

Transforming Mental Health Care

Investor Presentation
February 2025



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This presentation includes “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. In some cases, you can identify forward-looking statements by terms such as “believe,” “continue,” “could,” “estimate,” “expect,” “may,” “might,” “plan,” “potential,” “project,” “should,” “target,” “will,” “would,” or the negative of these terms, and similar expressions intended to identify forward-looking statements. However, not all forward-looking statements contain these identifying words. These forward-looking statements include express or implied statements relating to our financial guidance; our strategic plans or objectives; our expectations and projections about our future cash needs and financial results; the anticipated proceeds, if any, to be received from the exercise for cash of the warrants sold in the January 2025; our plans for a strategic reorganization, including a reduction in workforce, and our expectations regarding impact of and cost savings from our planned reduction in workforce; our plans and expectations regarding our phase 3 trials in treatment-resistant depression (TRD), including our expectations regarding the time periods during which the results of the two Phase 3 trials will become available; the potential for the pivotal phase 3 program in TRD, any future trials in PTSD, or other trials to support regulatory filings and approvals; our expectations regarding the safety or efficacy of our investigational COMP360 psilocybin treatment, including as a treatment for TRD, PTSD, and anorexia nervosa; our expectations regarding the benefits of our investigational COMP360 psilocybin treatment; and our plans, expectations and ability to achieve our goals related to our research collaboration agreements. By their nature, these statements are subject to numerous risk and uncertainties, including the our need for substantial additional funding to achieve our business goals, including to repay the term loan facility, and if we are unable to obtain this funding when needed and on acceptable terms, we could be forced to delay, limit or terminate our clinical development efforts; the risk that holders of the warrants sold in the January 2025 financing may never exercise the warrants and we may not receive any additional proceeds from the exercise of the warrants sold in the January 2025 offering; negative general economic and market conditions; the availability of future tranches under the term loan facility is dependent, in part, on the approval of the lender, achievement of certain milestones and other factors; clinical development is lengthy and outcomes are uncertain, and therefore our phase 3 clinical trials in TRD and our other clinical trials may be delayed or terminated; impact of global macroeconomic trends on our business, our expectations about the outcomes of our clinical programs and actions of regulatory agencies; the results of early-stage clinical trials of our investigational COMP360 psilocybin treatment may not be predictive of the results of later stage clinical trials; our efforts to obtain marketing approval from the applicable regulatory authorities in any jurisdiction for COMP360 or any of future product candidates may be unsuccessful; the risk that our research collaborations will not continue or will not be successful; and our efforts to obtain coverage and reimbursement for our investigational COMP360 psilocybin treatment, if approved, may be unsuccessful; our dependence on third parties in connection with our clinical trials and other factors beyond our control, that could cause our actual results, performance or achievements to differ materially and adversely from those anticipated or implied in our statements. 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Market & Industry Data

Market & industry data projections, estimates, industry data and information contained in this presentation, including our general expectations about our market position and market opportunity, are based on information from third-party sources, publicly available information, our knowledge of our industry and assumptions based on such information and knowledge. Although we believe that our third party-sources are reliable, we cannot guarantee the accuracy or completeness of our sources. All of the projections, estimates, market data and industry information used in this presentation involve a number of assumptions and limitations, and you are cautioned not to give undue weight to such information. In addition, projections, estimates and assumptions relating to our and our industry’s future performance are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including, but not limited to, those described above, that could cause future performance to differ materially from our expressed projections, estimates and assumptions or those provided by third parties.



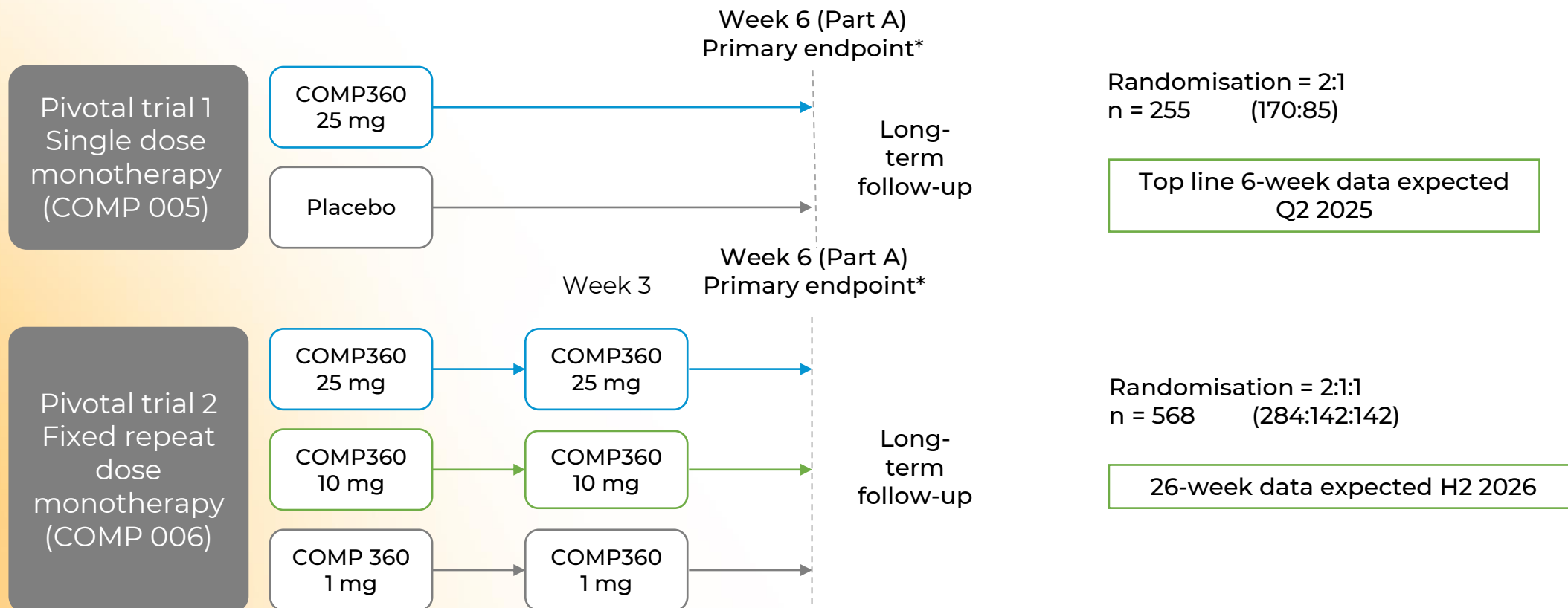
Compass Pathways

Dedicated to accelerating patient access to evidence-based innovation in mental health.

- Lead product candidate: COMP360 psilocybin treatment in treatment resistant depression (TRD)
- Phase 2 TRD program published in *The New England Journal of Medicine*
Phase 3 TRD program recruiting
 - Pivotal trial 1 (COMP005): top-line 6-week data expected Q2 2025
 - Pivotal trial 2 (COMP006): top-line 26-week data expected H2 2026
- Phase 2 PTSD positive top-line data reported in Q2 2024
- \$207 million cash and cash equivalents at September 30, 2024
- \$150 million of gross proceeds from January 2025 financing and up to approx. \$353 million if the ADS Warrants are fully exercised for cash



Phase 3 program: Overview of ongoing pivotal trial designs

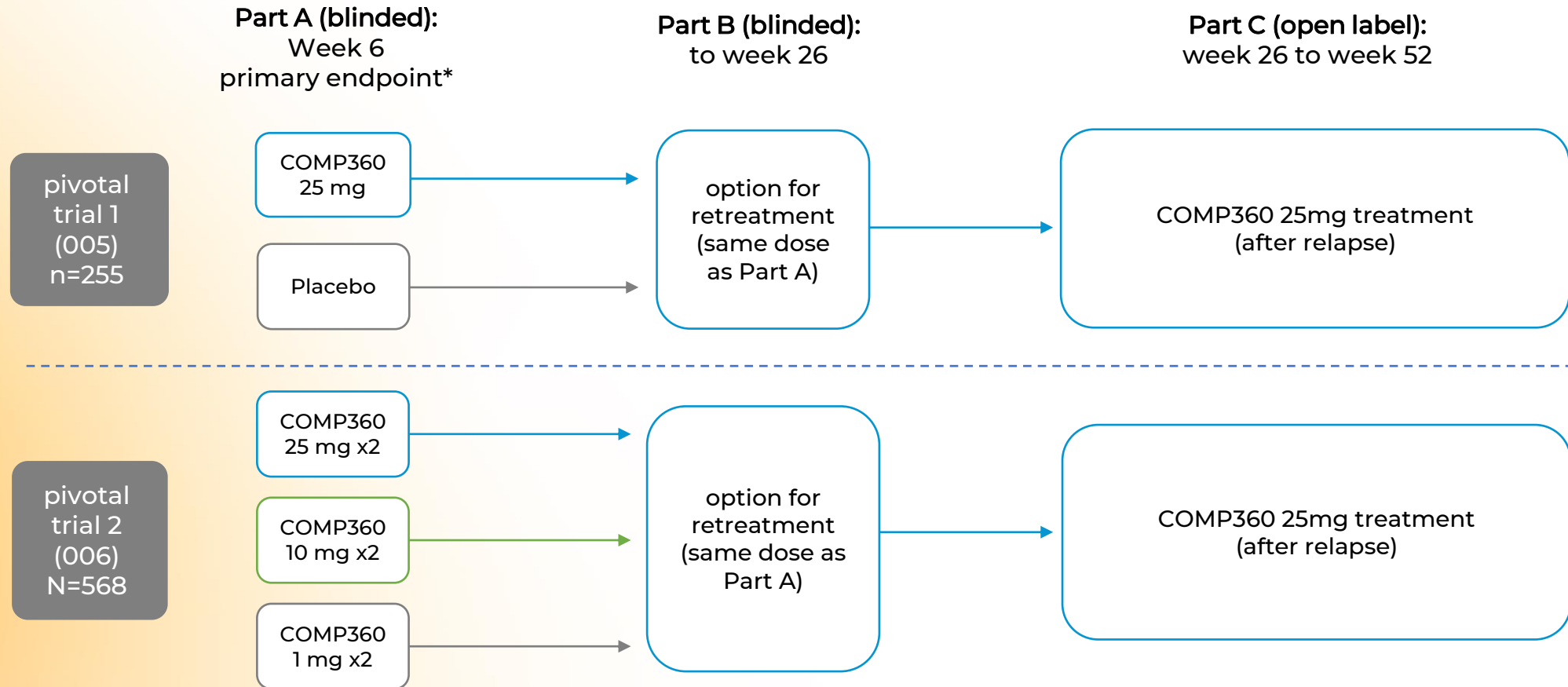


The phase 3 program will be conducted across approx. 150 sites in 12 countries. The participant population (TRD definition and core inclusion/exclusion criteria) remains unchanged compared to Phase 2b

*Primary endpoint - change from baseline in MADRS total score at Week 6



Phase 3 program long-term follow up component



*Primary endpoint - change from baseline in MADRS total score at Week 6

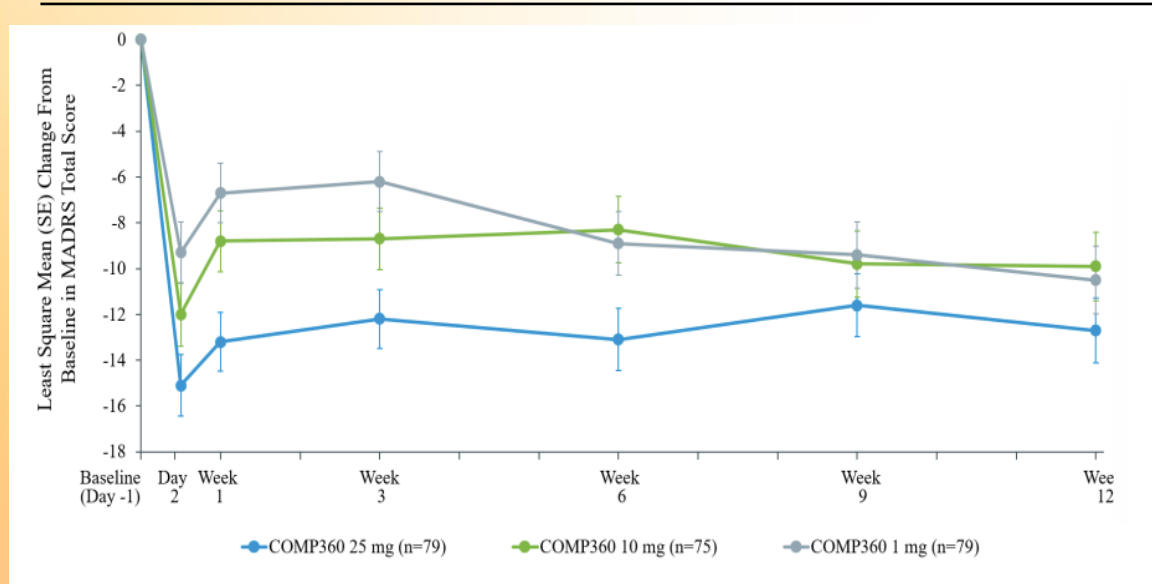


Phase 2b trial: Results demonstrate the potential for a rapid, sustained response in TRD

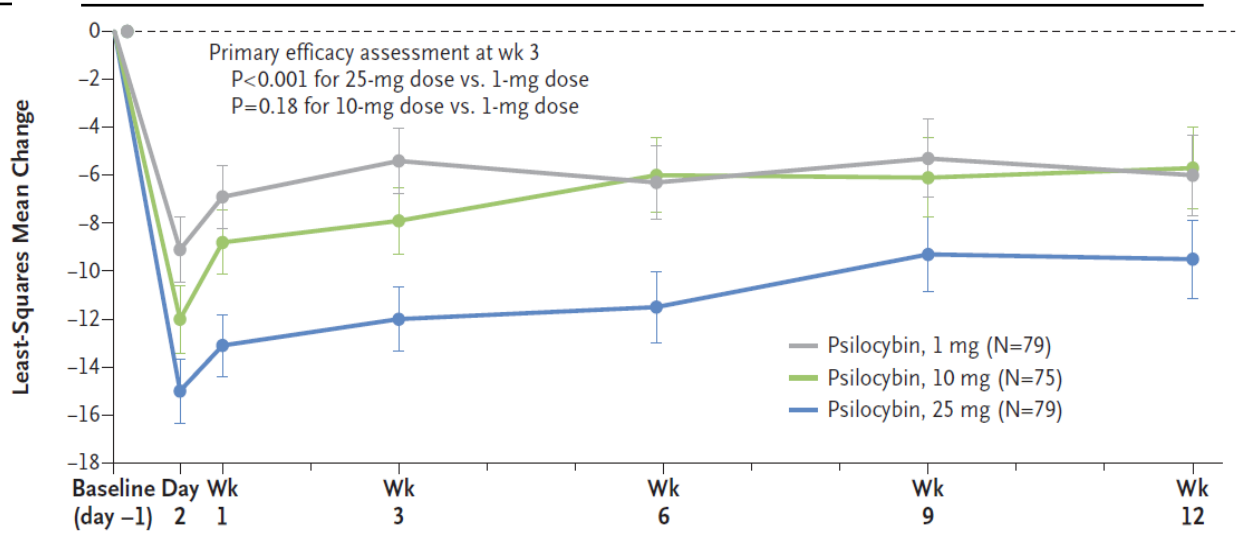
Published in The NEW ENGLAND JOURNAL of MEDICINE*

Randomized, controlled, double-blind trial, 3 arms, single dose (either 1mg, 10mg or 25 mg) of COMP360 psilocybin alongside psychological support. Results were measured as a change on the MADRS** depression scale from baseline (a day prior to administration) over a 12-week period. The primary endpoint of this study was the change from baseline in MADRS total score at week 3.

Without imputation for use of anti-depressants during trial period (consistent with phase 3 design)



With imputation for use of anti-depressants during trial period (applied in phase 2b)



Clinical Effect: We saw a statistically significant and clinically meaningful reduction in depression symptoms.

Rapid onset of action: The effect occurred the day after the administration.

Durability: We saw a sustained response at week 12 – a positive indication for high potential as a monotherapy.



Phase 2b most frequent TEAEs ordered by the 25mg arm (at least 5% in any treatment group)

MedDRA TEAE preferred term	COMP360 25mg	COMP360 10mg	COMP360 1mg	Overall
	N=79	N=75	N=79	N=233
	n (%)			
Headache	27 (34.2)	16 (21.3)	20 (25.3)	63 (27.0)
Nausea	18 (22.8)	7 (9.3)	4 (5.1)	29 (12.4)
Fatigue	12 (15.2)	5 (6.7)	7 (8.9)	24 (10.3)
Insomnia	8 (10.1)	11 (14.7)	14 (17.7)	33 (14.2)
Anxiety	7 (8.9)	13 (17.3)	3 (3.8)	23 (9.9)
Mood altered	7 (8.9)	3 (4.0)	1 (1.3)	11 (4.7)
Back pain	6 (7.6)	0	3 (3.8)	9 (3.9)
Dizziness	6 (7.6)	1 (1.3)	1 (1.3)	8 (3.4)
Suicidal ideation	5 (6.3)	5 (6.7)	4 (5.1)	14 (6.0)
Myalgia	5 (6.3)	2 (2.7)	1 (1.3)	8 (3.4)
Euphoric mood	4 (5.1)	5 (6.7)	4 (5.1)	13 (5.6)
Depression	4 (5.1)	6 (8.0)	5 (6.3)	15 (6.4)
Abdominal pain upper	4 (5.1)	2 (2.7)	1 (1.3)	7 (3.0)
Irritability	4 (5.1)	2 (2.7)	1 (1.3)	7 (3.0)
Panic reaction	4 (5.1)	1 (1.3)	1 (1.3)	6 (2.6)
Depressed mood	3 (3.8)	5 (6.7)	4 (5.1)	12 (5.2)
Paraesthesia	3 (3.8)	4 (5.3)	1 (1.3)	8 (3.4)
Thinking abnormal	0	4 (5.3)	0	4 (1.7)

TEAE incidence is higher in the 25mg group overall

Key mood-related TEAEs (euphoric mood, depression, depressed mood, suicidal ideation) do not have a higher incidence in the 25mg arm

Note: MedDRA = Medical Dictionary for Regulatory Activities; TEAE = treatment emergent adverse event; N = number of participants in the population; n = number observed



Phase 2b trial: COMP360 psilocybin treatment was generally well-tolerated

Treatment-emergent adverse events (TEAEs)

>90% of TEAEs were of mild or moderate severity.

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most frequent TEAEs across the 10mg and 25mg doses were headaches, nausea, fatigue, insomnia and anxiety.

>77%

of TEAEs occurring on the day of administration resolved on the same or next day; most were mild or moderate.

There were no concerns with vital signs, ECG or clinical laboratory data in any of the treatment groups

TEAEs involving hallucinations (which only occurred in the 25mg and 10mg groups) and illusions (all groups) started and resolved on the day of administration.

TESAEs of suicidal ideation, suicidal behaviour and intentional self-injury were uncommon but occurred unevenly across groups in non-responders

- All patients who experienced these events during the trial had said during screening that they had had suicidal thoughts prior to the trial.
- 3 TESAEs of suicidal behavior in non-responders, 30 days post administration in the 25 mg arm emphasizing the need for a vigilant approach to the TRD condition.



Planning for commercial execution through an existing and well-established infrastructure of interventional psychiatry treatment centers

If approved, **COMP360** is expected to be delivered to patients through an established infrastructure of interventional psychiatry **treatment centers**

- >4,000 sites currently set up to deliver available interventional psychiatry treatments[#]
- ~1.4 million prescriptions/procedures[^] were administered at established treatment centers in 2023

Strategic collaborations have been established between Compass and select **treatment centers** across the US to help inform preparation for a scalable delivery model for **COMP360**, if approved

Current interventional psychiatry treatments are delivered frequently[#], allowing for operational experience at the **treatment centers**, but requiring a cumulatively high number of hours of patient and provider time

Spravato® (esketamine):

20-28 treatments⁽¹⁾

ketamine:

12-15 treatments⁽⁶⁾

TMS:

30-36 treatments⁽²⁾⁽⁵⁾

ECT:

6-12+ treatments⁽³⁾⁽⁴⁾

If approved, **COMP360** and the **services/time*** provided at **treatment centers** are expected to be reimbursed by **Payers**

[#] Compass estimate. Interventional psychiatry treatments: Spravato® (esketamine), ketamine, transcranial magnetic stimulation (TMS) and electroconvulsive therapy (ECT); treatment #s represent a typical course over 6 months

[^] Esketamine: IQVIA Longitudinal Access and Adjudication Data (LAAD), 2023; rTMS & ECT: Definitive ATLAS All-payer claims database, 7/27/2024 update

References: [1] ICER, 2019; [2] Ross, 2018; [3] Petrides, 2011; [4] Thirhalli, 2020; [5] Voigt, 2017; [6] Wilkinson, 2018

*New CPT III codes accepted, and language released by AMA for Psychedelic Drug Monitoring Services; published in the CPT Manual and effective on January 1, 2024



We are developing a balanced and differentiated pipeline



PTSD is a key target for COMP360 given encouraging phase 2 data and similarities in PTSD and TRD patient co-morbidities. We have a range of options for a clinical development program and we are now exploring those options.

NOTE: NCE = new chemical entity; PTSD = post-traumatic stress disorder; TRD = treatment-resistant depression



Phase 2 PTSD study safety profile (primary endpoint)

Summary of most frequent TEAES (≥10% prevalence)

MedDRA TEAE Preferred Term (at least 5%)	COMP360 25 mg (N = 22)			
	Overall		COMP360 admin day	
	n (%)	E	n (%)	E
Headache (PTs: Headache, Tension headache)	11 (50.0)	15	6 (27.3)	6
Nausea	8 (36.4)	9	6 (27.3)	6
Crying	6 (27.3)	6	6 (27.3)	6
Fatigue	6 (27.3)	6	4 (18.2)	4
Hallucination (PTs: visual, auditory, synaesthetic)	5 (22.7)	7	5 (22.7)	7
Muscle tightness	3 (13.6)	3	3 (13.6)	3
Paraesthesia	3 (13.6)	3	2 (9.1)	2
Visual impairment	3 (13.6)	3	3 (13.6)	3

COMP360 was well tolerated with no treatment emergent serious adverse events reported

No participants re-started SSRI's or antidepressants after COMP360 administration in study

There were 2 events of suicidal ideation, the first event was a moderate and transient event on administration day who went on to be a responder. The second event was mild and occurred at Week 7 by a non-responder. Both events resolved during the study.

NOTE: E = events, MedDRA = Medical Dictionary of Regulatory Authorities, n = number of participants with TEAE, PT = preferred term, TEAE = treatment emergent adverse event

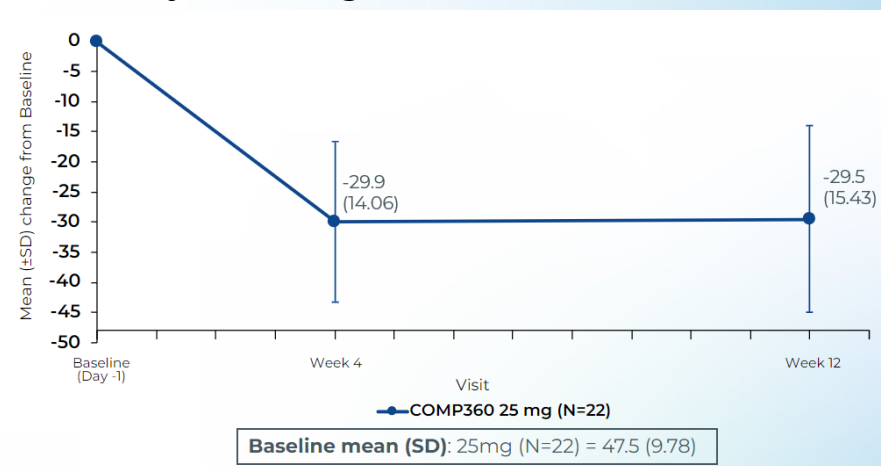


Post-traumatic stress disorder (PTSD) positive phase 2 study

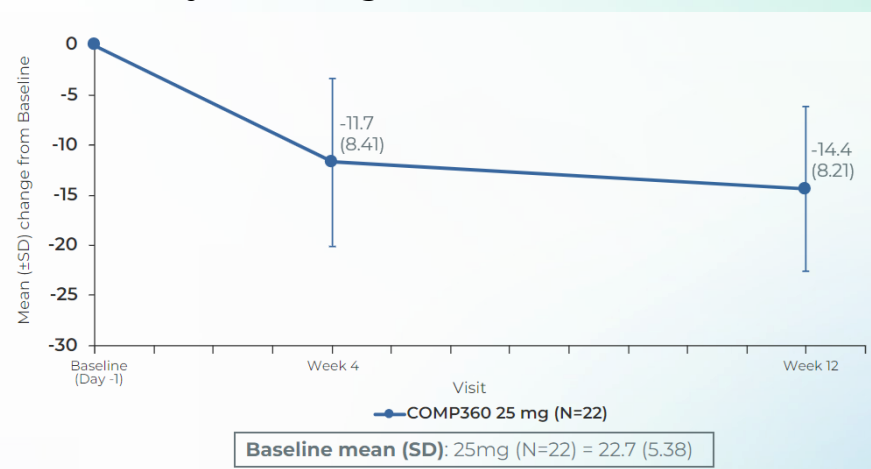
- N=22, multi-center open-label, single administration of 25mg COMP360 with psychological support
- Early onset and sustained change from baseline in CAPS-5 observed at week 4 and week 12
- Durability in CAPS-5 reductions from baseline seen at week 4 (29.5 points) and week 12 (29.9)
- Response in CAPS-5: 81.8% at week 4, 77.3% at week 12
- Remission in CAPS-5: 63.6% at week 4, 54.5% at week 12
- COMP360 was generally well tolerated with no treatment emergent serious adverse events reported
- No participants re-started SSRI's or antidepressants after COMP360 administration in study
- Mean baseline of 47.5 CAPS-5 total score, which is considered severe

NOTE: CAPS-5 = clinician administered PTSD scale

Summary of change from baseline in CAPS-5 score



Summary of change from baseline in SDS score



We're a biotechnology company...

...dedicated to accelerating patient access to evidence-based innovation in mental health.

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