2 December 2025

First patient successfully dosed in TRP-8803 trial to treat Binge Eating Disorder

- **Successful and safe administration of TRP-8803 (IV-infused psilocin), with precise control over dose and duration, in first enrolled BED patient – Marks a world first clinical use of TRP-8803 in a neuropsychiatric condition**
- **BED patient underwent a therapeutic mid-range dose infusion for 140 minutes, progressed well through treatment and was discharged on completion**
- **Patient to now undergo supportive therapy, followed by a second dose on 15 December**
- **Second enrolled patient progressing well through baseline assessments with multiple patients**

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 successfully and safely administered its first TRP-8803 (IV-infused psilocin) dose to a patient in the Company's trial to treat Binge Eating Disorder (BED) alongside Swinburne University.

The participant was administered TRP-8803 on 1 December 2025, marking the first patient dosing in the Company's BED trial which seeks to recruit a total of 12 patients suffering from BED, in two six-person cohorts. Each cohort will be administered two doses of TRP-8803, 14 days apart in concert with supportive therapy. The first cohort will receive a mid-range dose and the second cohort will be administered a higher-range dose.

The patient was administered a therapeutic mid-range dose of TRP-8803 for 140 minutes, with the infusion allowing clinicians to finely control onset, depth and duration of the psychedelic experience. This precise modulation is designed to improve both safety and patient experience compared to oral psilocybin. The participant was discharged after dosing follow-up was completed. The patient will now undergo supportive therapy, prior to being administered with a second dose on 15 December 2025, allowing for top-line results early next quarter.

The Company advises that patient recruitment remains ongoing and a number of additional enrolments are expected in the near term. Alongside this, baseline assessment for the second enrolled patient is progressing well and is set to be dosed in January.

Management commentary:

CEO, Mr Jason Carroll said: *"Successfully and safely dosing our first patient represents a major clinical and operational milestone for Entropy Neurodynamics. This development follows 4 years of scientific development, extensive work alongside Swinburne University and demonstrates our capability to execute*

on our clinical strategy."

"With additional enrolments advancing well and our second patient undertaking baseline assessment, we remain firmly on track to deliver top-line results in Q1 CY26. Importantly, TRP-8803's controlled infusion profile allows us to precisely tailor the onset, depth and duration of the administered dose. This level of dose control is critical for ensuring patient safety, enhancing therapeutic predictability and advancing our broader goal of bringing first-in-class neuropsychiatric therapy into late-stage development."

Q&A

1. What is TRP-8803?

TRP-8803 is Entropy Neurodynamics' proprietary intravenous (IV) formulation of psilocin, the active metabolite of psilocybin, designed for use in psychedelic-assisted therapy.

2. How does TRP-8803 differ from oral psilocybin?

Unlike oral psilocybin, TRP-8803 delivers psilocin directly via infusion, enabling rapid onset, precise dose control and predictable duration of the treatment experience.

3. Why is dose control important in psychedelic therapy?

Controlled infusion allows clinicians to tailor the onset, depth and duration of the psychedelic state, improving patient safety, therapeutic predictability and commercial scalability compared to oral administration.

4. What conditions is TRP-8803 being developed to treat?

Entropy Neurodynamics is advancing TRP-8803 for neuropsychiatric and pain-related conditions including binge eating disorder (BED), fibromyalgia, and irritable bowel syndrome (amongst others).

5. What milestone has just been achieved in the BED trial?

The first patient has been successfully and safely dosed with TRP-8803, marking the world's first clinical use of IV-infused psilocin in a neuropsychiatric condition.

6. How is the BED trial structured?

The study will recruit 12 patients in two cohorts. Each cohort receives two doses of TRP-8803, 14 days apart, alongside supportive therapy.

7. What outcomes are expected from the BED trial?

The trial aims to demonstrate safety, tolerability and therapeutic benefit, with top-line results anticipated in Q1 CY26.

8. What were the results of earlier TRP-8802 studies?

Phase 2a trials using TRP-8802 (oral psilocybin) showed promising results, including an average reduction in binge eating episodes of more than 80% in BED patients.

9. How does TRP-8803 support commercial feasibility?

By reducing variability and shortening intervention times, TRP-8803 makes psychedelic therapy more practical for clinical settings, payers and large-scale adoption.

10. Why is TRP-8803 significant for Entropy Neurodynamics?

It represents a first-in-class precision delivery platform for psychedelic therapy, positioning the company at the forefront of biomarker-guided, scalable neuropsychiatric treatments.

This announcement has been authorized 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 regimens 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.