Research Initiation: Entropy Neurodynamics Ltd (ASX:ENP)

Patented Psychedelic Treatment Through Precision IV Dosing

Share Price: $0.035

Entropy Neurodynamics Ltd (ASX: ENP) is a clinical-stage biotechnology company pioneering psychedelic therapies, with a patent granted over intravenous (IV) infused psilocin, designed for precision dosing of psychedelic-assisted therapy.

ENP's lead program is TRP-8803, IV-infused psilocin, the active ingredient of psilocybin. ENP believes, along with supporting data, that psilocin could be used to treat debilitating conditions such as binge eating disorder (BED), fibromyalgia, irritable bowel syndrome (IBS), depression and anxiety. Indications which affect millions, with large multi-billion end markets, however treatments are often inadequate.

With its proprietary IV-infusion of psilocin (TRP-8803), ENP has advantages over traditional oral psilocybin such as faster onset time (~15 minutes), shorter treatment duration (2 hours), precision dosing control and rapid reversibility.

Early clinical signals have been highly encouraging. ENP's oral psilocybin prototype (TRP-8802) achieved an >80% reduction in binge eating episodes in a Phase 2a trial and 100% of fibromyalgia patients reported pain relief and improved quality of life in an initial study. Patients also experienced improved sleep quality, reduced anxiety, and improved cognitive ability.

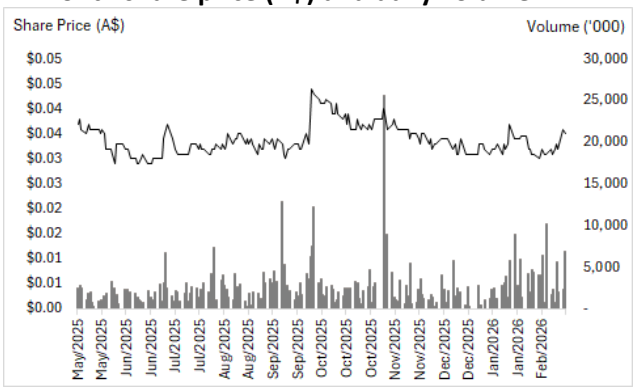
Following a $6.1 million institutional placement in November 2025 and a A$2.6m R&D credit facility ENP is positioned to deliver on near term catalysts.

ASX: ENP
Sector: Healthcare
18 Feb 2026

Market cap. (A$m)	55
Shares outstanding (m)	1,564
Shares fully diluted (m)	2,301
Market cap full dil. (A$ m)	81
52-week high/low (A$)	$0.028/$0.047
Co. Website	entropyneurodynamics.com

Source: Iress

12 month share price (A$) and daily volume



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Potential Near-Term Catalysts

Catalyst	Timeframe
Final data for TRP-8802 Phase 2a for IBS	Q1 CY26
Recruitment and dosing of additional patients for TRP-8803 trial to treat binge eating disorder (BED)	Ongoing
Top-line results from TRP-8803 trial to treat binge eating disorder (BED)	Q1 CY26
Commencement of a new & significant clinical trial with TRP-8803	Q1 CY26
Completion and final data of TRP-8803 for BED	H1 CY26
A robust pipeline of volunteer results will deliver strong consistent news-flow throughout 2026	Ongoing

Table 1: Upcoming Catalysts. Timetable is indicative only and subject to change.

Register to Receive Future ENP Research Notes

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Entropy Neurodynamics Ltd

ENP is conducting Phase 2 clinical trials using its proprietary psilocybin and psilocin-based treatments for conditions such as binge eating disorder (BED), fibromyalgia, and irritable bowel syndrome (IBS). These disorders are linked by underlying brain-body dysfunction and often lack effective long-term treatments. ENP's intravenous psilocin formulation (TRP-8803) is designed to offer faster, more controllable psychedelic therapy, with the potential to deliver lasting relief. Beyond the current programs, the company sees broader opportunities to treat other mood, pain, and functional disorders where traditional treatments fall short.

Top Shareholders

Shareholder	Ordinary Shares Held	% Held
Dr William Garner (Co-founder)	222,454,729	13.82%
Citicorp Nominees Pty Ltd	92,203,266	5.73%
Dr Daniel Tillett (NED)	62,000,000	3.85%
Mr Jason Carroll (CEO)	52,300,000	3.25%
Netwealth Investments Ltd <Super Services A/C >	46,798,859	2.91%
Netwealth Investments Ltd <Wrap Services A/C>	44,702,386	2.78%
Mr. Herwig Janssen (Chair)	35,583,453	2.21%

Table 2: Top shareholders as of 31 December 2025. Source: December 2025: Quarterly Activities Report

The Medical Psychedelic Industry

Psychedelics were once confined to counterculture and experimental use but now are at the forefront of a "psychedelic renaissance" in mental healthcare. Researchers and biotech companies worldwide are developing therapies based on substances like psilocybin, MDMA, LSD, DMT, and related analogues for hard-to-treat psychiatric conditions. These efforts have attracted significant investment and attention from both specialised startups and established pharmaceutical firms. Early clinical trials have shown promising efficacy in disorders such as depression, post-traumatic stress disorder (PTSD), and addiction, fuelling hopes that psychedelic-assisted therapies could revolutionise mental health treatment.

The medical psychedelic industry represents one of the most compelling emerging segments within mental health and neurological therapeutics. Once relegated to the fringes of drug research, compounds such as psilocybin are now at the forefront of a rapidly expanding pharmaceutical and clinical services market, driven by increasing global mental health burdens and a paradigm shift toward novel treatment modalities.

According to recent market forecasts, the global psychedelic drugs market is projected to grow significantly over the coming decade. The industry was estimated to be worth approximately USD 3.9 billion in 2025 and is expected to more than double to around USD 9.6 billion by 2032, representing a robust ~14% compound annual growth rate (CAGR) over the forecast period[1]. Psilocybin, the active molecule behind "magic mushrooms" is one of the fastest-growing segments within this broader market, projected to account for nearly one-third of total market share due to its therapeutic potential and increasing clinical acceptance.

The growth trajectory is underpinned by several macro drivers:

[1] Psychedelic Drugs Market Trends, Share & Forecast, 2025-2032

- Rising awareness and education among clinicians, regulators, and the broader public, driven by high-profile clinical trial results, academic research, and mainstream media coverage
- Clinical validation and regulatory momentum, with psychedelic-assisted therapies earning breakthrough designations and advancing through late-stage trials, improving investor confidence and healthcare interest.
- Geographic expansion of legal and clinical frameworks, particularly in North America and parts of Europe, which currently account for the largest share of psychedelic drug market revenue and research infrastructure[2].

Compared with traditional psychiatric pharmaceuticals, the psychedelic therapeutics segment remains nascent but is exhibiting higher relative growth rates, reflecting untapped patient populations and premium pricing potential for innovative therapies, where one or two treatments per year may replace daily medications while improving patient outcomes.

Early adoption in hospital pharmacies and specialised treatment centres further signals an industry in transition from experimental to mainstream medical practice. In this context, psilocybin companies are positioned within a high-growth medical wave that intersects public health demand, scientific advancement, and shifting regulatory environment. Overall, offering a substantial long-term market opportunity as the sector scales toward broader clinical application and commercialisation.

Problems with Oral Psilocybin & the Solution

Psilocybin is the compound found in “magic mushrooms”. Used for thousands of years in religious and healing rituals it is believed that psilocybin could be beneficial in treating a range of difficult to treat mental and physical conditions such as anxiety, depression, PTSD, eating disorders, chronic pain conditions and other high burden disorders with limited treatment options.

While studies have shown promise, oral psilocybin presents several practical and clinical challenges. The time to onset for oral psilocybin is relatively slow, and the timing of peak effects can be unpredictable. Patients may require anywhere between one and four hours to reach the peak therapeutic zone due to variability in absorption and metabolism. Once the effects begin, the therapeutic experience typically lasts four to six hours and can extend up to eight hours in some cases, which significantly lengthens total treatment time.

[2] Psychedelic Drugs Market Size & Share Analysis - Industry Research Report - Growth Trends 2031 - mordorintelligence.com

Dosing precision is another key limitation. Due to liver metabolism (which is variable between patients), it is impossible to consistently achieve optimal blood levels of psilocin (the active component of psilocybin), with up to 30%[3] of patients failing to reach an adequate therapeutic zone due to insufficient exposure. Conversely, if blood psilocin levels are too high, patients may experience unwanted adverse effects.

Side effects become more likely when blood psilocin concentrations exceed the therapeutic range and can include nausea, vomiting, loss of bladder control, and paranoia. Importantly, Oral psilocybin is not a reversible therapy. Once treatment has begun, the core psychedelic effects cannot be stopped and must run their natural course, which as mentioned can extend up to eight hours. While supportive medications can reduce anxiety or agitation, they cannot fully reverse the underlying psychedelic state

From a commercial perspective, this creates scalability challenges. Patients require continuous medical supervision for the full duration of treatment, potentially for many hours, making it difficult to see how oral psilocybin therapy could be efficiently scaled within a clinical or reimbursement-driven healthcare model.

Benefits of IV Psilocin

When Psilocybin is consumed it is converted (through liver metabolism) into psilocin. Psilocin acts primarily on serotonin receptors in the brain, particularly the 5-HT2A receptor, which drives the altered perception, cognition, and therapeutic effects observed during a psychedelic experience.

The ability to administer psilocin intravenously offers meaningful advantages over oral psilocybin therapies. Treatment sessions are significantly shorter, typically lasting two hours, which reduces patient burden, lowers supervisory costs and improves clinic throughput.

The onset of the psychedelic state is rapid and predictable, with therapeutic effects generally achieved within 15 minutes. This allows clinicians to initiate treatment quickly and better manage session timing.

IV administration also enables precise targeting and maintenance of psilocin blood levels. Clinicians can adjust dosing in real time to keep patients within the therapeutic zone, reducing variability in treatment response and lowering the risk of under- or over-exposure.

[3] First patient enrolled in Binge Eating Disorder Trial – Tryptamine Therapeutics

Importantly, IV psilocin is quickly reversible in an emergency. If adverse effects occur or treatment needs to be stopped, infusion can be ceased and blood levels decline rapidly, providing a critical and comforting safety advantage for both patients and clinicians.
These characteristics support commercial scalability. Shorter, more predictable session, reduce staffing requirements, increase patient turnover, and improve cost efficiency, making IV psilocin more compatible with regulated clinical settings and reimbursement-driven healthcare models.

TRP-8803 (IV psilocin)

TRP-8803 (IV Psilocin Formulation) is ENPs flagship program and lead drug candidate. TRP-8803 delivers psilocin via intravenous (IV) infusion, allowing unprecedented control over dose and duration in a psychedelic therapy setting. The company has positioned TRP-8803 for Phase 2 trials in multiple indications, leveraging positive signals from earlier oral psilocybin studies using TRP-8802 (oral psilocybin).

TRP-8803 has undergone Phase 1 trials in obese and non-obese healthy volunteers where it established safety, confirmed achievement of blood psilocin levels within the therapeutic zone, confirmed reversibility and achieved desired pharmacokinetic (PK) profile.

The study was open label and undertaken at CMAX Clinical Research in Adelaide. 14 (11 non-obese weight and three obese) volunteers were administered TRP-8803 via IV-infusion at varying dose levels for up to 150 minutes. The study focused on optimising the dose and infusion rate of TRP-8803 to consistently deliver precise psilocin blood levels while maintaining an acceptable PK profile.

All participants in the study achieved onset of the psychedelic state in under 20 minutes. Patients infused with TRP-8803 achieved consistent blood levels of psilocin within the target therapeutic zone. Furthermore, the escalating dosing regimen confirmed a strong relationship between psilocin blood levels and psychedelic intensity.

During the study ENP was also able to demonstrate the reversibility of TRP-8803. One participant experienced an increase in heart rate above the study threshold of 100 beats per minute. Upon pausing the infusion, the participant's heart rate returned to acceptable levels.

Figure 1 highlights the infusion's ability to quickly bring patients into the therapeutic zone, maintain drug levels within the desired range and then reverse the effects.

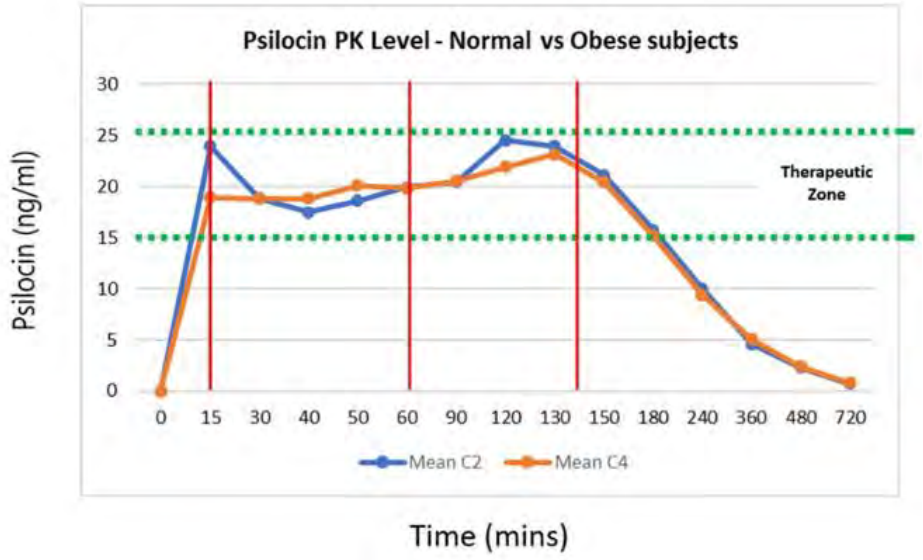

Figure 1: Average psilocin blood concentrations in obese (mean C4) and non-obese subjects (mean C2)

TRP-8803 is currently undergoing Phase 2 trials for the treatment of binge eating disorder alongside Swinburne University.

The trial will recruit 12 patients suffering from BED in two, six-person cohorts. Each cohort will be administered two doses of TRP-8803 14 days apart, in parallel with supportive therapy. The first cohort will receive a mid-range dose with the second cohort receiving a higher range dose. The first patient was dosed on 1 and 15 December 2025 with a second patient receiving their first dose on 5 February 2026.

The primary objective of the study is to evaluate the safety of TRP-8803 following two administrations in patients with binge eating disorder, with safety monitored for 12 weeks after the first dose.

Secondary objectives include assessing TRP-8803's ability to induce a psychedelic state in patients with binge eating disorder and evaluating its clinical activity, including effects on binge eating frequency and other weight related measures four weeks after the second dose. ENP will also use the results to explore the potential utility of TRP-8803 in treating comorbidities (anxiety, depression etc.) commonly experienced by patients with binge eating disorder, which will help inform plans for future clinical development.

In January 2026 the first patient successfully completed their 4-week follow-up assessment following two TRP-8803 infusions. The patient described feeling calmer and more in control around food, with greater awareness of choices and a reduced urge to continue eating once satisfied.

TRP-8802 (oral psilocybin)

TRP-8802 is a synthetic oral psilocybin capsule that ENP has used in exploratory Phase 2a studies. While it is not intended to be the final commercial product, TRP-8802 has proven valuable for generating early signs of efficacy across multiple indications. Where a positive clinical response is demonstrated, subsequent studies are expected to utilise TRP-8803 (IV-infused psilocin), with the potential to deliver improved efficacy, safety, and a more controlled patient experience.

TRP-8802 for Binge Eating Disorder (BED)

TRP-8802 has undergone a Phase 2a clinical trial for the treatment of binge eating disorder at the University of Florida**.** Results have since been published in the peer-reviewed Journal of Eating Disorders[4]. The trial demonstrated an average reduction in binge eating episodes of more than 80%.

Six patients of which five were available for data evaluation were enrolled in a four-week run in period, during which they were required to maintain a daily diary to record the number of binge eating episodes and their perceived loss of control overeating. Patients with binge eating disorder frequently experience symptoms of anxiety and depression. During the four-week run in period, patients also completed the Hospital Anxiety and Depression Scale (HADS) questionnaire to assess levels of anxiety and depression.

The initial two weeks focused on baseline data collection, with the following two weeks comprising eight hours of psychotherapy delivered by trained clinicians alongside EEG and fMRI assessments. After the four-week run in period, patients received a 25 mg oral psilocybin capsule administered by a psychotherapist. Participants continued to be monitored and assessed for 12 weeks after the dosing.

Across all patients, daily binge eating episodes were reduced by an average of 80.4% from baseline during the four week post dosing measurement period. All patients reported a reduction of at least 60% in daily binge eating episodes compared with baseline, with four of five patients reporting a reduction of 75% or greater[5].

The number of daily instances in which patients reported a perceived loss of control overeating was reduced by an average of 81.6% during the four week post dosing measurement period. Four

[4] An open-label pilot study of psilocybin-assisted therapy for binge eating disorder | Journal of Eating Disorders - link.springer.com
[5] Tryp Therapeutics Announces Interim Results For Its Phase II Clinical Trial For The Treatment Of Binge Eating Disorder With Psilocybin-Assisted Psychotherapy - tryptherapeutics.com

of five patients reported a reduction of greater than 70 percent compared with baseline.

Four of five (80%) of patients recording waist circumference reduction at week 6 post dose, including two patients achieving reductions greater than 6cm.

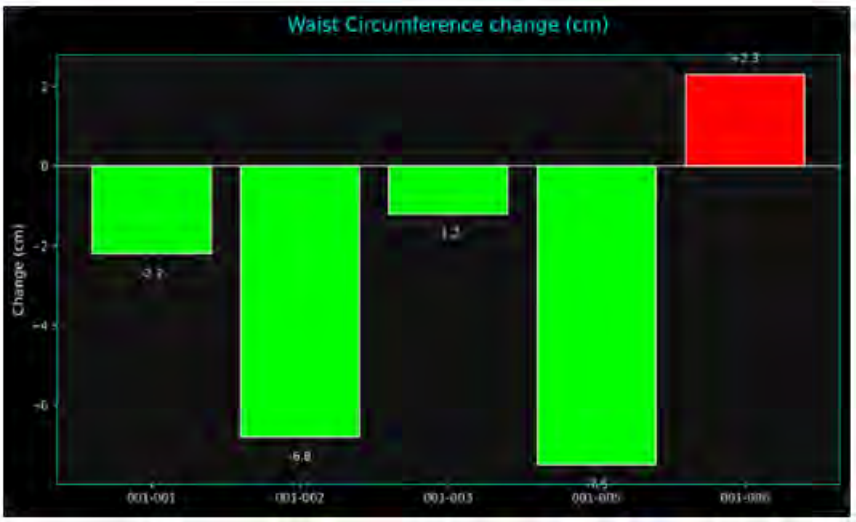

Figure 2 Reduction in waist circumference from baseline through Week 6 for each evaluable patient. Source: Company

Importantly, the safety profile of the psilocybin assisted psychotherapy sessions was favourable. No serious adverse events were reported, and no drug related adverse effects were observed in the weeks following psilocybin administration in any patients within the interim cohort.

In addition, *Figure 3 shows* analysis of Hospital Anxiety and Depression Scale. Anxiety and depression scores demonstrated improving trends in patients' levels of anxiety and depression.

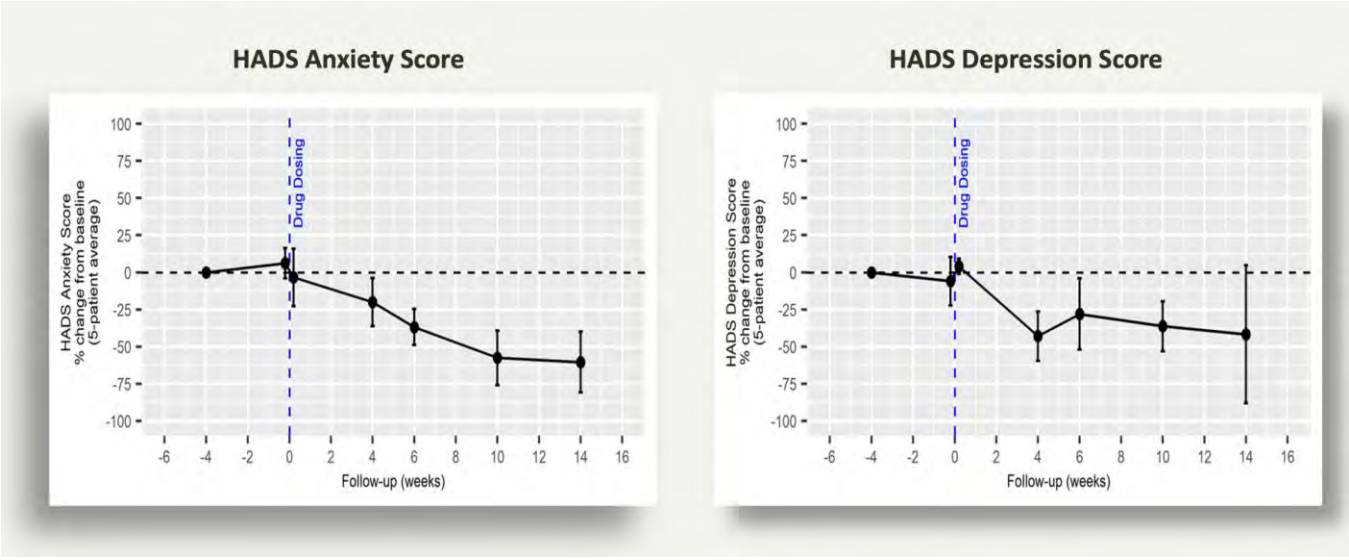

Figure 3 HADS anxiety and depression scores. Source: openaccessgovernment.org

TRP-8802 for Fibromyalgia

In a Phase 2a trial utilising TRP-8802 in the treatment of Fibromyalgia, 100% of fibromyalgia patients reported pain relief and improved quality of life[6].

The open label study conducted at the University of Michigan aimed to evaluate TRP-8802 in conjunction with psychotherapy in patients with fibromyalgia. Five patients were treated with two doses of TRP-8802, starting with a 15 mg dose followed by a 25 mg dose two weeks later, alongside structured psychotherapy. Clinical outcomes were compared with baseline measures one month after the second dose.

All patients experienced improvements in pain severity, sleep disturbance and pain interference (how much pain disrupts daily life). Patients also reported improvements in chronic pain acceptance, physical function, anxiety, fatigue, improved cognition and participation in social roles.

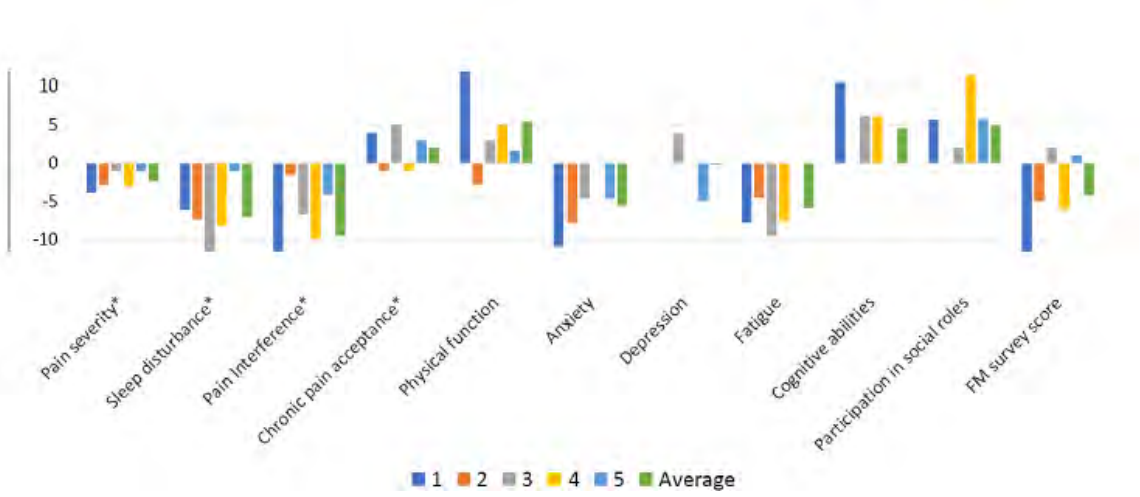

Figure 4: Changes in patient-reported outcomes across multiple symptoms. Source: Company

[6] Tryptamine Therapeutics Deliver Encouraging Results Evaluating Psilocybin For Fibromyalgia - tryptherapeutics.com

TRP-8802 for irritable bowel syndrome (IBS)

ENP has released positive interim results from its Phase 2a trial of TRP-8802 for irritable bowel syndrome (IBS). 75% (3 out of 4) of patients reported a clinically meaningful decrease in abdominal pain and gastro-intestinal associated anxiety. In addition, patients with pre-existing anxiety and depression also showed positive improvement[7].

The core objective of the trial is to assess whether psilocybin, administered alongside structured psychotherapy, can reduce chronic symptoms of irritable bowel syndrome, particularly abdominal pain, and improve patient wellbeing, while also exploring its mechanism of action on the gut brain axis. The study will examine how psilocybin may modulate brain networks involved in chronic pain and gastrointestinal specific anxiety, with the potential to reduce visceral hypersensitivity in patients with irritable bowel syndrome.

In the study participants are randomly assigned to one of two groups. The Immediate Treatment Group begins psilocybin assisted therapy immediately. The Delayed Treatment or waitlist group is monitored for eight weeks without receiving psilocybin before subsequently undergoing the same therapy protocol. This study design allows outcomes to be compared between participants who receive immediate treatment and those who receive a delayed intervention.

In December 2024, ENP, announced positive interim results from the trial's first cohort. At that time, four of ten patients had completed psilocybin assisted therapy. Of those patients, 75%, or three out of four, experienced a clinically meaningful reduction in IBS related abdominal pain and associated gastrointestinal anxiety.

Binge Eating Disorder (BED)

Binge eating disorder is an eating disorder that affects approximately 233 thousand Australians[8] and 2.8 million Americans[9]. The most prevalent eating disorder in Australia, accounting for 47 percent of cases[10]. However, awareness of the condition remains low relative to anorexia nervosa and bulimia nervosa.

The global market for treatments targeting binge eating disorder was estimated at USD 0.76 billion in 2022. Supported by increasing diagnosis rates, greater clinical recognition, and rising global

[7] Positive interim results in Phase 2a TRP-8802 IBS trial - Entropy Neurodynamics Limited (ASX:ENP) - listcorp.com.
[8] About Eating Disorders - insideoutinstitute.org.au
[9] Binge Eating Disorder: Statistics, Facts, and You - healthline.com
[10] Binge eating disorder (BED) - betterhealth.vic.gov.au

prevalence, the market is expected to grow steadily at a compounded annual growth rate of approximately 6.1% up to 2031. On this trajectory, total market value is projected to reach approximately USD 1.28 billion[11].

Binge eating disorder is characterised by recurrent episodes of binge eating, occurring at least weekly, during which individuals consume unusually large quantities of food rapidly over a short period of time.

Individuals often experience feelings of guilt, disgust, and depression following a binge eating episode[12]. Untreated and ongoing binge eating disorder can lead to a range of physical and mental health complications. These may include cardiovascular disease, type 2 diabetes, high blood pressure and high cholesterol, arthritis, social isolation and loneliness, as well as depression and anxiety[13].

Current treatments for binge eating disorder include behavioural therapy, medication and behavioural support.

Lisdexamfetamine (LDX) is the only medication to have gained FDA approval for the treatment of binge eating disorder (BED). As a stimulant it is associated with side effects such as dry mouth, insomnia, sleep disturbances, jitteriness, and upper respiratory tract infections[14].

Studies suggest that GLP-1RAs may reduce binge eating frequency and associated comorbidities, while also demonstrating a favourable psychiatric side effect profile compared with current treatment options[15]. However, evidence from large scale, blinded, placebo-controlled trials remain limited. A recent meta-analysis published in the British Medical Journal (BMJ) looked at 37 studies involving 9,341 adults and found that participants regained an average of 0.4 kg, per month after discontinuing weight management medications. At that pace, researchers estimate individuals would return to their original weight within 1.7 years[16].

Fibromyalgia

Fibromyalgia is a chronic condition that causes severe and widespread musculoskeletal pain as well as fatigue, sleep

[11] Global Binge Eating Disorder (BED) Market to Reach $1.28 - globenewswire.com
[12] About eating disorders – edgi2.org.au
[13] Binge eating disorder (BED) - betterhealth.vic.gov.au
[14] Patient perceptions of lisdexamfetamine as a treatment for binge eating disorder: An exploratory qualitative and quantitative analysis - sciencedirect.com
[15] GLP-1 receptor agonists: A novel pharmacotherapy for binge eating (Binge eating disorder and bulimia nervosa)? A systematic review - pmc.ncbi.nlm.nih.gov
[16] Weight regain after cessation of medication for weight management: systematic review and meta-analysis – bmj.com

disruptions, memory and mood issues[17]. It's believed Fibromyalgia affects between 2 and 4%[18] of the population implying between 150-300 million individuals worldwide.

The global fibromyalgia treatment market is estimated to be valued between US$2 billion and US$4 billion[19] and is expected to grow to approximately US$5 billion by 2034[20].

There are three FDA-approved drugs for fibromyalgia. Duloxetine (Cymbalta) and milnacipran (Savella) adjust brain chemicals to ease widespread pain while pregabalin (Lyrica) blocks overactive nerve cells.

Large patient surveys show that only a small fraction of fibromyalgia sufferers are *highly satisfied* with their treatment outcomes. A survey of over 1,600 fibromyalgia patients in Germany found that a mere 12.7% reported "high" satisfaction with their treatment, while the majority reported moderate or low satisfaction (40.8% moderate, 31.7% low, and 14.8% no satisfaction at all)[21].

Irritable Bowel Syndrome (IBS)

Irritable bowel syndrome is a widespread and complex condition involving gut-brain dysfunction, resulting in severe, recurrent abdominal pain as well as disrupted and unpredictable bowel habits. Despite its substantial impact on quality of life and healthcare costs, the condition remains under-recognised and underdiagnosed.

IBS is a highly prevalent condition affecting between 10% and 15% of people in the United States[22] with around 30% of people who experience symptoms consulting their doctor[23].

The global market for irritable bowel syndrome treatments is estimated to be valued between USD $3.0 billion[24] and $4.0 billion with projections indicating growth to approximately USD 6.0 billion by 2030[25]

[17] Fibromyalgia - Symptoms & causes - mayoclinic.org
[18] Fibromyalgia - rheumatology.org
[19] Fibromyalgia Treatment Market Size, Statistics Report 2034 - gminsights.com
[20] Fibromyalgia Treatment Market Size to Hit USD 5.16 Billion by 2034 - precedenceresearch.com
[21] Patient-related predictors of treatment satisfaction of patients with fibromyalgia syndrome: results of a cross-sectional survey - pubmed.ncbi.nlm.nih.gov
[22] Irritable Bowel Syndrome (IBS) - gi.org
[23] The epidemiology of irritable bowel syndrome - pmc.ncbi.nlm.nih.gov
[24] Irritable Bowel Syndrome Treatment Market Report, 2024 – 2032 - gminsights.com
[25] Irritable Bowel Syndrome Treatment Market Size Report 2030 - grandviewresearch.com

Patent Library

- **Australian patent granted protecting the precision-controlled IV delivery method underpinning TRP-8803**:
  - Patent protection extends through to 2042
  - Covers the proprietary two-phase dosing model consisting of a rapid loading dose inducing therapeutic state within 5–30 minutes and a controlled maintenance infusion to stabilise plasma levels
  - Enables clinician control over onset, depth and duration of the psychedelic experience
  - Allows immediate cessation of treatment by stopping the IV infusion
  - Protects use of EEG-based monitoring to support biomarker development and precision psychiatry applications
  - Claims extend across psilocybin, psilocin and related chemical variants
  - Applies across multiple high-value indications including anxiety, PTSD, addiction, eating disorders, fibromyalgia and nociplastic pain
  - Strengthens competitive positioning by creating method-level barriers around controlled IV psychedelic delivery
  - Additional corresponding patent applications remain under review in other jurisdictions

- Provisional patent application covering use of psilocybin and derivatives in the treatment of binge eating disorder (BED) filed June 2022
- Provisional patent application for treatment of fibromyalgia filed September 2022
- Provisional patent application for salt & co formers of TRP-8803 filed September 2022
- Provisional patent for IBS filed Jan 2023

EEG Entropy Biomarker

ENP has signed an agreement with two of the world's leading psychedelic-brain researchers, Professor Robin Carhart-Harris and Professor Pedro Mediano, to create a new EEG-based brain biomarker. This biomarker will help measure what is happening in the brain in real time when a patient receives TRP-8803. The platform will use machine-learning algorithms and closed-loop EEG

monitoring to define the optimal neuroplasticity window during TRP-8803 infusion.

Mental health treatment relies heavily on subjective scores such as surveys and questionnaires. This program aims to create the first regulatory-grade physiological biomarker for psychedelic therapy, offering objective measures of treatment effect, improved patient-selection capabilities, and enhanced safety through real-time dose modulation. Companion biomarkers in CNS drug development have shown significant improvement in approval probability[26].

Peer Comparisons

Compass Pathways PLC (NASDAQ:CMPS) Market Capitalisation ~USD$560m: is a UK company conducting studies to evaluate psilocybin as a treatment for treatment-resistant depression (TRD), post-traumatic stress disorder (PTSD), and anorexia nervosa. Its lead program COMP360, is a synthetic formulation of psilocybin currently undergoing Phase 3 trials for treatment resistant depression.

AtaiBeckley Inc (NASDAQ: ATAI) Market Capitalisation ~USD$1.3b: is a clinical-stage biopharmaceutical company targeting conditions such as treatment-resistant depression (TRD) social anxiety disorder and opioid use disorder. Its lead program, BPL-003 a mebufotenin benzoate nasal spray is being investigated as a treatment for treatment-resistant depression (TRD) and was granted breakthrough therapy designation by the U.S. Food and Drug Administration (FDA). ATAI has a diversified pipeline with products such as VLS-01 (buccal film DMT) and EMP-01 (oral R-MDMA),

Definium Therapeutics Inc (NASDAQ: DFTX) Market Capitalisation ~USD$1.6b: Formerly Mind Medicine (NASDAQ: MNMD), is a late-stage clinical biopharmaceutical company developing a pipeline of product candidates for brain health disorders. MM120 is a form of lysergide D-tartrate (LSD) currently in Phase 3 to treat generalised anxiety disorder (GAD) and major depressive disorder (MDD).

Helus Pharma (NASDAQ: HELP) Market Capitalisation ~USD$300m: Formerly known as Cybin (CYBN), is developing psychedelic-based treatments for patients with mental health condition. Its investigational product HLP003, a deuterated psilocin analog has been granted FDA breakthrough therapy designation for the adjunctive treatment of major depressive disorder (MDD).

[26] Estimation of clinical trial success rates and related parameter - pmc.ncbi.nlm.nih.gov

Investment Thesis

Innovative Therapeutic Niche: ENP is one of the few companies applying psychedelics to somatic and pain-related disorders (fibromyalgia, IBS, etc.), giving it a first-mover advantage in these large indications. Its focus on precision IV dosing of psilocin differentiates it from peers using oral psilocybin, as it offers greater control and potentially better outcomes.

Promising Clinical Results: The company has validated its approach in early trials, with exceptional outcomes: e.g., >80% reduction in binge eating episodes, 100% response rate in fibromyalgia pain relief, and 75% response in interim IBS data. Such positive signals are rarely seen in initial studies, suggesting a potentially profound treatment effect. These results de-risk the pipeline by indicating a clear therapeutic signal and help justify progressing to larger trials.

Intellectual Property and Regulatory Headway: ENP's formulations are patented or patent pending protecting the specific delivery mechanism of psilocin and associated therapy protocols. Early clinical results have strengthened its IP position by generating data supporting its methods. On the regulatory front, the company has navigated approvals for psychedelic trials in multiple jurisdictions (Australia, U.S.), a complex task given the controlled nature of these substances. This demonstrates operational expertise and positions ENP favourably.

Huge Market Potential in Target Indications: The conditions ENP is targeting are widespread and have major unmet needs, representing multi-billion-dollar market opportunities. For example, fibromyalgia affects ~2-5% of the adult population (over 10 million in the US) with few effective treatments; IBS is prevalent worldwide (~11% global prevalence) and often inadequately managed by diet and drugs; binge eating disorder is the most common eating disorder. A successful therapy in any of these could achieve significant penetration.

Pipeline Expansion and Indication Add-ons: ENP's proprietary platform could be extended beyond the current three indications – essentially in any condition where psilocybin has shown an efficacy signal. There is also the possibility of leveraging the EEG biomarker platform to develop new IP, to personalise treatments, develop companion diagnostics or patient selection tools, which could, not only enhance treatment efficacy and differentiate ENP's offering, but provide opportunities for licensing the platform technology to other parties.

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Key Risks

Investing in Entropy Neurodynamics entails considerable risk, typical of early-stage biotech companies, amplified by the novelty of psychedelic drug development. Key risk factors include:

- **Clinical Development Risk:** ENP's pipeline candidates must pass rigorous clinical trials to achieve approval. There is a significant risk that efficacy seen in small open-label studies may not be confirmed in larger randomised trials. any failure to meet primary endpoints in Phase 2b or Phase 3 (or if the effect size is modest) would drastically reduce the likelihood of regulatory approval and erode ENP's value.
- **Regulatory Risk:** Bringing a psychedelic drug to market involves navigating an evolving regulatory landscape. ENP will need approvals from agencies like the FDA, EMA, and TGA. There is risk in how regulators will view the risk/benefit profile of psilocin for these indications. Even if clinical efficacy is shown, regulators might require additional trials, longer follow-ups (to ensure durability or no long-term adverse effects), or post-approval safety monitoring due to the unique nature of the therapy. Additionally, regulators may insist that therapy be delivered under strict conditions, which could complicate the approval or commercial rollout. ENP also faces the risk of extensive regulatory delays if agencies request more data that prolongs time to market and consumes resources.
- **Financing & Dilution Risk**: ENP will require substantial capital to complete Phase 2, Phase 3, and commercialisation. The risk is that ENP may need to raise funds multiple times, and if its share price is low at those times, it could result in heavy dilution. If broader market conditions for biotech are poor, or if ENP encounters any hiccups that depress its stock, raising money on acceptable terms might be challenging. Should ENP's trials take longer or cost more than anticipated, the cash burn could accelerate. If ENP cannot secure needed funding, it might have to delay or cancel programs, or in worst case, it may cease to be a going concern.
- **Commercialisation and Adoption Risk:** Even if ENP successfully brings a product to market, there are risks around its commercial uptake. Psychedelic therapy is not a pill patients can simply pick up at a pharmacy; it requires a controlled setting, specialised clinicians, and significant

patient commitment. There may be logistical and cost challenges in training enough providers or setting up infusion centres. Insurance is another issue; will payers cover a psychedelic-assisted therapy? If they view it as experimental or too costly (given therapy hours involved), adoption could be slow or limited to private pay patients, curbing revenue. Stigma or patient acceptance could also be an issue: some patients or doctors might be reluctant to try a psychedelic approach due to misconceptions or preference for conventional medications. Another concern is if primary care physicians will refer patients to psychedelic clinics. Many doctors will have never considered psychedelic therapy, convincing them to adopt a new treatment might take time and significant education. If ENP's treatments are approved, competitive positioning versus existing therapies will influence uptake.

- **Competition Risk:** Another company may develop a similar psilocybin/psilocin therapy for ENP's target indications. If, say, a competitor shows equally strong data in fibromyalgia and reaches the market around the same time, ENP could lose first-mover advantage or even be second-to-market, affecting its market share. Larger competitors with more resources could overtake ENP. Advances in treatment of pain or IBS via other mechanisms (new drugs, gene therapies, etc.) could emerge over the multi-year development timeline, potentially reducing the need for ENP's solution.
- **Personnel and Operational Risks:** ENP relies on a small team of experts. The loss of any key personnel could hamper progress. Replacing individuals with specialised knowledge in both psychedelics and drug development is nontrivial.
- **Macro and Market Risks:** Broader factors could impact ENP. Changes in healthcare policy or macroeconomic downturns could strain biotech funding. The psychedelic sector's sentiment can swing if negative press or events occur it could dampen investor enthusiasm across the board.
- **Risks related to pre-revenue pharmaceuticals, biotechnology & Life sciences companies in general**. The stocks of biotechnology, pharmaceutical and medical device companies without revenue streams should always be regarded as speculative in character.

Board of Directors

Herwig Janssen – Chairman

Mr Janssen is an internationally recognised leader in the global healthcare and pharmaceutical industry. With a career spanning more than four decades, he has held senior executive roles that have shaped the growth trajectories of some of the world's most influential healthcare organisations.

Most recently, he served as Vice President of Licensing & Acquisitions (Emerging Markets) at J&J Innovative Medicine (formerly Janssen Pharmaceuticals), part of multinational giant Johnson & Johnson. Mr Janssen played a pivotal role in driving strategic partnerships, licensing transactions, technology transfers and M&A initiatives across fast-growing global markets.

As part of the Janssen family, he has had a longstanding association with Janssen Pharmaceuticals, closely connected to its strategic acquisition by Johnson & Johnson. His tenure includes serving as VP of Business Development in the United States, where he oversaw a diverse portfolio of deals and commercial agreements, showcasing his ability to execute high-value, cross-border transactions.

Across multiple senior leadership roles in R&D, international marketing, sales and business development, Mr Janssen has built a reputation for identifying breakthrough innovation, establishing global market pathways, and forming partnerships that unlock long-term commercial value. His experience and industry relationships position him as a highly impactful contributor to any healthcare or pharmaceutical growth strategy.

Jason Carroll – Chief Executive Officer & Managing Director

Jason is a highly regarded life sciences executive with more than 30 years of global industry experience. He most recently served as Managing Director of iNova Pharmaceuticals Philippines, following senior leadership roles at Johnson & Johnson, Janssen Pharmaceutica, and Bristol Myers Squibb.

Jason has led operations, commercial teams and business development across Asia Pacific, including serving as General Manager of Janssen Philippines and Managing Director of One J&J Vietnam. He is recognised for driving major turnarounds and building high performing teams, including tripling iNova Philippines' sales during his tenure.

He holds a BSc in Organic Chemistry from Flinders University and an MBA in Technology Management from Deakin University.

Chris Ntoumenopoulos - Executive Director

Mr Ntoumenopoulos is the Managing Director of Twenty 1 Corporate, an Australian corporate advisory firm specialising in capital markets and strategic growth.

With more than 20 years of experience in financial markets, he has been instrumental in raising significant capital for emerging companies and guiding boards through complex corporate transactions. His expertise spans capital raising, M&A, corporate strategy, and public market advisory.

He has held directorships on ASX listed companies for over 7 years and has been directly involved in building some of Australia's most successful life sciences stories. Notably, he was a founding director of ResApp Health Ltd (ASX:RAP), acquired by Pfizer, and Race Oncology (ASX:RAC), now one of Australia's leading precision oncology companies.

Mr Ntoumenopoulos currently serves as a Non-Executive Director of TrivarX Limited (ASX:TRI).

Daniel Tillett - Non-Executive Director

Dr Daniel Tillett is the Founder and CEO of Nucleics, a private Australian biotechnology company that develops and sells world-leading DNA sequencing software for the global genomics industry. Nucleics' SaaS genomics tools are used in more than 30 countries by over 250 companies and research institutions. Dr Tillett also serves as Managing Director and Chief Executive Officer of Race Oncology Limited (ASX: RAC), a clinical-stage biopharmaceutical company focused on advancing next-generation cancer therapies.

Previously, Dr Tillett was a Senior Lecturer in the School of Pharmacy at La Trobe University, where he taught and conducted research spanning pharmacy, phage therapy, microbiology, bioinformatics and cancer biology.

He brings more than 20 years of commercial biotech experience across project management, sales and marketing, intellectual property strategy, fundraising and early-stage investment.

Dr Tillett holds a PhD in Molecular Genetics and Biochemistry from the University of New South Wales. He is the author of more than 40 scientific publications and is an inventor on multiple granted patents in molecular biology, microbiology, genetics and biochemistry.

Gage Jull - Non-Executive Director

Gage Jull is the Executive Chairman of Arrow Exploration, a TSX-V and London AIM listed oil and gas exploration and production company. Under his leadership, Arrow has increased production, strengthened its balance sheet and continued to grow its cashflow. Prior to Arrow, Gage co-founded and served as Chairman of Bordeaux Capital Inc., a Toronto-based mergers and acquisitions advisory firm focused on emerging companies in the natural resources and related sectors. Before establishing Bordeaux Capital, Mr Jull was Managing Director of Corporate Finance at Mackie Research Capital Corp., an investment banking and brokerage firm.

Mr Jull has extensive experience acting as lead underwriter on cross-border equity and debt offerings involving energy assets across global markets, with capital sourced from Canada, the U.S. and the U.K. Earlier in his career at Prudential Bache, he led the $40 million cross-border IPO of Quadra Logic Technologies, a Vancouver-based pharmaceutical company. Over his career, he has completed more than 200 financings and M&A transactions.

He holds a BSc from the University of Toronto, an MBA from the University of Western Ontario, and maintains both PEng and CFA designations.

ENP has assembled a world-class management team supported by leading scientific advisers, including Jim Gilligan (Chief Scientific Officer), David Castle (Consultant Medical Officer & Scientific Advisor), Robin Carhart-Harris (Chairman Scientific Advisory Board), Daniel Clauw (Scientific Advisor), Joel Castellanos (Scientific Advisor), William Schmidt (Scientific Advisor), and Philippa Hay (Scientific Advisor).

Appendix I – Capital Structure

Security	Description	On Issue
ENP	Ordinary Fully Paid	1,561,567,837
ENPAA	ORD FULLY PAID RESTRICTED	49,873,318
ENPAL	OPT EXP 12-MAY-2026 EX $0.025	1,200,000
ENPAX	OPT EXP 31-MAR-2027 EX $0.04	162,000,000
ENPAQ	OPT EXP 24-APR-2027 RESTRICTED	36,160,000
ENPAD	OPT EXP 29-MAY-2027 EX $0.027	184,235,780
ENPAR	OPT EXP 29-MAY-2027 RESTRICTED	118,683,780
ENPAH	OPT EXP 08-JUL-2027 EX $0.0625	1,808,000
ENPAM	OPT EXP 01-DEC-2027 EX $0.0375	4,000,000
ENPAN	OPT EXP 01-DEC-2027 EX $0.05	2,000,000
ENPAO	OPT EXP 01-DEC-2027 EX $0.075	2,000,000
ENPAC	OPT EXP 19-DEC-2027 EX $0.08	2,000,000
ENPAI	OPT EXP 30-OCT-2028 EX $0.0338	7,232,000
ENPAS	OPT EXP 30-OCT-2028 RESTRICTED	30,604,190
ENPAJ	OPT EXP 29-MAY-2029 EX $0.0469	15,439,178
ENPAK	OPT EXP 29-MAY-2029 EX $0.0531	8,316,800
ENPAP	OPT EXP 29-MAY-2029 EX $0.2125	361,600
ENPAT	OPT EXP 29-MAY-2029 RESTRICTED	18,803,200
ENPAV	OPT EXP 31-DEC-2029 EX $0.04	13,500,000
ENPAB	OPT EXP 19-DEC-2030 EX $0.05	50,000,000
ENPAA	OPT EXP 31-DEC-2030 EX $0.05	28,750,000

Table 3: Issued Capital. Source: Iress 9 Feb 2026

Appendix II - Cash and cash equivalents

5.	**Reconciliation of cash and cash equivalents** at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	**Current quarter $A'000**	**Previous quarter $A'000**
5.1	Bank balances	6,426	1,348
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other	-	-
5.5	**Cash and cash equivalents at end of quarter (should equal item 4.6 above)**	**6,426**	**1,348**

Table 4: Cash and cash equivalents as of 31 December 2025. Source: December 2025: Quarterly Activities Report

General Advice Warning, Disclaimer & Disclosures

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