

mannkind

MNKD Investor Deck

January 13, 2025



Cautionary Statement

Statements in this presentation that are not statements of historical fact are forward-looking statements that involve risks and uncertainties. Words such as “believes”, “anticipates”, “plans”, “expects”, “intend”, “will”, “goal”, “potential” and similar expressions are intended to identify forward-looking statements. These forward-looking statements are based upon MannKind's current expectations.

Actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of risks and uncertainties, which include, without limitation, risks associated with manufacturing and supply, risks associated with developing product candidates, stock price volatility and other risks detailed in our filings with the Securities and Exchange Commission (“SEC”), including under the “Risk Factors” heading our Annual Report on Form 10-K for the year ended December 31, 2023, filed with the SEC on February 27, 2024, and subsequent periodic report on Form 10-Q and current reports on Form 8-K.

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MannKind Highlights

Closed 2024 Strong with Year of Growth Ahead



PIPELINE

TYVASO DPI® COLLABORATION

Sep-YTD 2024: Record royalty revenue of \$75M (+48%); manufacturing-related revenues of \$74M (+108%)

CLOFAZIMINE INHALATION SUSPENSION (MNKD-101)

Phase 3 global study with >50% sites initiated; FDA Fast Track, QIDP & Orphan designation

NINTEDANIB DPI (MNKD-201)

Successfully completed Phase 1 study; advancing into the next phase of development



PRODUCTS

EBU NET REVENUE

Sep-YTD 2024: \$59M (+10% vs. YTD 2023)

INHALE-1 PEDIATRIC PHASE 3 TRIAL

Top line results for primary endpoint (6 Months) announced in 4Q 2024

INHALE-3 PHASE 4 STUDY

Positive 30-week data announced in 3Q; expect to seek FDA label update in 1H 2025

GESTATIONAL DIABETES

Investigator Initiated trial through Jaeb Center kicks off in 1H 2025



FINANCIAL

FINANCIAL RESULTS

Sep-YTD 2024 total revenues \$209M (+49%)

STRONG FINANCIAL POSITION

Completed private exchange of convertible notes in Dec for stock and cash, reducing debt by \$194M (84%); Sep-YE 2024 pro-forma cash position >\$180M

Our Strategy

MannKind has a therapeutic focus on two disease areas:



ENDOCRINE

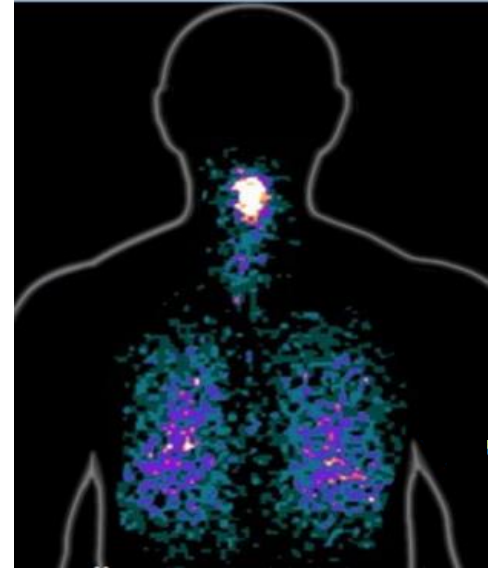


ORPHAN LUNG

Our Technology is Differentiated

Versatile Platform With Competitive Advantages

- Technosphere[®] technology provides highly efficient delivery
 - Dry powder administered via portable inhalers
 - Provides rapid systemic and uniform distribution to the deep lung
- Extensive distribution of powder throughout lung using FDKP (fumaryl diketopiperazine) microparticles
- Technosphere utilized in two FDA-approved products (Afrezza[®], Tyvaso DPI[®]) and explored in pipeline programs (e.g., MNKD-201)



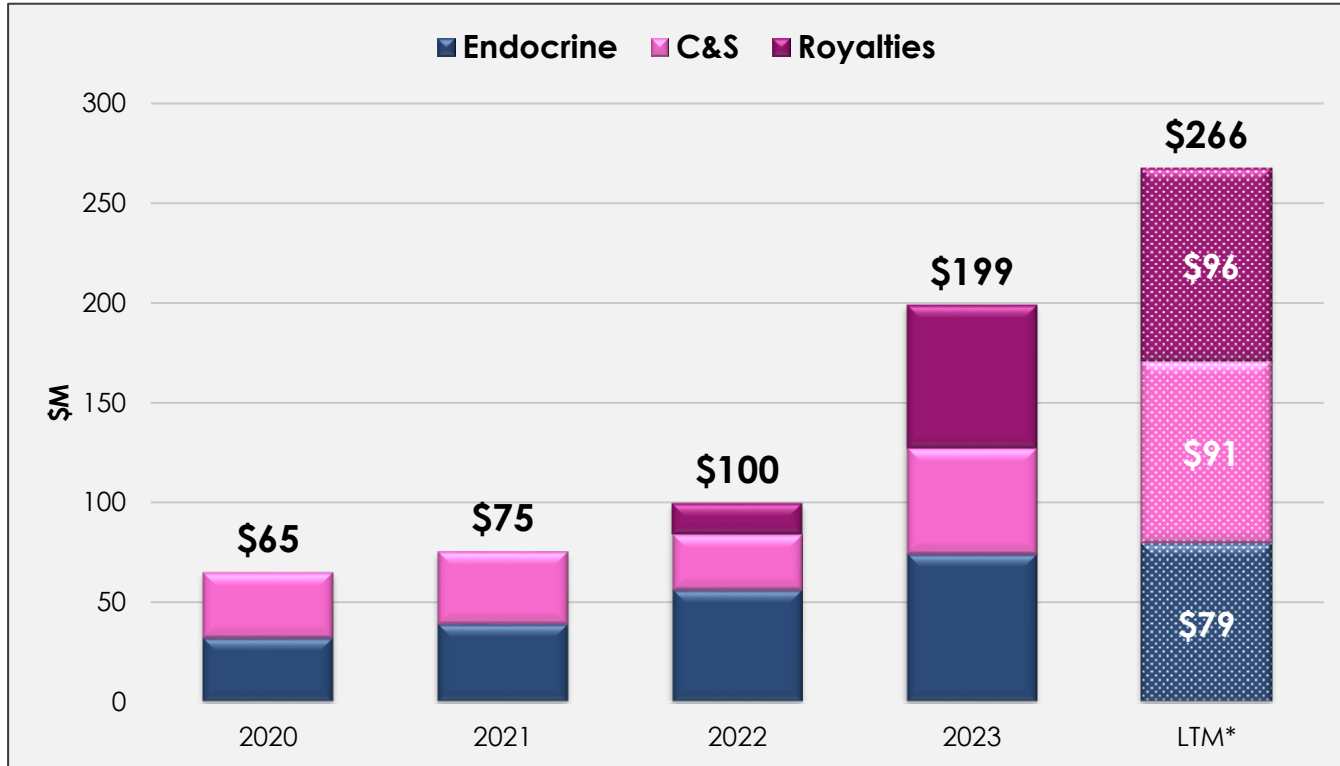
MNKD Products & Pipeline

Product	Targeted Indications	Pre-IND	Phase 1	Phase 2	Phase 3	Approval	
Afrezza® (insulin human) Inhalation Powder	T1 and T2 diabetes mellitus (adults)					Marketed	
Pediatric Afrezza® (insulin human) Inhalation Powder	Indication Expansion: T1 and T2 diabetes mellitus (pediatrics)					Phase 3	International Expansion: Brazil (Biommm); India (Cipla); In Process
V-Go® all-in-one insulin delivery patch	management of diabetes mellitus in persons requiring insulin (adults)					Marketed	
Tyvaso DPI® <small>(marketed by United Therapeutics)</small>	pulmonary arterial hypertension / pulmonary hypertension associated with interstitial lung disease					Marketed	
Clofazimine Inhalation Suspension (MNKD-101)	nontuberculous mycobacterial lung disease					Phase 3	
Nintedanib DPI (MNKD-201)	idiopathic pulmonary fibrosis					Phase 1	
Dornase Alfa (MNKD-301)	cystic fibrosis					Preclinical	

● endocrine
 ● orphan lung

Rising Five-Year Revenue Trend

Double Digit Revenue Growth YoY



Endocrine Business Unit

Products + Trials

Diabetes

Afrezza

Building the next Standard of Care in Mealtime Insulin Therapy

- Indicated for T1DM & T2DM mealtime control
- Taken at the start of a meal
- Demonstrates improved Time-In-Range
- Access at \$35 for Medicare and commercial

**Afrezza is a Unique Mealtime Insulin
That Solves an Unmet Need**



Afrezza® Inhaler

PLUS

Afrezza® Insulin Cartridges



4 units

8 units

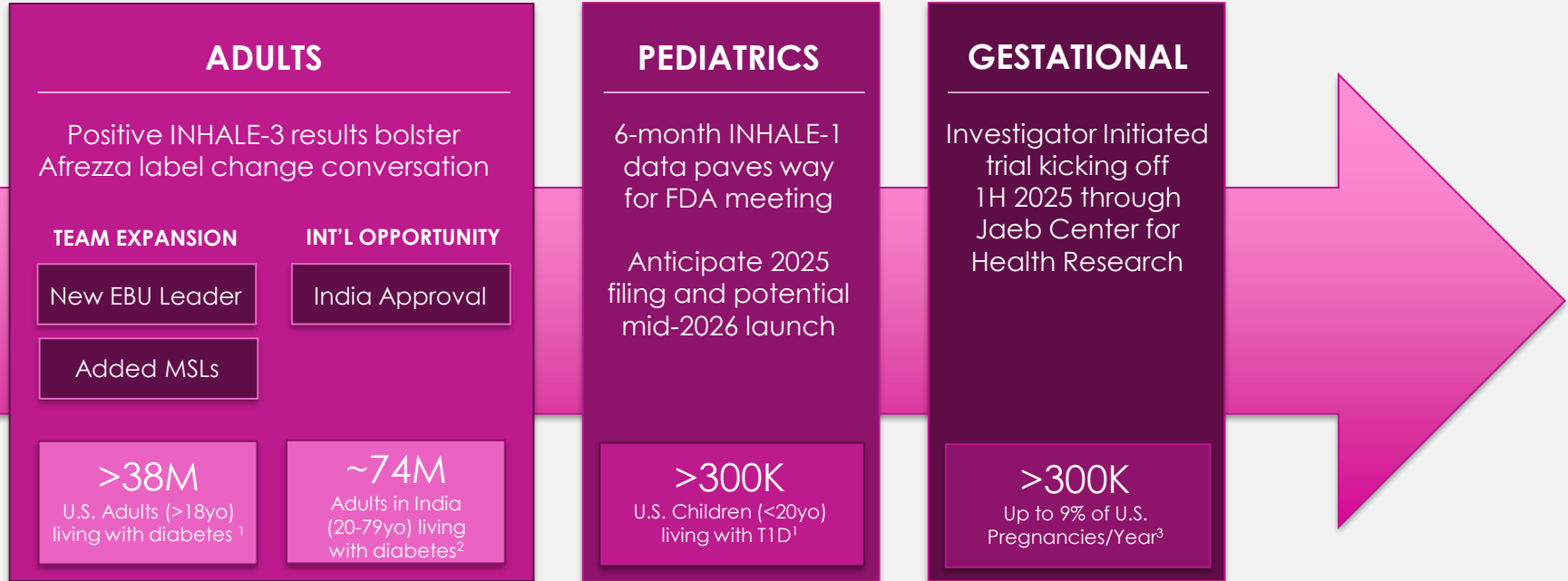
12 units



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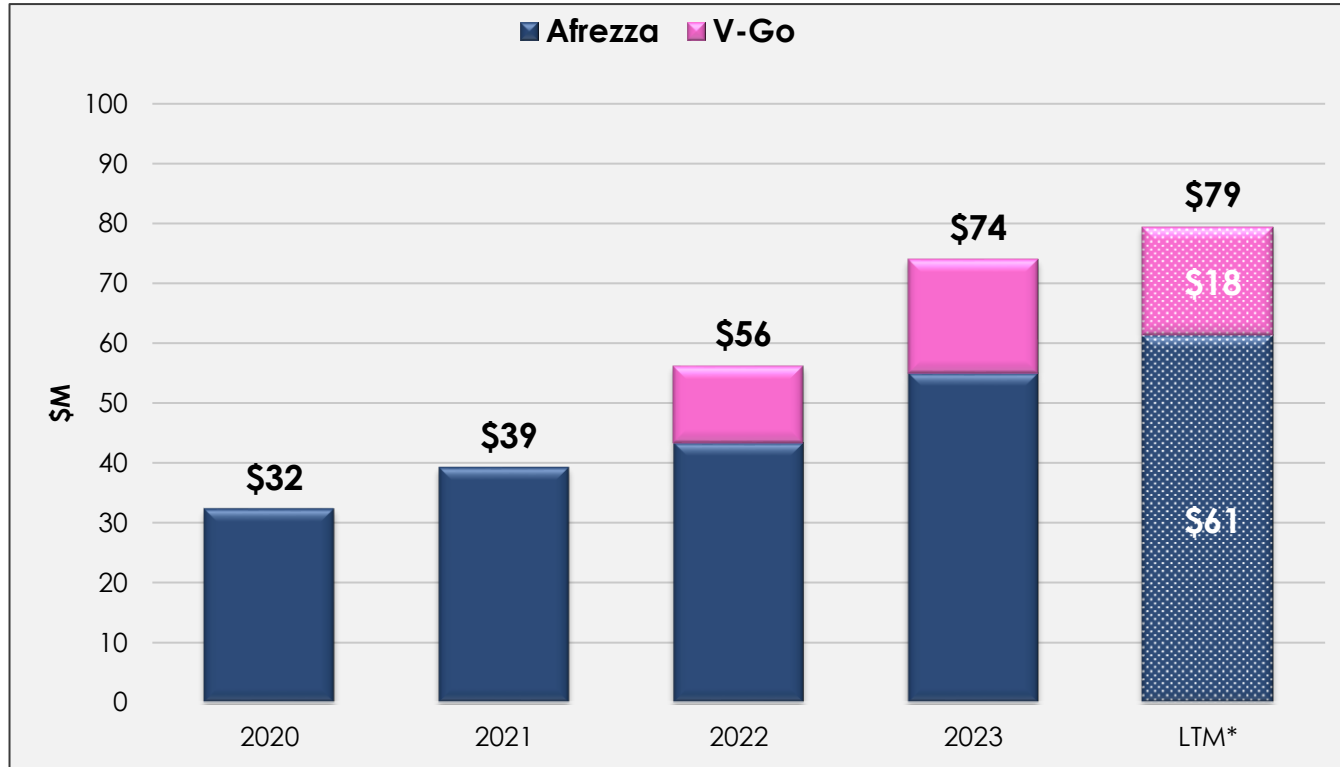
MNKD Diabetes Program Progression

Abundant near-term and long-term value drivers



¹ American Diabetes Association (ADA), 2021.
² International Diabetes Federation (IDF), 2021.
³ ADA.

Rising Five-Year EBU Revenue Trend



Amphastar Collaboration in 2025

MannKind to Promote BAQSIMI® Through Its U.S. Sales Force

- Collaboration underway as of January 2025
- No change to MannKind call plan
 - Afrezza prioritized as primary promoted product and first sales detail
 - BAQSIMI added as secondary opportunity to make HCPs aware of product
- BAQSIMI (glucagon) is the first and only dry nasal spray to treat very low blood sugar (severe hypoglycemia) in people with diabetes ages 4 years and above



INHALE-1: Phase 3 Study

Largest U.S. study on Afrezza in More Than a Decade

Targeted Indication	Pediatric Subjects With Type 1 or Type 2 Diabetes Mellitus
U.S. Patient Population	>300,000 children (<20yo) living with T1D ¹
Study Size	230 total randomized Participants (aged 4-17)
Locations	40 certified U.S. sites
Primary Endpoints	Change in A1c from baseline to week 26
Timeline	Anticipate 2025 filing and potential mid-2026 launch



**Randomized
Phase
Completed**



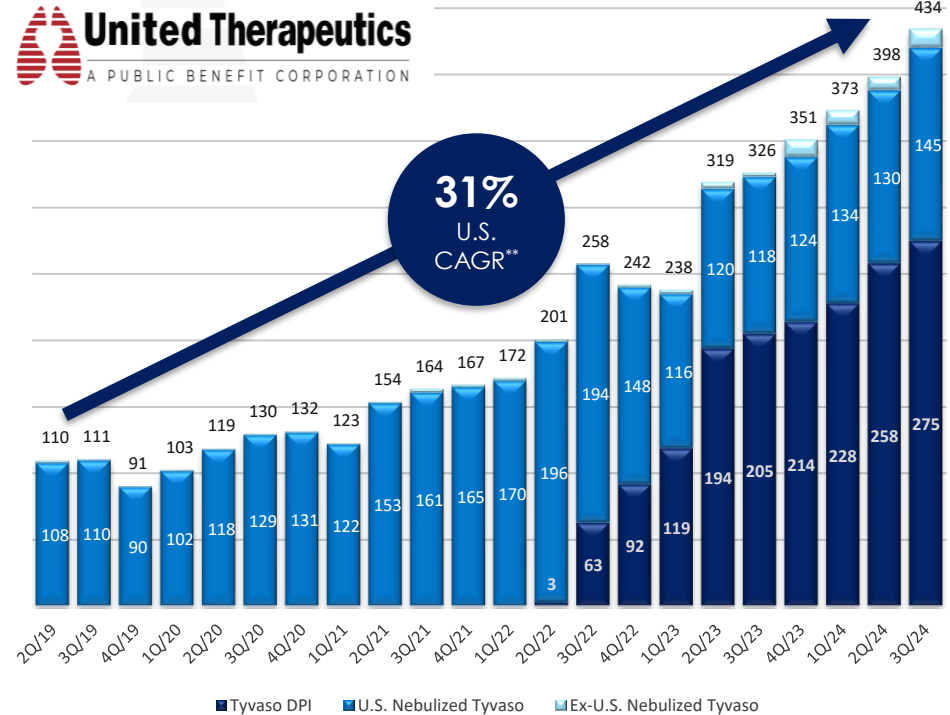
Orphan Lung Opportunity

Products + Trials

Tyvaso DPI
MNKD-101
MNKD-201

Tyvaso DPI United Therapeutics Collaboration

- Receive 9% royalty on Tyvaso DPI net sales
 - Tyvaso DPI annual run rate of \$1B+*
- Manufacturing revenue LTM \$91M
- TDPI revenues provide non-dilutive pipeline funding
- Potential label expansion in IPF & PPF (UT's TETON 1, 2, PPF studies)



* Based on 3Q Earnings.

** CAGR = compound annual growth rate calculated from 3Q/2019 to 3Q/2024 Quarterly revenue, millions USD (Source: United Therapeutics).

NTM Lung Disease

Global Health Concern with Prevalence Rising ~7.5% YOY

NTM lung disease is a chronic lung infection caused by bacteria naturally found in the environment – such as water and soil – that can lead to cough, fatigue, a reduction in lung function, and poor quality of life, among other debilitating symptoms. While exposure to NTM is common and generally does no harm, individuals with underlying conditions are at increased risk. [LearnAboutNTM.com](https://www.learnaboutntm.com).



Nearly 200 species of NTM; the most common is MAC (~80% of U.S. NTM lung disease cases)



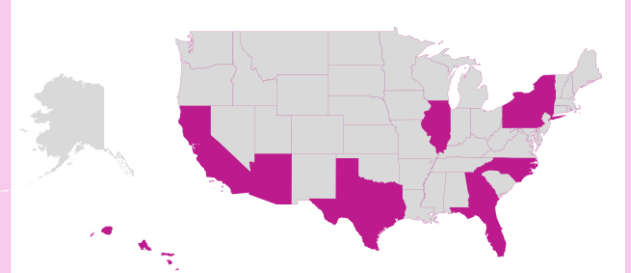
More common in women over the age of 65



NTM disease often goes undiagnosed or can be misdiagnosed



Total addressable population is >250k U.S. and Japan



70% of annual NTM cases in the U.S. have been associated with states highlighted in magenta*

MNKD-101 Development Rationale

Current Therapies Have Limitations in Efficacy, Safety & Tolerability

- Clofazimine Inhalation Suspension has potential to maximize anti-mycobacterial activity at the site of infection (lungs), minimizing systemic exposure and possibly providing an improved safety profile
- Good adoption rate expected
 - MNKD-101 is an inhaled formulation of clofazimine, a drug that is familiar to physicians
 - Oral clofazimine is part of official clinical practice guidelines for NTM treatment
- Convenient dosing cycle: 28 days on, 56 days off
 - Can alleviate patient treatment burden and noncompliance

Limitations in Current Therapy Options



Require higher concentration of drug that results in higher systemic toxicity



Systemic AEs including GI issues (nausea, vomiting), liver or kidney damage, and hearing loss

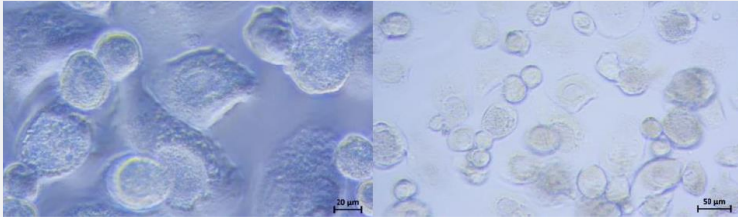


Frequent dosing may contribute to patient fatigue and low compliance

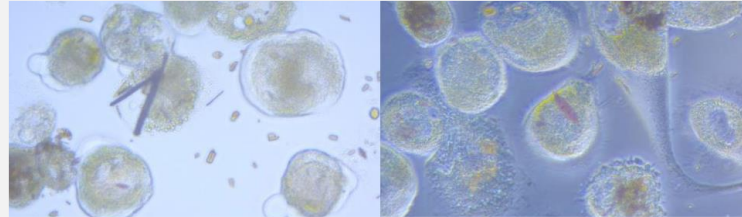
NTM Mycobacteria – Difficult to Treat

Invasive to Pulmonary Compartments – Particularly Macrophages

- NTM can invade lung tissue and intracellular pulmonary compartments – specifically macrophages
 - Subverts macrophage defenses, replicates, and causes chronic infections
 - May assemble in biofilm colonies within mucus and alveolar walls in lung tissue
- Preclinical research shows MNKD-101 is well phagocytosed, indicating promise as an effective treatment for NTM



THP-1 differentiated cells without formulation (left: 400x magnification; right 200x magnification)



THP-1 cells after washing procedure and incubation time with MNKD-101 for 24 hours (400x magnification)

ICoN-1: Phase 3 Study

Clofazimine Inhalation Suspension (MNKD-101)

Targeted Indication	Refractory NTM (nontuberculous mycobacteria) lung disease caused by MAC (mycobacterium avium complex)
Patient Population (U.S. and Japan)	Estimated as ~250,000 Estimated 15-20% are refractory
Study Size	180 evaluable patients globally
Locations	100+ sites already selected in U.S., Japan, Australia, South Korea and Taiwan
Co-Primary Endpoints (U.S.)	Sputum culture conversion by end of Month 6 and change in Quality of Life-Bronchiectasis From baseline to end of Month 6*
Designations	FDA Fast Track, Orphan, Qualified Infectious Disease Product (QIDP)



Enrollment Underway



ICoN-1 Phase 3 Study

>50% (as of YE 2024) of Anticipated Sites Activated in Phase 3 Global Study

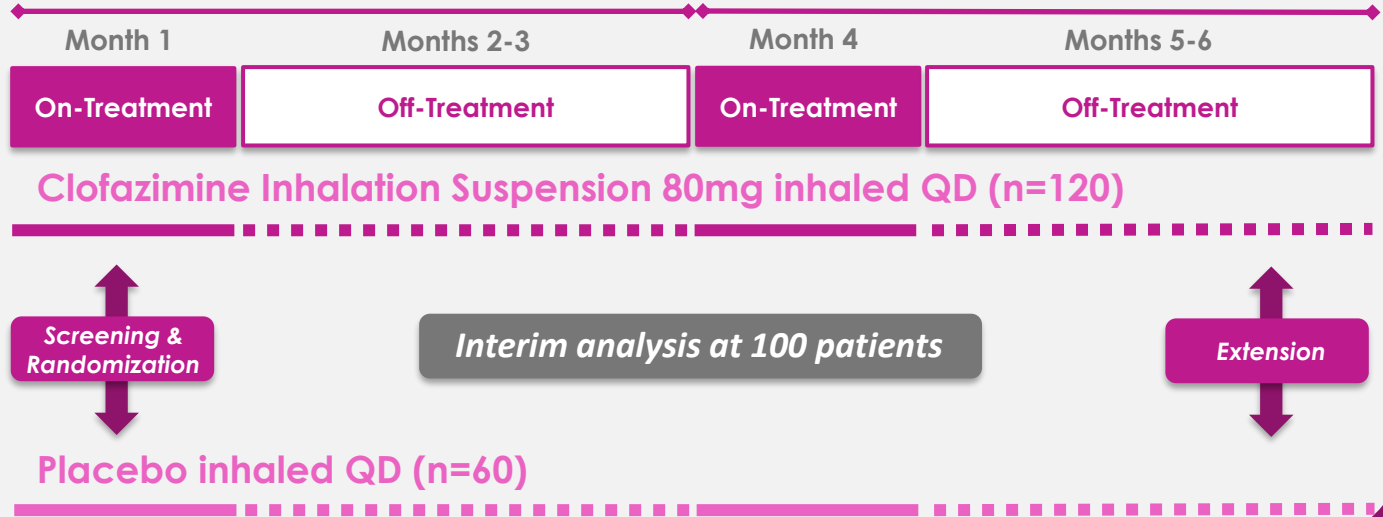


- **Co-Primary Endpoints:**
Sputum culture conversion + patient reported outcomes*

- **Health Authority Approval in Five Countries**
(U.S., Japan, South Korea, Australia and Taiwan)

- **FDA Fast Track, QIDP & Orphan Designation**
(potential 12 years exclusivity)

STUDY DESIGN



Idiopathic Pulmonary Fibrosis (IPF)

Variable and Progressive Disease That Can Lead to Lung Failure

Idiopathic pulmonary fibrosis (IPF) is a serious chronic disease that affects the tissue surrounding the air sacs in the lungs. This condition develops when the lung tissue becomes thick and stiff for unknown reasons. Over time, these changes cause permanent scarring in the lungs, called fibrosis, that makes it progressively more difficult to breathe. Lung damage from IPF is irreversible and progressive.



IPF is the most common type of pulmonary fibrosis



More common in people over the age of 50, affects more men than women, and more likely to develop in current and former smokers



No cure and can lead to respiratory failure

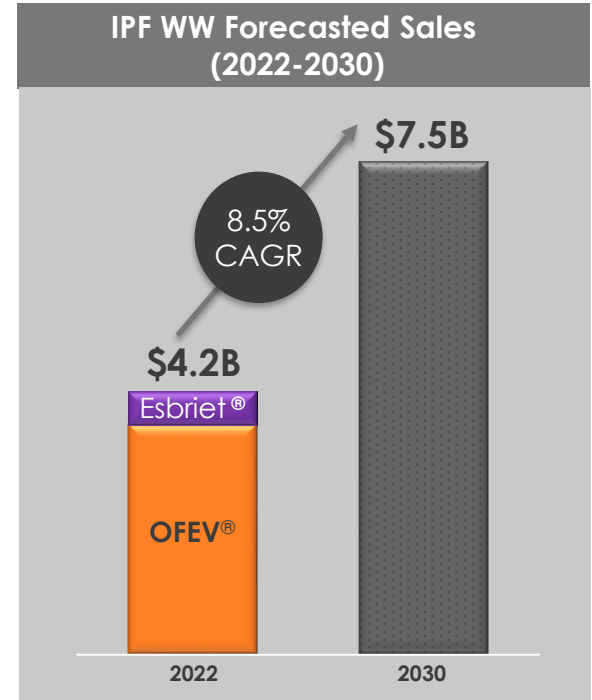


While the number of people affected by IPF is unknown, estimated total addressable U.S. population is ~100k¹ and prevalence has grown nearly 20% over the last decade

IPF: A Growing Therapeutic Area

Current Treatment Options Not Well Tolerated, High Discontinuation Rates

- Progressing nintedanib DPI as a potential treatment improvement relative to Ofev®:
 - Targeting comparable pulmonary exposure and efficacy
 - Bypassing the GI system could reduce common adverse effects (GI and neurological) seen with oral nintedanib
- Nintedanib DPI could also potentially be used concomitantly with other current and future IPF therapies



Nintedanib DPI: Successful Phase 1 Study

Subjects did not Experience Typical AEs Seen with Oral Nintedanib

KEY PHASE 1 STUDY HIGHLIGHTS

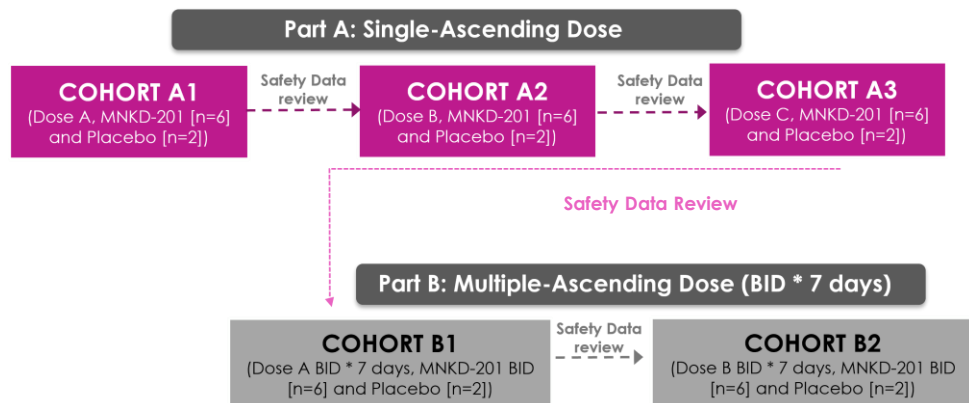
Met primary objective demonstrating nintedanib DPI was safe and well tolerated in healthy volunteers

No serious AEs or AEs typically seen with oral nintedanib

Preclinical chronic toxicology study did not show any adverse findings

Expect to meet with FDA in 1H 2025 to discuss advancing to next phase of development

PHASE 1 STUDY DESIGN



Financial Update



Milestones
Key Value Drivers

Strong Financial Position



**Endocrine BU
Profitability +
Tyvaso DPI**

**Funding
Development**



**Positive
Financial
Results**

\$15M

3Q Non-GAAP Net Income

\$45M

YTD Non-GAAP Net Income



**De-Levered
Balance
Sheet**

\$36M

Debt Principal Balance YE

\$237M

Reduction over PY

Saved Potential Dilution by 12.5M Shares

Anticipated Key Value Drivers



- **MNKD-101 Phase 3 Trial Initiated**
 - Every 1,000 patients is ~\$100M in Revenue
- **MNKD-201 Phase 1 Trial Completed**
 - 2023 Ofev net revenues of ~\$3.8B

ORPHAN LUNG



- **Growth and Conversion to Tyvaso DPI**
 - Every 10k covered patients is ~\$300-350M in Revenue
- **UT TETON 1&2 Studies (IPF), TETON PPF**

TYVASO DPI



- **INHALE-1 (Pediatrics)**
 - Each 10% share ~\$150M in Revenue
- **INHALE-3 (Pump Spraying)**
- **International Opportunity**

ENDOCRINE

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