Transforming Mental Health Care

Investor Presentation
June 2025

Compass

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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,” “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 strategic plans or objectives; our expectations and projections about our future cash needs and financial results; our plans and expectations regarding our phase 3 trials in treatment-resistant depression (TRD), including our expectations regarding the time periods during which the 26-week 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; any implication that past results will be predictive of future results; our expectations regarding the benefits of our investigational COMP360 psilocybin treatment; our ability to obtain adequate coverage and reimbursement for our investigational COMP360 psilocybin treatment and related time and services to administer the treatment, if approved, and our plans, expectations and ability to achieve our goals related to our strategic 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; 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; the full results and safety data from this Phase 3 study in TRD or the results and safety data from our second Phase 3 study in TRD, COMP006, may not be consistent with the preliminary results to date; 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 strategic collaborations will not continue or will not be successful; 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; negative general economic and market conditions; unfavorable geopolitical conditions; changes in policy or resources of U.S. governmental agencies; 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. For additional disclosure regarding these and other risks we may face, see the disclosure contained under the heading "Risk Factors" and elsewhere in the Company’s most recent Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and subsequent public filings with the US Securities and Exchange Commission (the “SEC”). You should not rely upon forward-looking statements as predictions of future events. Although our management believes that the expectations reflected in our statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances described in the forward-looking statements will be achieved or occur. Moreover, neither we, nor any other person, assumes responsibility for the accuracy and completeness of these statements. Accordingly, you are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date such statements are made and should not be construed as statements of fact. Except as required by applicable law, we undertake no obligation to update these forward-looking statements to reflect any new information, events or circumstances after the date hereof, or to reflect the occurrence of unanticipated events. No representations or warranties (expressed or implied) are made about the accuracy of any such forward-looking statements.

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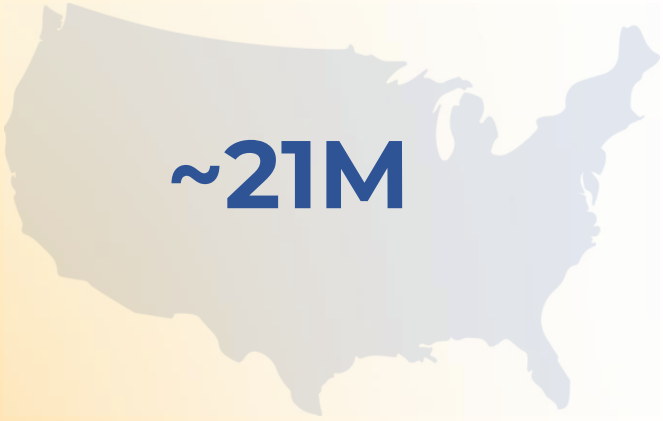
Market & industry data projections, estimates, industry data and information contained in this presentation, including our general expectations about our market position and market opportunity, are based on information from third-party sources, publicly available information, our knowledge of our industry 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

- Phase 3 TRD program ongoing
  - Pivotal trial 1 (COMP005): achieved 6-week primary endpoint
  - Pivotal trial 2 (COMP006): 26-week data expected H2 2026
- Lead product candidate: COMP360 psilocybin treatment in treatment resistant depression (TRD)
- Phase 2 TRD program published in *The New England Journal of Medicine*
- Phase 2 PTSD positive top-line data reported in Q2 2024, late-stage clinical study in development
- Cash position of $260.1 million at March 31, 2025

Treatment-resistant Depression (TRD) affects millions in the U.S.



~21M

Prevalence of U.S. adults experiencing major depression each year[1]

~9M

Adult patients who are drug treated for MDD in the past year[2]

~3M

MDD patients failed by ≥2 antidepressants and considered TRD[2]

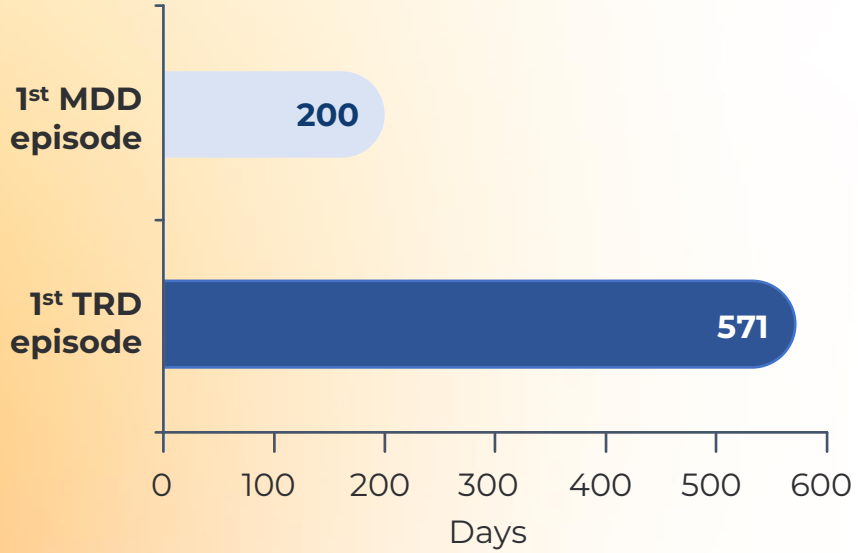
TRD

The definition of TRD adopted by the US Food and Drug Administration (FDA) is **failure to respond to two or more antidepressant regimens** despite adequate dose and duration and adherence to treatment[3]

1.. https://www.nimh.nih.gov/health/statistics/major-depression Accessed June 21, 2025. **2.** Zhdanava M, et al. *J Clin Psychiatry.* 2021;82(2):20m13699. **3.** US Food and Drug Administration. Major Depressive Disorder: Developing Drugs for Treatment. Guidance for Industry. June 2018. https://www.fda.gov/media/113988/download. Accessed May 21, 2025.

TRD patients are disproportionately impacted vs. non-TRD MDD patients

Patients with TRD have longer depressive episodes[1]



Compared to patients with non-TRD MDD, those with TRD experience:

70%
greater
work time loss[2]

17-30%
increased risk of
all-cause mortality[3]

51%
increased risk of
mortality due to suicide[3]

Key: lighter color = MDD; darker color = TRD

1. Wu B, et al. *PLoS One*. 2019;14(8):e0220763. **2.** Amos TB, et al. *J Clin Psychiatry*. 2018;79(2):17m11725. **3.** Gustafsson TT, et al. *J Affect Disord*. 2025;368:136-142.

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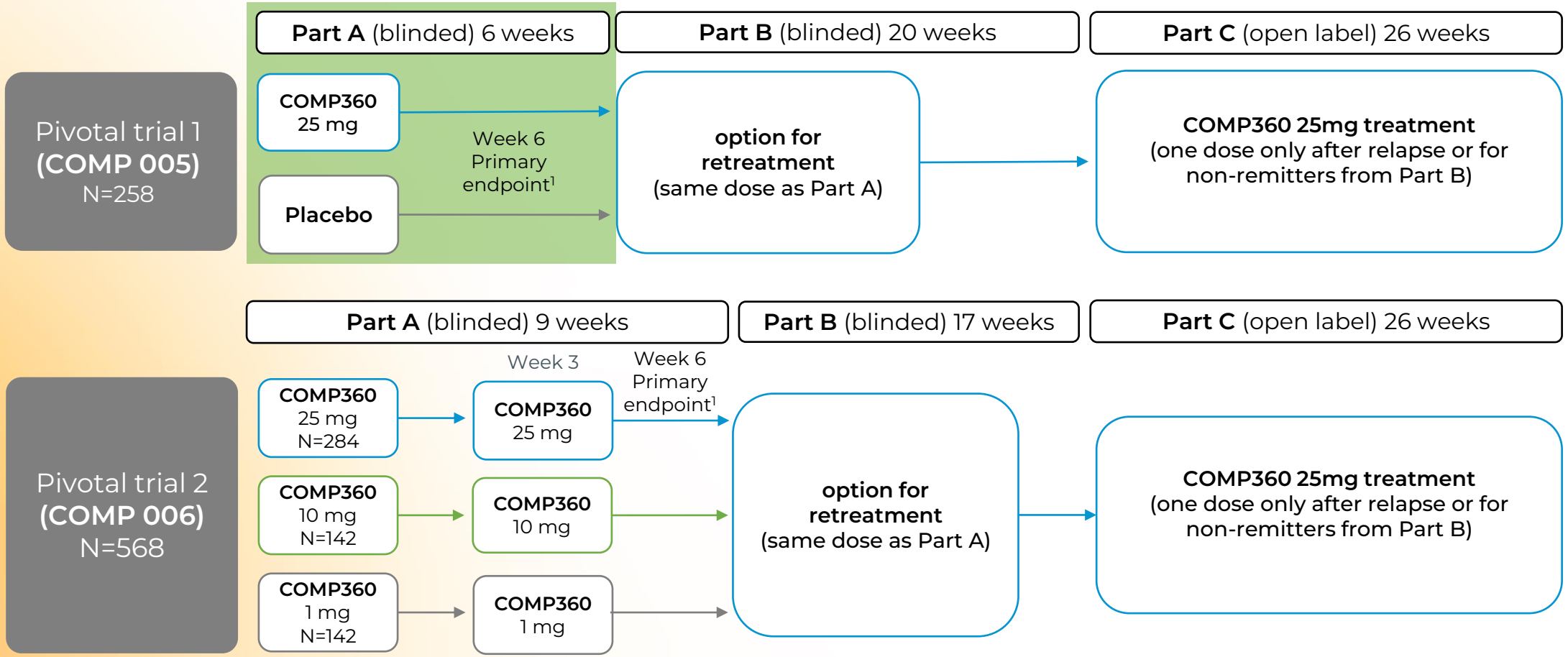
Current drug treatment progression pathway for MDD/TRD patients

Condition	Major Depressive Disorder (MDD)		Treatment-resistant Depression (TRD)
Treatment Line of Therapy	**1st Line**	**2nd Line**	**3rd Line+**
Typical treatment progression and available treatments	– Traditional antidepressant	– Switch to different traditional antidepressant – Combination of traditional antidepressants – Augment (antidepressant + mood stabilizers, anticonvulsants, atypical antipsychotics)	– Switch to different traditional antidepressant – Combination of traditional antidepressants – Augment (antidepressant + mood stabilizers, anticonvulsants, atypical antipsychotics) ***FDA approved for TRD:*** – esketamine and olanzapine + fluoxetine

Phase 3 program: Overview of pivotal trial designs

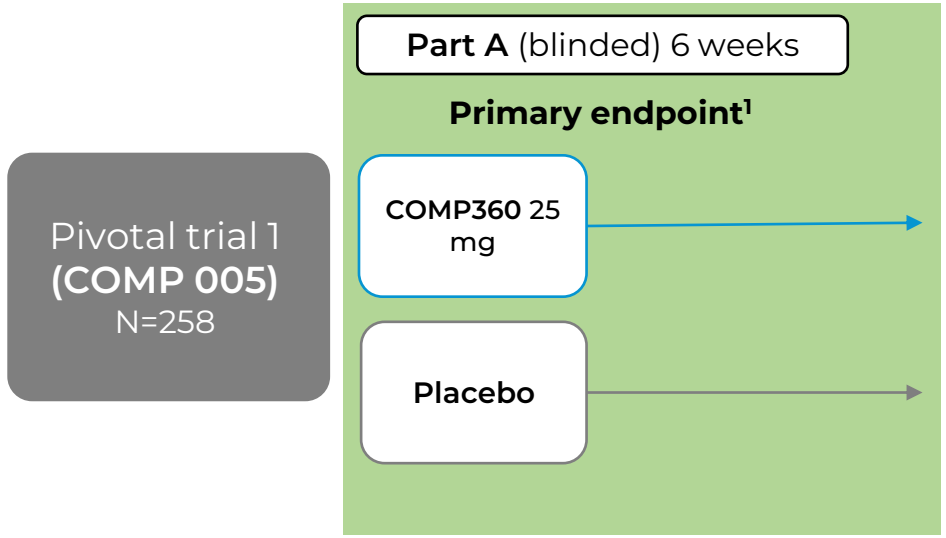


The participant population (TRD definition and core inclusion/exclusion criteria) remains unchanged compared to Phase 2b

1. Primary endpoint = change from baseline in MADRS total score at Week 6. 2. Remitters are defined as patients with MADRS total score ≤12 and no single item ≥4. Note that it can take several weeks to organise a dosing session for non-remitters from Part A or Part B so re-dosing does not necessarily happen immediately at the start of Part B or Part C, respectively.

Phase 3 COMP005 trial: Primary endpoint achieved with high statistical significance

- Clinically-meaningful mean treatment difference of -3.6 points on MADRS
- p<0.001; CI: 95% (-5.7, -1.5)
- Safety (statement provided by the DSMB chair June 23, 2025):
  Based on the latest review of the data for the COMP 005 and COMP 006 studies, safety findings are consistent with previous studies of COMP360 and there are no new or unexpected safety findings. From this review of the data, there is no evidence of a clinically meaningful imbalance between treatment arms in suicidality in either study.



Note: The COMP005 trial is ongoing, the results are preliminary and have not been reviewed by FDA Statement on file from the DSMB Chair, dated June 19, 2025.

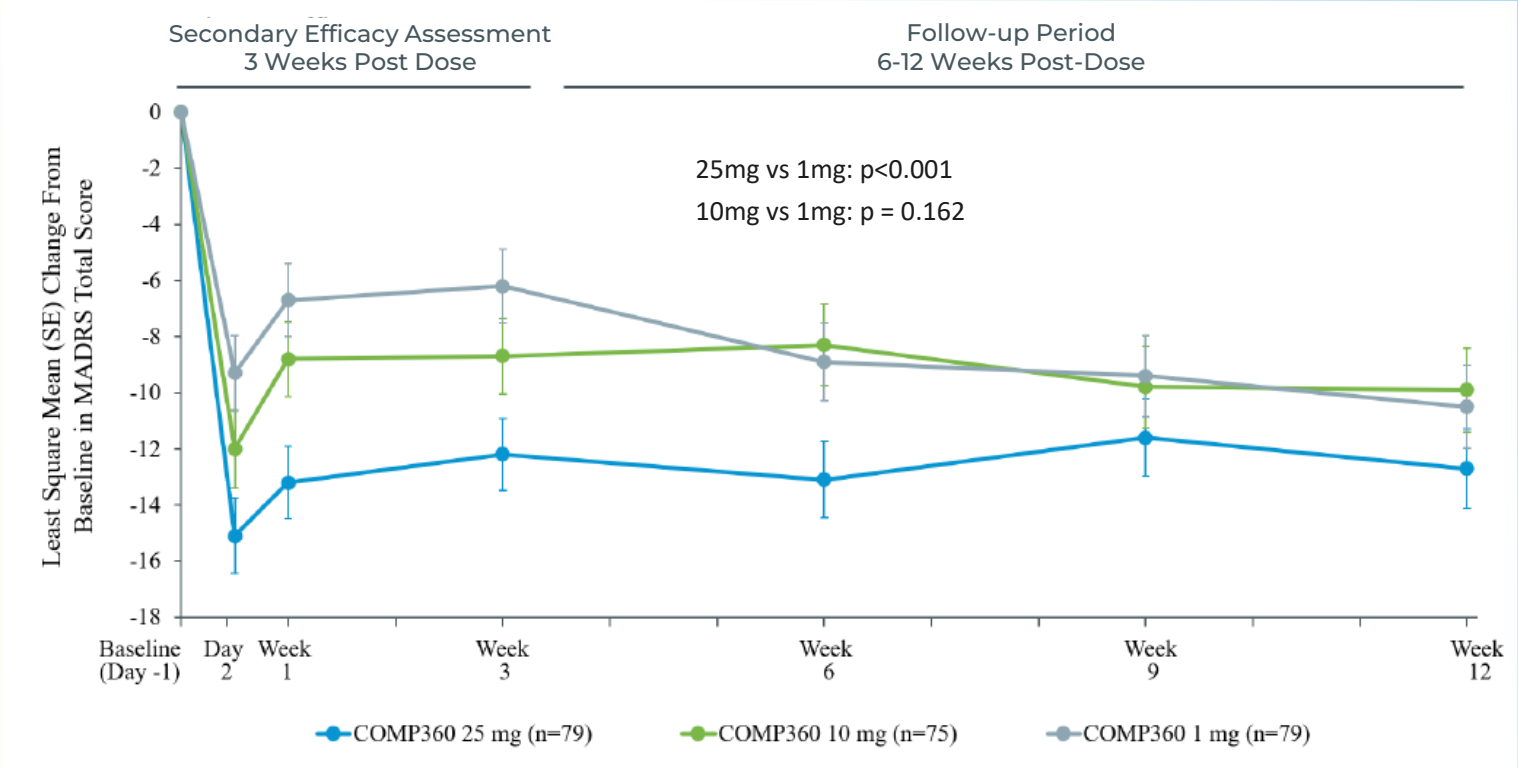
Phase 2b trial: Results demonstrate the potential for a rapid, sustained response in TRD

Published in The NEW ENGLAND JOURNAL of MEDICINE*

In a randomized, controlled, double-blind trial, three groups of participants were given a 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.



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.

NOTE: **Least square mean change from baseline in MADRS total score; MADRS = Montgomery-Åsberg Depression Rating Scale; the above analysis is from the NEJM Supplement and does not include the imputation for use of anti-depressants (see appendix for the trial protocol analysis)

*N Engl J Med 2022;387:1637-48. DOI: 10.1056/NEJMoa2206443

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

Treatment-emergent adverse events (TEAEs)

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

5 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, at least 30 days post administration in the 25 mg arm emphasizing the need for a vigilant approach to the TRD condition.

COMP004: Long-term data shows average efficacy of a single dose of 25mg COMP360 at 92 days

Durable improvement in symptoms:

52-week observational follow-up study from Phase 2b reveals single 25 mg COMP360 psilocybin dose offers longer-term antidepressant effects compared to lower doses, with average efficacy for a single dose of 25mg lasting about 12 weeks in all P2b participants (n=233)

Median time to depressive event was substantially longer (up to 189 days) in a post hoc analysis of the subgroup of participants that were enrolled in the '004 study (n=58)*

Safety monitoring.

COMP360 was generally well tolerated. Three participants reported experiencing a treatment emergent serious adverse event (TESAE) post-enrollment to COMP004, occurring more than 6 months after a single dose administration and all deemed unrelated to study drug.

Published in March 2025 edition of the *Journal of Clinical Psychiatry*.

***note the potential for some "survivor" bias in this group**

Our early commercial planning efforts are focused on ensuring appropriate TRD patients can access COMP360, if approved

Educate & Learn

- KOLs/HCPs
- Clinical care teams
- Patients
- Payers
- Federal and State policy makers

Enable Awareness & Access

- Educating advocacy organizations
- Developing a meaningful value proposition
- Generating value and outcomes research
- Engaging in permitted pre-approval payer discussions

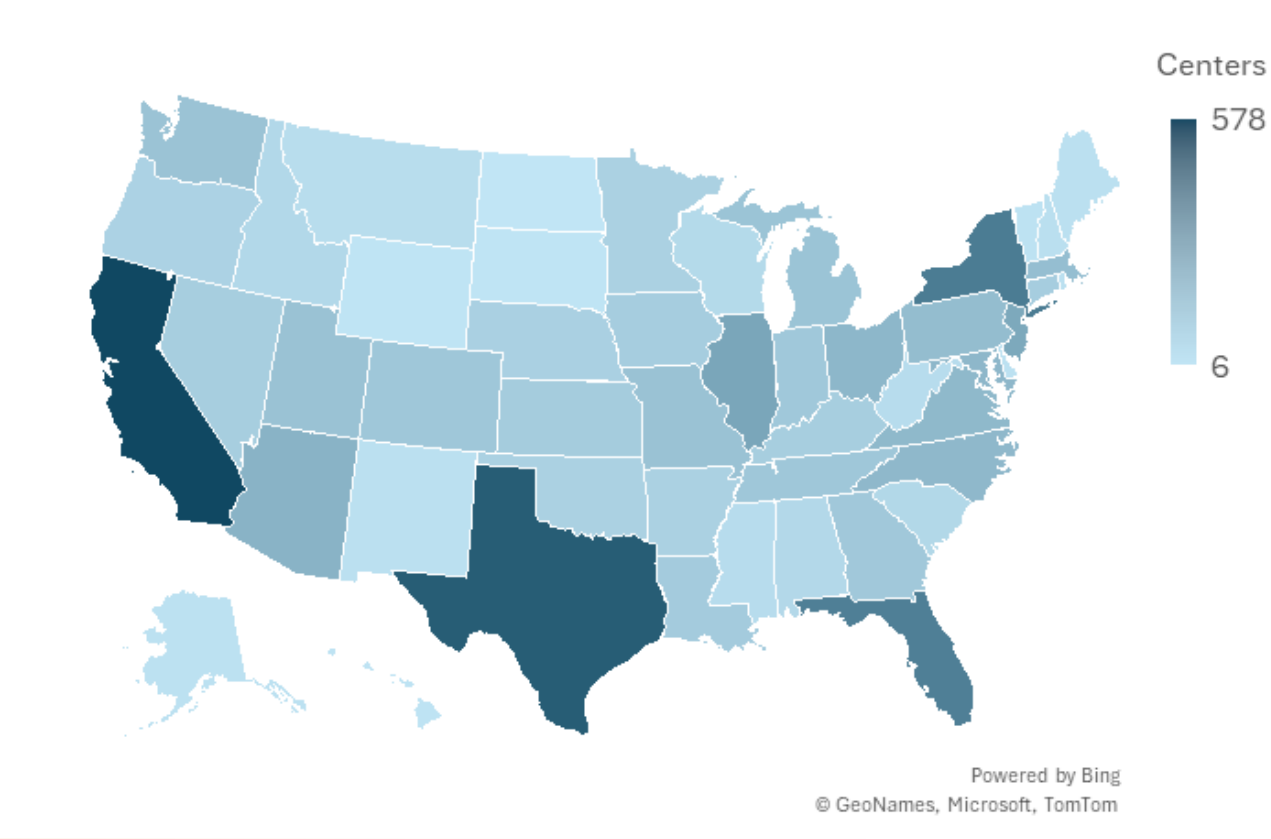
Prepare for Launch

- Strategic collaborations
- Identify potential implementation gaps for new sites potentially delivering COMP360
- Leverage existing Spravato infrastructure

NOTE: KOL = key opinion leaders; HCP = healthcare professional

Potential launch of COMP360 will leverage a well-established infrastructure of interventional psychiatry treatment centers

~6,000 Spravato treatment centers in US[1]



Established Practice Patterns

- Dedicated rooms/areas for longer treatments
- Operational and scheduling capabilities with team-based workforce
- Knowledge of and operational know-how of payer reimbursement requirements
- Knowledge of and operational know-how of Risk Evaluation and Mitigation Strategy (REMS) requirements
- Scaling to meet patient demand

1.. www.spravatohcp.com/find-treatment-center – data pulled 6/10/2025

If approved, COMP360 prescribing, dosing, and reimbursement is expected to integrate within current clinical practice

Prescribing	▪ Prescribed by an HCP licensed to prescribe medication to patients
Dose administration	▪ Patient self-administers and is monitored by a licensed HCP[1] during session ▪ Dosing and monitoring to take place at a certified treatment center
Reimbursement[2]	▪ COMP360 available through specialty pharmacy and buy-and-bill – drug reimbursed through **pharmacy benefit** ▪ Evaluation and Monitoring (E/M) CPT[3] codes - billed by the hour through **medical benefit**

1. Based on draft guidance by the FDA for psychedelic drug development (June 2023), credentials for a qualified HCP are stated as: PhD, PsyD, MD, DO, MSW, LCPC, LMFT, NP
2. Coding and reimbursement for COMP360 have not yet been established and are subject to change from current thinking
3. CPT stands for Current Procedural Terminology. It's a system of codes created by the American Medical Association (AMA) to describe medical procedures and services. These codes are used for billing purposes and are part of the national coding system under the Health Information Portability and Accountability Act (HIPAA)

Note: 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

COMP360 has the potential for a differentiated profile across multiple indications

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)

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

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

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.

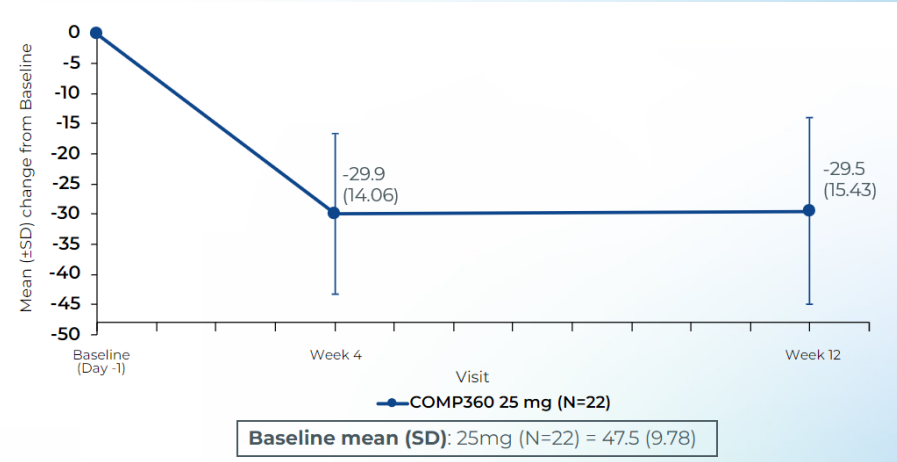
NOTE: E = events, MedDRA = Medical Dictionary of Regulatory Authorities, n = number of participants with TEAE, PT = preferred term, TEAE = treatment emergent adverse event

Phase 2 PTSD study – meaningful and sustained symptom improvement

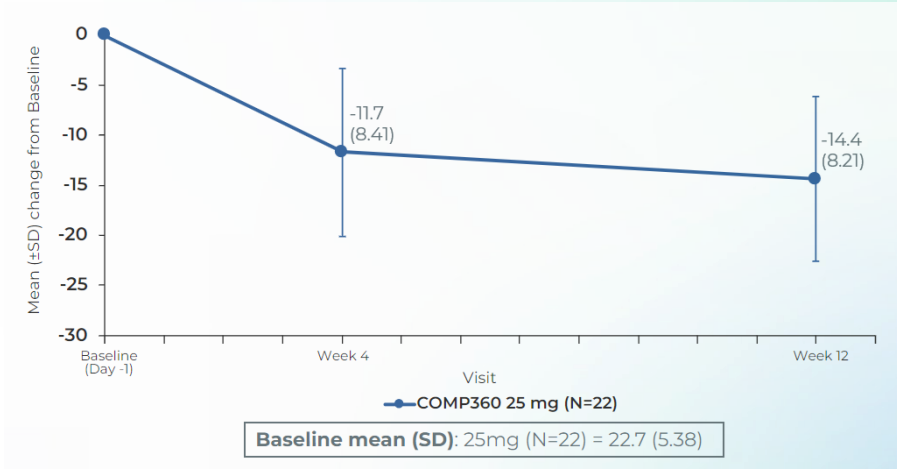
- N=22, multi-center open-label, single administration of 25mg COMP360 with psychological support
- Early onset and sustained change from baseline in CAPS-5 observed at week 4 and week 12
- Durability in CAPS-5 reductions from baseline seen at week 4 (29.5 points) and week 12 (29.9)
- Response in CAPS-5: 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



Appendix

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

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We're a biotechnology company...

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

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