



NeoLumina

OPENING MINDS & CREATING
NEW POSSIBILITIES

NEOLUMINA

BIOSCIENCE INC.

BUSINESS SUMMARY

 [NEOLUMINABIO.COM](https://neoluminabio.com)



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Executive Summary



Technology

- ✓ Therapies based on the rapidly growing scientific and clinical evidence of psychedelic molecules to treat psychiatric and mental health disorders
- ✓ Proprietary natural psilocybin-based product candidate being prepared to submit for approval to start Phase 2 clinical trials for eating disorders
- ✓ Many novel psilocybin and psilocin analogs created

People

- ✓ Founders and management are experienced in biopharma business and product development
- ✓ Scientific and production relationships established with high-quality, well-known entities
- ✓ Advisor group formed with experts from leading academic and healthcare institutions

Need

- ✓ Eating disorders are the #1 cause of death among mental health conditions with few products currently available for treatment
- ✓ Current drugs for psychiatric disorders have limited efficacy and negative side effects

Value Creation

- ✓ Complete clinical trial on lead product candidate and advance to pharma licensing deal
- ✓ Advance other natural and analog product candidates toward clinical development
- ✓ Funding to date has been by founders, management, and advisors

PROBLEM

EATING DISORDERS ARE THE NUMBER ONE CAUSE OF DEATH IN MENTAL ILLNESS



Eating disorders are estimated to cause 1 death every 52 minutes globally.¹

Approximately 28 million people in the US and an estimated 600 million people globally suffer from an eating disorder¹

Between 60% and 80% of people with an eating disorder are female¹

Significant Unmet Need



There are few approved drugs for eating disorders. Those drugs that are used have:

- Low rates of success.
- High rate of negative side effects..

Preparing for Phase 2 Eating Disorder Clinical Trial

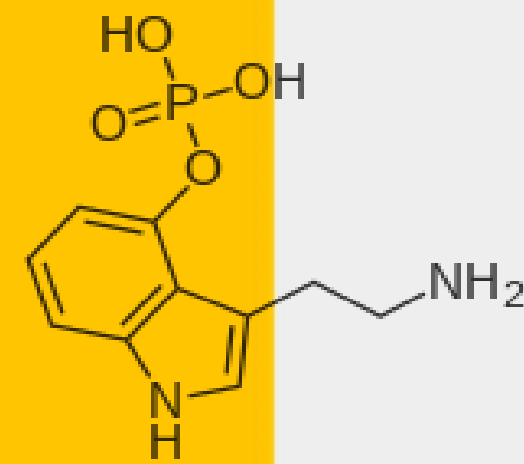
NeoLumina has the exclusive global license to its lead product candidate, PEX010, which:

- Is a natural psilocybin-based oral capsule.
- Is currently in Phase 2 for several other indications.
- Has been shown to be safe and well tolerated in Phase 1.
- NeoLumina is preparing to submit for approval to the FDA to start a Phase 2 clinical trial in binge eating disorder.

¹ National Association of Anorexia Nervosa and Associated Disorders

Significant Value Investment Opportunity

Our lead product candidate (PEX010) is a proprietary natural psilocybin-based compound being prepared to submit to the FDA to begin a Phase 2 human clinical trial for binge eating disorder.



- Binge eating disorder represents **the largest of the eating disorders** – more than anorexia and bulimia combined.²
- Approximately **70% of people with binge eating disorder are obese**, which provides another key value creation opportunity.³
- 80% of people with binge eating disorder have **other psychiatric and physical disorders**, such as anxiety, depression, hypertension, and diabetes.⁴



**WE DEVELOP
THERAPIES FOR
MENTAL HEALTH
DISORDERS BASED ON
PROPRIETARY
PSILOCYBIN
TECHNOLOGY**

Psilocybin has been shown in studies to have positive effects with minimal negative side effects on treating many mental health disorders, including eating disorders.

² National Association of Anorexia Nervosa and Associated Disorders

³ Healthline

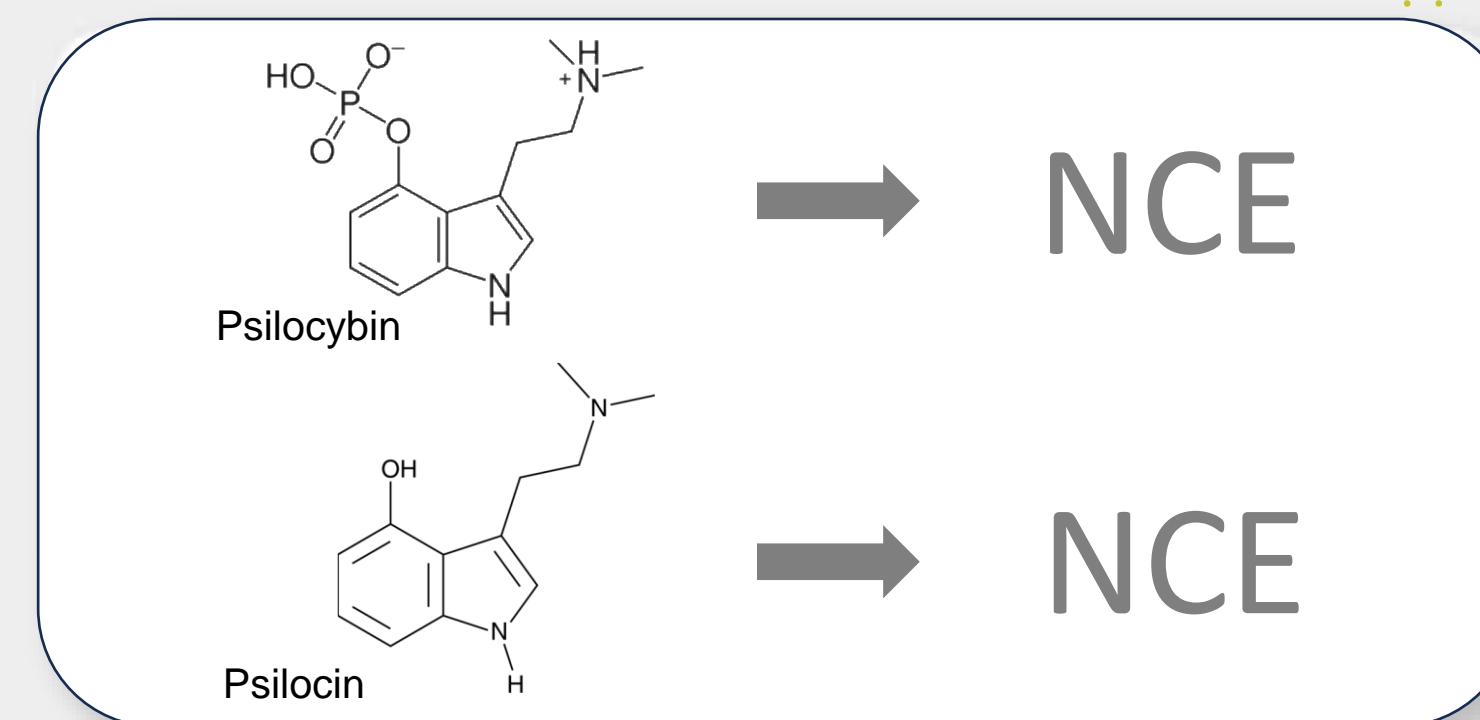
⁴ National Institute of Health

Product Development Portfolio

Development of Natural Molecules

Proprietary psilocybin-based natural product candidate being prepared to submit for approval to start Phase 2 human trial for eating disorders

Working with Lambert Spawn: leveraging 100+ years of mushroom production to develop a proprietary low-cost method for producing psilocybin and psilocin



Creation of New Chemical Entity (NCE) Analogs

Working with São Paulo University R&D and scientific experts

Many psilocybin and psilocin analogs designed and screened

Screening has resulted in several potential lead product candidates



The economic impact of mental illness is projected to be \$6 trillion by 2030⁵

Eating disorders

Eating disorders are the leading cause of death among mental health disorders, estimated to cause 1 death every 52 minutes globally⁶

1 in Every 8 People

Approximately 1 in every 8 people in the world (approximately 1 billion people) live with a mental health disorder⁷

Estimated 703,000

An estimated 703,000 people commit suicide every year and for every suicide, approximately 20 other people attempt it⁷

Anxiety and Depression

Anxiety and depression affect approximately 600 million people globally⁷

MENTAL HEALTH MARKET:

2023: \$402.1B

Projected 2028: \$485.7B

Psychedelics

PSYCHEDELICS MARKET:

2023: \$4.8B

Projected 2028: \$10.2B

CAGR: 16.1%

Psychedelic molecules have shown in clinical studies to have positive effects on several mental health disorders with minimal negative side effects

Widespread drug prescribing has not reduced mental disability or suicide, and current drugs have significant negative side effects⁸

⁵ Lancet Commission Report




⁶ National Association of Anorexia Nervosa and Associated Disorders

⁷ World Health Organization

⁸ British Medical Journal

⁹ Research and Markets Global Reports

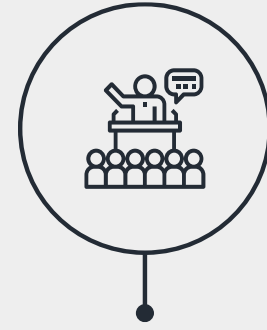
Pipeline Overview

Program	Indications	Discovery	Research	Preclinical	Phase 1	Phase 2
PEX010	Eating Disorders					
Natural Molecules	Anxiety, PTSD, Pain					
Analogs	Depression, Addictions					

Development Status Summary

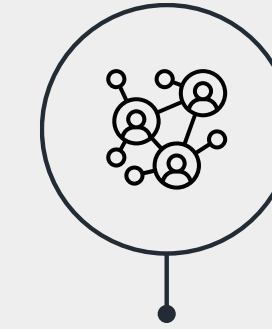
- PEX010 application being prepared to start Phase 2 clinical study
- Natural molecules being isolated with Lambert Spawn to begin formulation
- Many analogs created with São Paulo University for screening
- Final specific indications to be determined for each product candidate once testing is completed

Current Status



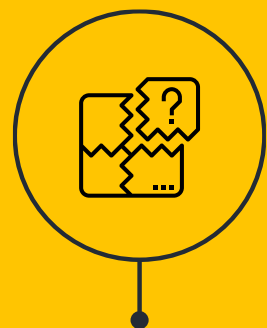
Experienced Team

Management team and advisory group have vast experience in biomedical development



Exclusive Global License

Proprietary natural* psilocybin-based product candidate being prepared for submission to start Phase 2 clinical trials on eating disorders



Working with Lambert Spawn

Partnership with the oldest independent spawn manufacturer in North America



R&D Partnerships

São Paulo University and Foundation for Agriculture and Forestry Studies and Research

Experienced Leadership and Advisors

Gaetano Morello, ND



Director and Chief Executive Officer

Dr. Morello is an accomplished naturopathic clinician and nutraceutical entrepreneur with over 30 years of experience.

Jeremy Baker



Director and Chief Business Officer

Mr. Baker is successful entrepreneur with an investment portfolio across different agriculture-related business.

Mark Gold, MD



Chief Medical Officer

Dr. Gold has more than 25 years as Professor of Neuroscience, physician-scientist at UF McKnight Brain Institute, Eminent Scholar & Chairman of Psychiatry.

Jim DeMesa, MD, MBA



Chief Operations Executive

Dr. DeMesa has over 30 years in biotech and pharmaceutical leadership and management, including strategy,, product development, partnering, clinical trials, and operations.

Several medical and scientific advisors from many well-known institutions, including:



Alejandro Ochoa
Director

Mr. Ochoa has over 20 years of experience in financial services



Wendy Oliver-Pyatt, MD
A leading expert in treating eating disorders with over 25 years of experience. Director of International Association of Eating Disorder Professionals



Michael Murray, ND
Widely regarded as a world-leading authority on natural medicine, is a graduate, faculty member, and serves on the Board of Regents of Bastyr University



Christine Smith PhD
Technical Director of QA and Research and Development for L.F. Lambert Inc., a leading global producer of commercial mushroom spawn. She received her PhD in 1992 from the University of Wales, UK in Microbial Genetics



Milestones

Experienced clinical and regulatory teams formed

Clinical advisor experts engaged

FDA Pre-IND meeting

Submit FDA application to start a PEX0101 Phase 2 clinical trial

Initiate pharma partnering process

Pharma licensing Term Sheet

Finalize pharma license deal

2024

2025

2026

2027

PEX010 clinical trial design started

First 2 clinical trial sites identified

Finish clinical trial design and FDA application

Start PEX010 binge eating disorder clinical trial

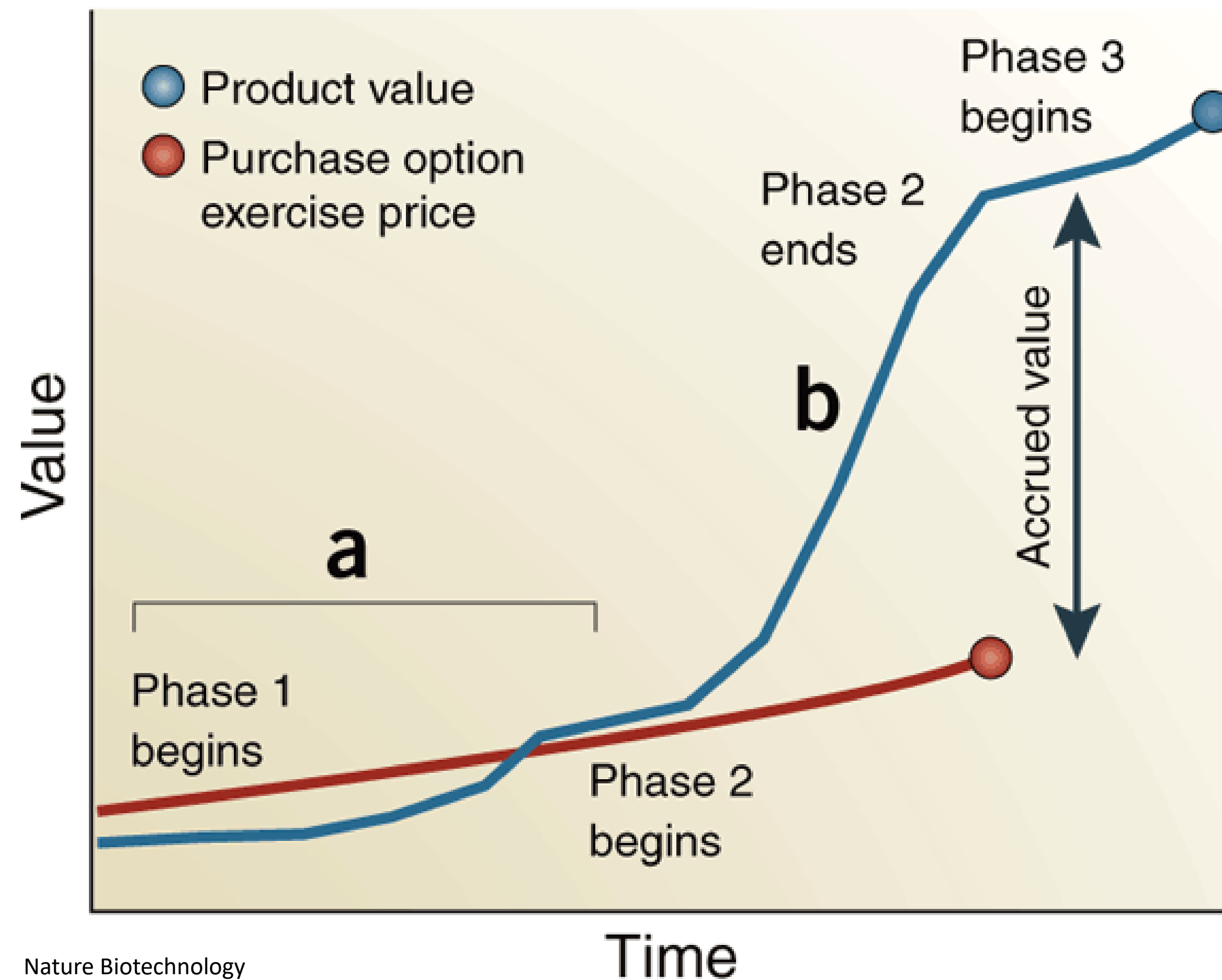
Advance other potential product candidates toward clinical development

PEX010 clinical trial

Report PEX010 clinical trial results



The Value of Phase 2 Clinical Results



Provides Significant Value Increase Potential

- Phase 2 results are expected in H1 2027
- Preclinical and clinical results support the potential for positive Phase 2 results
- The plan is to partner with a pharma company after positive Phase 2 results and create liquidity for investors
- Recent information indicates upfront fees from pharma partnering in Phase 2 have increased 4-fold since 2022¹⁰

Comparable Companies

		Market Cap
Compass Pathways	NASDAQ; CMPS	\$420M
Mindset Pharma	CSE: MSET	\$59M
Atai Life Sciences	NASDAQ; ATAI	\$401M
Cybin	NYSE; CBYN	\$200M
Mind Medicine	NASDAQ; MNMD	\$589M
GH Research	NASDAQ; GHRS	\$870M

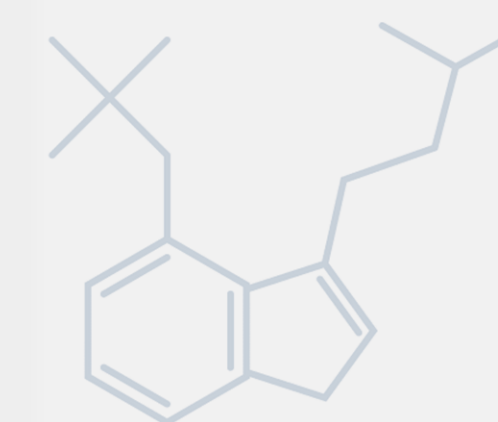
Green text indicates companies with Phase 2 results

- ✓ Mindset Pharma is the company most closely relevant to NeoLumina's valuation as a company starting Phase 2 – recently acquired for \$59M
- ✓ All the other companies have Phase 2 results and have valuations several times greater than NeoLumina

NeoLumina is positioned to create significant value with this first financing round

Many private companies are in preclinical development or Phase 1 and most have raised Series A and Series B rounds

NeoLumina is preparing to apply to start Phase 2 clinical trials and is just at the seed round stage with the \$500K put in so far by founders, management and advisors



Summary of the Opportunity

- ✓ Proprietary natural psilocybin-based product candidate being prepared to submit for Phase 2 clinical trials for eating disorders, the deadliest psychiatric disorder, where there are few approved drugs
 - The first Phase 2 trial will be for binge eating disorder, which represents the largest of all the eating disorders
 - ~70% of people with binge eating disorder are obese, providing another significant value-creation opportunity
- ✓ Natural psilocybin has been shown to be more effective than synthetic psilocybin
- ✓ Only \$500K has been put into the company to date - all by founders, management and advisors
- ✓ Seed financing round is the first funding for investors – so very attractive for initial shareholders
- ✓ Significant value creation potential with positive Phase 2 clinical results
- ✓ Pharma partnering can bring in substantial non-dilutive capital and additional value with Phase 2 data
- ✓ Plan to create liquidity for initial investors at a much larger valuation with positive clinical trial results and possible pharma partnering deal

Main Corporate Objectives for Value Creation



2025

- Complete seed financing
- Initiate eating disorder clinical trial
- Advance development of natural molecules for other indications
- Advance development of lead analog molecules

2026-2027

- Complete eating disorder clinical trial
- Complete pharma partnering deal
- Create liquidity through a public offering