ASX Announcement

28/09/21

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Emyria to present at Lifesciences webinar today

Emyria Limited (ASX: EMD) (Emyria or the Company), a data-backed treatment development and clinical services company, is pleased to announce that Dr., Michael Winlo, managing director for Emyria, will be presenting at the Proactive Lifesciences webinar.

A **presentation** will be delivered and is **attached to this cover note.**

Emyria will be one of three companies presenting, which also includes Amplia Therapeutics and Patrys.

Details of the event are as follows:

- **Event:** Proactive Lifesciences Webinar
- **Webinar Presenter:** Emyria's Managing Director, Dr, Michael Winlo
- **Date and Time:** Tuesday 28th September 2021, 12pm Sydney time (AEST)

To register, please click on the link below:

https://event.webinarjam.com/register/91/qqy97hzy

For additional information, please contact:
John Phillips at Proactive on john.phillips@proactiveinvestors.com or call 0431 597 771.

This announcement has been approved and authorised by the Managing Director of Emyria Limited.

For further information on **Emyria**:

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About Emyria (www.emyria.com)

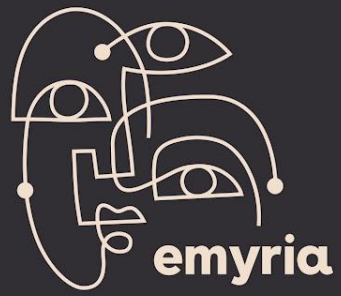
Emyria Limited is a data-backed, drug development company. **Emyria's Treatments** target unmet needs and are focused on obtaining approval from major global regulators. Emyria's drug development programs are informed by insights generated from extensive analysis of **Emyria Data** - deep, ethically-sourced clinical evidence that is gathered with patients across Emyria's independent clinical services (**Emerald Clinics** - www.emeraldclinics.com.au)

Emyria Data provides deep treatment insights and is therefore a source of unique IP, strategically designed drug development and personalised care programs.

Emyria's first drug development program, **EMD-003** is targeting unmet needs in mental health. Specifically psychological distress and the symptoms of anxiety, depression and stress.

Cautionary Note on Forward-Looking Statements

Any statements in this press release about future expectations, plans and prospects for the Company, the company's strategy, future operations, and other statements containing the words "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "predict," "project," "target," "potential," "will," "would," "could," "should," "continue," and similar expressions, constitute forward-looking statements. Actual results may differ materially from those indicated by such forward-looking statements as a result of various important factors, including: the Company's ability to successfully develop its product candidates and timely complete its planned clinical programs and the Company's ability to obtain marketing approvals for its product candidates. In addition, the forward-looking statements included in this press release represents the Company's views as of the date hereof. The Company anticipates that subsequent events and developments will cause the Company's views to change. However, while the Company may elect to update these forward-looking statements at some point in the future, the Company specifically disclaims any obligation to do so. These forward-looking statements should not be relied upon as representing the Company's views as of any date subsequent to the date hereof.



Emyria's Unique Value Drivers

September 2021 | Dr Michael Winlo, MD & CEO

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individual care.

Contents

Emyria's value drivers

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(1) Attractive valuation



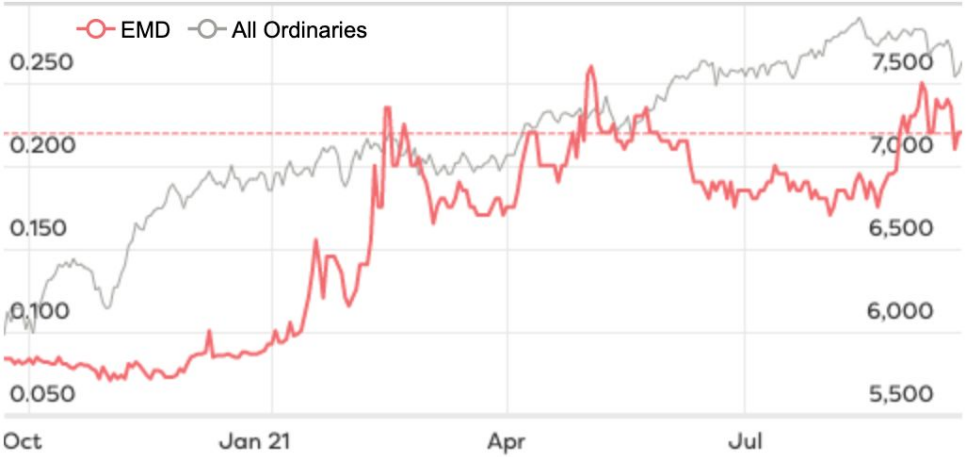


Corporate snapshot

Key Metrics	Value
Shares on issue	254m
(Escrowed component)	*100m*
Last close (26 Sep 2021)	A$0.22
Market Capitalisation (17 Sep 2021)	**A$56M**
Cash (30 June 2021)	A$6.5m
Debt (30 June 2021)	-
Enterprise value	**A~$49m**
Total options (exercise price $0.114-0.45) *expiring. 2022-24*	62m

Top 20 = 60.48%
Director ownership = 27.17%

Emyria share price over 12 months



Source: https://emyria.com/for-investors/#Stock-Information

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Emyria (MC ~56m) is advancing in three, billion dollar verticals

Emyria has developed a clear strategy for value creation

1 FDA-, and TGA-approved cannabinoid medicines

Emyria has developed a novel, ultra-pure cannabinoid dose form that meets all FDA requirements.

Pivotal registration trials are in planning for multiple target indications addressing major global unmet needs

2 FDA-approved MDMA-analogue therapies

Emyria has exclusive access to a library of unique MDMA-analogues with commercialisation potential as treatments for a range of neurological disorders and psychedelic-assisted therapies

3 World-leading real-world evidence

Emyria has built a robust, proprietary, clinical-trial-grade evidence asset to assist with multiple FDA and TGA registration programs

Market leaders

GW pharmaceuticals

Acquired for US$7.2B (Feb 2021)

atai LIFE SCIENCES

Market cap: US$2.49B (Sep 21)

flatiron

Acquired for US$2.1B (Apr 2018)

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Sources: https://investor.jazzpharma.com/news-releases/news-release-details/jazz-pharmaceuticals-completes-acquisition-gw-pharmaceuticals
https://finance.yahoo.com/quote/ATAI/ / https://www.roche.com/media/releases/med-cor-2018-04-06.htm

(2) Real-World Evidence





Emyria's Real-World Evidence (RWE) - 5,000 patients and counting

Our proprietary, robust and ethically-sourced clinical data:

**** covers dose-response insights across a diverse set of patients***

**** provides insights and IP which de-risks our drug development programs***

2 - 98 years **age range** of patients	**56%** **female** patients	**44** Unique **primary indication**s
54% Patients presenting with symptoms of moderate to severe **anxiety**	**53%** Patients presenting with symptoms of **depression**	**7.12** Average **concomitant medications** per patient at initial visit
0-600 mg Range of **CBD** prescribed doses are carefully titrated for each patient which gives Emyria unique dose response insights	**0-197** mg Range of **THC** prescribed doses are carefully titrated for each patient which gives Emyria unique dose response insights	**35%** Patients experiencing an **adverse event**

Data summary as of 01 DEC 2020

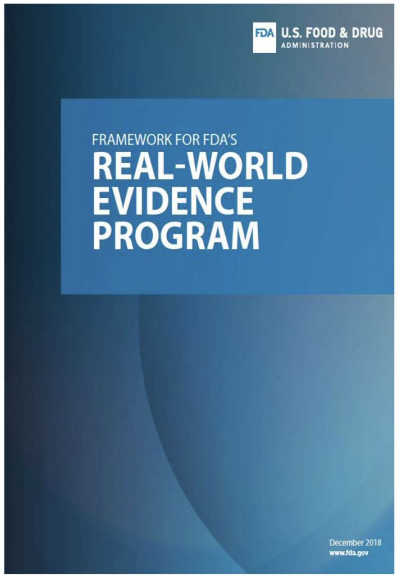
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RWE now used in 75% of FDA approval applications, and growing

September 16, 2020

What role does RWE play in FDA approvals?

The U.S. Food and Drug Administration (FDA) is approving more drugs with the help of real-world evidence (RWE) than ever before. In 2019, one in two of the agency's approvals included an RWE study, and, according to our latest analysis, that number jumped to 75 percent in 2020.



Source: https://aetion.com/evidence-hub/infographic-what-role-does-rwe-play-in-fda-approvals/



Curating RWE is a valuable business globally

	flatiron	Verana Health	AETION	emyria
Therapy area focus	Cancer	Eye disease + neurology	Diverse	40+ clinical indications
Care delivery	NO	NO	NO	YES
Novel drug development	NO	NO	NO	YES
Data asset quality	Electronic Medical Records (needs cleaning)	Patient Registries (needs cleaning)	Insurance claims data (needs cleaning)	**Direct input from patient and clinicians** (minimal cleaning, regulatory-grade)
Investment to date (AUD)	**$475M** **Acquired: $2.9B Apr 18**	**$209M** Last funding: $152M Feb 20	**$227M** Last funding: $110M May 21	**~$20M** Last funding: $5M Apr 21

Source: https://www.crunchbase.com

(3) Synthetic (“pure”) cannabinoid delivery platform



Medicinal cannabis is stuck at “2.0”; pharmaceuticals are “3.0”

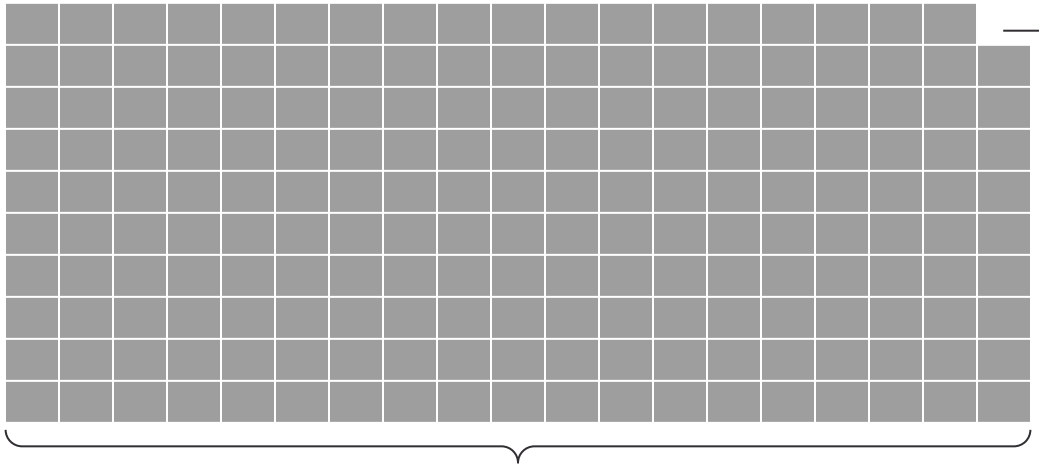
40% *of drugs behind the pharmacist's counter in the Western world are derived from plants that people have used for centuries. This includes the top 20 best selling prescription drugs in the United States today.*

Medicine	“1.0” Natural origins		“2.0” First medical use	Trials & registration	“3.0” Synthetic formulation	Commercialisation status
Statins		*Pleurotus ostreatus (oyster mushroom)*	**1970’s** First discovered	**1987** *Synthetically* developed		**US$95bn** lifetime sales of Lipitor alone
Aspirin		*Salix alba (white willow)*	**~400 BC** First prepared as a tea	**1899**		**US$750M USD** for “aspirin cardio” alone in 2020
Cannabis		*Cannabis sativa (cannabis)*	**~8000 BCE** First medicinal use documented		**Emyria’s novel synthetic delivery and drug development programs target multiple indications**	**Initial targets: mental health, insomnia and pain**

https://www.fiercepharma.com/pharma/from-old-behemoth-lipitor-to-new-king-humira-u-s-best-selling-drugs-over-25-years

Unregistered botanical cannabinoids do not generate returns

There are 190 unregistered Cannabinoid products in Australia[1]...



$100m

Total Australian sales in 2020

***...and only* 1 registered product**
(Epidyolex by GW Pharma)

$686m

Total Global sales in 2020[2] from rare paediatric epilepsy market only

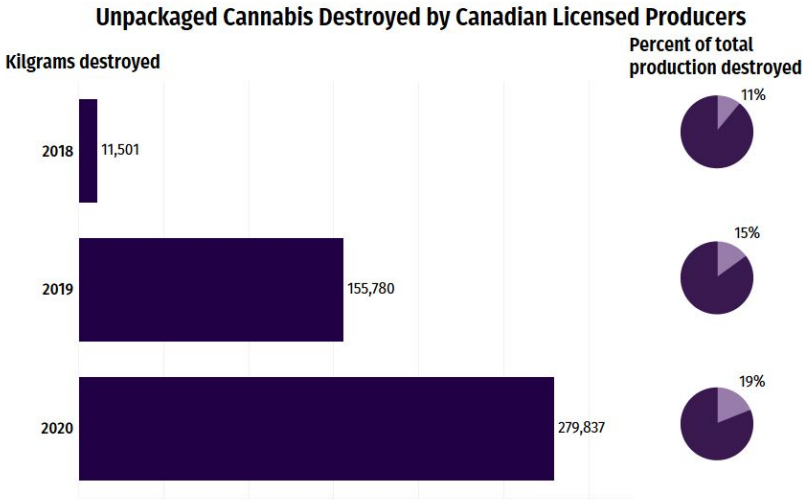
03 Feb 21, GW acquired by Jazz Pharmaceuticals (USD$7.2B)



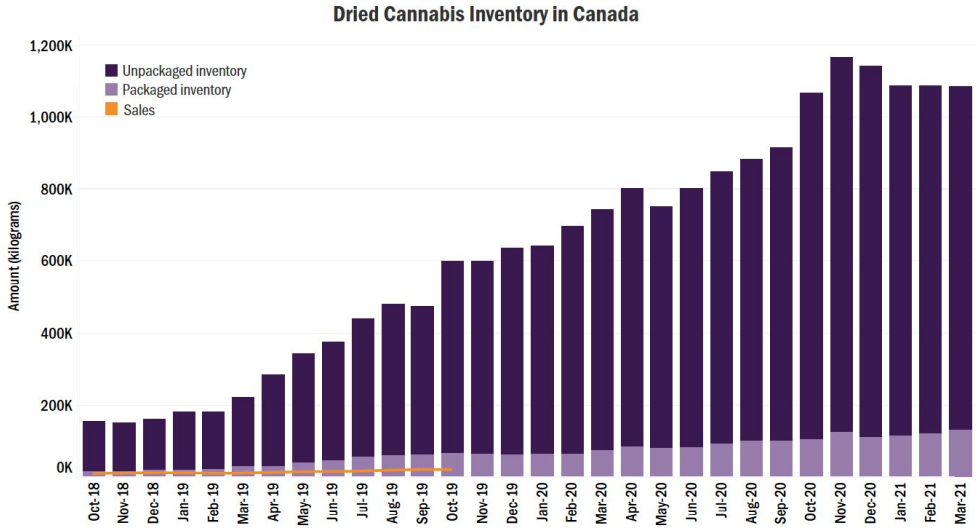
*Emyria has appointed **Dr Karen Smith**, Ex-Chief Medical Officer and **Global Head of R&D at Jazz Pharmaceuticals** to Chair Emyria's Strategic Advisory* (ASX Announcement 22 Feb 21)

1. https://freshleafanalytics.com.au/wp-content/uploads/2021/03/FreshLeaf-Analytics-H1-2021.pdf
2. https://www.globenewswire.com/news-release/2021/02/16/2175953/0/en/GW-Pharmaceuticals-plc-Reports-Fourth-Quarter-and-Year-End-2020-Financial-Results-and-Operational-Progress.html

Botanical cannabinoids are in chronic oversupply



Source: Health Canada, MJBizDaily, a division of Anne Holland Ventures Inc. 2021



Note: Health Canada stopped disclosing sales in kilograms in Oct. 2019.

Emyria's unique synthetic cannabinoid platform



ALTASCIENCES

Emyria is developing a novel cannabinoid delivery platform with leading North American contract drug manufacturer Altasciences (See ASX Announcement 13 August 2021)

Feature	Emyria's Synthetic Platform	Botanical alternatives
Safety	*Synthetic CBD has **equivalent** physiological effects to botanical CBD [1]*	
Reliability	Synthetically manufactured cannabinoids ensure consistent batch-to-batch quality at scale	Botanical CBD can have high batch-to-batch variability (see TGA audit results https://www.tga.gov.au/testing-medicinal-cannabis-products-being-supplied-sas-australia)
Regulatory	Consistent purity ensures acceptability from all major global regulators	Plant-extracted cannabinoid acceptable by some regulatory agencies only
Cost	Far more cost effective over long-term	Currently expensive ($250-800/month for 150mg/day CBD)

1. Maguire R, F, Wilkinson D, J, England T, J, O'Sullivan S, E: The Pharmacological Effects of Plant-Derived versus Synthetic Cannabidiol in Human Cell Lines. Med Cannabis Cannabinoids 2021. doi: 10.1159/000517120



Emyria's synthetic cannabinoid development strategy

An evidence based, synthetic (ultra-pure) cannabinoid product will create significant returns

- Regulators will continue to ensure pharmaceutical standards at federal level in US, Aus (*eg FDA statement, down scheduling of low dose CBD in Aus*) in line with historical precedents
- Botanical products currently non compliant (due to purity) or cost prohibitive (due to input costs)
- Demand for CBMP's as substitute and adjunct therapeutics will rise based on safety and efficacy profile
- Big pharma will own API and supply chain when hurdles of safety, efficacy and scalable manufacture are met



Emyria's growing cannabinoid patent portfolio

	Title	Official No.	Status
Emyria's cannabinoid patents cover unique formulations, delivery approaches and "method of use"	Use of Cannabidiol for the Treatment of Psychological Distress	2020904152	Provisional filed
	Use Of Cannabinoid for the Treatment of Psychological Distress	2021901086	Provisional filed
	Use Of Cannabidiol for the Treatment of Irritable Bowel Syndrome-Related Psychological Distress	2021901672	Provisional filed
	Use Of Cannabinoid Combination for the Treatment of Irritable Bowel Syndrome-Related Psychological Distress	2021901674	Provisional filed
	Cannabidiol Dosing Regime	2021902001	Provisional filed
	Others in development covering unique delivery platforms, dose responses and clinical indications	*Multiple provisionals expected 2021*	

(4) MDMA analogue drug discovery and development



Emyria's MDMA analogues - a novel drug discovery pipeline

Emyria's MDMA analogues	
Key features	• Exclusive access to >100 unique MDMA analogues • >10 years of development at UWA • Entire library exclusively optioned to Emyria • Verified excellent purity and stability • Early preclinical results for neurological disorders • Potential for use as novel psychedelic-assisted therapeutics
Accelerated development program	1. In-house expertise and partners to conduct target-to-hit and hit-to-lead screening via neuro-receptor analysis and validation studies 2. Lead compound selection informed by clinical, pharmacological and medicinal chemistry experts 3. Multiple patent families filed to protect all distinct, drug classes identified





Psychedelic companies are attracting large valuations

Symbol	Company	Market Cap (AUD)	
ATAI	ATAI Life Sciences N.V.	**$3,216,535,666**	Multiple psychedelics R+D targeting depression, anxiety, substance use,, TBI, Schizophrenia
CMPS	COMPASS Pathways Plc	**$1,789,730,559**	Testing synthesized psilocybin, administered with support from a trained therapist, to treat depression
GHRS	GH Research PLC	**$1,464,094,233**	(5-MeO-DMT) for depression
MNMD	Mind Medicine (MindMed) Inc.	**$1,145,502,960**	LSD experiential therapy for anxiety, 18-MC for substance abuse, LSD microdosing
CYBN:AQL	CYBIN INC.	$501,142,795	Psilocybin for MDD, deuterated tryptamine for anxiety and alcohol, phenethylamines
FTRP:CA	Field Trip Health Ltd.	$492,435,180	Ketamine-assisted psychotherapy clinical service
IHL:ASX	Inncannex Healthcare Ltd	$341,789,028	Commencing phase 2b trial for Psi-GAD psilocybin, targeting Generalised Anxiety Disorder
SEEL	Seelos Therapeutics Inc.	$272,158,453	Ketamine for major depressive disorder (MDD)
NUMI:CA	Numinus Wellness Inc.	$250,081,619	Ketamine clinics and clinical trials in MDMA-assisted therapy for PTSD & psilocybin for substance abuse
EMD:ASX	***Emyria Limited***	***$55,900,000***	***Commencing phase IIb MDMA-assisted therapy trial for PTSD, Developing range of novel MDMA-analogues from library of >100 compounds, real-world data generation***

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Source: https://psychedelicinvest.com/index/(accessed August 22nd)

(5) Clinical service delivery



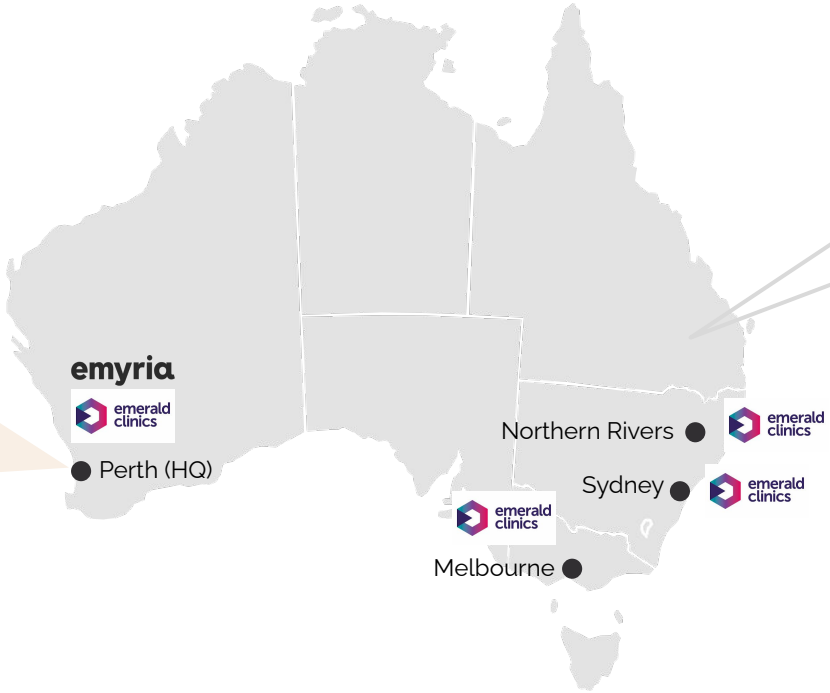


Caring for Australians, developing treatments for the globe



Headquartered in **Perth**,

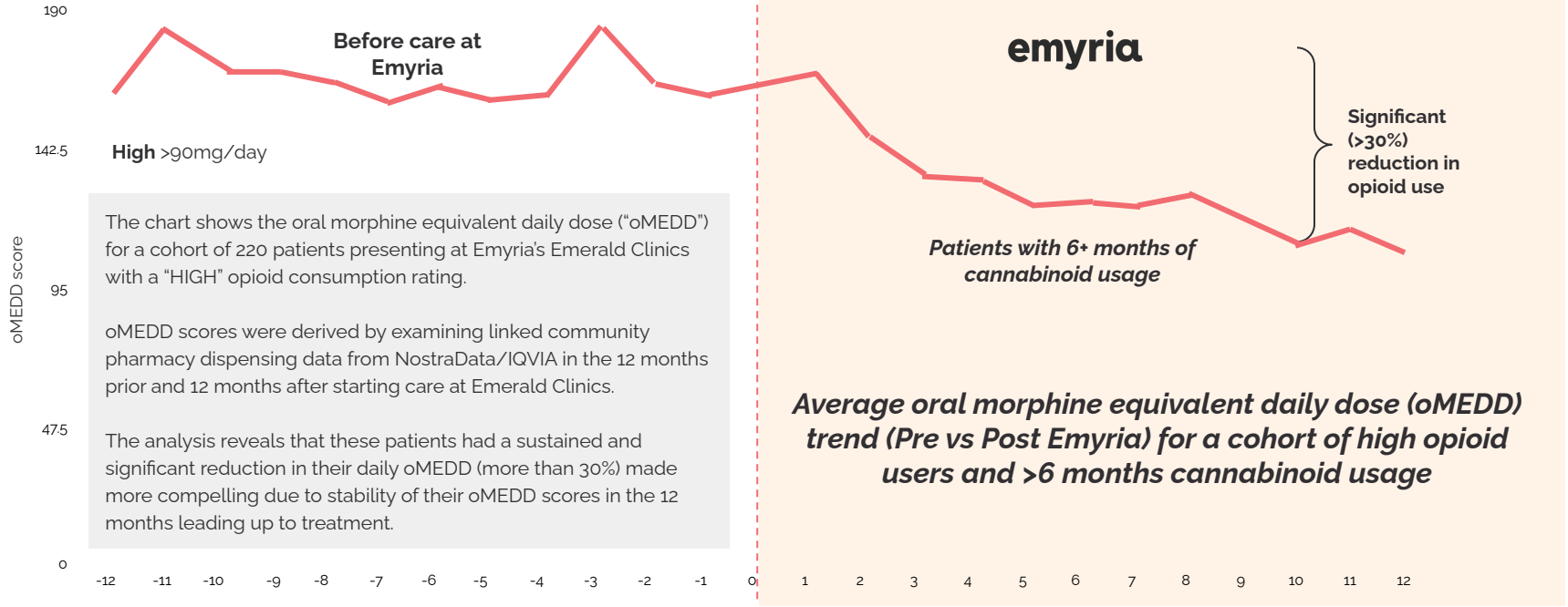
Emyria operates a national clinical site network (Emerald Clinics) providing thousands of **patients with unmet needs** safe access to **new and promising treatments** while also generating robust and **ethically-sourced clinical data**.



Global registration targets

Our data guides unique drug development programs targeting major unmet needs and registration with the world's largest regulators: *FDA (USA), MHRA (UK), EMA (Europe)*

Emyria's care model reduces opioid use by > 30%



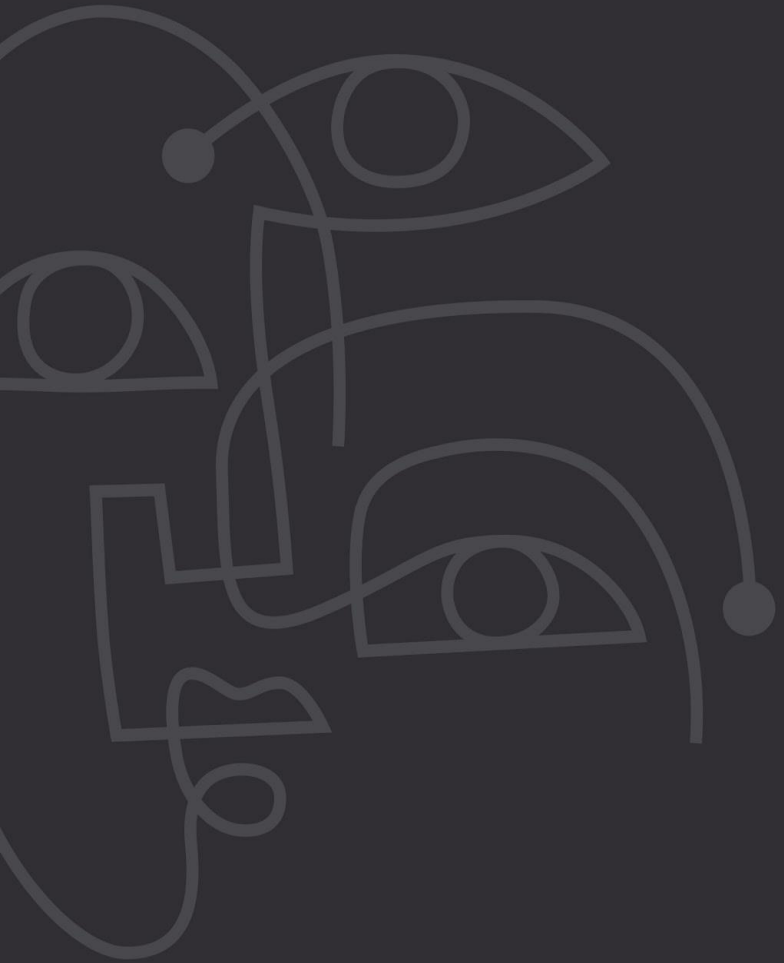
The chart shows the oral morphine equivalent daily dose ("oMEDD") for a cohort of 220 patients presenting at Emyria's Emerald Clinics with a "HIGH" opioid consumption rating.

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 Emerald Clinics.

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.

Average oral morphine equivalent daily dose (oMEDD) trend (Pre vs Post Emyria) for a cohort of high opioid users and >6 months cannabinoid usage

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6. Team of global experts

Multiple previous FDA approvals

Board with deep clinical and commercial expertise

Key Person	Role	Experience	Affiliations
	**Dr Stewart Washer** Chairman & Founder	**Cynata** (ASX:CYP) – stem cells **Orthocell** (ASX:OCC) – regenerative medicine **Botanix** (ASX:BOT) – synthetic CBD	ortho·cell advancing tissue repair & regeneration; botanix PHARMACEUTICALS; cynata therapeutics
	**Dr Michael Winlo** Managing Director	**Medical doctor** Director at **Linear Clinical Research** - Phase 1 clinical trials Health Lead at **Palantir** (NYSE:PLTR) - Big Data analytics MBA from **Stanford University**	linear; Palantir; Stanford University
	**Dr Alistair Vickery** Medical Director	Specialist **general practitioner** Chair of **Black Swan Health** - mental health Associate **Professor of Primary Health Care**	BLACK SWAN HEALTH LTD; THE UNIVERSITY OF WESTERN AUSTRALIA
	**Matt Callahan** NED & Founder	Founder **Botanix** (ASX:BOT) - synthetic CBD Founder **Orthocell** (ASX:OCC) - regenerative medicine 4 products through **FDA approval** More than 20 years' **legal and IP experience**	ortho·cell advancing tissue repair & regeneration; botanix PHARMACEUTICALS; iCeutica Making Drugs Better
	**Professor Sir John Tooke** Independent NED	**Knighted** in the UK for Services to Medicine Senior Independent Director, **BUPA Chile** Head of Medical Sciences, **University College London** Review board, **Google DeepMind** Immediate past **President Academy of Medical Sciences**	Bupa; UCL; DeepMind; The Academy of Medical Sciences

Emyria's key advisors

Key Person	Role	Experience	Affiliations
	**Dr Karen Smith, MD, PhD, MBA, LLM** Chair of Strategic Advisory	**Multiple Directorships** with innovative pharmaceutical companies **Ex-Chief Medical Officer** and **Global Head of R&D** at **Jazz Pharmaceuticals** Overseen more than 100 clinical trials and **20 regulatory approvals**	Jazz Pharmaceuticals
	**Assoc. Prof. Matthew Pigott, Dr, BSc PhD** Medicinal Chemist, MDMA Analogues	Worked on **antibiotic drug discovery** in collaboration with **GlaxoSmithKline** Has spent the past 10 years developing **MDMA analogues** for Parkinson's disease and other **neurological conditions**	THE UNIVERSITY OF WESTERN AUSTRALIA
	**Prof. Mathew Martin-Iverson, BSc Alta., PhD Br.Col.** Neuropharmacologist	**Head of Psychopharmacology, UWA** Over **35 years** of experience studying **amphetamines** and other **psychostimulants**	THE UNIVERSITY OF WESTERN AUSTRALIA

Psychiatry leadership

Name	Role	Experience	Affiliations
	**Dr Eli Kotler, MBBS, MPM, FRANZCP, AFRACMA** Principal Investigator	**Medical Director** at **Malvern Private Hospital**, specialising in drug & alcohol addiction recovery Strong **research background** Board Member, **Mind Medicine Australia** Participant, inaugural **CPAT course**	MIND MEDICINE AUSTRALIA The Royal Australian & New Zealand College of Psychiatrists MALVERN PRIVATE HOSPITAL
	**Dr Jeremy Tannenbaum, MBBS(Hons), BSc, FRANZCP** Consultant Psychiatrist	Psychiatrist & Specialist Pain Medicine Physician trainee, **Hollywood Private Hospital**, **The Anodyne Centre (holistic pain management clinic)** & **Fiona Stanley Hospital** Completed medical elective with **Prof. David Nutt** at **Imperial College, London**	Imperial College London The Royal Australian & New Zealand College of Psychiatrists The ANODYNE CENTRE
	**Dr Richard Magtengaard, MBBS, BSc, RAN, RTD, FRANZCP** Consultant Psychiatrist	**Director of Military Trauma Recovery Program**, Salvado Former Commissioned Officer within the **Royal Australian Navy** Member of Australasian Military Medical Association; affiliations with the ADF Joint Health Command, St John's Ambulance and WAPOL	Salvado. NAVY The Royal Australian & New Zealand College of Psychiatrists



Six reasons to invest in Emyria (ASX: EMD)

1 Attractive valuation

Compared to industry vertical peers

2 Proprietary RWE

Unique insights into what treatment is working and in whom, source of IP

3 Synthetic cannabinoid delivery platform

Designed to meet FDA requirements, favourable COGS

4 MDMA-analogue drug discovery pipeline

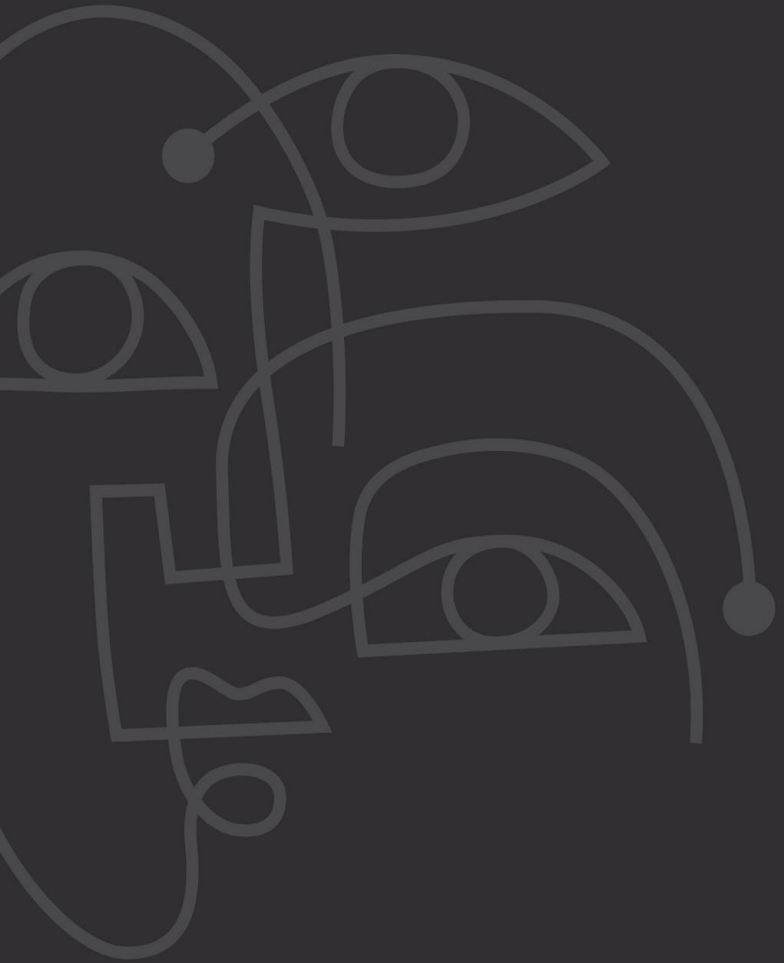
Multiple potential treatments for neurological and psychiatric conditions

5 National clinical service delivery

Front-line experience treating patients with unmet needs

6 Team of global experts

Over 24 FDA approvals, over 100 clinical trials, clinical and commercial experience



For more information, please contact:

Dr. Michael Winlo, Managing Director
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