

For personal use only



**emyria**  
**(ASX:EMD)**

*Creating tomorrow's therapies  
from today's patient stories*

**Strategic Update & Rights Issue Launch**  
**September 2023 | [mwinlo@emyria.com](mailto:mwinlo@emyria.com)**

# emyria

## OUR MISSION

Set a new standard for global mental health care by blending compassionate care, data insights and pioneering therapies.

For personal use only



# 7 INVESTMENT HIGHLIGHTS for EMYRIA (ASX : EMD)

## Australia is leading the charge globally in new treatments for mental health

The TGA's decision to legalise psychedelics, which came into force in July 2023, puts Emyria and Australia potentially years ahead of other jurisdictions like the US.

**A regulatory environment that advantages Emyria**

## At the forefront of psychedelic assisted treatment

Emyria has the infrastructure (clinics and team) and approved care models needed to provide psychedelic treatments under TGA rules.

**Ready to be one of the first ASX companies providing these treatments**

## Novel MDMA products

Emyria has partnered with UWA to develop a number of novel MDMA-like treatments.

The goal is to modify MDMA and unlock new therapeutics for neuropsychiatric disorders like Parkinson's disease.

**Strong IP covering potentially unique medicines**

## Unparalleled access to patient data

Through our clinics, Emyria has access to opt-in patient data and uses a state-of-the-art data platform - Palantir Foundry - to reveal unique insights.

**Data that informs better care practices and drug development opportunities**

## Clinics delivering revenue

Emyria provides wraparound, multidisciplinary mental health care services to patients.

We made \$1.6M last FY, targeting \$5.7M this FY.

**Revenues subsidise R&D**

## CBD "Side bets"

Emyria is developing Ultra-Pure CBD for the treatment for anxiety symptoms and pain.

We have secured a commercial partner and are working with others, such as, the National Institutes of Health in the US to advance the program

**CBD products in clinical trials**

## Experienced management team

Emyria's Board and Management are highly qualified in technology-backed clinical services, data and drug development.

**Global advisors to support our global ambitions**

For personal use only

## Rising Demand, Inadequate Solutions

# \$225 Billion

US Spending (2019) <sup>1</sup>

Despite large costs, a gaping need for affordable, effective and durable treatments persists.

## The Promise of Psychedelic-Assisted Therapy



Psychedelic-assisted therapy is showing promising results in large clinical trials. <sup>2</sup>

This is encouraging significant clinical interest and investment, globally.

## The Challenge of Psychedelic-Assisted Therapy



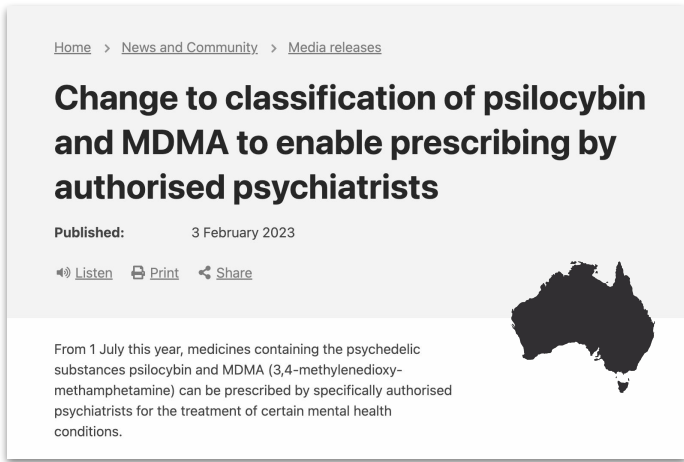
Safe delivery of psychedelic-assisted therapy demands cooperation between therapists and psychiatrists, thoughtful preparation of the clinic environment and careful diagnosis, screening, expectation setting and monitoring with patients.

**Very few clinical services are prepared for these treatments, limiting patient access.**

For personal use only

## Leading the Global Charge

TGA's recent rescheduling<sup>1</sup> of **MDMA**-assisted therapy (MDMA-AT) for PTSD & **psilocybin**-assisted therapy (P-AT) for treatment resistant depression creates immense potential for innovators in mental health.



Australia's proactive stance on psychedelic therapies places it at least a year ahead of the rest of the world.

## Not Just Drugs, But Holistic Care

*“For approval to prescribe, psychiatrists will need to demonstrate **appropriate training, patient selection, evidence-based treatment protocols and patient monitoring.** Further, ongoing **psychotherapeutic support remains an essential component** of the psychedelic treatment model.”*

**-RANZCP (College of Psychiatrists) <sup>2</sup>**

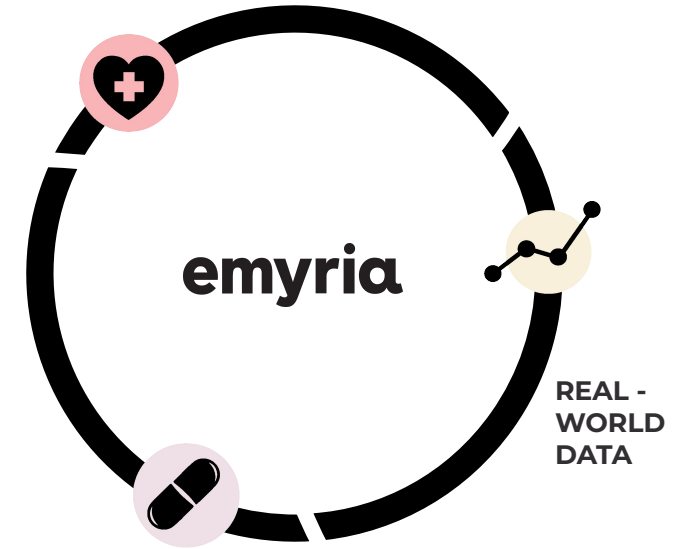


## Emyria's Model is Well Positioned

The future of mental healthcare will intertwine new drugs with new care models.

With unique expertise in drug development & care delivery, underpinned by data, Emyria is uniquely prepared to lead this new frontier.

CARE DELIVERY



THERAPY DEVELOPMENT

SOURCES:

- 1. <https://www.tga.gov.au/products/unapproved-therapeutic-goods/mdma-and-psilocybin>
- 2. RANZCP has not provided its consent to be named or for the statement to be included in this Presentation

# EMYRIA'S UNIQUE BUSINESS MODEL | MERGING CARE DELIVERY & DRUG DEVELOPMENT

For personal use only

## care DELIVERY

- National clinics & telehealth
- 30 clinicians & specialists
- 14,000+ patients treated *so far*
- Innovative care provision:
  - MDMA-AT
  - Cannabinoid medicines

## real-world DATA

- We track clinical outcomes
- Palantir Foundry as core data platform for analysis
- Remote patient monitoring

## drug DEVELOPMENT

- MDMA-inspired medicines
- Ultra-Pure CBD medicines

Potential for sustainable service *Revenues & Data*

Potential for *Milestone & License Revenues*

## (1) Solidify Multiple Potential Revenue Streams *Via:*

### **DIRECT PATIENT TREATMENTS:**

Provides potential to generate steady revenues from patients and health payers. We specialise in emerging treatments.

### **STRATEGIC CLINICAL PARTNERS:**

By licensing our methodologies we can potentially unlock additional revenues and foster innovation.<sup>1</sup>

### **DRUG PROGRAM LICENSES:**

As our drug development initiatives mature and succeed, they may present revenue opportunities through licensing and partnerships.

## (2) Sustainable National and Global Growth *Via:*

### **TECH-DRIVEN OPTIMISATION**

Leveraging technology ensures efficient operations, better patient outcomes, & scalability.

### **EXTENDING OUR FOOTPRINT:**

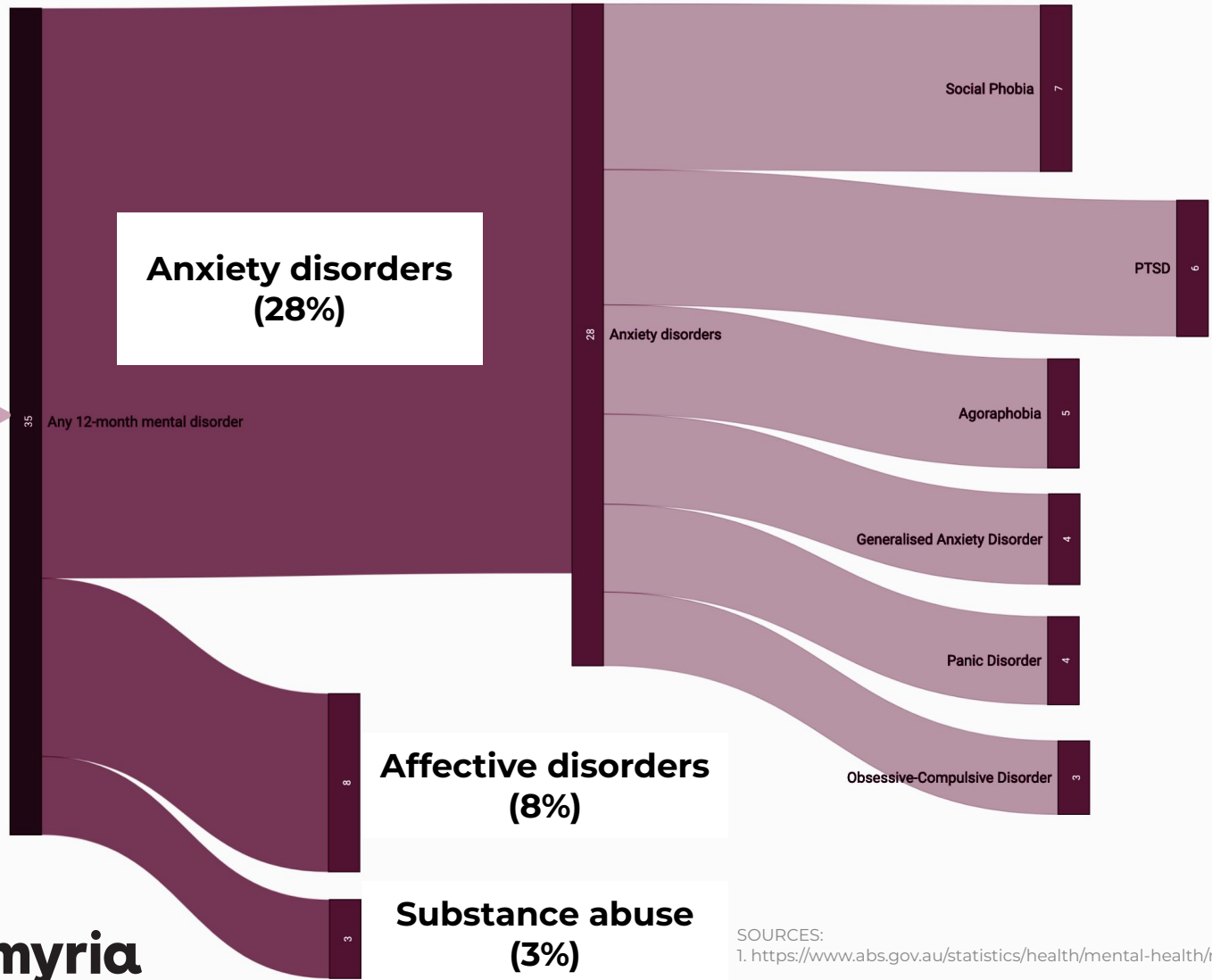
With a robust model in place, we can expand organically or via strategic partnerships or acquisitions.

For personal use only

# OUR CURRENT FOCUS | COMPLEX MENTAL HEALTH

35% of Australian adults experienced at least 1 mental health challenge in the last 12 months<sup>1</sup>

For personal use only



PTSD (6%)

Amidst Australia's mental health landscape, we're prioritising unmet needs in **anxiety disorders** with proprietary dose forms of **cannabinoids** and **MDMA-AT for complex & chronic PTSD**.

As PTSD shares substantial symptom overlap with **depression** and **chronic pain**, we believe our approach has the potential to positively impact these adjacent mental health conditions.

Given the recent TGA changes and our multidisciplinary team, *Emyria is starting with MDMA-AT for PTSD*.



# WHAT IS POST-TRAUMATIC STRESS DISORDER (PTSD)? <sup>1</sup>

*A chronic, debilitating mental health disorder that can occur following a traumatic event*

## Symptoms

### Re-experiencing:

Intrusive memories, flashbacks, and nightmares

### Avoidance:

Evading reminders of the trauma and feeling detached

### Increased arousal:

Irritability, sleep issues, and being easily startled

### Mood & cognition:

Persistent negative emotions and distorted blame

### Physical symptoms:

Palpitations, sweating, and gastrointestinal issues

## Current Treatments

### TREATMENT OPTIONS FOR PTSD



COUNSELLING & PSYCHOTHERAPY



PRESCRIPTION



EXPOSURE THERAPY

Re-imagining events in a safe environment



GROUP THERAPY

Up to **50%** treatment resistance <sup>2</sup>

## Market for MDMA-AT <sup>3</sup>

### Total Addressable Market (TAM)

*In any 12 month period, PTSD affects 6% of Australian adults  
~1,000,000 (much greater globally)*



### Serviceable Addressable Market (SAM)

*50% of sufferers have treatment chronic/severe PTSD; ~22% not suitable  
Eligible for MDMA-AT ~400,000*



### Early Target Market

*1-10% of patients suitable for MDMA-AT in Western Australia:  
~300 to 3,000 patients*

At ~\$30k/pt for three MDMA-AT sessions, there exists an opportunity for transformative healing for patients and a promising revenue stream to support our growth

#### SOURCES:

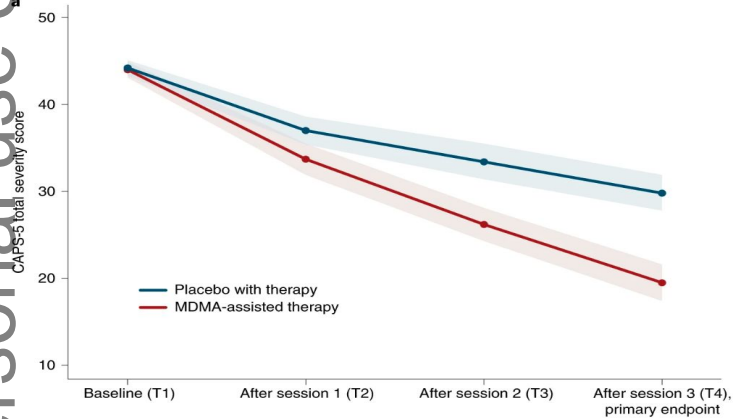
1. Davis LL, Schein J, Cloutier M, et al. The economic burden of posttraumatic stress disorder in the United States from a societal perspective. *J Clin Psychiatry*. 2022;83(3):21m14116

2. Committee on the Assessment of Ongoing Efforts in the Treatment of Posttraumatic Stress Disorder; Board on the Health of Select Populations; Institute of Medicine. Washington (DC): National Academies Press (US); 2014 Jun 17.

3. See workings on SLIDE 31

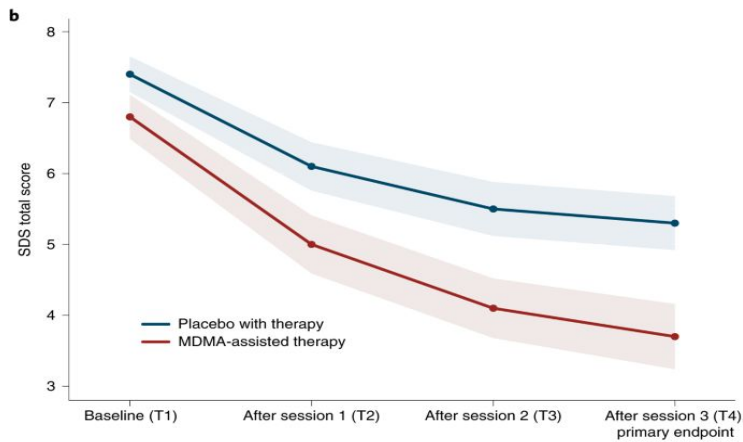
# MDMA-ASSISTED THERAPY (MDMA-AT) SHOWING REMARKABLE PROMISE FOR PTSD<sup>1</sup>

## Improves symptoms



MDMA-AT significantly attenuated PTSD symptomology, as shown by the change in CAPS-5 total severity score from baseline to 18 weeks after baseline<sup>1</sup>

## Improves function



MDMA-AT significantly reduced clinician-rated functional impairment, implying an improved quality of life, as shown by the change in Sheehan Disability Scale score from baseline to 18 weeks after baseline<sup>1</sup>

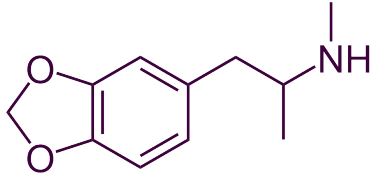
## Durable benefits

“ The majority of participants reported lasting benefits at Long Term Follow-Up, and over half reported benefits continued to grow, suggesting participants were able to successfully integrate therapeutic experiences into their daily lives to cultivate continued healing and growth”<sup>1</sup>

For personal use only

# HOW DOES MDMA-AT WORK?

## MDMA



MDMA (3,4-methylenedioxyamphetamine or “ecstasy”)

Causes release of 3 neurotransmitters:

### 1 Serotonin

contributes to mood, prosocial effects

### 2 Dopamine

associated with reward, euphoria

### 3 Noradrenaline

stimulant activity, attention

## Clinical Effects of MDMA

MDMA is an “entactogen” - drugs that produce feelings of emotional communion, oneness, relatedness, emotional openness & fear extinction.

**INCREASES**

feelings of wellbeing  
sociability & extroversion  
interpersonal trust

**AN ALERT STATE OF CONSCIOUSNESS**

**DECREASES**

feelings of fear & defensiveness

## Role in Therapy

MDMA is thought to assist patients access traumatic memories without overwhelming distress.

The improved feelings of trust and wellbeing while under the influence of the medication can support open communication and strengthen the therapeutic alliance between patient and therapist.

Reduced defensiveness is thought to facilitate more honest introspection and acceptance of therapeutic guidance.

Ultimately, these features are believed to improve the efficacy of skilled psychotherapy.

## Risks & Exclusions

Patients with cardiovascular disease or psychotic disease are generally excluded from therapy. The main side effects of therapy can include anxiety, restlessness, fatigue, jaw-clenching, headache and transient increases in blood pressure - all of which are closely monitored during therapy.

For personal use only

# EMYRIA'S MDMA-AT MODEL

## Ethics-Approved Care Model <sup>1</sup>

- Fit-for-purpose clinical space
- Trained multidisciplinary team
- Stringent clinical governance & oversight
- Two therapists for all sessions
- GMP-grade medicine & tight supply chain

**PRE-TREATMENT PERIOD**  
2-12 weeks



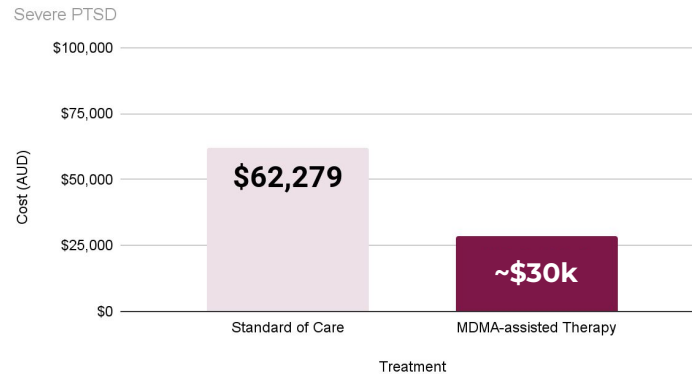
**3 CONSECUTIVE TREATMENT & INTEGRATION PERIODS**  
(12 weeks)



**FOLLOW-UP PERIOD**  
(12 months from last Treatment Session)

## Anticipated Cost-Effective Compared to Standard Care<sup>2</sup>

Total Cost of MDMA-AT vs Standard of Care (18 months)



**MDMA-AT anticipated to be cost effective** especially for severe PTSD over an 18 month time period. <sup>2</sup>

Avenceña et al noted that increased access to MDMA-AT could save lives and improve the health of patients with chronic and severe PTSD, while reducing healthcare costs. <sup>3</sup>

## Who Might Pay For MDMA-AT?

### Health insurers and government

We will approach payers to offer our support in the evaluation cost-effectiveness for these new treatment approaches.

**Individual patients** - patients will not be expected to pay while participants in clinical trials, however, once Authorised Prescriber status has been obtained there is the possibility to offer access to patients able to pay out-of-pocket

### SOURCES:

1. See ASX release 08 June 2023

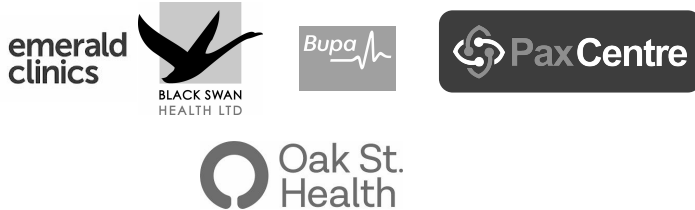
2. Cost estimates from internal evaluation. Majority of costs related to Standard of Care related to in-patient treatment costs. Majority of costs related to MDMA-AT related to length of therapist engagement

3. See Avenceña, A.L.V., et al. The Costs and Health Benefits of Expanded Access to MDMA-assisted Therapy for Chronic and Severe PTSD in the USA: A Modeling Study. Clin Drug Investig 42, 243-252 (2022) AND

# OUR TEAM'S ADVANTAGES | LEADERS IN CARE, DATA and DRUG DEVELOPMENT

## Innovative Care Delivery

Our team has experience across clinical care, consulting, and academia. With backgrounds ranging from specialist medical practitioners with esteemed roles in primary health care and medical councils, our team understands the challenges and intricacies of sustainable healthcare delivery.



## Data, Research & Technology

With experience at from Silicon Valley tech giants to innovative healthcare tech startups, our team understands the world of complex data integration and analysis. With experience advising the FDA on tech initiatives and leadership roles in healthcare data firms, we understand the potential for modern tech and data to revolutionise mental health care.



## Global Drug Development Success

Our team has experience across the vast spectrum of the drug development lifecycle. With involvement in numerous clinical trials, major regulatory approvals across continents, and leadership in global biotech firms, we have the breadth and depth of knowledge to navigate the intricate pathways of drug innovation.



For personal use only

# OUR BOARD



**CHAIRMAN**  
**Dr Stewart Washer**  
**PhD (Microbiology)**  
 Serial entrepreneur  
 Multiple ASX listings



**NE-DIRECTOR**  
**Prof Sir John Tooke**  
**FRCP, FMedSci**  
 Clinician-researcher  
 Expert in learning health systems



**E-DIRECTOR**  
**Dr Karen Smith**  
**MD, PhD, MBA, LLM**  
 US-based biopharma executive. Multiple FDA approvals



**MANAGING DIRECTOR**  
**Dr Michael Winlo**  
**MBBS(Hons), MBA**  
 Entrepreneur, big data, clinical trials and drug development



**NE-DIRECTOR**  
**Dr Mohit Kaushal**  
 Technology enabled clinical services, strategy and investment



**MEDICAL DIRECTOR**  
**C/Prof Alistair Vickery**  
**MBBS, FRACGP, FCHSM**  
 Medical Director  
 Epidemiological researcher

For personal use only

## CLINICAL & SCIENTIFIC LEADERSHIP



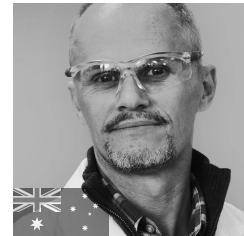
**Claire Kullak**  
**BSc (Nursing)**  
 Trauma-specialist and nationally recognised trainer



**Dr Jon Laugharne**  
**MBBS, FRCP (UK), FRANZCP**  
 Consultant psychiatrist & therapist



**Dr Jenny Morgan**  
**MBBS, FRANZCA**  
 Consultant pain specialist



**Prof Matt Piggott**  
**BSc, PhD (Chemistry)**  
 Specialist in amphetamine chemistry and novel drug design



**Dr David Gunn**  
**MBBS, FRACGP**  
 Cannabinoid expert  
 Substance abuse & mental health treatment



**Dr Jeremy Tannenbaum**  
**BSc, MBBS (Hons), FRANZCP**  
 Consultant Pain Specialist  
 Consultant Psychiatrist

# PROVEN MOMENTUM | TRACTION TO DATE

## Key Milestones Achieved

### MDMA-assisted therapy (MDMA-AT)

Ethics-approved protocol, training completed & drug supply secured<sup>1</sup>

### >150 Novel MDMA analogues

Created and screened large library of unique MDMA-like compounds<sup>2</sup>

### 3 proprietary dose forms of CBD

In preclinical and clinical trials<sup>3</sup>

### Commercial partner

Secured Aspen Pharmacare for sales and distribution of EMD-RX5 pending successful registration with the TGA<sup>4</sup>



## Robust Patient Outcomes

**14,000**

Patients treated through our clinical services network

**30% reduction in opioids**

After 6 months care at Emerald Clinics<sup>5</sup>



**4 years of symptom improvement**

Across anxiety, depression, stress & sleep<sup>6</sup>

## Strategic Growth Initiatives



Acquisition of Australia's leading, multidisciplinary psychological trauma treatment centre<sup>7</sup>



Member the Foundry For Builders Program providing access to the world's most advanced data platforms<sup>8</sup>

### Future:

Launch new care programs  
Advance drug development programs  
Clinical partnerships

#### SOURCES:

1. See ASX release 08 June 2023
2. See ASX release 20 March 2023
3. See ASX release 04 April 2023
4. See ASX release 04 April 2023

#### SOURCES:

5. See ASX release 07 June 2021
6. Vickery AW, et al (2022) A large Australian longitudinal cohort registry demonstrates sustained safety and efficacy of oral medicinal cannabis for at least two years. PLOS ONE 17(11): e0272241

#### SOURCES:

7. See ASX release 03 July 2023
8. See ASX release 07 October 2021

For personal use only

# OUR ROADMAP

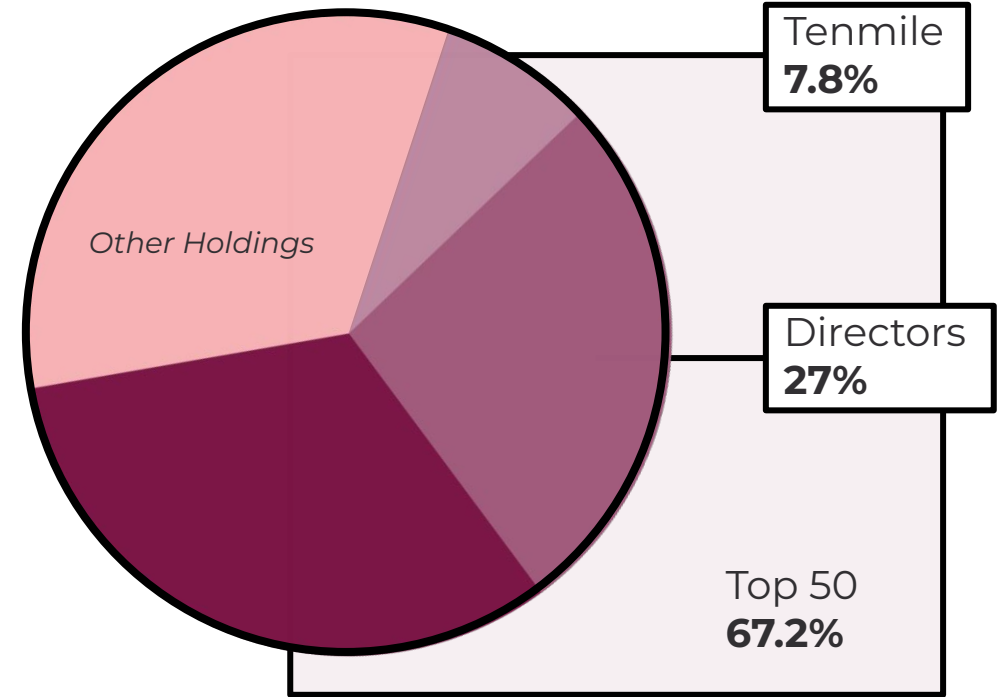
For personal use only

#	PROGRAM	MILESTONE 1	MILESTONE 2	MILESTONE 3	OTHERS
1	<b>Deliver MDMA-AT</b>	Begin treatment on first patient (MDMA)	Emyria psychiatrists obtain Authorised Prescriber status	Complete patient recruitment for Phase 2b trial (MDMA)	Complete Phase 2b trial for MDMA
2	<b>Develop Novel MDMA Treatments</b>	Animal study results for fast-acting MDMA analogue	Animal study results for Parkinson's MDMA analogue	Identify lead drug candidates for Phase 1 trial	
3	<b>Expand to Psilocybin &amp; Ketamine Therapies</b>	Approval for ketamine assisted therapy protocol	Begin treatment on first patient (ketamine)	Secure key approvals for psilocybin use	Begin treatment on first patient (psilocybin)
4	<b>CBD "Side Bet" Clinical Trials</b>	Recommence Phase 3 trial of low-dose CBD for stress & anxiety	Begin Phase 1 trial of high-potency CBD treatments	Results of Phase 1 trial of high-potency CBD treatments	
5	<b>Scale Clinical Health Services &amp; Engage Payers</b>	Secure a major payer partnership	Licence a care model to a clinical partner	Open a new clinic or form new clinical partnership	
6	<b>Expand Intellectual Property &amp; Build Partnerships</b>	Receive Clear Search Report from international patent examiner	Secure granted patents in national phase	File new patent family provisionals	Updated commercial license with UWA



# OUR CORPORATE STRUCTURE

KEY METRICS	VALUE
Market Capitalisation	~A\$31M
Last reported cash (at 30 Jun 2023)	A\$2.73M + \$2m Placement (Sep) + \$3.1m Rights Issue (Oct)



## Emyria overview

Understand how your share registry has changed over time.

Past year ▾

Shareholder count  Share price  Volume  Announcements



For personal use only

For personal use only

**ENTITLEMENT OFFER TO RAISE \$3.1m**

**Emyria (EMD) is launching a Entitlement Offer (“Offer”) to provide existing shareholders the opportunity to invest in advancing the next phases of our highly promising clinical programs.**

For personal use only

- Offer is expected to raise \$3.1m (before costs) to fund Emyria’s leading programs.

- Under the Offer, all shareholders holding Emyria shares by the Record Date (Wed, Sep 13th) will be eligible to participate.

- Full Details and Prospectus available 6 September 2023.

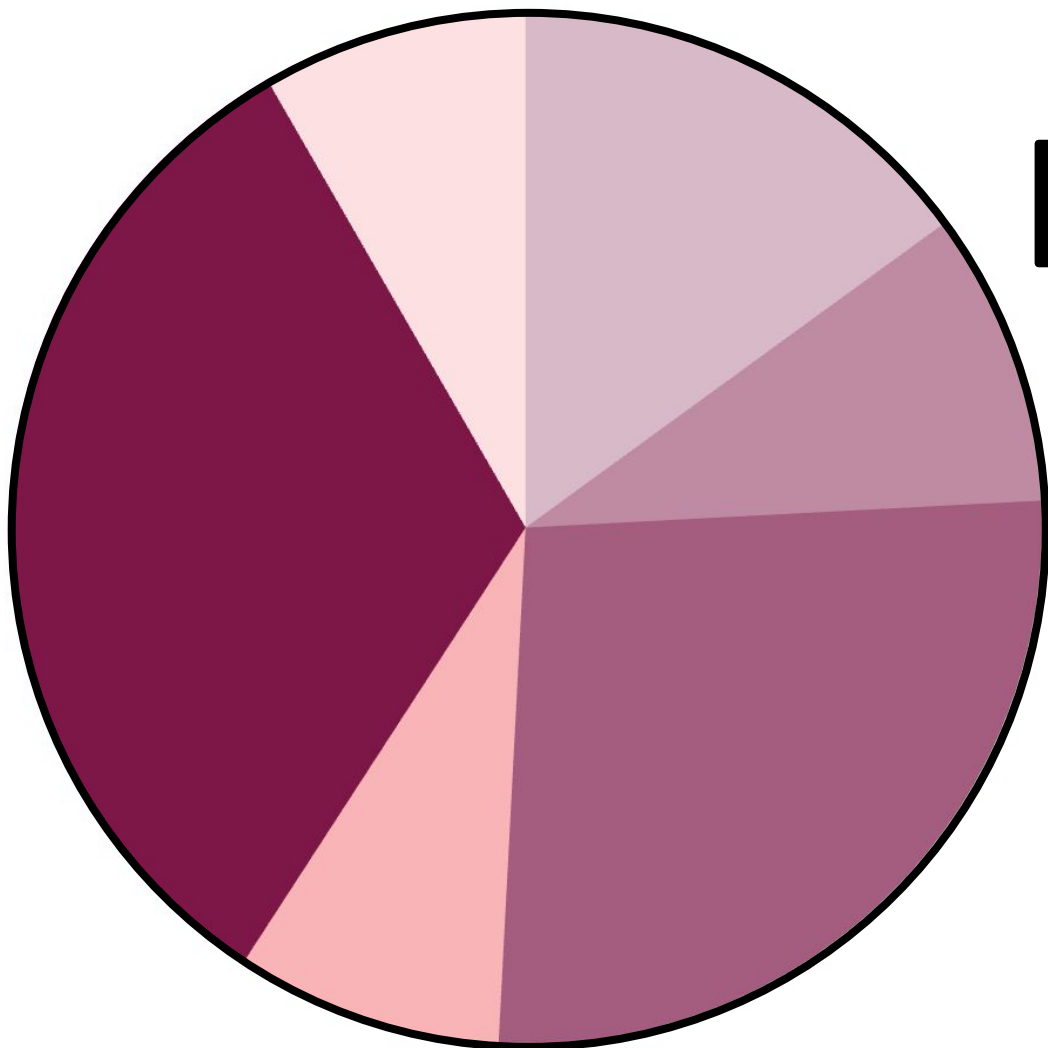
- For every 7.5 shares held by the Record Date, shareholders will be eligible to apply for 1 share priced at \$0.075.

- New shares issues will rank *pari passu* with existing shares from their date of issue.

- In addition, each successful applicant will be entitled to 1 free attaching, unlisted option for every 2 shares purchased under the Offer.

# ENTITLEMENT OFFER | USE OF FUNDS

For personal use only



**\$3.1m**

## PROPOSED EXPENDITURE

### CARE DELIVERY

- Finalise Pax Acquisition \$500,000
- Authorised prescriber launch \$375,000
- Service expansion (ketamine) \$775,000

### DRUG DEVELOPMENT

- CBD drug optimisation \$350,000
- MDMA-analogues 1 lead series to animal studies \$793,300

- DATA** \$250,000

- OFFER FEES \$56,700

## ENTITLEMENT OFFER | INDICATIVE TIMETABLE

For personal use only

Event	Date (2023)
Lodgement of Entitlement Offer Prospectus with ASIC	5 September
Announcement of Entitlement Offer Prospectus and investor presentation on ASX	6 September
Entitlement Offer “Ex” date Expected date for quotation of new shares issued under the Placement	12 September
Record Date to identify security holders entitled to participate in the Entitlement Offer	13 September
Entitlement Offer Prospectus and personalised entitlement and acceptance forms made available to persons entitled and announcement that this has occurred Entitlement Offer opening date	18 September
Entitlement Offer closes at 5:00pm (AWST)	28 September
Announcement of the results of the Entitlement Offer Appendix 2A and 3G for Entitlement Offer	5 October

\* Emyria retains the discretion to alter any or all of these dates

# ENTITLEMENT OFFER (RIGHTS ISSUE) | WEBSITE EXPLAINING THE OFFER

[OFFER.EMYRIA.COM](https://offer.emyria.com)

For personal use only

**emyria** [What is a Rights Issue?](#) [How to apply?](#) [Why is Emyria doing a Rights Issue?](#) [FAQ](#) [Contact](#) [Apply Now](#)

## Emyria Limited Rights Issue

The Board of Directors at Emyria warmly invites you to participate in our upcoming Rights Issue. This Capital Raising effort, targeting up to \$3.1 million, will help fast-track Emyria's mental healthcare programs, including MDMA-assisted therapy for PTSD, novel drug development, and payer engagement, while also supporting potential revenue growth and data collection.

Every Eligible Shareholder holding Emyria shares by the Record Date (Wednesday, 13th September, 2023) can contribute to Emyria's growth and is welcome to apply for shares priced at \$0.075 per new fully paid ordinary share. This presents an opportunity for shareholders to be an integral part of Emyria's development journey.

[Apply Now](#) [Learn more →](#)



## ENTITLEMENT OFFER | DISCLAIMER

In accordance with section 734(6) of the Corporations Act, the Company notes that:

- the Entitlement Offer will be undertaken pursuant to a disclosure document issued by the Company in accordance with section 713 of the Corporations Act (the Prospectus);
- the Prospectus is available on the Company's website ([www.emyria.com](http://www.emyria.com)) and the ASX Market Announcements Platform under the Company's ASX code "EMD";
- participants in the Entitlement Offer should consider the Prospectus in full before deciding to participate and acquire securities under the Entitlement Offer; and
- any participants in the Entitlement Offer will be required to complete the application form that will be in or will accompany the Prospectus.

For personal use only

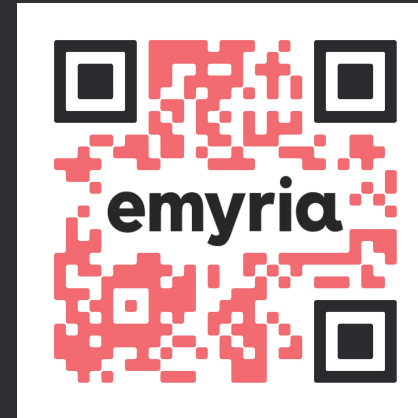
For personal use only

## CONTACT INFORMATION

<b>Michael Winlo</b>	mwinlo@emyria.com
<b>Investors</b>	investors@emyria.com
<b>Media</b>	media@emyria.com
<b>General</b>	info@emyria.com

### INVESTOR HUB:

<https://investorhub.emyria.com/>





For personal use only

**APPENDIX:**

# DISCLAIMER to presentation

This presentation has been prepared by Emyria Limited ACN 625 085 734 (Company or Emyria). This presentation is not a financial product or investment advice or recommendation, offer or invitation by any person or to any person to sell or purchase securities in Emyria in any jurisdiction. This presentation contains general information only and does not consider the investment objectives, financial situation and needs of individual investors. Investors should make their own independent assessment of the information in this presentation and obtain their own independent advice from a qualified financial adviser having regard to their personal objectives, financial situation and needs before taking any action. No representation or warranty, express or implied, is made as to the accuracy, completeness, reliability or adequacy of any statements, estimates, opinions or other information, or the reasonableness of any assumption or other statement, contained in this presentation. Nor is any representation or warranty (express or implied) given as to the accuracy, completeness, likelihood of achievement or reasonableness of any forecasts, prospective statements or returns contained in this presentation. Such forecasts, prospective statements or returns are by their nature subject to significant uncertainties and contingencies, many of which are outside the control of Emyria. To the maximum extent permitted by law, Emyria and its related bodies corporate, directors, officers, employees, advisers and agents disclaim all liability and responsibility (including without limitation any liability arising from fault or negligence) for any direct or indirect loss or damage which may arise or be suffered through use or reliance on anything contained in, or omitted from, this presentation. An investment in Emyria securities should be considered speculative and is subject to investment and other known and unknown risks, some of which are beyond the control of Emyria. Emyria does not guarantee any rate of return or the absolute or relative investment performance of Emyria securities. The distribution of this presentation including in jurisdictions outside Australia, may be restricted by law. Any person who receives this presentation must seek advice on and observe any such restrictions.

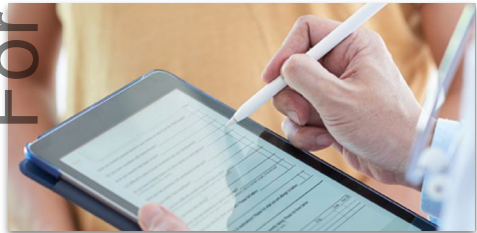
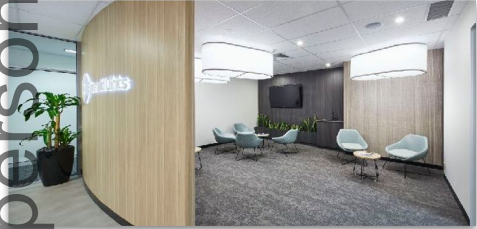
This release may contain certain forward-looking statements with respect to matters including but not limited to the financial condition, results of operations and business of Emyria and certain of the plans and objectives of Emyria with respect to these items. These forward-looking statements are not historical facts but rather are based on Emyria's current expectations, estimates and projections about the industry in which Emyria operates, and its beliefs and assumptions. Words such as "anticipates," "expects," "intends," "plans," "believes," "seeks," "estimates," "guidance" and similar expressions are intended to identify forward looking statements and should be considered an at-risk statement. Such statements are subject to certain risks and uncertainties, particularly those risks or uncertainties inherent in the process of developing technology and in the endeavour of building a business around such products and services. These statements are not guarantees of future performance and are subject to known and unknown risks, uncertainties and other factors, some of which are beyond the control of Emyria, are difficult to predict and could cause actual results to differ materially from those expressed or forecasted in the forward looking statements. Emyria cautions shareholders and prospective shareholders not to place undue reliance on these forward-looking statements, which reflect the view of Emyria only as of the date of this release. The forward-looking statements made in this announcement relate only to events as of the date on which the statements are made. Emyria will not undertake any obligation to release publicly any revisions or updates to these forward-looking statements to reflect events, circumstances or unanticipated events occurring after the date of this announcement except as required by law or by any appropriate regulatory authority.

**Presentation release authorised by Michael Winlo, CEO and Managing Director**

# EMYRIA CLINICS | OUR EXPANDING MENTAL HEALTH FOOTPRINT

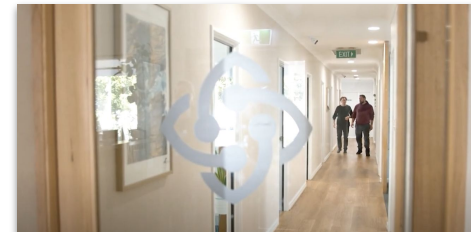
We offer a **suite of solutions & ongoing support**, not just a single service

A data-centric clinic working with newly rescheduled treatments like THC & CBD. We monitor & care for patients when “nothing else has worked”



- **GP-led** clinical service
- **~10,000+** patients
- **40+** clinical conditions
- **Cannabinoid-based medicine** specialists
- **World's largest data registry** on cannabinoid-based therapies and outcomes<sup>1</sup>
- Leveraging **Palantir Foundry**<sup>2</sup>

Australia's leading, multidisciplinary treatment centre for psychological trauma



- **Psychiatrist**-led service for **complex trauma care**<sup>1</sup>
- **Diverse service offering**
- **19 clinicians:** psychiatrists, mental health nurses, psychologists, counsellors, OTs & social workers, physical therapists
- Ethics-approved **psychedelic - assisted therapy model**<sup>2</sup>

# EMYRIA CLINICS | A PERSONALISED PATH TO MENTAL WELLNESS

We offer **wraparound care** before, during and after treatment

## ACTIVE ASSESSMENT, DATA COLLECTION & REVIEW

Neuropsychiatric disorders share an overlapping imprint of poor body health<sup>1</sup> which is why Emyria's care models prioritise both physical and mental well-being. By providing comprehensive care we can achieve and measure exceptional health outcomes as well as develop new therapies and approaches, **including our own.**

### EVIDENCE-BASED CARE



Rapid **intake** and **assessment**



**Evidence-based** care led by **psychiatrists** & managed by **GPs** and specially-trained **therapists**

### EMERGING TREATMENTS



**TMS** and / or **Cannabinoid** Therapy

### CLINICAL TRIALS



**Psychedelic-assisted** Therapy



**Experimental** Treatments

For personal use only

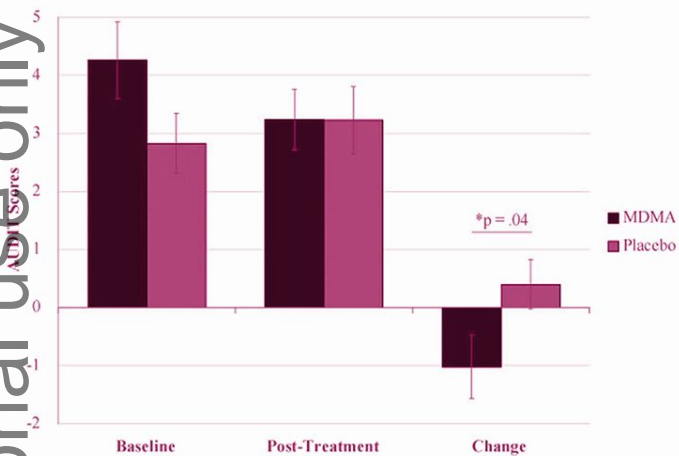
# EMYRIA CLINICS | MULTIDISCIPLINARY MODEL

For personal use only

SERVICE MODEL	KEY STRENGTHS	KEY LIMITATIONS	EMYRIA ADVANTAGES
<b>GP Clinics</b>	Accessible, generalised care	Limited support; not specialised	✓ Provides specialised care with <u>robust support</u>
<b>Specialists</b>	High-level, specialised care	Often do not address physical health	✓ Offers multidisciplinary care covering <u>mental</u> & <u>physical</u> health
<b>“Single service” clinics</b> (eg. “Ketamine Clinics”)	Specialised service	Referral risk for clinicians. <i>“Where do my patients go if treatment fails?”</i>	✓ Offers <u>a suite of services</u> before, during & after care
<b>Academic &amp; Research Centers</b>	Cutting-edge research and treatments	Not focused on scalable, cost effective delivery	✓ Combines innovative approaches that translate to the community <u>cost effectively</u>
<b>EMYRIA MODEL</b>	Multidisciplinary, data-driven, revenue-generating	---	✓ <b>The infrastructure and team to deliver new and emerging treatments while collecting data to support ongoing innovation and development</b>

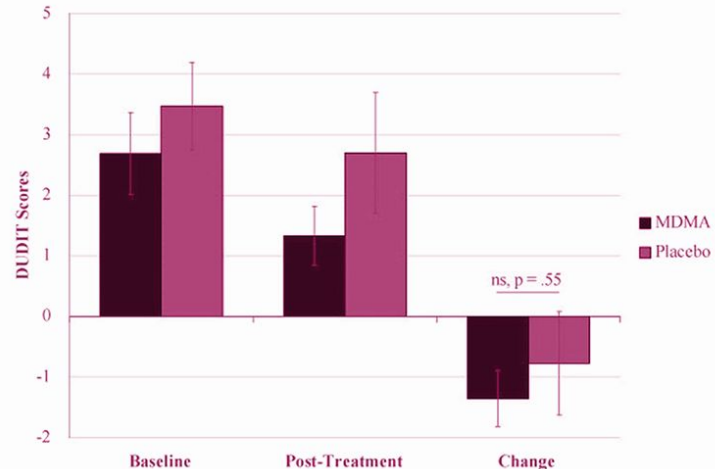
# MDMA-AT EFFECTS On Alcohol and Substance Disorder (“ASUD”) & Suicidality

## MDMA-AT may lead to subclinical improvements in alcohol use



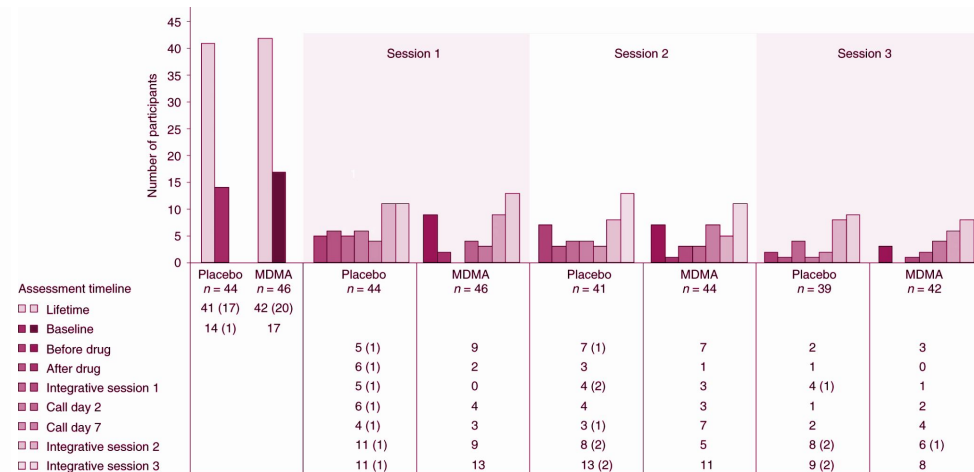
Compared to Placebo+therapy, MDMA-AT was associated with a significantly greater reduction in mean AUDIT change scores as compared to placebo.<sup>1,2</sup>

## MDMA-AT does not increase risk of illicit drug use



Changes in DUDIT scores were not significantly different between treatment groups.<sup>1</sup>

## MDMA-AT may reduce the risk of suicidality



Serious suicidal ideation (a score of 4 or 5 on the C-SSRS) was minimal during the MAPPI study and occurred almost entirely in the placebo arm.<sup>1</sup>

### Sources:

- Nicholas CR, Wang JB, Coker A, Mitchell JM, Klaire SS, Yazar-Klosinski B, Emerson A, Brown RT, Doblin R. The effects of MDMA-assisted therapy on alcohol and substance use in a phase 3 trial for treatment of severe PTSD. *Drug Alcohol Depend.* 2022 Apr 1;233:109356. doi: 10.1016/j.drugalcdep.2022.109356. Epub 2022 Feb 11. PMID: 35286849; PMCID: PMC9750500.
- Mitchell, J.M., Bogenschutz, M., Lilienstein, A. et al. MDMA-assisted therapy for severe PTSD: a randomized, double-blind, placebo-controlled phase 3 study. *Nat Med* 27, 1025–1033 (2021). <https://doi.org/10.1038/s41591-021-01336-3>

# EPIDEMIOLOGY OF POST-TRAUMATIC STRESS DISORDER <sup>1</sup>

For personal use only

	Adults aged > 18 (millions)	% with current PTSD	Adults with PTSD	% with chronic and severe	Adult PTSD cases that are chronic or severe	% with disqualifying condition	Adult PTSD cases eligible for MDMA-AT	Cost to Treat	TAM
<b>USA</b>	250.5	3.60%	9,018,000	50%	4,509,000	22%	3,517,020	\$30,000	\$105,510,600,000
<b>AUSTRALIA</b>	20.7	3.60%	745,200	50%	372,600	22%	290,628	\$30,000	\$8,718,840,000
<b>WESTERN AUSTRALIA</b>	2.07	3.60%	74,520	50%	37,260	22%	29,063	\$30,000	\$871,884,000

Sources:  
 1. <https://link.springer.com/article/10.1007/s40261-022-01122-0#Fig2>  
 2. Phoenix Australia



## MEDICINE-ASSISTED THERAPIES

For personal use only

### MDMA-ASSISTED THERAPIES

- Trained Team 
- Ethics-Approved Care Model 
- Drug Supply Secured 
- First Patient Consented 
- First Patient Treated 

### KETAMINE-ASSISTED THERAPIES <sup>1</sup>

- Trained Team 
- Ethics-Approved Care Model 
- Drug Supply Secured 
- First Patient Consented 
- First Patient Treated 

### PSILOCYBIN-ASSISTED THERAPIES <sup>2</sup>

- Trained Team 
- Ethics-Approved Care Model 
- Drug Supply Secured 
- First Patient Consented 
- First Patient Treated 

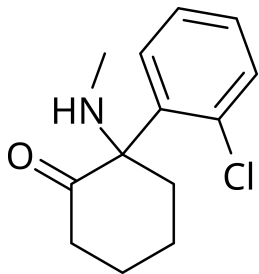
Sources:  
1. See ASX release 08 August 2023  
2. See ASX release 18 April 2023



# WHAT'S NEXT? Ketamine-AT

For personal use only

## KETAMINE



**A dissociative anesthetic**

Has a complex influence...

**1 NMDA Receptor Antagonism:** Blocks NMDA receptors in the brain, involved in pain signaling and synaptic plasticity

**2 Enhances Neuroplasticity:** Stimulates the growth and formation of synapses

**3 Release of Neurotransmitters:** Including glutamate, which then activates AMPA receptors and contributes to antidepressant effects

## Clinical Effects

Clinical effects of ketamine can vary depending on the dose, route of administration, and individual patient factors. In general, main effects are:

**1 Anesthesia and Analgesia:** Used for pain relief and producing a trance-like unresponsiveness

**2 Neuronal Growth & Anti-inflammatory:** Stimulates neuroplasticity and promotes brain cell regrowth

**3 Antidepressant** Yields rapid mood uplift, especially in treatment-resistant depression.

## Role in Therapy

Ketamine induces a brief dissociative state, allowing patients to view memories or thoughts differently.

Its fast-acting antidepressant effects create an immediate therapeutic window, enhancing patient engagement in therapy.

Ketamine's stimulation of neuronal growth may reinforce and consolidate therapeutic insights.

Together, these unique features of ketamine treatment are believed to enhance the therapeutic process, leading to more lasting benefits.

## Risks & Exclusions

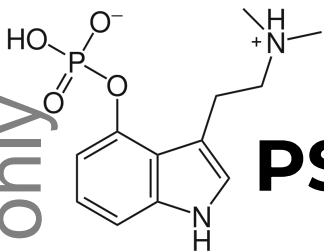
Some individuals might experience challenging emotional responses or unsettling hallucinations. Additionally, patients with a history of psychosis, certain heart conditions, or on specific medications might be excluded from its use

### Key Recent Research:

1. Loo, C., et al (2023). Efficacy and safety of a 4-week course of repeated subcutaneous ketamine injections for treatment-resistant depression (KADS study): Randomised double-blind active-controlled trial. *The British Journal of Psychiatry*, 1-9. doi:10.1192/bjp.2023.79
2. Anand, A., et al (2023). Ketamine versus ECT for Nonpsychotic Treatment-Resistant Major Depression. *New England Journal of Medicine*, 2023; 388:2315-2325 DOI: 10.1056/NEJMoa2302399

# WHAT'S NEXT? Psilocybin-AT

For personal use only



## PSILOCYBIN

Hallucinogenic

Main biological effects

- 5-HT2A Receptor Agonism:** Psilocybin and metabolite, psilocin, act as agonists at the 5-HT2A receptors. Believed to be central to hallucinations
- 5-HT1A Receptor Agonism:** Psilocin also shows affinity for 5-HT1A, which might contribute to the overall experience induced by psilocybin.
- Dopamine Release:** Psilocybin might have an effect on dopamine D2 receptors, although this is less pronounced than its effect on serotonin (5HT) receptors.

### Key Recent Research:

- von R, R., et al (2022). Single-dose psilocybin-assisted therapy in major depressive disorder: a placebo-controlled, double-blind, randomised clinical trial eClinicalMedicine, Volume 56, 101809  
Goodwin, G.M., et al. Psilocybin for treatment resistant depression in patients taking a concomitant SSRI medication. Neuropsychopharmacol. 48, 1492-1499 (2023).  
<https://doi.org/10.1038/s41386-023-01648-7>

## Clinical Effects

The clinical effects of psilocybin can vary depending on the dose, route of administration, and individual patient factors. In general, main effects are:

- Altered Perception:** Psilocybin leads to hallucinations and a distorted sense of time.
- Emotional Release:** Users often experience intense emotions, facilitating therapeutic breakthroughs
- Sense of Connection:** Psilocybin can induce feelings of unity, diminished ego, and enhanced empathy, valuable in therapeutic contexts.

## Role in Therapy

Psilocybin is understood to amplify emotional understanding and connection, making it easier for people to revisit and heal from tough memories.

It also gives many a feeling of unity and interconnectedness, offering a fresh perspective that can break negative thought cycles. Additionally, psilocybin seems to enhance the brain's adaptability, making it more receptive to positive change.

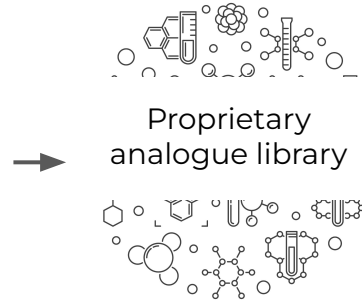
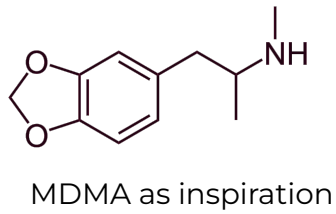
Some people even describe profound, meaningful experiences during sessions, which can leave a lasting sense of purpose and interconnectedness. All these effects combined can be transformative, especially when guided by trained therapists in a safe environment.

## Risks & Exclusions

Some individuals might experience challenging emotional responses or unsettling hallucinations. Additionally, patients with a history of psychosis, certain heart conditions, or on specific medications might be excluded from its use

# EMYRIA DRUG DEVELOPMENT | MDMA-ANALOGUES

One of the **world's largest libraries of MDMA analogues** developed



## Dopamine

associated with feelings of *pleasure and satisfaction*

## Serotonin

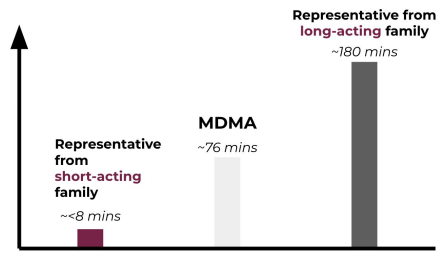
thought to contribute to feelings of *well-being*

## Noradrenaline

affects attention and related to "*fight or flight*" response

## EMD-MX1

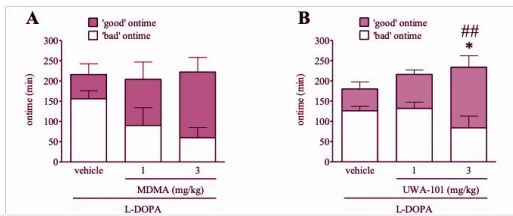
Increasing versatility of drug-assisted therapy for mental health disorders



We have created MDMA-like molecules with rapid *and* extended half-lives.

## EMD-MX2

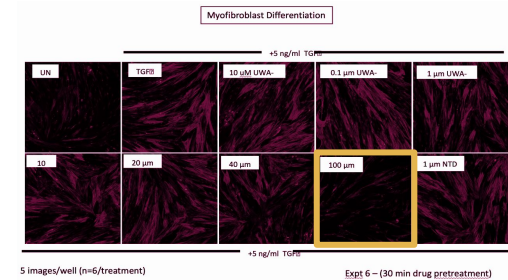
Selective serotonin & dopamine releasers to help symptoms of L-DOPA induced dyskinesia (LID)



LID affects up to 80% of all Parkinson's disease sufferers.

## EMD-MX3

Highly specific transporter binding molecules for range of indications.



We have novel molecules that are potent antagonists of 5HT2B, involved in fibrosis.

For personal use only

For personal use only

## Target Indication & Market

MDMA looks very promising as an adjunct with psychotherapy for PTSD.

However...

**Half-life** (~6 h): requires long clinical sessions which increase costs

**Stimulant features:** can cause anxiety when coming on and at low doses increases blood pressure and heart rate

**Euphorogenic:** an abuse liability (is euphoria necessary for psychotherapy?)

### MX1 Program Goals

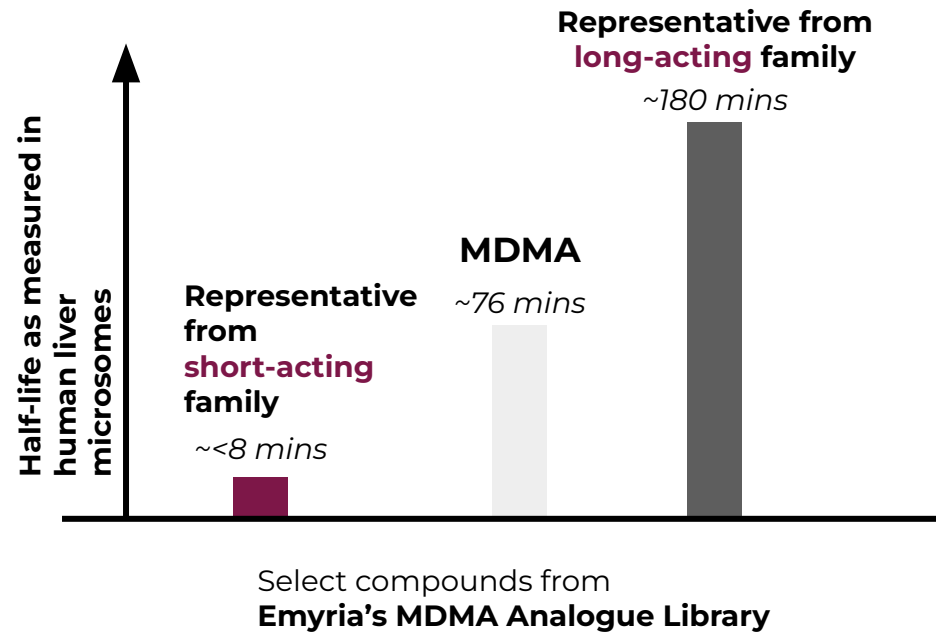
SERT reversal ⇨ serotonin release ⇨ prosocial, fear extinguishing effects ✓

NET reversal ⇨ noradrenaline release ⇨ stimulant activity ✗

DAT reversal ⇨ dopamine release ⇨ euphoria ✗

## Key Preclinical Results

Metabolic studies performed to-date demonstrate Emyria's compound library contains novel MDMA analogues with both short-, and long-, acting metabolism profiles.



## Next Steps

Emyria and partner the University of Western Australia (UWA) are developing a broad set of candidates inspired by these insights and we are actively developing new compounds inspired by the unique Structure Activity Relationships (SARs) observed in the compounds tested to take.

The creation of these new compounds is underway at UWA.

These next generation compounds will be screened for unwanted or "off-target" effects and sent for further metabolic studies.

For personal use only

## Target Indication & Market

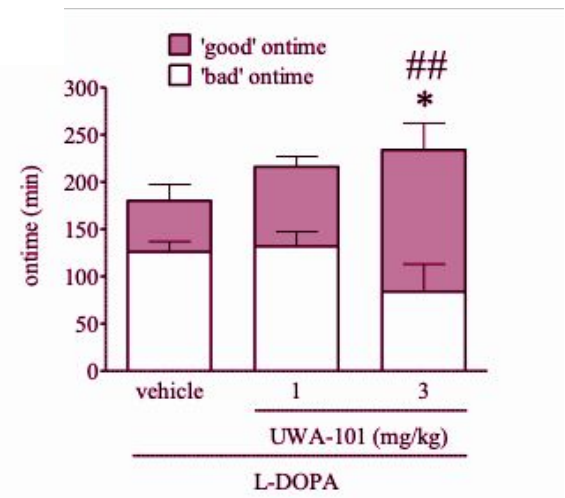
Parkinson's Disease (PD) is the world's fastest growing neurological disorder. The most common treatment for PD is to replace the depletion of dopamine with a precursor called levodopa (L-DOPA). However, prolonged treatment with L-DOPA can lead to a movement disorder called L-DOPA induced dyskinesia (LID). 80% of PD patients will develop LID, 30% within just 3 years. Globally, this is 5-6m individuals.<sup>1</sup>

There is a significant unmet need for a medication that can improve the symptoms of LID.

The most recently approved treatment - Ongentys™ (opicapone) - only increases **good** "ON-time" by ~6% over 24 hours.<sup>2</sup>

## Key Preclinical Result

In a gold-standard primate model of Parkinson's Disease, MDMA-analogue UWA-101, had a significant effect on increasing the duration of **total** and **good** ON-time.

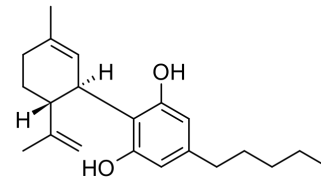


UWA-101 increased the **total** duration of L-DOPA-induced antiparkinsonian benefit (total ON-time) by up to **30%**. In addition, UWA-101 (3 mg/kg) significantly increased the duration of **good** quality ON-time by 178%.

## Next Steps

Emyria and partner the University of Western Australia (UWA) are developing a broad set of candidates inspired by the insights of UWA-101. Some of these compounds are currently being evaluated in global laboratories.

The best performing compounds identified will then progress to animal models with partners at the University of Sydney. Set-up of those experiments is underway.



We've developed multiple dose forms targeting registration as capsule medicines

For personal use only

## EMD-RX5



An Ultra-Pure CBD capsule for **over-the-counter** treatment of anxiety and stress symptoms.

**15%** of all adults.<sup>1</sup>

In **Phase 3** clinical trials.

**Commercialised** to Aspen Pharmacare Australia.<sup>2</sup>

## EMD-RX7



**High bioavailability** Ultra-Pure CBD for **prescription** indications, like opioid-sparing.

Opioid use disorder is a **\$471.0 billion** expense in the US.<sup>3</sup>

In preclinical screening in USA.

Currently being assessed by the **NIH (USA)** in their Preclinical Screening Program for Pain (PSPP) program.<sup>4</sup>

## EMD-RX9



**High potency, high bioavailability** Ultra-Pure CBD for **prescription** indications.<sup>5</sup>

Market leader: **Epidiolex (\$1B/yr)**<sup>6</sup>

Preparing for Phase 1 clinical trials.

Seeking commercialisation partners.

### SOURCES:

1. Australian Institute of Health and Welfare 2018. Australia's health 2018. Australia's health series no. 16. AUS 221.

2. See ASX release 04 April 2023

3. <https://www.cdc.gov/injury/features/health-econ-cost-of-injury/index.html>

4. See ASX release 28 Nov 2022

5. See ASX release 24 April 2023

6. <https://investor.jazzpharma.com/news-releases/news-release-details/jazz-pharmaceuticals-announces-full-year-and-fourth-quarter-2022>

# EMD-RX5 PRODUCT DEVELOPMENT UPDATE

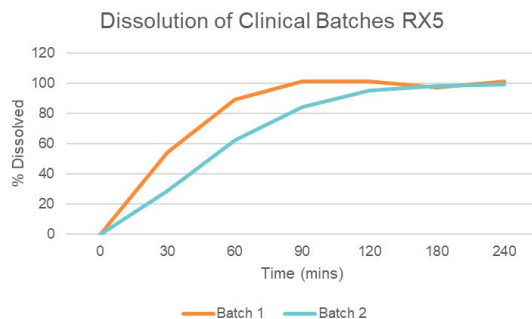
## Update

During routine quality assessments a difference in dissolution rates between two batches of EMD-RX5 was identified. For clarity, "dissolution rates" refer to how quickly a substance dissolves in a simulated solvent.

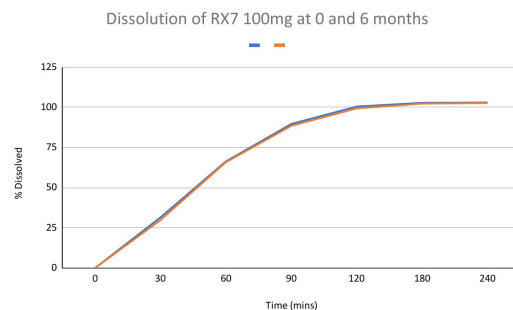
For all products seeking registration, consistency in the dissolution rates is expected between batches of the same product as well as over time. In this case, Batch 1, used for the first half of the trial, and the newly introduced Batch 2 showed a discrepancy in their dissolution rates (see Fig 1). It's important to note that both Batches still met all stringent guidelines for safety and CBD purity and that there are no safety concerns; the issue is solely with the dissolution rates.

Having used all of Batch 1 in the trial, the Company has paused recruitment to investigate the matter with Batch 2 further, in line with the rigorous standards set by the Therapeutic Goods Administration ("TGA"). Our preliminary investigations indicate that the issue is likely a manufacturing variation affecting one of the excipients (inactive substances used as carriers for the active ingredients). The Company has ruled out other potential causes (for example chemical changes or the outer capsules).

## Data



**Figure 1:** Difference in dissolution rates between Batch 1 and Batch 2 of EMD-RX5 at 6 months



**Figure 2:** No difference in dissolution rates between a single batch of EMD-RX7 showing tight consistency over time

## Next steps

A new manufacturing method is being developed, using an updated manufacturing process and a new batch will be produced and monitored for stability. An update on this program is expected towards end of H2, 2023. In the meantime, Emyria's Contract Research Organisation ("CRO") is conducting a full quality review of all study data gathered to date (~50% recruitment), to ensure readiness for analysis when appropriate.

Emyria's portfolio also includes two other Ultra-Pure CBD capsules, RX7 and RX9. These products remain unaffected by stability or dissolution issues. RX7 has shown remarkable stability and bioavailability (the rate at which a drug is absorbed into the bloodstream), outperforming other registered CBD products in preclinical assessment. RX9 is also progressing well, with method development underway. Both candidates hold promise as high potency, highly bioavailable, solid oral dose forms of Ultra-Pure CBD nearing readiness for Phase 1 clinical trials.

## AIP Features

For personal use only



### AI-Optimized Data Foundation

Run LLMs and other AI on a secure, real-time, multi-modal foundation.



### AIP Assist

Build everything from pipelines to applications faster, with human-AI collaboration.



### AIP Logic

Author no-code functions that use LLMs. Manage, chain and wield those functions in custom applications.



### Agents

Define LLM agents to pursue specific, scoped goals.



### Action Graph

Implement decisions across your underlying operational systems.



### AIP Automate

Monitor the activity of AI agents in real-time, with fine-grain control over both user-approved and autonomous tasks.



### Control Panel

Monitor, govern, and control the activity and reach of LLMs and other AI in real-time.



### Safe AI Handoff

Connect LLMs to trusted models across your enterprise with safe handoff functions.



### Digital Footprint

Audit the full trail of all AI prompts, outputs, explanations, recommendations, and actions.



### Human-in-the-Loop

Dictate when decisions require human input, including multi-stakeholder checks.



### Decision Capture & Learning

Capture decisions and outcomes for continuous AI validation and improvement.



We are experienced in **tracking clinical outcomes & personalising care**

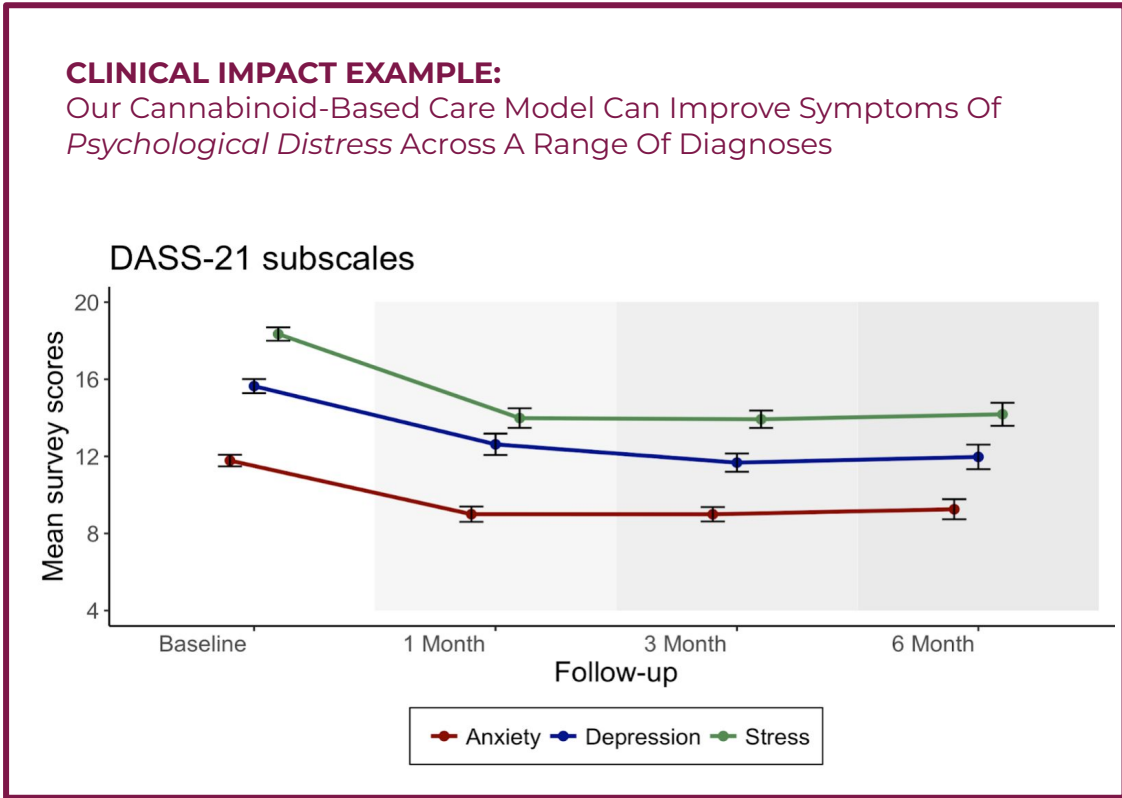
For personal use only



% of patients with "moderate" to "severe"  
**ANXIETY, DEPRESSION, STRESS**

TOP 10 indications:

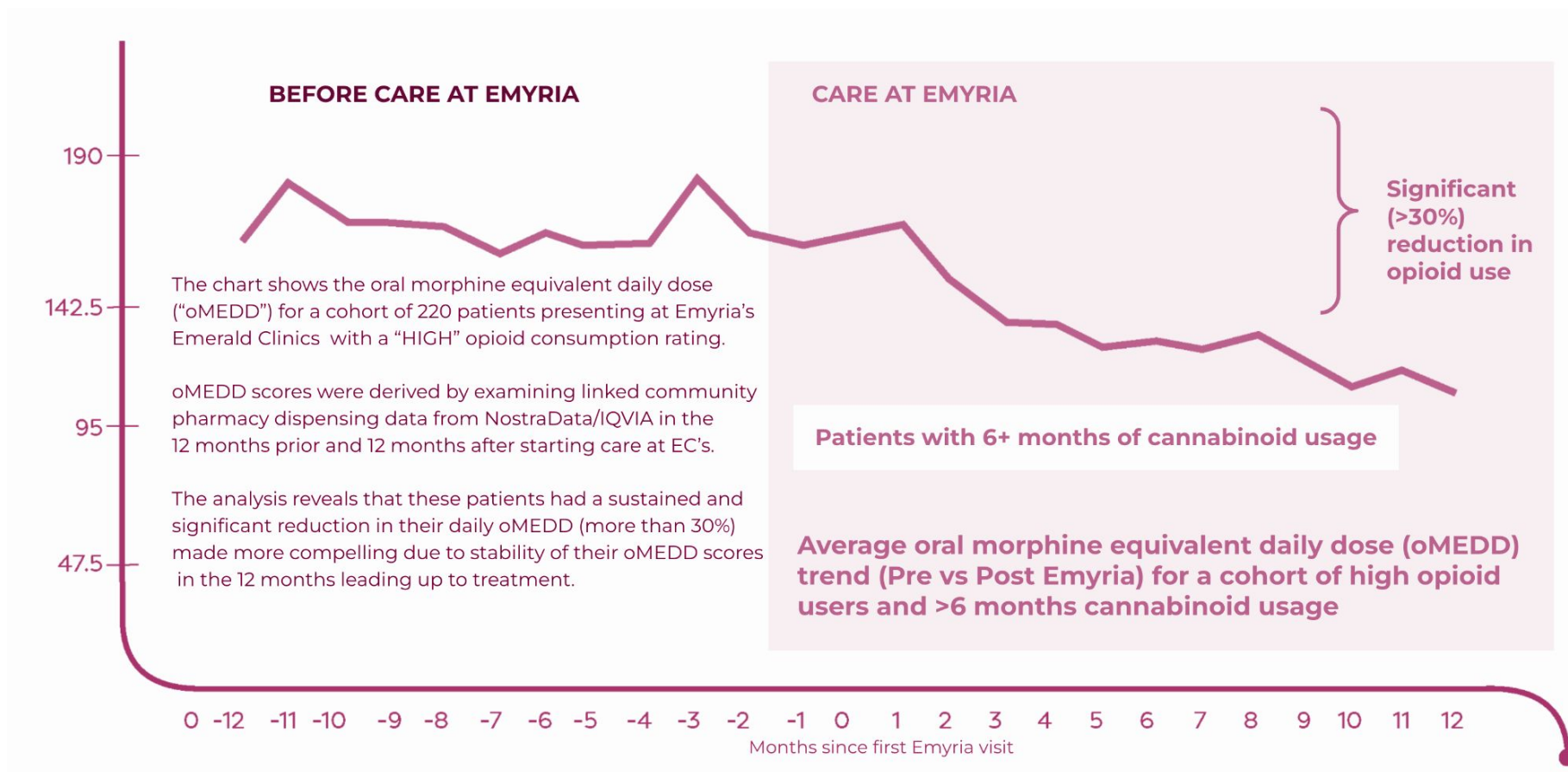
	ANXIETY <sup>1</sup>	DEPRESSION <sup>1</sup>	STRESS <sup>1</sup>	INSOMNIA <sup>2</sup>
Chronic non-cancer pain	73	52	39	60
Insomnia	76	49	42	95
Cancer pain	75	37	24	75
Anxiety	57	70	73	85
PTSD	42	82	76	95
Autism	68	54	80	77
Depression	76	71	67	83
Migraine/headache	74	44	40	84
Irritable bowel syndrome	62	45	42	85
Parkinson's disease	59	52	43	89



We are experienced in **tracking clinical outcomes & personalising care**

For personal use only

**CLINICAL IMPACT EXAMPLE: OUR CANNABINOID-BASED CARE MODEL CAN REDUCE OPIOID USE <sup>1</sup>**



The chart shows the oral morphine equivalent daily dose ("oMEDD") for a cohort of 220 patients presenting at Emyria's Emerald Clinics with a "HIGH" opioid consumption rating.

oMEDD scores were derived by examining linked community pharmacy dispensing data from NostraData/IQVIA in the 12 months prior and 12 months after starting care at EC's.

The analysis reveals that these patients had a sustained and significant reduction in their daily oMEDD (more than 30%) made more compelling due to stability of their oMEDD scores in the 12 months leading up to treatment.

# EMYRIA INTELLECTUAL PROPERTY

For personal use only

	TITLE	OFFICIAL NO.	STATUS
	MDMA Analogues	2021903836	PCT filed <i>(search report due '23)</i>
	Cannabidiol Dosing Regime	2021902001	PCT filed
	Cannabinoid Dosage Form	2022900479	PCT filed
	Use of Cannabidiol for the Treatment of Psychological Distress	2020904152	PCT filed
	Use Of Cannabidiol for the Treatment of Psychological Distress	2021901086	Provisional filed
	Use Of Cannabidiol for the Treatment of Irritable Bowel Syndrome Symptoms	2021901672	Provisional filed
	Use Of Cannabinoid Combination for the Treatment of Irritable Bowel Syndrome Symptoms	2021901674	Provisional filed
<i>Others in development covering unique delivery platforms, dose responses and clinical indications</i>		<i>Additional provisionals expected</i>	