

# Capitalizing on Consciousness?

## Innovative Mental Health Solutions

2022 PRIMER

Jefferies

# Capitalizing on Consciousness: Innovative Mental Health Solutions

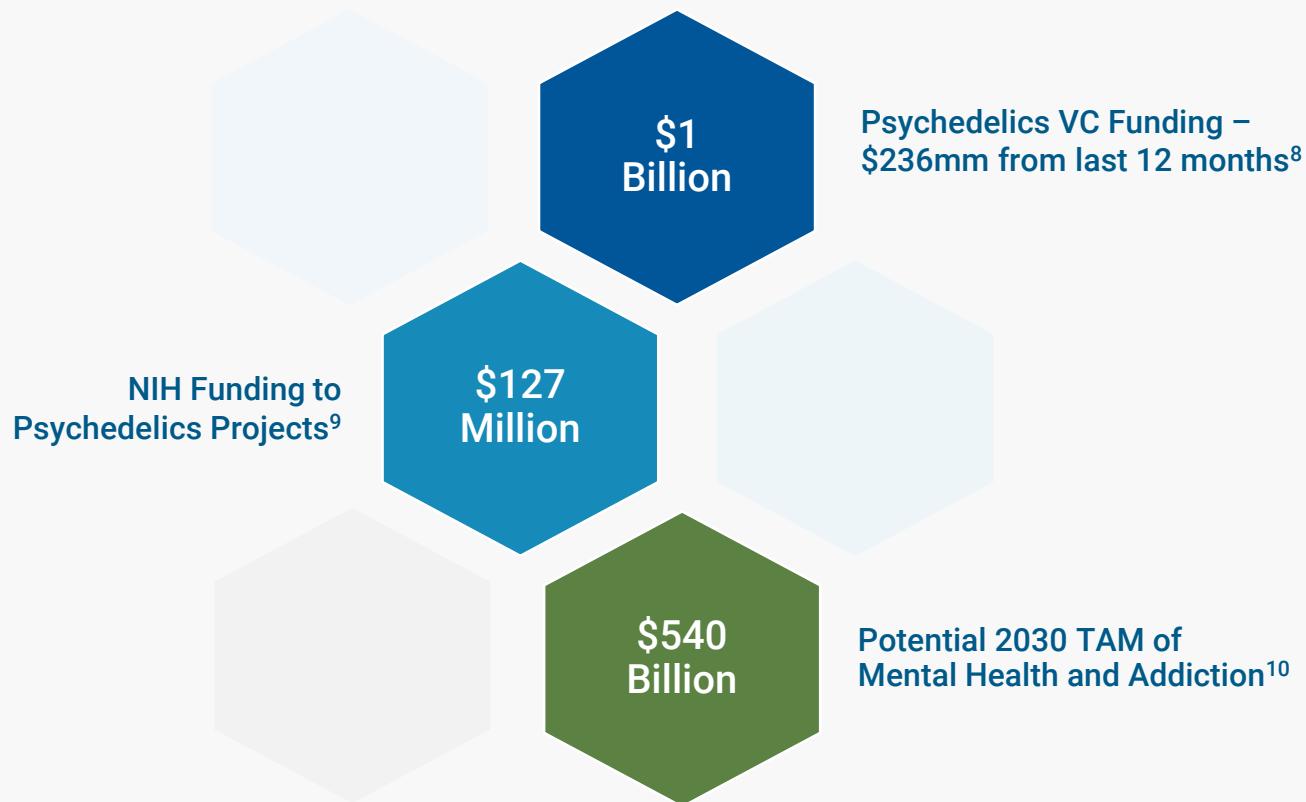
The global mental health crisis is severe and growing. One in five people reportedly struggle with mental illness, which affects not only the individual but broader society.<sup>1</sup> As the World Health Organization states, “**There is no health without mental health**”.

Financially, this crisis carries a heavy burden – global costs of just 2 common mental health conditions, depression and anxiety, amount to over **\$1 Trillion annually**.<sup>2</sup>

Many point to existing pharmaceuticals and therapeutic treatments as ineffective. Of nearly 9 million Americans who take antidepressants, the medicine fails 30% of them.<sup>3</sup>

Mental health and addiction is a **\$380 Billion industry, expected to reach \$540 Billion by 2030**<sup>4</sup>. The repercussions impact at least one billion lives, and yet still has no market leading solutions.<sup>5</sup>

**Enter: Psychedelic medicine.** Research from Johns Hopkins<sup>6</sup>, New York University<sup>7</sup>, and other institutions on the potential of psychedelic use in therapy gives some investors hope we’re on the cusp of a **mental health treatment breakthrough**.



1 [WHO](#)

2 Ibid

3 [NYT](#)

4 [Allied Market research](#)

5 [WHO](#)

6 [John's Hopkins Medicine Newsroom](#)

7 [NYU Langone News Hub](#)

8 PitchBook

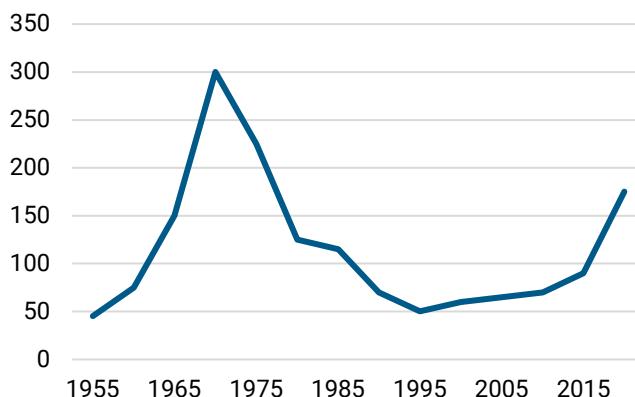
9 NIH

10 [Allied Market research](#)

# Why Now?

## PUBLICIZED CONTENT AND PROJECTS ARE RAISING AWARENESS

### Academic Publications on Classic Psychedelics



Source: Heffter Research Institute

- Academic publications are at their highest levels since the 1970's, when psychedelics were classified as a 'Schedule 1 drug' by the DEA.<sup>11</sup>
- Books and articles from popular authors like Michael Pollan<sup>12</sup> and documentaries across platforms<sup>13</sup> kickstarted a social movement.
- Headlines highlight research of drugs like Ketamine, MDMA, and Psilocybin (mushrooms) relieving the effects of mental illness such as depression, PTSD, anxiety and addiction.<sup>14</sup>

## COMPANY READOUTS AND BUSINESS PLANS RESHAPING THE LANDSCAPE

- Positive proof of concept data has been supported by the science, and companies have been innovative around implementing double-blind, placebo-controlled studies to show efficacy.<sup>15</sup>
- Dozens of biotech companies are mapping out disciplined, responsible, and federal approval-aligned approaches to psychedelic drug development and testing.<sup>16</sup>
- Digital therapeutics and devices may be the key for projects to scale and be commercially viable.<sup>17</sup>

### Notable Upcoming Company Clinical Trials (*dozens more in Phase I and II...*)

	Phase II	Phase III
<b>MAPS</b>	MDMA for Eating Disorders and Anxiety	MDMA for Post-traumatic stress disorder (PTSD) and Treatment-Resistant Depression (TRD)
<b>Compass Pathways</b>	COMP360 for Treatment-Resistant Depression (TRD)	Expected 2024
<b>Usona Institute</b>	Psilocybin for Major Depressive Disorder (MDD)	TBD
<b>MindMed</b>	MM-120 (LSD) for ADHD and General anxiety disorder	TBD
<b>Atai Life Sciences</b>	PCN-101 (Ketamine) for Treatment-Resistant Depression (TRD)	TBD

Source: Psychedelic Alpha

11 [Heffter Research Institute](#)

12 Michael Pollan, *How to Change Your Mind*. 2018

13 [Open Foundation](#)

14 [WSJ](#)

15 Jefferies Equity Research

16 Ibid

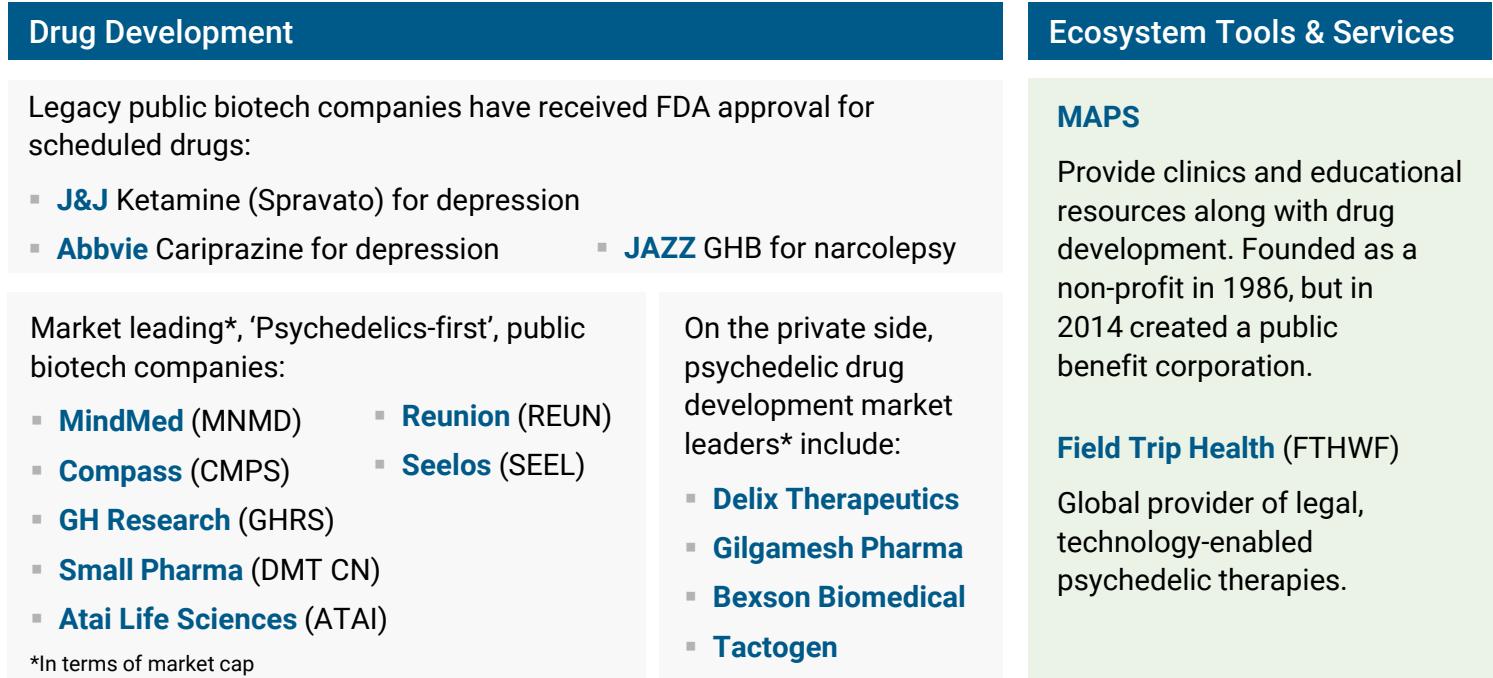
17 Empath Ventures

# Institutional Products and Players

There are multiple channels through which investors have accessed investments in psychedelics. Over **30 publicly-traded companies** and around **50 private companies** are pursuing psychedelics projects.<sup>18</sup> Several **family offices, foundations, biotech-focused hedge funds, and venture capital firms** are actively putting money to work – investing in research, drug development, and infrastructure companies and organizations.

## PUBLICIZED CONTENT AND PROJECTS ARE RAISING AWARENESS

Some companies are focused on drug development, while others offer infrastructure solutions and tools for the ecosystem – such as retreats or clinics for psychedelic therapeutic use.



\*In terms of market cap

## KEY INVESTORS

- **Family Offices** – Large investor vertical interested in psychedelics. These groups can typically write smaller ticket sizes and have more nimble diligence processes.<sup>19</sup>
- **Foundations** – Groups focused on social causes are invested in the financial and scientific opportunities. The Steve & Alexandra Cohen Foundation has given \$19mm to psychedelics projects.<sup>20</sup>
- **High Net Worth Individuals** – Marc Andreessen (A16z)<sup>21</sup>, Peter Theil (Paypal)<sup>22</sup> and others have publicly made investments.
- **VC's and Hedge Funds** – Venture capital firms have been the main fundraising source for psychedelics start-ups.<sup>23</sup> Some biotech-focused hedge funds have recently gotten involved in the space.<sup>24</sup>

## Psychedelics VC Fundraising



18 PitchBook

19 Jefferies Capital Intelligence

20 Steven & Alexandra Cohen Foundation [– Psychedelic Research](#)

21 Empath Ventures

22 CNBC

23 Crunchbase

24 Bloomberg

# Path to Legality and Commerciality

## REGULATORY HEADWINDS REMAIN

Psychedelics were labeled as a Schedule 1 drug in 1970, which classified the drug as having no accepted medical use and high potential for abuse. To test and roll out any of these drugs at scale, psychedelics will need to be **approved by the FDA and rescheduled**.

There are multiple approaches countries and states have taken to ‘legalize’ medication historically, and many biotech companies and stakeholders are endorsing a certain path for psychedelics. The route seems to be one of **federal medicalization**, in accordance with FDA rules, not recreational legalization state-by-state, such as popularized by the Cannabis industry.<sup>25</sup>

The FDA announced earlier this year that they plan to take a science-based, *non-political*, approach to regulation.<sup>26</sup> That, along with recent breakthrough therapy designations of MDMA in 2017 and Psilocybin in 2018, leads many advocates to believe the FDA could be **more receptive to prescription psychedelic drug** use in the coming years. The next 12-24 months will be critical to understanding how soon we may expect to see psychedelics legalization in some form.

## Key US Psychedelics Investment & Approval Dates



## 2026 ► Proliferation of the Psychedelics Investable Universe?

Sources: Jefferies, FDA, Empath Ventures

25 [National Cannabis Industry Association](#)

26 Jefferies Equity Research

# Investors are Asking...

## WILL THE CANNABIS INDUSTRY BE PREDICTIVE OR INFORMATIVE?

Cannabis and psychedelics are commonly cited in the same ‘investment category’ and appear together in ETF’s and investor portfolios. Cannabis has paved the way for the shifting public perception of psychedelics, but there are large scientific and investment distinctions between the two industries.

- **Different Substances and IP:** Cannabis typically refers to the weed plant and compounds: THC and CBD. Psychedelics refers to a portfolio of plants, synthetic drugs, retreats, clinics, and infrastructure. This portfolio is also growing as companies develop new and novel molecules.<sup>27</sup> Patents on IP and medical devices also presents huge commercial opportunities.
- **Multiple Touchpoints:** To reap the medical benefits of psychedelics requires a “set & setting” experience – consumption takes place in a certain environment, under supervision, and with aftercare. Required touchpoints for a positive therapeutic outcome could offer additional business opportunity.
- **Target Markets and Use Cases:** Cannabis may have a larger TAM,<sup>28</sup> and its use-cases are more recreational or revolve around pain management for medical use. Psychedelics may have recreational applications over time but focus near-term is on medical use and federal (FDA) breakthrough therapy approval.

## CAN PSYCHEDELICS SCALE SAFELY AND SUSTAINABLY?

Most investors are less concerned with company readouts and efficacy, and more curious about the commercial viability of psychedelic drug development and delivery.

- **Time & Costs:** The commonly used psychotherapy model includes 2 therapists for a 6–8-hour session. This format plus high dosage pricing adds up with limited insurance coverage options.
- **Institutional Involvement:** Institutions in financial services, academia, and the military have begun facilitating transactions and offering lab and clinical space for companies. However, it’s unclear how many institutions will do business with a still pre-approved and unregulated drug industry.
- **Patient and Therapist Supply:** Will existing therapists utilize psychedelics? Will patients pursue this treatment style even as more risks are publicized? The FDA requires REMS (Risk Evaluation and Mitigation Strategies) to be published for approval, which has historically weakened demand.

27 [Vice](#)

28 [NIH](#)

# How Jefferies Can Help

Jefferies global investment bank has built a reputable healthcare franchise across research, trading, corporate access, and banking. Below find details on business lines focused on biotech and psychedelics. Please reach out to your prime brokerage coverage person for contact details and more information.

- **Banking:** One of the largest healthcare investment banking teams in the world. 135+ bankers worldwide, including 21 coverage offices in the United States, Europe, China, India, and Japan. Key relationships with biotech and psychedelics-focused founders, sponsors, and investors.
- **Research & Corporate Access:** Broad and unique coverage of healthcare across subsectors and geographies, with a focus on biotech. Inaugural mental health summit took place in Fall '22 featuring 12+ public and private psychedelics companies. Host annual global healthcare conferences in London and New York which feature a handful of psychedelics-focused companies.

## STRATEGIC CONTENT

**Annette Rubin**  
[Arubin2@jefferies.com](mailto:Arubin2@jefferies.com)  
(212) 778-8361

**Shannon Murphy**  
[shannon.murphy@jefferies.com](mailto:shannon.murphy@jefferies.com)  
(212) 336-1139

## CAPITAL INTELLIGENCE

**William Gibbs**  
[wgibbs@jefferies.com](mailto:wgibbs@jefferies.com)  
(212) 336-7292

**Leor Shapiro**  
[lshapiro@jefferies.com](mailto:lshapiro@jefferies.com)  
(212) 336-6267

---

## IMPORTANT DISCLAIMER

THIS MESSAGE CONTAINS INSUFFICIENT INFORMATION TO MAKE AN INVESTMENT DECISION.

This is not a product of Jefferies' Research Department, and it should not be regarded as research or a research report. This material is a product of Jefferies Equity Sales and Trading department. Unless otherwise specifically stated, any views or opinions expressed herein are solely those of the individual author and may differ from the views and opinions expressed by the Firm's Research Department or other departments or divisions of the Firm and its affiliates. Jefferies may trade or make markets for its own account on a principal basis in the securities referenced in this communication. Jefferies may engage in securities transactions that are inconsistent with this communication and may have long or short positions in such securities.

The information and any opinions contained herein are as of the date of this material and the Firm does not undertake any obligation to update them. All market prices, data and other information are not warranted as to the completeness or accuracy and are subject to change without notice. In preparing this material, the Firm has relied on information provided by third parties and has not independently verified such information. Past performance is not indicative of future results, and no representation or warranty, express or implied, is made regarding future performance. The Firm is not a registered investment adviser and is not providing investment advice through this material. This material does not take into account individual client circumstances, objectives, or needs and is not intended as a recommendation to particular clients. Securities, financial instruments, products or strategies mentioned in this material may not be suitable for all investors. Jefferies does not provide tax advice. As such, any information contained in Equity Sales and Trading department communications relating to tax matters were neither written nor intended by Jefferies to be used for tax reporting purposes. Recipients should seek tax advice based on their particular circumstances from an independent tax advisor. In reaching a determination as to the appropriateness of any proposed transaction or strategy, clients should undertake a thorough independent review of the legal, regulatory, credit, accounting and economic consequences of such transaction in relation to their particular circumstances and make their own independent decisions.

© 2022 Jefferies LLC