

Emyria enters exclusive agreement with UWA to develop a drug discovery pipeline of novel psychedelic therapies

Highlights:

- Emyria has secured exclusive rights to a library of more than 100 novel MDMA analogues from the University of Western Australia creating a unique drug-discovery pipeline
- The library of compounds has been developed by the highly regarded research group of medicinal chemist, Dr. Matt Piggott, who has been working with MDMA analogues, and exploring their therapeutic potential, for more than 10 years
- Emyria aims to screen and expand the existing library in order to identify families of patentable compounds with the greatest promise as new psychedelic-assisted therapies and treatments for other neurological disorders
- Emyria will lead the global patent strategy, already underway, of this unexplored research space
- Program has the potential for Emyria to lead the clinical development and commercialisation of multiple, novel, CNS-active compounds to help treat patients with major unmet needs

Emyria Limited (ASX: EMD) (Emyria or the Company), a clinical drug development and care delivery company, is pleased to announce it has entered into an exclusive agreement with the University of Western Australia to examine and expand a unique library of proprietary, MDMA-like compounds or 'analogues' which has been developed over the last 10 years.

The analogues are unique chemical entities that are structurally similar to 3,4-methylenedioxymethamphetamine ('MDMA', 'ecstasy'), but designed to engage different neurological targets, and therefore, elicit potentially unique clinical and neuro-cognitive effects.

The agreement provides Emyria with a unique drug discovery pipeline, which will assist the company in becoming a leader in the development of psychedelic-assisted therapies and treatments for major neurological disorders.

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UWA Group Global Leadership

Dr. Matt Piggott, who will be leading the screening and compound expansion program, has more than 23 years of experience in sophisticated organic synthesis, medicinal chemistry, chemical biology, and therapeutic drug development. Dr. Piggott has been investigating MDMA analogues for more than 10 years and is considered a world expert in this area.

Dr. Piggott has also provided expert opinions, evidence and commercialisation advice to numerous multinational pharmaceutical and regulatory agencies.



Therapeutic potential

For a number of mental health disorders, including Post-Traumatic Stress Disorders (PTSD), there are limited efficacious treatment options. Recently, there has been renewed interest in the potential of MDMA-assisted psychotherapy to restore function for patients with these disorders with the primary hypothesis that MDMA, via prosocial effects, and in conjunction with psychotherapy, increases the ability of patients to address the underlying psychopathology of their disorder. [1]

MDMA-analogues have also shown promise as treatments for other neurological disorders, such as Parkinson's disease. In these indications, it may be desirable to limit or remove the euphoric and stimulant effects of MDMA.

Therefore, for the treatment of certain psychiatric and neurological disorders, there is an interest in developing MDMA-like compounds that are more selective for specific neurological receptors. More selective drug candidates have the potential to become treatments for large patient populations with reduced cost and increased efficacy.

Emyria's Managing Director, Dr. Michael Winlo, said: "MDMA-assisted psychotherapy has demonstrated huge potential in treating severe Post Traumatic Stress Disorder and Emyria is actively working to develop a safe and scalable delivery model for this treatment.

Emerging treatments like psychedelic-assisted therapy have great potential but require further investment and innovation into new drugs, digital technologies and care models in order to improve efficacy, safety and access for patients.

With this exclusive agreement, Emyria has now added a unique drug discovery pipeline, which complements our existing programs, and which leverages years of research and development by Dr. Matt Piggott and his team. This agreement creates an opportunity for Emyria to lead the development of the next generation of MDMA-like compounds so they may become registered treatments for patients with major psychiatric and neurological disorders.

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This agreement prepares Emyria to be an Australian leader in the development of novel psychedelic assisted therapies and also has the potential to identify and develop novel therapeutic agents for other neurological disorders where there are large unmet needs, potentially expanding the range of disorders we can treat.

As a data-backed clinical care provider and drug developer we are uniquely positioned to lead the accelerated development and registration of promising new treatments as well as collect the evidence required to demonstrate adequate safety, efficacy and cost effectiveness and we look forward to updating the market accordingly on the progression of this program."

Exclusive licence option

Under the agreement, Emyria will initially fund a minimum of \$491,000 to UWA and Dr. Matt Piggott over the next 12 months. Funds will support further screening and analysis on the current series of more than 100 novel MDMA-analogues as well as further novel compound synthesis to expand and broaden the library.

The program is an important step in investigating the therapeutic potential of MDMA analogues as novel, psychedelic-assisted therapies as well as for a range of psychiatric and neurological disorders, by examining the effects of the compounds on a range of neurological targets. The most promising compounds will be advanced through a full clinical development program.

Emyria will also direct a global commercial patent strategy alongside the program to ensure relevant intellectual property is suitably protected. Upon completion of the program, Emyria will have an option to exclusively license the most promising compounds (and their associated patent families).

Potential applications in psychedelic-assisted therapy

MDMA has recently shown considerable promise, in Phase III clinical trials, as a treatment for severe Post-Traumatic Stress Disorder (PTSD) when administered alongside structured psychotherapy. [1]

Emyria is currently developing an open-label, Phase II clinical trial program designed to demonstrate the clinical effectiveness and scalability of MDMA-assisted psychotherapy as a treatment for PTSD in Australia. The program, EMDMA-001, has been developed with partners Mind Medicine Australia and Principal Investigator, Dr. Eli Kotler, who are providing trained psychotherapists and clinical oversight (See ASX releases 05 May 2021 and 29 June 2021).

However, MDMA-assisted psychotherapy is contraindicated for patients on certain medications and the drug's long half-life means patients typically require close observation for more than 10 hours per treatment session. Further, MDMA has been associated with a number of potential and unwanted side effects [2].

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For these reasons, within the psychedelic-assisted therapy field, there is interest in MDMA-like alternatives that can deliver the desirable and positive, prosocial effects of MDMA while shortening the half-life or reducing the incidence of adverse events. Given that MDMA is a small molecule that interacts with multiple neurological receptors, it may be possible, with the right medicinal chemistry expertise, to develop novel molecules that can elicit the desirable, pro-social aspects of MDMA to support effective psychotherapy but without some of the side-effects, or long half-life, that currently limits its therapeutic potential.

UWA's Associate Prof. Matt Piggot, said: *"I am delighted to be working with Emyria and their team of clinicians and partners to investigate the therapeutic potential of our MDMA analogues. Emyria has the resources to accelerate the development of drug candidates and demonstrated capacity to register neurological treatments that improve patient wellbeing."*

This announcement has been approved and authorised for release by the Board of Emyria Limited.

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References:

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<https://www.drugabuse.gov/publications/research-reports/mdma-ecstasy-abuse/what-are-effects-mdma>

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About Emyria (www.emyria.com)

Emyria Limited is a clinical drug development and care delivery company.

Emyria's

Treatments target large unmet needs and are focused on obtaining approval ("registration") with major global regulators. Emyria's treatment 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.

About University of Western Australia

The University of Western Australia (UWA) is a public research university in the Australian state of Western Australia.

UWA has been ranked as having some of the highest quality undergraduates of any university in Australia and is ranked second in Australia for the quality of its undergraduate programs.

The Academic Ranking of World Universities (ARWU) produced by Shanghai Jiao Tong University has consistently placed UWA as the joint best university in Australia (along with the University of Queensland) in the fields of clinical medicine and pharmacy. UWA is also a leader in the fields of medicinal and biomolecular chemistry according to ERA (Excellence in Research) Rankings.

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.