Equity Research | Desk Note

Entropy Neurodynamics Limited (ASX: ENP)

72 Patients, Nine Cohorts, Eight Disorders: Entropy Broadens the Platform

5 Aug 2026 | Analyst: Nathan Graves | nathan@prenzlergroup.com.au

Company Snapshot

Company	Entropy Neurodynamics Limited
Lead asset	TRP-8803, a proprietary formulation of intravenously (IV) infused psilocin, for psychedelic therapy
Lead indication	Binge Eating Disorder
Shares on issue	1,631.8m
Share Price (close 4 Aug 2026)	$0.036
Market Cap	$58.7m
Cash (30 June 2026)	$5.6m

Entropy (ENP), the IV delivered psychedelic company has quietly added treatment resistant depression (TRD) to its clinical program.

Treatment resistant depression is the one psychedelic indication with a proven reimbursement pathway. Spravato reached an annual sales rate above US$2 billion on Q4 2025 quarterly figures. Compass Pathways and GH Research are concentrated in TRD. On 16 July 2026 Lilly agreed to pay US$2.8 billion upfront for AtaiBeckley, with up to US$1.0 billion more in milestone payments, principally for its TRD assets.

Entropy Neurodynamics (ENP), capitalised at a small fraction of any of those companies, has now added TRD to its clinical program. It did so quietly, as one of eight indications listed in a Phase 1b/2a basket study approved this week.

Entropy received Human Research Ethics Committee (HREC) approval to begin a Phase 1b/2a multi-indication basket study of TRP-8803 (intravenously infused psilocin) across eight disorders.

ENP has also entered into a Clinical Trial Research Agreement (CTRA) with Swinburne University to run the study.

Prenzler Group Pty Ltd ABN 77 621 100 730 | Authorised Rep of AFSL 456663
Suite 1 Level 12/25 Bligh St, Sydney NSW 2000, Australia
www.prenzlergroup.com.au

Study Design

Element	Detail
Phase	Phase 1b/2a, open label (all participants and clinicians know what treatment is being given)
Participants	72 participants across nine clinical cohorts of eight participants each
Indications	Eight, with Treatment Resistant Major Depressive Disorder split across two cohorts (patients on stable antidepressant therapy, and patients not on antidepressant treatment)
Treatment	Two doses of TRP-8803 given approximately two weeks apart, alongside a structured psychedelic assisted psychotherapy program
Primary endpoint	Safety.
Secondary and exploratory endpoints	Changes in anxiety, quality of life, disease specific symptoms and broader patient reported outcomes
Biomarker assessments	MRI, functional MRI, electroencephalography (EEG), speech analysis and qualitative patient interviews
Site and partner	Swinburne University
Remaining steps before dosing	Clinical Trial Notification (CTN) acknowledgement and site-specific governance approvals

The eight indications being evaluated are:

Anorexia Nervosa	Body Dysmorphic Disorder
Fibromyalgia (chronic pain)	Generalised Anxiety Disorder
Irritable Bowel Syndrome	Post Traumatic Stress Disorder
Obsessive Compulsive Disorder	Treatment Resistant Major Depressive Disorder

The two-cohort TRD design deserves attention. Splitting Treatment Resistant Depression into an on-antidepressant cohort and an off-antidepressant cohort is a commercial decision. SSRI washout is one of the most practical barriers to psilocybin adoption. Compass Pathways' COMP005 protocol requires participants to complete washout from antidepressant medications before dosing. In practice that is a real-world adherence problem, a safety problem during the taper, and a prescriber reluctance problem, since most prescribers are wary of taking a patient off a medication that is working.

If TRP-8803 shows activity on top of stable antidepressant therapy, that is a clear differentiator against the leading Phase 3 asset (COMP360), in the largest indication in the sector.

Purpose of the Study

The study is designed to evaluate TRP-8803 across multiple neuropsychiatric indications, with the aim of identifying the most promising future development opportunities while generating efficacy, safety and data.

Prenzler Group Pty Ltd ABN 77 621 100 730 | Authorised Rep of AFSL 456663
Suite 1 Level 12/25 Bligh St, Sydney NSW 2000, Australia
www.prenzlergroup.com.au

Benefits of the Basket Study

- **Capital efficiency.** A basket design evaluates multiple indications simultaneously, enabling direct comparison of clinical response, quality of life, biomarkers and treatment mechanisms while reducing development timelines and costs.
- **Prioritisation.** Assessing multiple disorders in one program is intended to help Entropy identify which indications have the strongest clinical and commercial potential, guiding future development and capital allocation.
- **Risk reduction.** Rather than depending on a single indication, ENP can evaluate several at once. Positive outcomes in one or more indications may create value even if some show limited response.
- **Safety database.** The study expands the clinical safety record for TRP-8803 across multiple patient populations.
- **Differentiation.** The study is intended to further separate Entropy's precision controlled intravenous platform from oral psychedelic therapies.

Next Steps

Entropy must complete Clinical Trial Notification acknowledgement and site-specific governance approvals before dosing begins. Recruitment starts shortly, first patient dosing is expected during the current quarter, and ENP anticipates completing dosing in one or more indication cohorts before the end of CY2026.

Results from Recent Binge Eating Disorder Trial

The basket study builds on Cohort 1 topline results from Entropy's Phase 2 trial of TRP-8803 in treatment resistant Binge Eating Disorder (BED), reported on 7 July 2026. That trial is enrolling 12 patients across two cohorts of six, with each participant receiving two administrations of TRP-8803 delivered 14 days apart alongside supportive therapy.

Cohort 1 results:

Endpoint	Result
Clinical remission	50% of patients (3 of 6), reporting no binge eating episodes in the four weeks after treatment
Clinically meaningful response (minimum 30% improvement from baseline)	100% of patients
Weekly binge eating episodes	74% reduction
Binge Eating Severity (BES)	58% reduction
Anxiety (GAD-7)	58% reduction
Depression (PHQ-9)	57% reduction
Life satisfaction	63% improvement
Clinical Global Impression (CGI)	33% improvement

Safety:

- Across Cohort 1 there were no Serious Adverse Reactions, no Suspected Unexpected Serious Adverse Reactions and no discontinuations due to safety events. Most adverse reactions were assessed as mild or moderate. One Grade 3 adverse event was observed, consistent with the known pharmacology of psilocin and managed per protocol.

Prenzler Group Pty Ltd ABN 77 621 100 730 | Authorised Rep of AFSL 456663
Suite 1 Level 12/25 Bligh St, Sydney NSW 2000, Australia
www.prenzlergroup.com.au

- The independent Data Safety Monitoring Board (DSMB), an external expert group that reviews trial safety data, recommended progression to Cohort 2 without protocol modification, under the protocol specified 60 minute infusion regimen.

Parallel BED Readout

Cohort 2 of the BED trial is fully recruited, dosing was expected to begin in August under the 60-minute infusion regimen (compared to 140 minute infusion for cohort 1), and final Phase 2 BED study results are expected in Q4 CY2026.

Upcoming Catalysts

Catalyst	Expected timing	Significance
Basket study patient recruitment commences	Imminent	Eight conditions, eight recruitment streams. First real test of timelines.
BED Cohort 2 dosing under 60-minute infusion regimen	From August 2026	First run of the new 60-minute regimen.
First patient dosed in basket study	Current quarter (Q3 CY2026)	Becomes an active trial. Execution begins
Completion of dosing in one or more basket study indication cohorts	Before end of CY2026	Sets up first readout.
Cohort 2 BED study results	Q4 CY2026	Confirms or breaks the 60-minute regimen.
Additional BED durability and predictive biomarker data	Ongoing, no fixed date given	Durability decides commercial viability. Biomarkers identify likely responders.
Cohort level outcome data from basket study indications	Over the next 12 months	Reveals which of the eight conditions actually respond.
Identification of lead indications for later stage development	Over the next 12 months	Cannot fund eight. Everything feeds this choice.

Prenzler Group Pty Ltd ABN 77 621 100 730 | Authorised Rep of AFSL 456663
Suite 1 Level 12/25 Bligh St, Sydney NSW 2000, Australia
www.prenzlergroup.com.au

Global Peers

The table below sets out listed companies developing psychedelic or related rapid acting psychiatric therapies.

Company (Ticker)	Lead Asset, Indication and Delivery	Clinical Stage	Market capitalisation (USD, m)
Definium Therapeutics (Nasdaq: DFTX), formerly MindMed	DT120, LSD, GAD and MDD, dissolving tablet	DT120 in Phase 3; DT402 in Phase 2a	4,557.9
AtaiBeckley (Nasdaq: ATAI)	BPL-003, 5-MeO-DMT, TRD, nasal spray	BPL-003 in Phase 3 with US Breakthrough Therapy status; VLS-01 in Phase 2b	2,633.9[1]
GH Research (Nasdaq: GHRS)	GH001, 5-MeO-DMT, TRD, inhaled	Phase 2b complete in treatment resistant depression	1,932.6
Compass Pathways (Nasdaq: CMPS)	COMP360, psilocybin, TRD, oral	Phase 3 complete, NDA rolling submission	1,537.6
Cybin, operating as Helus Pharma (Nasdaq: HELP)	HLP003, psilocin analogue, adjunctive MDD, oral	Phase 3, fully enrolled	499.6
Entropy Neurodynamics (ASX: ENP)	TRP-8803, psilocin, BED, intravenous	Phase 2 BED Cohort 1 complete, Phase 1b/2a basket study approved	AUD 58.7[2]

[1] Set to be acquired for US$2.8 billion-US$3.8 billion by Lilly
[2] Entropy Neurodynamics is quoted in AUD
LSD = lysergic acid diethylamide
GAD = generalized anxiety disorder
MDD = major depressive disorder
TRD = treatment-resistant depression
BED = binge eating disorder
NDA = new drug application

Lilly Acquires AtaiBeckley

On 16 July 2026, Lilly (NYSE: LLY) and AtaiBeckley (Nasdaq: ATAI) announced a definitive agreement for Lilly to acquire AtaiBeckley.

Lilly will pay US$6.75 per share in cash on closing, an upfront equity value of about US$2.8 billion, 40% above AtaiBeckley's average trading price over the 30 days to 15 July 2026.

Shareholders will also receive contingent payments, worth up to US$2.50 per share, or about US$1.0 billion in additional potential value. On that basis the deal could reach roughly US$3.8 billion in total.

The transaction signals that large pharmaceutical companies see commercial and clinical value in short duration, in clinic psychedelic interventions. Lilly is building neuroscience aggressively, having acquired Centessa Pharmaceuticals for approximately US$7.8 billion in June 2026.

Both AtaiBeckley and Entropy are addressing the treatment delivery limitations of conventional psychedelic therapy. Oral psychedelic treatments, particularly psilocybin-based therapies, can produce

Prenzler Group Pty Ltd ABN 77 621 100 730 | Authorised Rep of AFSL 456663
Suite 1 Level 12/25 Bligh St, Sydney NSW 2000, Australia
www.prenzlergroup.com.au

effects lasting six hours or more, requiring significant clinical supervision, therapist time and treatment room capacity, which remain a major barrier to reimbursement and large-scale adoption. Entropy's TRP-8803 platform is designed to give clinicians direct control over the patient's psilocin exposure, with intravenous administration allowing shorter treatment time, the dose to be adjusted during treatment and the infusion stopped if required.

Lilly's acquisition of AtaiBeckley is a sign that delivery platforms capable of improving treatment control and scalability may attract increasing strategic interest.

Disclosure: Prenzler Group directors and employees own fully paid ordinary shares in Entropy Neurodynamics Limited (ASX: ENP)

Prenzler Group Pty Ltd ABN 77 621 100 730 | Authorised Rep of AFSL 456663
Suite 1 Level 12/25 Bligh St, Sydney NSW 2000, Australia
www.prenzlergroup.com.au

General Advice Warning

Please note that any advice given by Prenzler Group Pty Ltd or authorised representatives (Prenzler Group) is GENERAL advice, as the information or advice given does not take into account your particular objectives, financial situation or needs. You should, before acting on the advice, consider the appropriateness of the advice, having regard to your objectives, financial situation and needs. If our advice relates to the acquisition, or possible acquisition, of a particular financial product you should read any relevant Product Disclosure Statement or like instrument. Prenzler Group Pty Ltd | ABN 77 621 100 730 | Authorised Representative of AFSL 456663.

Disclaimers

Prenzler Group does not warrant the accuracy of any information it sources from others. Prenzler Group provides a report as an opinion held at a point in time about an investment or sector. Prenzler Group has no obligation to update the opinion unless you are a client of Prenzler Group. Assessment of risk can be subjective. Historical information may not translate into future performance. Portfolios of investments need to be well diversified and the risk appropriate for the investor. Prenzler Group does not stand behind the capital value or performance of any investment. To the fullest extent permitted by the law, Prenzler Group disclaim any liability for any loss or damage arising from the use of, or the reliance on, any information within the advice whether or not caused by any negligent act or omission of Prenzler Group. Overseas investors acknowledge that Prenzler Group has not solicited their business.