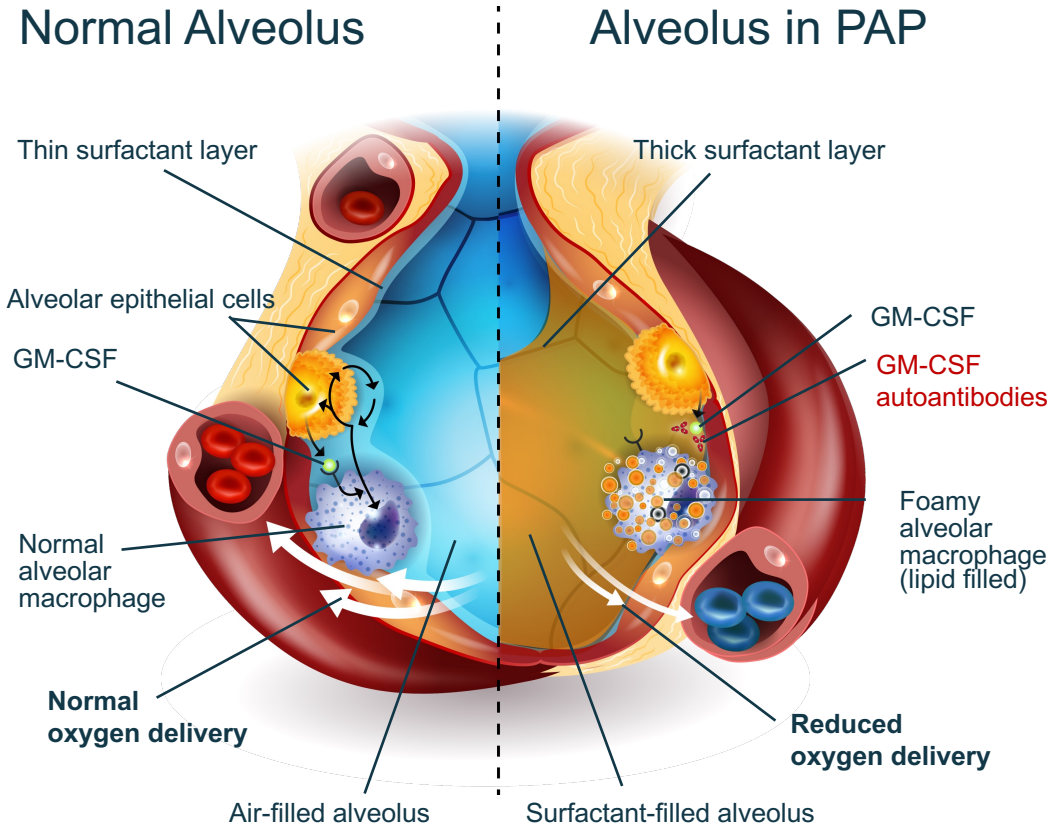

SAVARA

# Molgramostim

## Molgramostim for Autoimmune Pulmonary Alveolar Proteinosis (aPAP)

SAVARA

# aPAP: A Disease of Alveolar Macrophage Dysfunction




## Alveolar macrophages

Need GM-CSF for maturation, expansion, and function (e.g., surfactant clearance)

## GM-CSF

Critical to alveolar homeostasis, structure, function, and host defense

## aPAP

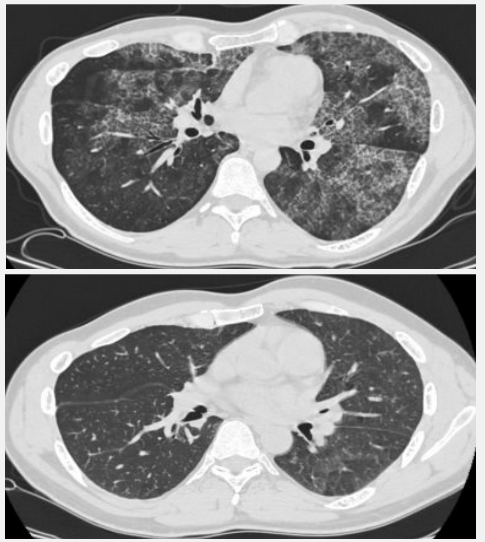
Caused by GM-CSF autoantibodies which block GM-CSF signaling and reduce surfactant clearance

Surfactant accumulation causes altered gas exchange in the lung, reduced blood oxygenation and, ultimately, hypoxemic respiratory failure

**aPAP PATIENT**

Baseline (Week 0)

After Treatment (Week 24)



*From IMPALA trial*





SAVARA

# aPAP is a Rare, Long-Term, Chronic Disease

## Progressive Shortness of Breath

- Gas exchange in the lungs is impaired and patients may experience shortness of breath
- At first it occurs upon exertion, but as disease progresses, it can occur even when a person is at rest

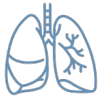
## Fatigue, Decreased Exercise Tolerance

- Fatigue and significantly reduced exercise capacity can dramatically impact the simplest of daily activities, e.g., getting winded walking up a flight of stairs

## Cough and Episodes of Fever

- Cough, sputum production, and episodes of fever, especially if secondary lung infection develops

## Fibrosis and Lung Transplant



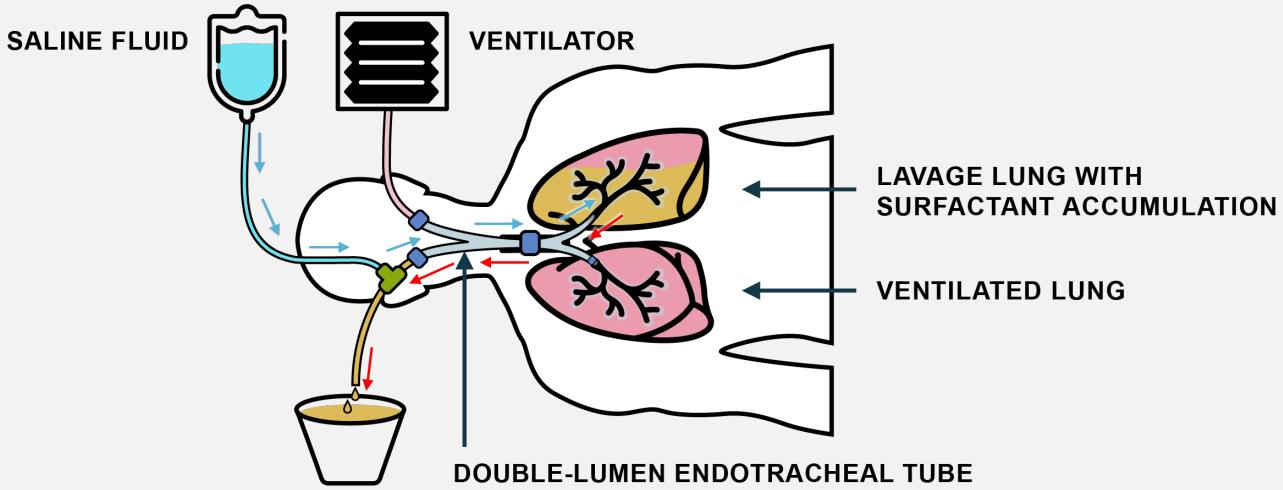
- In the long-term, the disease can lead to serious complications, including fibrosis, often leading to the need for lung transplantation

**There are no approved drugs for the treatment of aPAP.**
**Only option is whole lung lavage, an invasive procedure.**

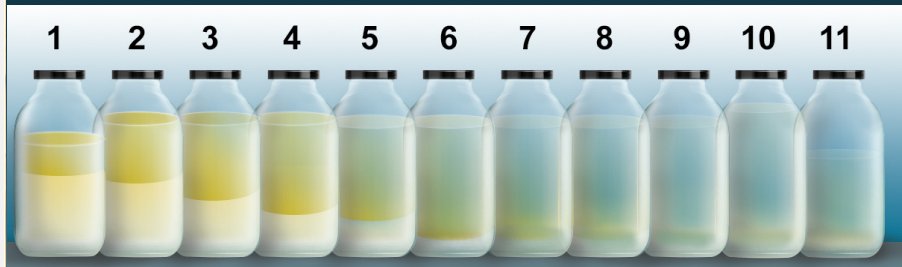


SAVARA

- Whole lung lavage is an invasive procedure to physically remove excess surfactant from the lungs and requires hospitalization
- Performed under general anesthesia by highly experienced physicians at certain sites




## Whole Lung Lavage is a Highly Invasive Procedure Performed in a Tertiary Center and is Not Standardized




Requires insertion of double-lumen endobronchial tube for lung separation

Treated lung is repeatedly filled with up to 15-50L of saline and then drained by gravity

Patient is percussed to emulsify the surfactant sediment

Saline is drained by gravity and continued until lavage fluid becomes clear

*Sources: 1: Campo, Assessment and Management of PAP in a Reference Center, Orphanet Jour. of Rare Dis., 2013; 2: Campo, Nat. History of PAP Data from Italian Nat. Reference Center, ERJ, 2019.; Seymour, J. J. Pulmonary alveolar proteinosis: Progress in the First 44 Years, Am. J. Respir Crit. Care Med, 2002.*





SAVARA

# Complications and Short-Comings of Whole Lung Lavage

## Potential Complications

- Rib fracture
- Hypoxia
- Pneumothorax (collapsed lung)
- Hydrothorax (fluid in pleural cavity)
- Superimposed infection
- Acute Respiratory Distress Syndrome (ARDS)

## Short Comings

- Treatment fails to address pathophysiology of disease
- Patients continue to experience symptomatic deterioration between procedures – and can require more than one whole lung lavage
- Rollercoaster ride of improvement and decline
- The procedure, performed under general anesthesia, is not standardized and remains highly operator-dependent



SAVARA

# Journey to Diagnosis Can Be Long and Misdiagnosis is Common

**Due to aPAP's rarity and associated non-specific symptoms, patients are often misdiagnosed with common pulmonary illnesses (e.g., recurrent pneumonia, chronic bronchitis, COPD, asthma); the diagnostic journey can take years**

**Diagnostic tests typically conducted to rule-out other more common pulmonary diseases:**

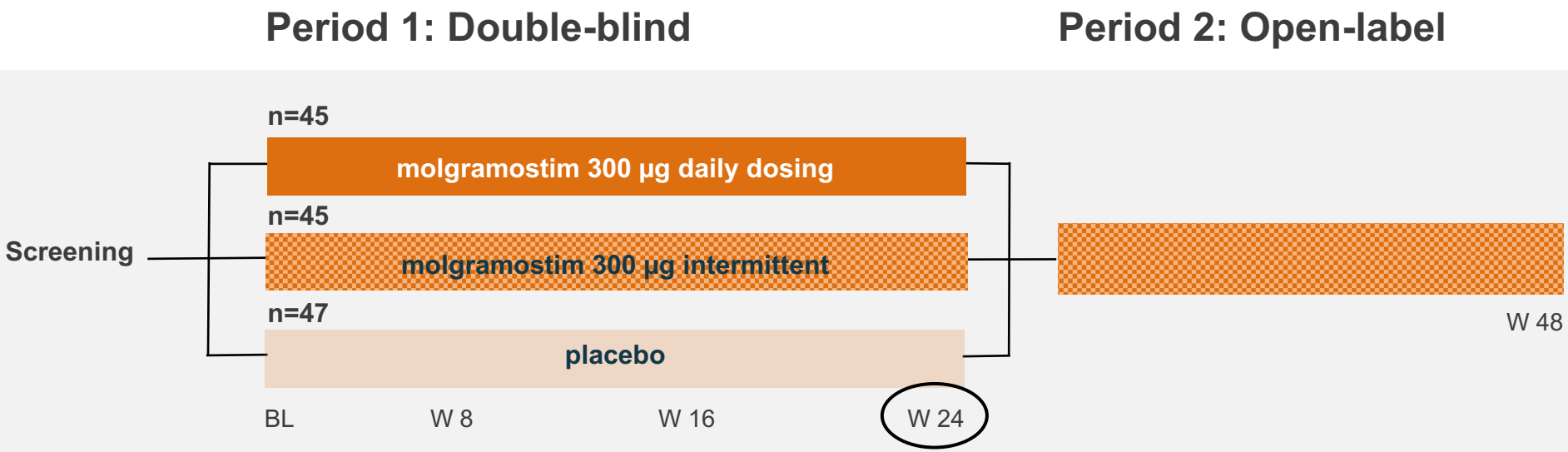
- Imaging
- Pulmonary function tests
- Secondary PAP testing
- Transbronchial biopsy and cytological analysis of bronchoalveolar lavage fluid



SAVARA

# IMPALA Clinical Trial Design

= Primary efficacy analyses




## Primary Endpoint*

- Change from baseline in A-a$DO_2$

**Primary analysis: Continuous dose vs. placebo*

## Secondary Endpoints**

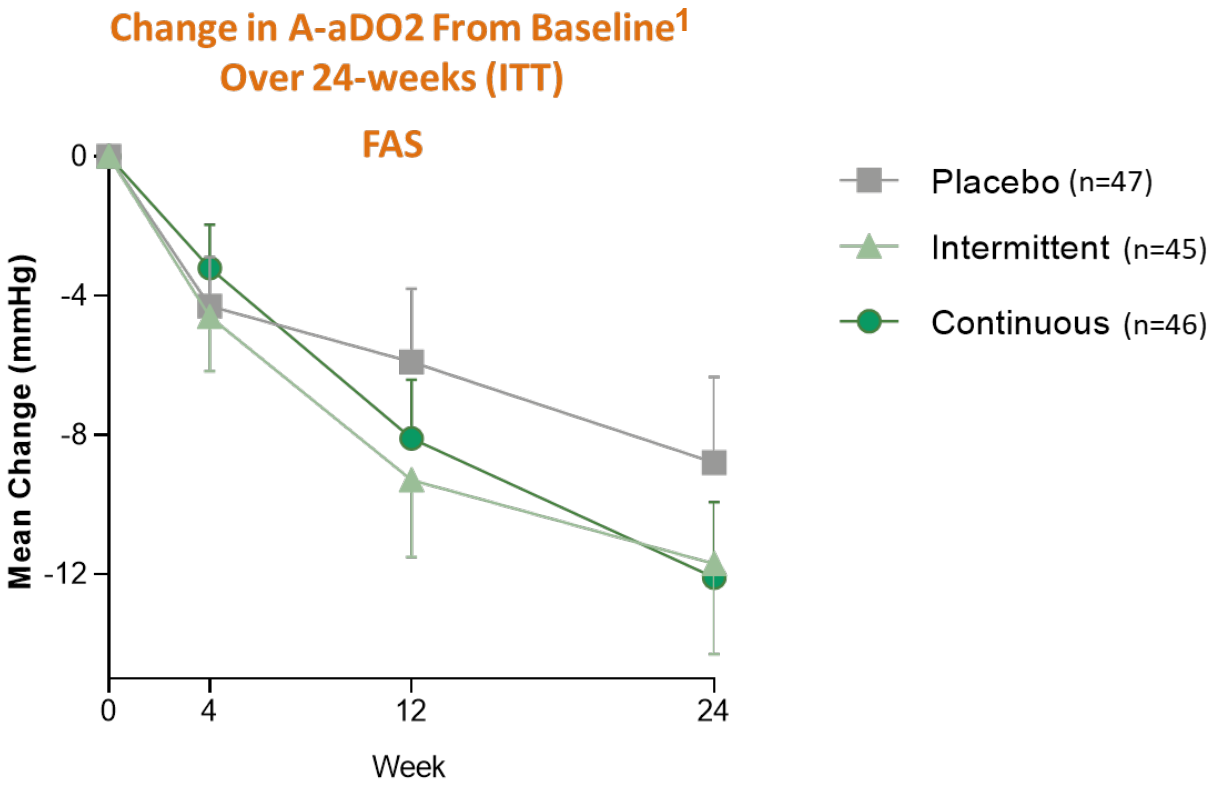
- 6-minute walk distance
- SGRQ
- Time to whole lung lavage/requirement for whole lung lavage

***Secondary endpoints: Analyzed in parallel and corrected for multiplicity*



SAVARA

# IMPALA Trial Did Not Meet the Primary Endpoint




*1: Trapnell, Inhaled Molgramostim Therapy in aPAP, NEJM, 2020.*

## Continuous Once Daily Dosing Regimen (OD)

Full Analysis Set (FAS)*
Estimated treatment difference of -4.6 mmHg (p=0.17)

Revised FAS†
Estimated treatment difference of -6.5 mmHG (p=0.025)

*Protocol specified analysis (ITT).

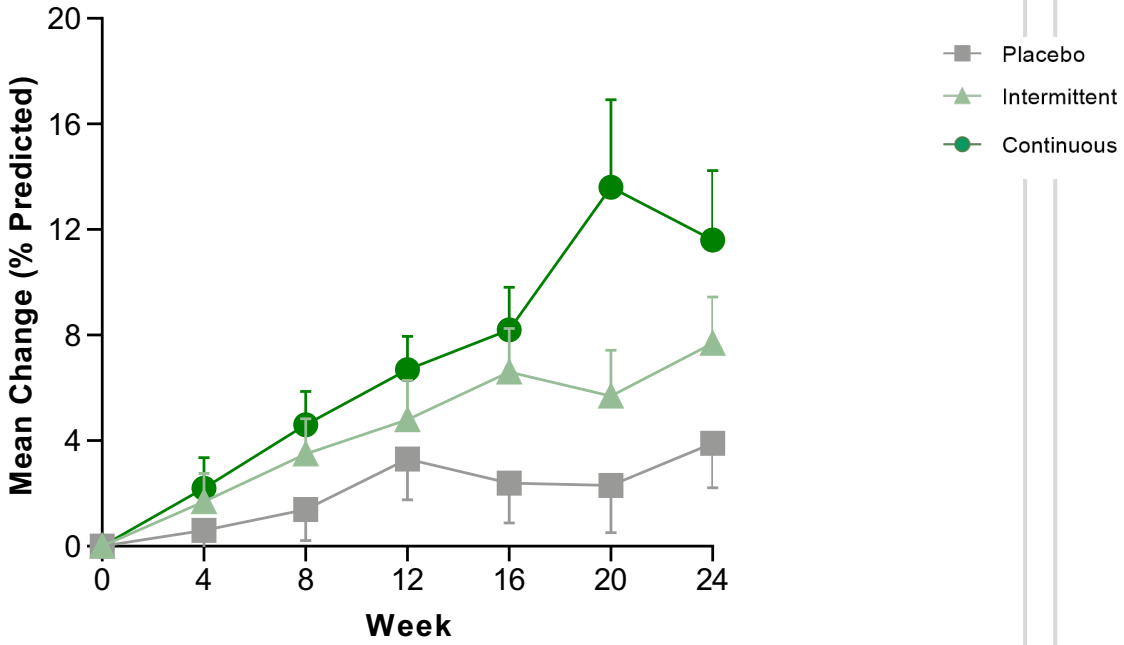
†Revised analysis excludes 4 patients using supplemental oxygen during testing (placebo: n=2, intermittent: n=1, continuous: n=1).



SAVARA

# IMPALA: DLCO and SGRQ Showed Robust Improvement with Continuous Once Daily (OD) Dosing Regimen

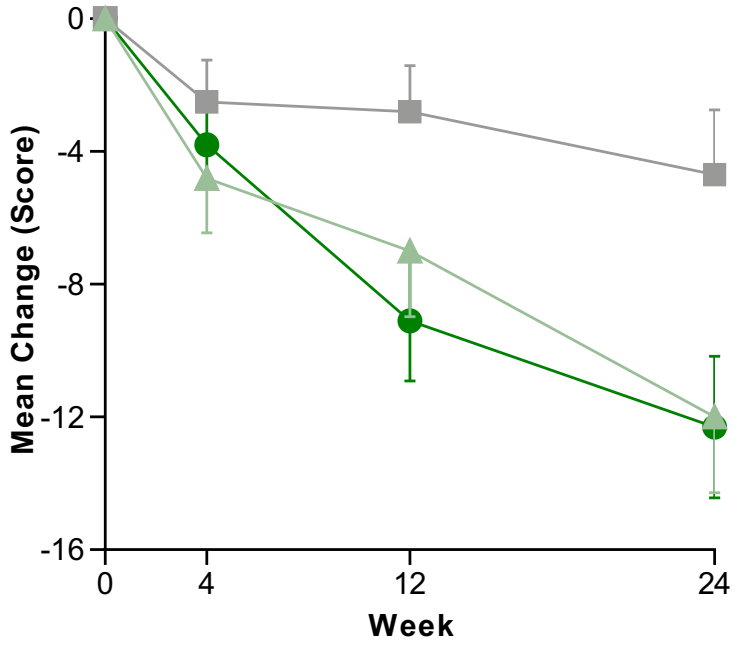
## Change in Diffusion Capacity for Carbon Monoxide (DLCO) From Baseline Over 24-weeks[1] (FAS)




**OD estimated treatment difference of 7.9% predicted (p=0.007)**

IMPALA-2 Primary Endpoint

## Change in St. George's Respiratory Questionnaire (SGRQ) From Baseline Over 24-weeks[1] (FAS)




**OD estimated treatment difference of 7.6 points (p=0.01)**

IMPALA-2 Secondary Endpoint



1: Trapnell, Inhaled Molgramostim Therapy in aPAP, NEJM, 2020.

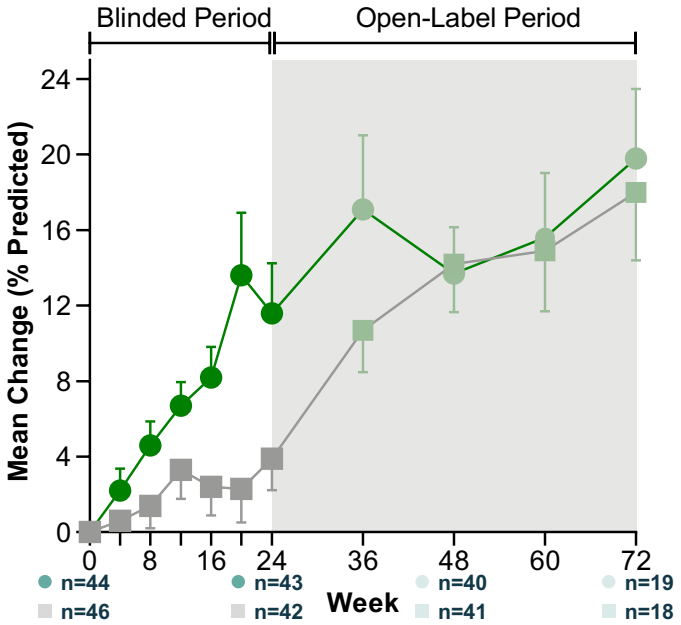


Results not adjusted for multiplicity.

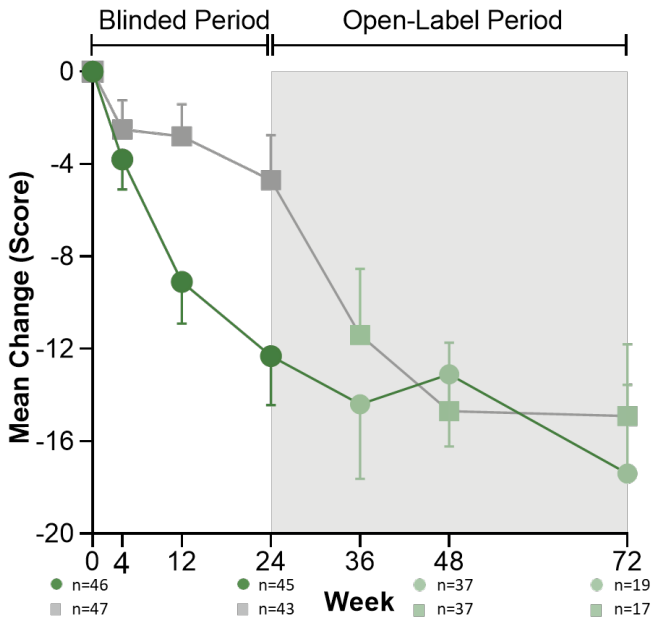
SAVARA

# IMPALA Open-Label Data Show Sustained Effect, or Continued Improvement, after Longer-Term Drug Exposure

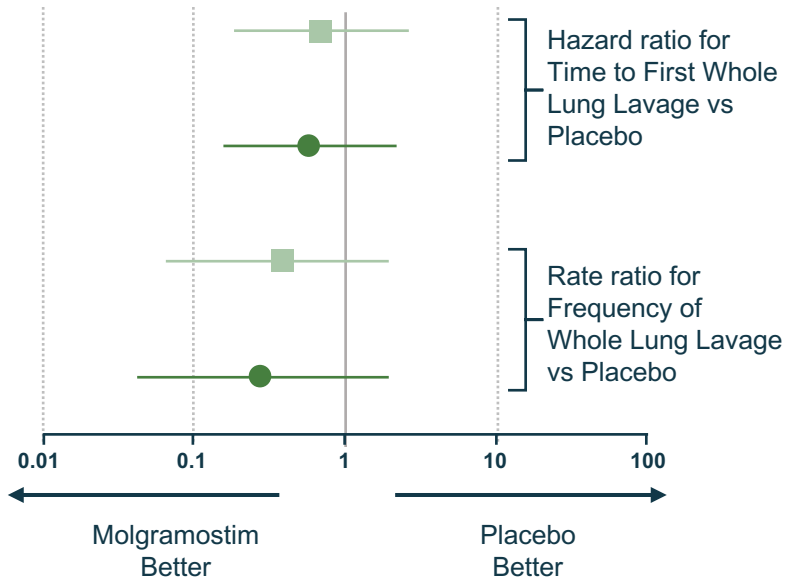
## Mean Change in DLCO Over Time[1]




## Mean Change in SGRQ Total Score Over Time[1]




## Use of Whole Lung Lavage During the Blinded Treatment Period[1]



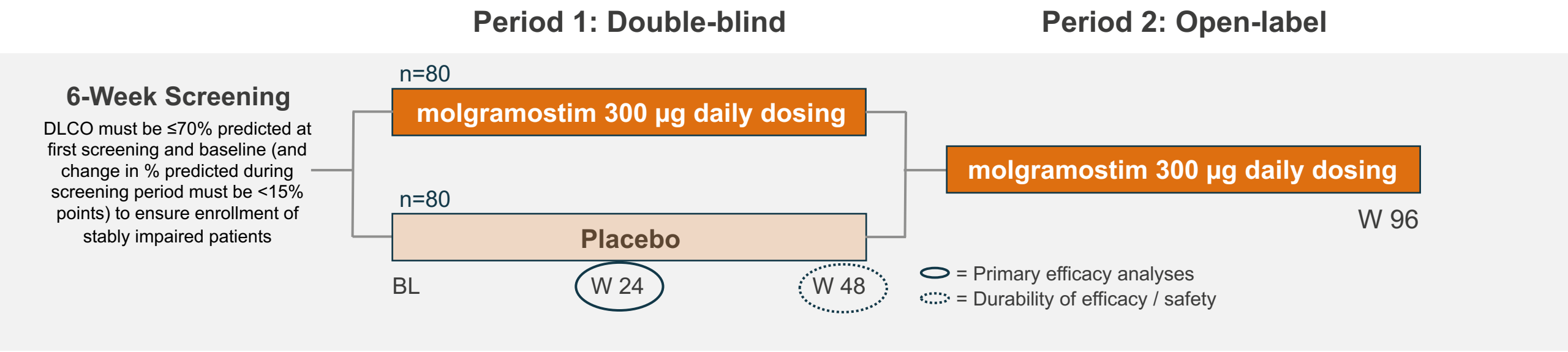

Continuous molgramostim  Placebo  Intermittent molgramostim

Dosing schedules for blinded and open-label periods were different.
All patients received intermittent molgramostim during open-label period.


1: Trapnell, Inhaled Molgramostim Therapy in aPAP, NEJM, 2020.

SAVARA

# Phase 3 IMPALA-2 Trial Design Leverages Key Learnings from IMPALA




## Primary Endpoint

- Change from baseline in DLCO
  - 90% powered to detect 5.7% predicted difference with standard deviation of 11

## Secondary Endpoints

- SGRQ Total Score
- SGRQ Activity Score
- Exercise capacity using treadmill test

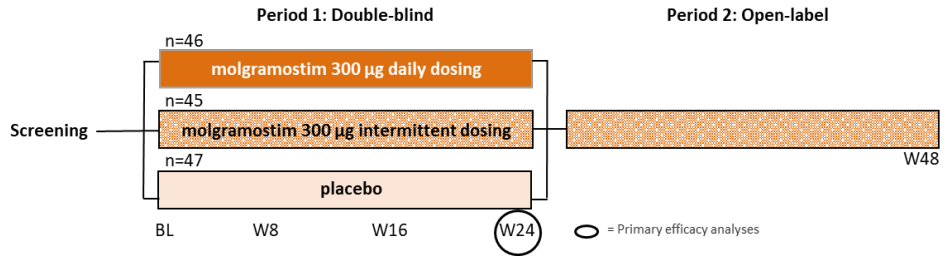
Patients needing whole lung lavage will have procedure prior to screening.



SAVARA

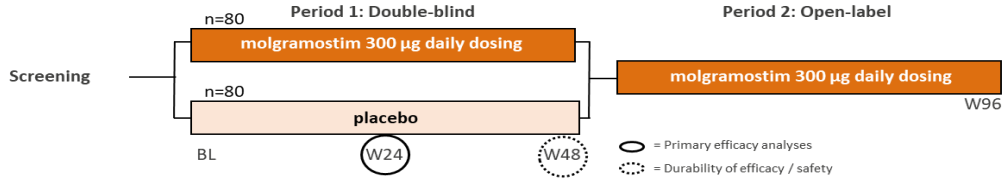
# Clinical Trial Design: IMPALA vs. IMPALA-2

## IMPALA




| | |
|---|---|
| **PRIMARY ENDPOINT:** | Gas Exchange: A-aDO2 (surrogate endpoint) |
| **SECONDARY ENDPOINTS:** | SGRQ Total (direct patient benefit)<br>6-minute walk distance<br>Whole lung lavage |
| **PATIENTS P/ARM** | n = ~46 |
| **TOTAL PATIENTS:** | n = 138 |
| **DEVICE:** | Pari e-Flow Nebulizer System |
| **NUMBER OF TRIAL SITES:** | 34 |
| **GEOGRAPHIES:** | 18 countries<br>N. America, Europe, Japan, S. Korea, Israel |
| **SUPPLEMENTAL OXYGEN:** | Allowed as background but not during ABG draw for A-aDO2 (n=4) |
| **DISEASE SEVERITY:** | Stable moderate to severe disease |

## IMPALA-2




| | |
|---|---|
| **PRIMARY ENDPOINT:** | Gas Exchange: DLCO (surrogate endpoint)<br>Standardized equipment with real-time overread |
| **SECONDARY ENDPOINTS:** | SGRQ Total (direct patient benefit)<br>SGRQ Activity<br>Exercise capacity test using treadmill |
| **PATIENTS P/ARM** | n = ~80 |
| **TOTAL PATIENTS:** | n = 164 |
| **DEVICE:** | Pari e-Flow Nebulizer System |
| **NUMBER OF TRIAL SITES:** | 54 |
| **GEOGRAPHIES:** | 18 countries<br>N. America, Europe, Japan, S. Korea, Australia |
| **SUPPLEMENTAL OXYGEN:** | Allowed as background, impossible during efficacy measure |
| **DISEASE SEVERITY:** | Stable moderate to severe disease |



SAVARA

# Molgramostim Regulatory Landscape

## MOLGRAMOSTIM IN aPAP REGULATORY DESIGNATIONS

- **Orphan Drug Designation, Europe (eligible for 10 years exclusivity)**
- **Orphan Drug Designation, US (eligible for 7 years exclusivity)**
- **Fast Track Designation, US**
- **Breakthrough Therapy Designation, US**
- **Innovation Passport Designation, UK**
- **Promising Innovative Medicine Designation, UK**

## IMPALA-2

- Trial design endorsed by regulatory authorities in the US, Canada, Japan, South Korea, Australia, and the countries in Europe where the trial is being conducted

## BIOLOGIC EXCLUSIVITY

- Upon Biologics License Application (BLA) approval FDA would grant 12 years marketing exclusivity



SAVARA

# Commercial Outlook

SAVARA

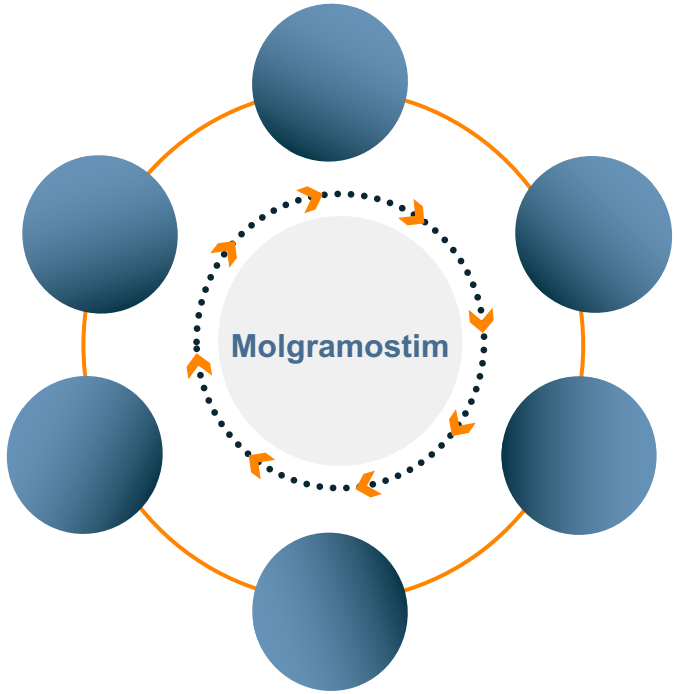
# Significant Global Commercial Opportunity

**Potential first and only approved treatment for aPAP globally**

**Dosing expected to be chronic,** providing long-term revenue stream

**Orphan disease-like infrastructure in US** (e.g., field-based team of ~15-30)

**Geographical commercial strategy optionality** (go-it-alone, regional partnerships, etc.)




**Assumed pricing power consistent with analogous orphan drug biologics**

**12-year biologic exclusivity in the US and biosimilar competition unlikely** (inhalation dosage form with local action of GM-CSF in the lung)

**Significant market expansion potential** via disease awareness campaign, expanded GM-CSF antibody testing in the US



SAVARA

# Published aPAP Epidemiology Studies

| REFERENCE | METHODOLOGY | INCIDENCE PER MILLION | DIAGNOSED PREVALENCE PER MILLION | IMPLIED US PATIENTS | IMPLIED EU PATIENTS |
|---|---|---|---|---|---|
| **Diagnosed Prevalence** | | | | | |
| **Inoue 2008** | **Registry based in Niigata, Japan** | **0.48** *(0.23-1.00)* | **6.2** *(3.8-10.3)* | ***~2,058*** | ***~2,325*** |
| **McCarthy 2018** | **US insurance claims data, 2008-2012** | **Not reported** | **6.3** *(5.2-7.6)* | ***~2,092*** | ***~2.363*** |
| **Diagnosed Prevalence With Increased (Broad Access) Antibody Testing** | | | | | |
| **Kitamura 2019** | **Update of Niigata registry** | **1.66** *(1.2-2.2)* | **26.6** *(9.0-73.0)* | ***~8,831*** | ***~9,975*** |





SAVARA

# US Claims Database of 300M+ Lives Identified ~3,600 Diagnosed aPAP Patients*

COMPREHENSIVE CLAIMS DATA

**300M+**

Unique Patients


- 99% HCPs
- 98% health systems
- 96% outpatient facilities
- 89% of hospitals

- Counted patients with PAP diagnoses codes and no subsequent diagnoses
- Reduced for aPAP and scaled up to reflect entire US population

**~3,600 Diagnosed US aPAP Patients**

** Data from 2023 US Insurance Claims analysis conducted by Savara*

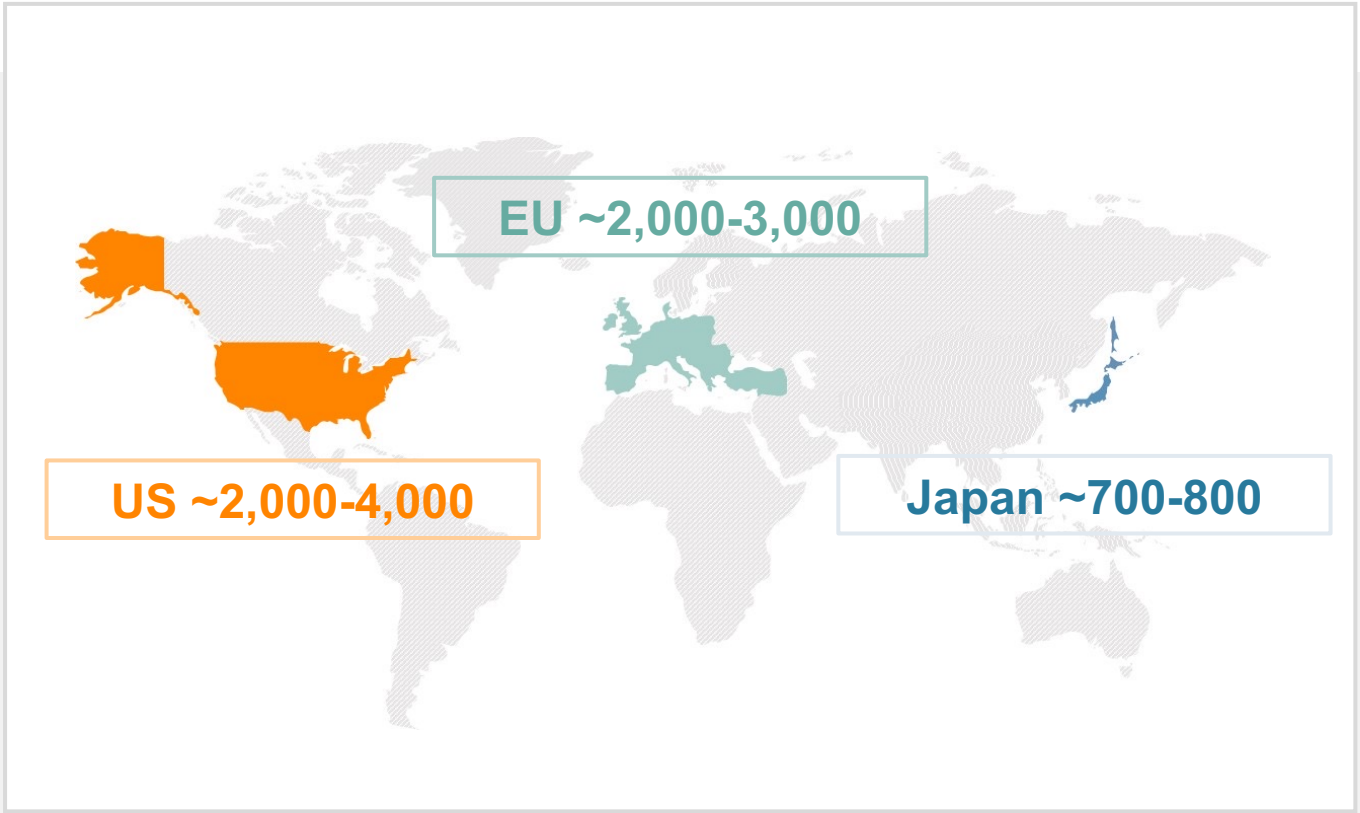




SAVARA

# Current Global aPAP Market has Significant Potential: $1B+

- Estimated 5,000-7,000 currently diagnosed patients in US, EU, and Japan
- Standard of care is lung lavage
- No approved therapeutics for chronic treatment
- Potential for ultra-rare disease pricing



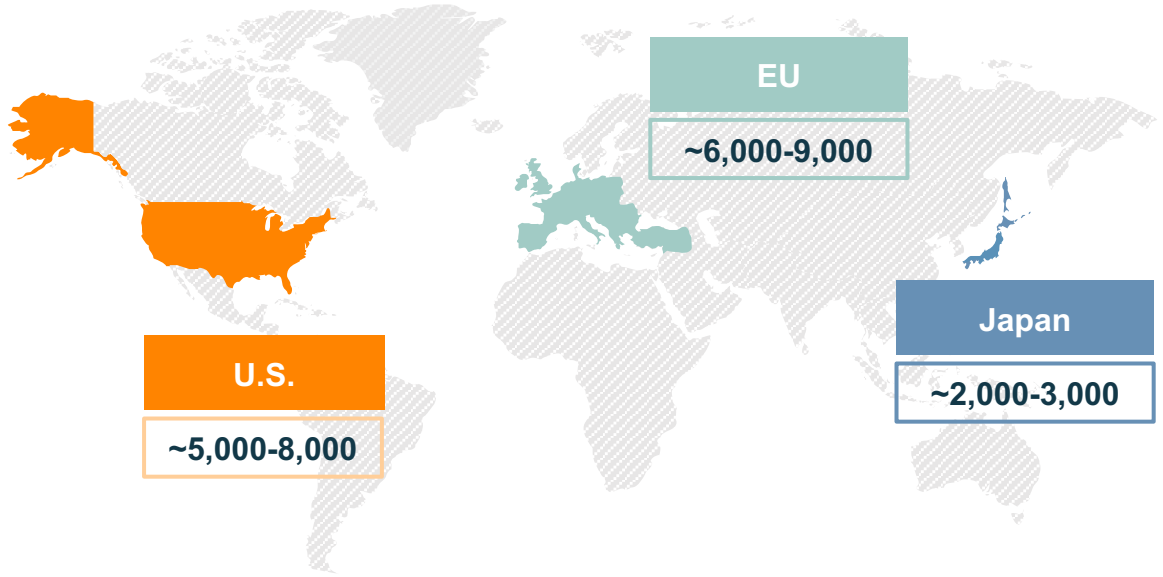





SAVARA

# Improving aPAP Disease Awareness and Expanding Antibody Testing Could Increase Addressable Market 2-4x

- **Many aPAP patients are undiagnosed**
  - Ultra-rare disease
  - Current lack of routine testing
  - Lack of meaningful treatments
- **Kitamura (2019) study = aPAP prevalence may be underestimated**
  - With improved antibody testing, there was an estimated 3-4x increase in prevalence
- **Savara found disease prevalence doubled when undiagnosed patients were identified through machine learning to match known diagnosed patients**




**Estimated True Prevalence in US, EU, and Japan: ~15,000-18,000**
Room for growth in diagnosis



SAVARA

# Disease Awareness and Antibody Testing Campaigns

## SAVARA PLANS TO

1. **Launch a Disease Awareness and Education Campaign:**
   - US Healthcare Provider (HCP) Website Launch in 2023
     - Increase HCP awareness of aPAP, including hallmark symptoms of the disease
     - Educate HCPs on the need for routine antibody testing
   - Seek to change clinical diagnostic guidelines to accelerate testing

2. **Offer No-Cost Antibody Testing**
   - Savara plans to offer a simple, accurate, no-cost, laboratory-based antibody blood test:
     - US: 2023 (via partnership with US-based lab with experience in Alpha-1 Antitrypsin testing)
     - EU: 2024



SAVARA

# Analog: Pulmozyme® (dornase alpha)

## Pulmozyme®

- Prototype inhaled biologic
- Approved by the FDA in 1993
- No biosimilar available

Pulmozyme is a registered trademark of Genentech





SAVARA

# Financials

SAVARA

- **Well capitalized**
  - ~$180M in cash*
- **Strong investor support with coverage from 5 equity research analysts**

## ANALYST COVERAGE

| | |
|---|---|
| Evercore ISI | Liisa Bayko, MSC, MBA |
| H.C. Wainwright | Andrew Fein |
| Jefferies | Andrew Tsai |
| Oppenheimer | Francois Brisebois |
| Piper Sandler | Yasmeen Rahimi, PhD |

# Financial Highlights



*Pro Forma for cash, cash equivalents, and short-term investments as of 6/30/23, including July equity offering



SAVARA

# Investment Thesis

**The molgramostim in aPAP clinical program has a high probability of success**

**As a novel inhaled biologic, molgramostim has the potential for a long-term, durable revenue stream**

**Significant global commercial opportunity**

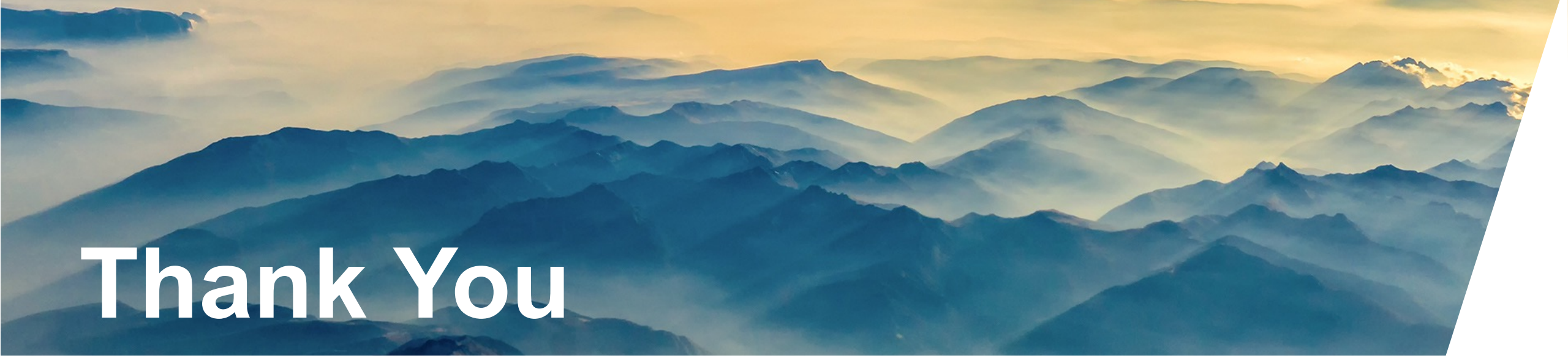
**Strong balance sheet – ~$180M in cash***





*Pro Forma for cash, cash equivalents, and short-term investments as of 6/30/23, including July equity offering

SAVARA



# Thank You

SAVARA