

16 December 2025

First patient dosing completed in TRP-8803 Binge Eating Disorder trial following second infusion

- First patient dosing initiatives completed following administration of second TRP-8803 (IV-psilocin infusion) on 15 December 2025
- BED patient underwent second TRP-8803 administration in 14-days per clinical trial protocol to treat Binge Eating Disorder and was discharged from the dosing component
- Patient will now undergo supportive psychotherapy, ahead of post-treatment review in four weeks (mid-January 2026)
- Second infusion administered following clearance from Drug and Safety Monitoring Board (DSMB) after safety review of first infusion
- DSMB ruling provides required safety clearance for remaining Cohort 1 patients set to undergo TRP-8803 administration through the coming quarter

Melbourne, Australia – Entropy Neurodynamics Limited (**‘Entropy Neurodynamics’**, **‘ENP’** or the **‘Company’**) (**ASX: ENP**), a clinical-stage biotechnology company, is pleased to advise that it has completed dosing for the first patient recruited in the Company’s trial to treat Binge Eating Disorder (BED) alongside Swinburne University.

The patient was administered their second infusion of TRP-8803 (IV-infused psilocin) on 15 December 2025, as part of the planned clinical trial which aims to recruit a total of 12 patients suffering from BED, in two six-person cohorts. During the trial, each cohort will be administered two doses of TRP-8803, 14 days apart in concert with supportive psychotherapy. The first cohort, including the recently dosed patient, will receive a mid-range dose and the second cohort will be administered a higher range dose.

The second infusion follows maiden dosing (refer ASX announcement: 2 December 2025), as well as Drug and Safety Monitoring Board (DSMB) clearance. During the most recent infusion, the patient attained a full psychedelic response following TRP-8803 administration, which allowed clinicians to replicate controlled onset, depth and duration of the psychedelic experience.

The patient was then discharged, marking completion of first patient dosing initiatives. The patient will now receive additional supportive psychotherapy, which allows the Company to provide top-line results in Q1 2026.



Commentary:

CEO, Mr Jason Carroll said: *“Completion of a full patient dosing experience is an important milestone for the Company and represents a strong start to our clinical program in BED. The administration of a second infusion of TRP-8803, with the patient attaining a full psychedelic response, demonstrates our ability to precisely control the onset, depth and duration of the psychedelic experience in a clinical setting – something which cannot be replicated with oral dosing. This level of control is a key differentiator of TRP-8803 and is central to our strategy of delivering consistent, clinician-guided psychedelic psychotherapy.”*

“With dosing now complete for the first patient, we look forward to advancing the supportive psychotherapy phase and reporting top-line results during Q1 2026. We believe this study has the potential to generate meaningful data that supports the broader development of TRP-8803 across eating disorders and other neuropsychiatric indications.”

Q&A

1. What is TRP-8803?

TRP-8803 is an intravenous (IV) formulation of psilocin—the active metabolite of psilocybin—designed for precision dosing in psychedelic-assisted therapy.

2. How is TRP-8803 different from oral psilocybin?

Unlike oral psilocybin, TRP-8803 offers rapid onset (~15 minutes), controlled depth and duration and consistent therapeutic exposure across patients.

3. Why does IV administration matter?

IV infusion bypasses the gut and liver, avoiding variability in metabolism and absorption—delivering predictable, clinician-guided psychedelic experiences.

4. What are the limitations of oral psilocybin?

Oral psilocybin has delayed onset (1–3 hours), long duration (6–10 hours) and high interpatient variability—making it difficult to standardise in clinical practice.

5. What does “full psychedelic response” mean in TRP-8803 trials?

It refers to achieving a therapeutic psychedelic intensity state.

6. Is TRP-8803 safer than oral psilocybin?

TRP-8803 allows for real-time monitoring and dose adjustment, reducing the risk of overexposure and enabling rapid reversal if needed.



7:..How long does a TRP-8803 session last?

Typically 2 hours, compared to 6–10 hours with oral psilocybin—making it more feasible for clinical and commercial deployment.

8. What role does psychotherapy play?

TRP-8803 is administered alongside supportive psychotherapy, which helps patients integrate their experience and enhances therapeutic outcomes.

9. Can TRP-8803 be used across multiple conditions?

Yes. It's being studied in Binge Eating Disorder, Fibromyalgia, and IBS—with expected expansion into other neuropsychiatric indications.

10. What makes TRP-8803 commercially scalable?

Its short duration, predictable response and infusion chair model allow for efficient clinic workflows and specialist reimbursement—similar to “in-office” infusions of biologic therapies in gastroenterology, rheumatology and dermatology.

This announcement has been authorised by the Board of Entropy Neurodynamics

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About Entropy Neurodynamics Limited

Entropy Neurodynamics is a clinical-stage biotechnology company focused on developing proprietary, novel formulations for the administration of psilocin in combination with psychotherapy to treat diseases with unmet medical needs. The Company's lead program, TRP-8803, is a proprietary formulation of IV-infused psilocin (the active metabolite of psilocybin) with potential to alleviate numerous shortcomings of oral psilocybin including: significantly reducing the time to onset of the psychedelic state, controlling the depth and duration of the psychedelic experience, and reducing the overall duration of the intervention to

a commercially feasible timeframe. Entropy Neurodynamics has completed a Phase 2a clinical trial for the treatment of binge eating disorder at the University of Florida, which demonstrated an average reduction in binge eating episodes of greater than 80%.

The Company also has also just completed a Phase 2a clinical trial for the treatment of fibromyalgia in collaboration with the University of Michigan and has initiated a Phase 2a clinical trial in collaboration with Massachusetts General Hospital for the treatment of abdominal pain and visceral tenderness in patients suffering from irritable bowel syndrome.

Each of the studies is utilising TRP-8802 (synthetic, oral psilocybin) to demonstrate clinical benefit in these indications. Where a positive clinical response is demonstrated, subsequent studies are expected to utilise TRP-8803 (IV-infused psilocin), that has the potential to further improve efficacy, safety, and patient experience.

Register for updates

The Company encourages investors to register their details with Automic Group investor portal. This also provides shareholders with the opportunity to elect communication methods to electronic only. This can be done by:

- Go to investor.automic.com.au
- If you're an existing user, log in with your username and password
- If you're a new user, click 'register', select 'Entropy Neurodynamics Limited'. Enter your Holding Number and postcode of the registered address on your holding. If your address is outside Australia, select the country. Follow the prompts to set up a username and password.
- Once you have created your account, you will need to update your communication method by clicking 'my details' under the 'profile' section of the investor portal account, then navigating to 'communication preferences' and select 'electronic only'

Risks associated with Psilocin

All medicines carry risks and specialist prescribers, such as registered psychiatrists are best placed to assess the suitability of a new medication against a patient's individual circumstances and medical history before proceeding. Adverse effects of psilocybin and similar compounds, such as psilocin, can include temporary increase in blood pressure and a raised heart rate. There may be some risk of psychosis in predisposed individuals. These effects of psilocybin and its derivatives are unlikely at low doses and in the treatment regimen used in psychedelic-assisted psychotherapy and appropriately managed in a controlled environment with direct medical supervision.

Forward-Looking Information

Certain information in this news release, constitutes forward looking information. In some cases, but not necessarily in all cases, forward-looking information can be identified by the use of forward-looking terminology such as "plans", "targets", "expects" or "does not expect", "is expected", "an opportunity exists", "is positioned", "estimates", "intends", "assumes", "anticipates" or "does not anticipate" or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might", "will" or "will be taken", "occur" or "be achieved". In addition, any statements that refer to expectations, projections or other characterizations of future events or circumstances contain forward-looking information. Statements containing forward-looking information are not historical facts but instead represent management's expectations, estimates and projections regarding

future events. Forward-looking information is necessarily based on a number of opinions, assumptions and estimates that, while considered reasonable by Entropy Neurodynamics as of the date of this news release, are subject to known and unknown risks, uncertainties, assumptions and other factors that may cause the actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward looking information, including but not limited to the factors described in greater detail in the "Risk Factors" section of the Company's Replacement Prospectus available at www.asx.com.au. These factors are not intended to represent a complete list of the factors that could affect Entropy Neurodynamics; however, these factors should be considered carefully. There can be no assurance that such estimates and assumptions will prove to be correct. The forward-looking statements contained in this news release are made as of the date of this news release, and the Company expressly disclaims any obligation to update or alter statements containing any forward-looking information, or the factors or assumptions underlying them, whether as a result of new information, future events or otherwise, except as required by law.