

COMP360 psilocybin therapy for treatment-resistant depression

Phase IIb topline data

09 November 2021



COMPASSION
Navigating Mental Health Pathways



Disclaimer

This presentation has been prepared by COMPASS Pathways plc ("we," "us," "our," "Compass" or the "Company") and is made for informational purposes only and does not constitute an offer to sell or a solicitation of an offer to buy securities, nor shall there be any sale of any securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction. The information set forth herein does not purport to be complete or to contain all of the information you may desire. Statements contained herein are made as of the date of this presentation unless stated otherwise, and neither this presentation, nor any sale of securities, shall under any circumstances create an implication that the information contained herein is correct as of any time after such date or that information will be updated or revised to reflect information that subsequently becomes available or changes occurring after the date hereof. This presentation may contain "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 relating to our business, operations, and financial conditions, including but not limited to current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies, our development plans, our preclinical and clinical results, including results of our phase IIb trial of COMP360 psilocybin therapy, and other future conditions. Words such as, but not limited to, "look forward to," "believe," "expect," "anticipate," "estimate," "intend," "plan," "would," "should" and "could," and similar expressions or words, identify forward-looking statements. New risks and uncertainties may emerge from time to time, and it is not possible to predict all risks and uncertainties. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise. Although we believe the expectations reflected in such forward-looking statements are reasonable, we can give no assurance that such expectations will prove to be correct. Accordingly, readers are cautioned not to place undue reliance on these forward-looking statements. No representations or warranties (expressed or implied) are made about the accuracy of any such forward-looking statements.



Our COMP360 psilocybin therapy



COMP360

Investigational synthetic, high-purity, polymorphic crystalline formulation of psilocybin

Oral capsules

Designated Breakthrough Therapy for TRD (in 2018)



Psychological support

COMP360 is combined with psychological support from specially trained therapists

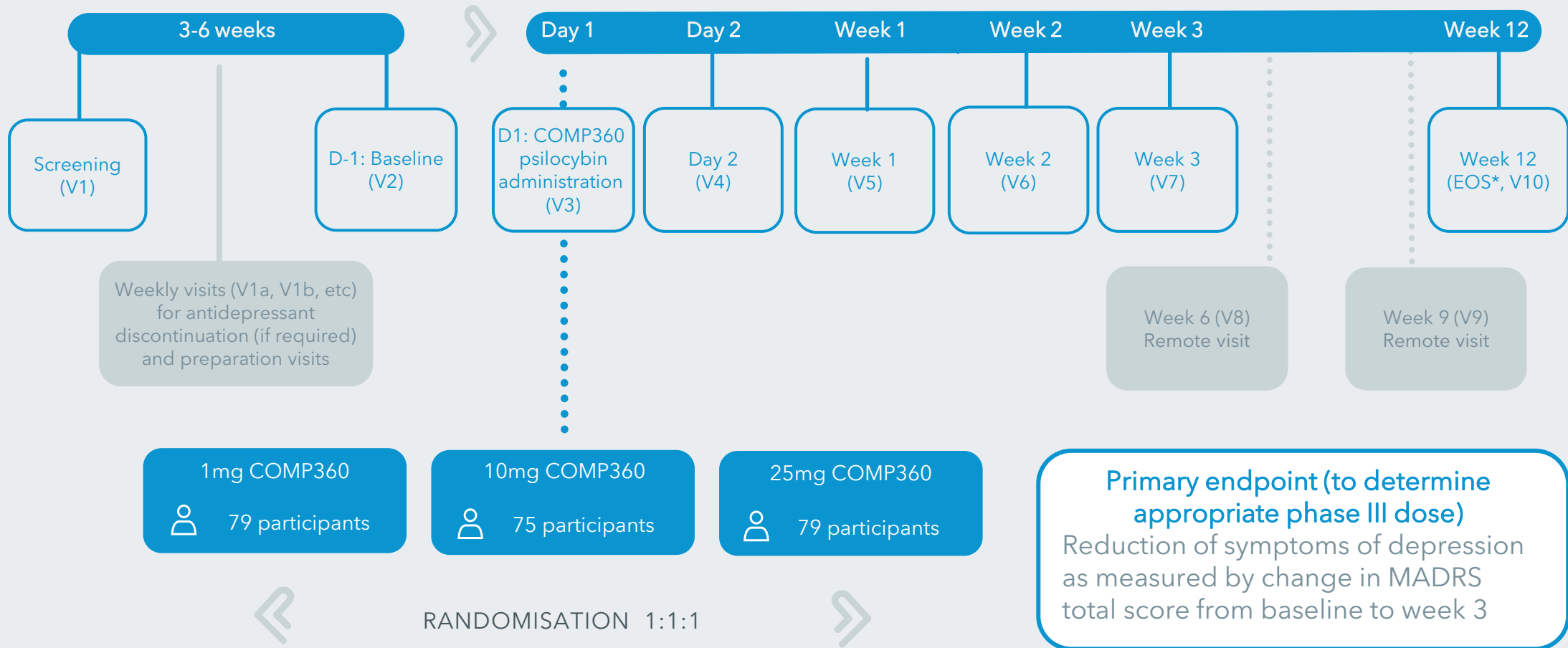
COMP360 psilocybin administration is preceded by preparation and followed up with integration



COMP360 psilocybin therapy: clinical status

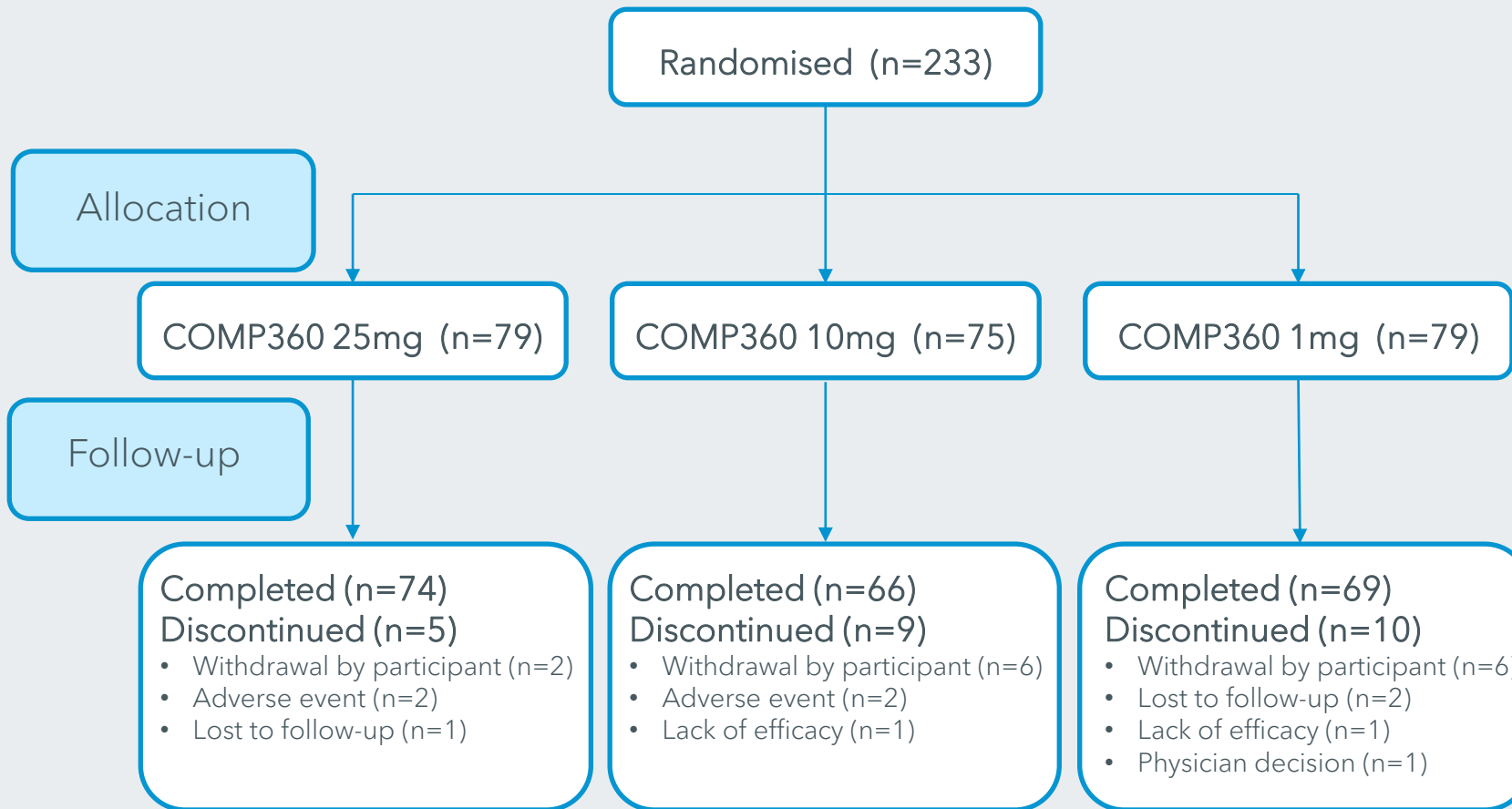
- Preclinical genotoxicity and cardiotoxicity studies completed or underway
- Phase I trial completed: COMP360 generally well-tolerated in healthy participants (n=89)
- Phase IIb trial in TRD: recruitment completed (n=233). Topline results
- Phase II exploratory, open-label trial in TRD: adjunct to SSRI (n=20). Results expected late 2021
- Long-term follow up of phase II TRD patients ongoing
- Phase II trial in PTSD launched

COMP 001 study design and endpoints



Note: MADRS = Montgomery-Åsberg Depression Rating Scale; EOS = end of study; TRD = treatment-resistant depression; D = day; V = visit

Participant disposition and demographics



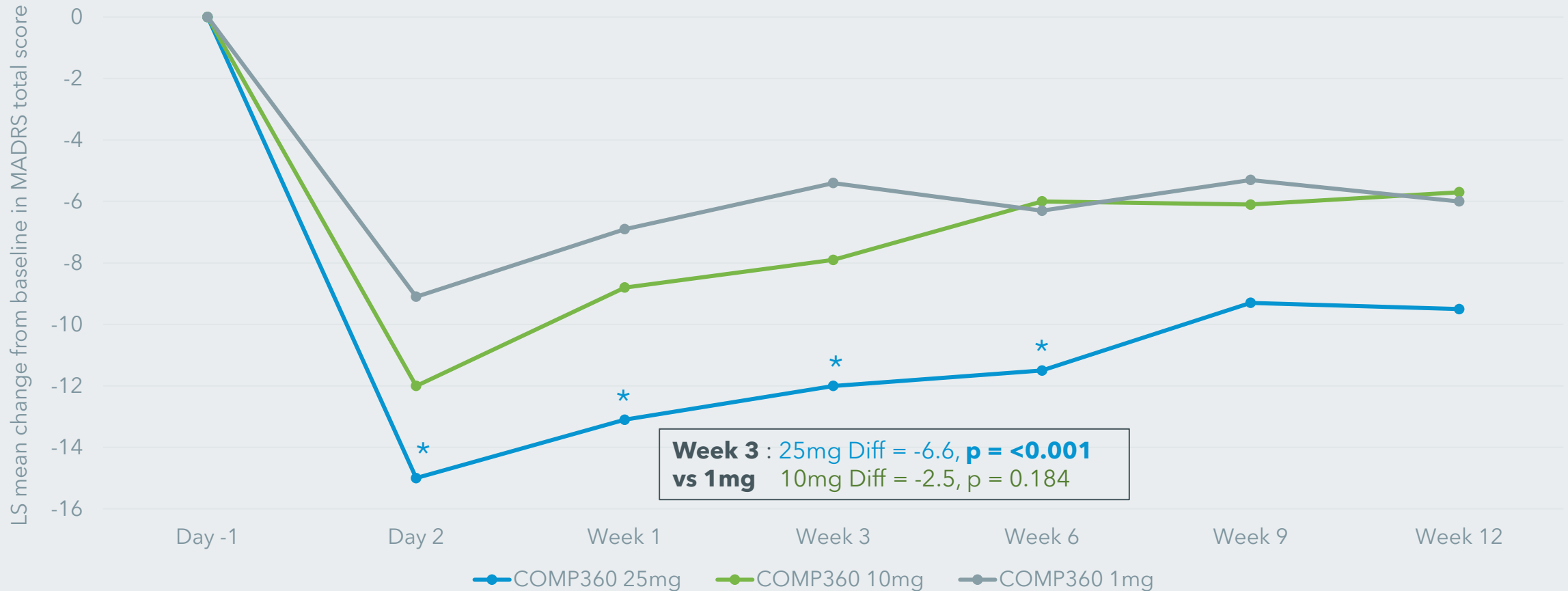
131 (56%) patients were from Europe, 102 (44%) from North America

219 (94%) patients had no prior psilocybin experience

Participant demographics (age, gender, race, BMI, baseline depression symptom severity) were well balanced across the three groups

Primary endpoint - change from baseline in MADRS total score

Statistically significant primary endpoint ($p < 0.001$) at week 3 (25mg vs 1mg). There was a rapid onset of action and durable effects with treatment differences between the 25mg vs 1mg group apparent from the day after COMP360 psilocybin administration

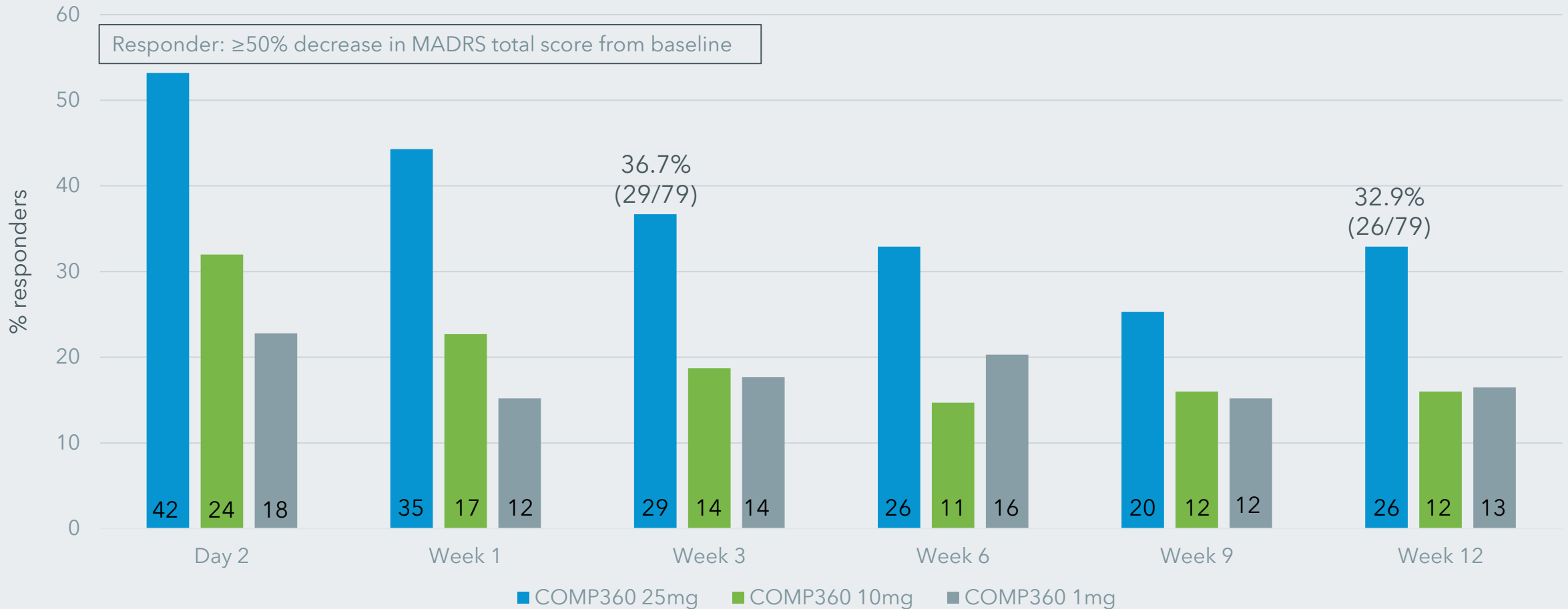


Baseline mean (SD): 25mg (n=79) = 31.9 (5.41); 10mg (n=75) = 33.0 (6.31); 1mg (n=79) = 32.7 (6.24)

Note: MADRS = Montgomery-Åsberg Depression Rating Scale; n = number observed; SD = standard deviation; LS = least squares; * = statistically significant treatment difference vs 1mg at visit; p = p-value

Key secondary endpoint - MADRS responders

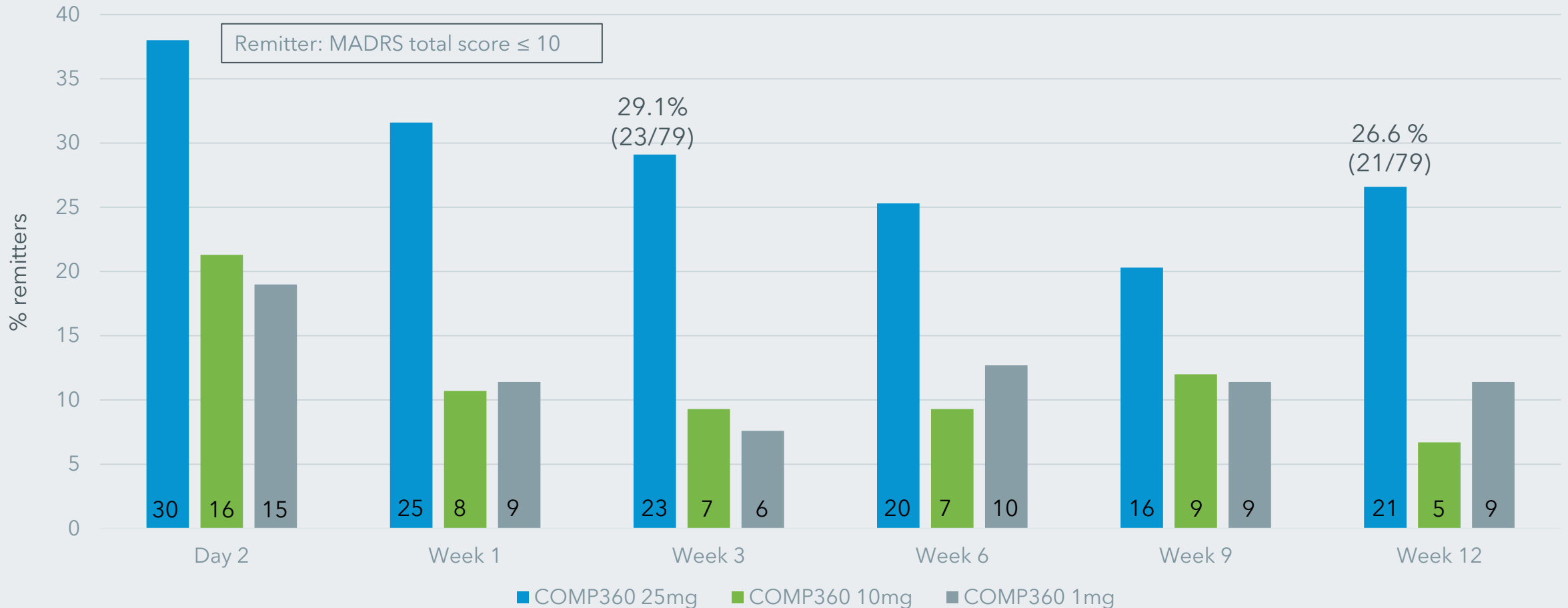
25mg group demonstrated rapid response, with treatment differences from day 2 to week 3 compared with the 1mg group



Note: MADRS = Montgomery-Åsberg Depression Rating Scale; number of responders stated in bar
Participants who started new treatment for depression were assumed to be non-responders, hence decreasing numbers reflecting antidepressant use over time

Key secondary endpoint - MADRS remitters

25mg group demonstrated rapid remission, with treatment differences from day 2 to week 3 compared with the 1mg group

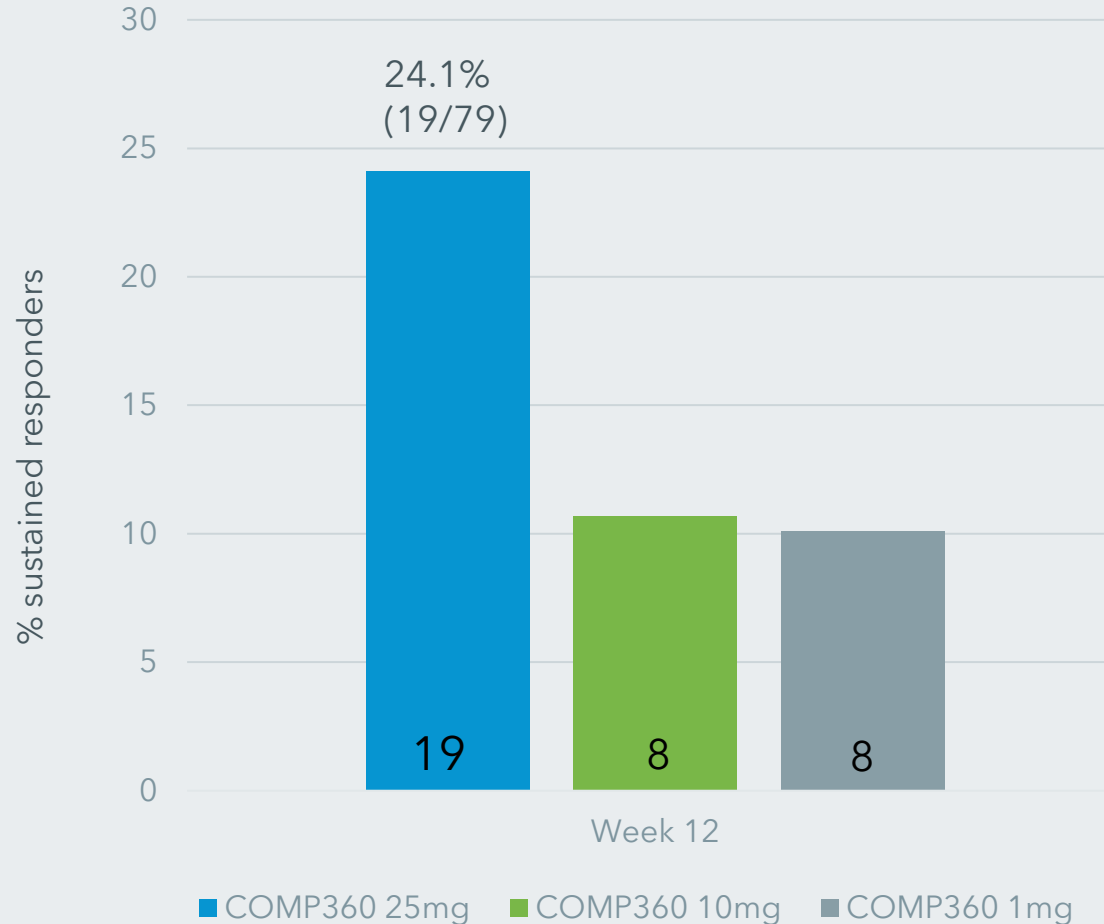


Note: MADRS = Montgomery-Åsberg Depression Rating Scale; number of remitters stated in bar

Participants who started new treatment for depression were assumed to be non-remitters, hence decreasing numbers reflecting antidepressant use over time

MADRS sustained responders at week 12

Higher proportion of sustained responders found in the 25mg vs 1mg arm



Sustained responder* - patients meeting the MADRS response criteria at week 3 and at week 12, and at least at one visit out of week 6 and week 9, and who did not start any new treatments for depression

Note: MADRS = Montgomery-Åsberg Depression Rating Scale; number of sustained responders stated in bar

Statistical significance cannot be claimed on secondary endpoints due to hierarchical testing being broken for the 10mg vs 1mg dose on the primary endpoint

Participants who started new treatment for depression were assumed to be non-responders, hence decreasing numbers reflecting antidepressant use over time

*The protocol-defined sustained response up to week 12 was 20.3% of patients in the 25mg group vs 10.1% in the 1mg group

Safety – treatment emergent adverse events (TEAEs) overview

- The vast majority of TEAEs (over 90%) were of mild or moderate severity
- The proportion of patients reporting a serious TEAE was comparable between the 25mg and 10mg groups:
 - 5 (6.3%) patients in the 25mg COMP360 arm
 - 6 (8.0%) patients in the 10mg COMP360 arm
 - 1 (1.3%) patient in the 1mg COMP360 arm
- TEAE incidence was slightly higher in the 25mg group than in the 10mg and 1mg groups
- Further analysis on the onset and duration of TEAEs is underway
- TEAE incidence includes all events, including those thought to be related to the psychedelic experience on the day of COMP360 psilocybin administration in the therapeutic setting

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

Treatment emergent serious adverse events (TESAEs) ordered by 25mg arm

MedDRA preferred term	COMP360 25mg	COMP360 10mg	COMP360 1mg	Overall
	N=79	N=75	N=79	N=233
	Number of patients per category (%)			
Patients with a TESAE	5 (6.3)	6 (8.0)	1 (1.3)	12 (5.2)
	Any TESAE			
Suicidal behaviour	3 (3.8)	0	0	3 (1.3)
Intentional self-injury ¹	2 (2.5)	2 (2.7)	1 (1.3)	5 (2.1)
Suicidal ideation	2 (2.5)	2 (2.7)	0	4 (1.7)
Drug withdrawal syndrome ²	1 (1.3)	0	0	1 (0.4)
Adjustment disorder with anxiety	1 (1.3)	0	0	1 (0.4)
Adjustment disorder with mixed anxiety and depressed mood	1 (1.3)	0	0	1 (0.4)
Depression	0	1 (1.3)	0	1 (0.4)
Hospitalisation	0	1 (1.3)	0	1 (0.4)

19 TESAEs were reported in total, experienced by 12 patients

(note: two patients had the same TESAE twice)

All suicidal behaviours were experienced at least one month after COMP360 administration

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

1= These were cases of non-suicidal self-injury (including) superficial cutting, scratching and punching which, although not meeting criteria for a TESAE, were classed as TESAEs in this study due to the protocol specifying that any behaviours on the Columbia-Suicide Severity Rating Scale, completed by participants at every study visit, be reported as a TESAE

2 = Codeine withdrawal

Largest, randomised, controlled double-blind psilocybin therapy trial shows rapid and sustained response for COMP360 psilocybin therapy

Key conclusions

- Largest, randomised, controlled, double-blind psilocybin therapy study ever completed shows rapid and sustained response for patients receiving a single 25mg dose of COMP360 psilocybin with psychological support
 - Multicentre, robust study of well characterised patients with treatment-resistant depression; 94% of patients had no prior psilocybin experience
 - Topline data, along with comprehensive secondary analyses to follow, provides the springboard for phase III development

Primary endpoint

- Study achieved its primary endpoint with 25mg demonstrating a statistically significant treatment difference of **-6.6** points on change from baseline in MADRS total scores vs the 1mg dose at week 3 (**p<0.001**)
 - The 10mg vs 1mg dose did not show a statistically significant difference at week 3 (numerical difference of -2.5 points)
 - The 25mg group demonstrated statistically significant efficacy from the day after the COMP360 psilocybin administration
 - At week 3, the 25mg group showed a 12 point reduction from baseline in MADRS total score

Secondary endpoints

- At least double the number of MADRS responders¹, remitters², and sustained responders³ with 25mg vs 1mg; rapid response and remission from day 2 to week 3
 - 36.7% (29 patients) in 25mg group showed response at week 3
 - 29.1% (23 patients) in 25mg group were in remission at week 3
 - 24.1% (19 patients) in 25mg group were sustained responders at week 12

Safety

- COMP360 was generally well-tolerated
 - Vast majority of TEAEs were mild or moderate in severity
 - The most frequent TEAEs were headache, nausea, fatigue and insomnia
 - There were 12 patients who reported serious TEAEs, including suicidal behaviour, intentional self-injury, and suicidal ideation, which are often observed in a treatment-resistant depression population

Note: MADRS = Montgomery-Åsberg Depression Rating Scale; TEAE = treatment emergent adverse events

1. Response: ≥50% decrease in MADRS total score from baseline; 2. Remission: MADRS total score ≤10; 3. Sustained response: patients meeting the MADRS response criteria at week 3 and at week 12, and at least at one visit out of week 6 and week 9; the protocol-defined sustained response up to week 12 was 20.3% of patients in the 25mg group vs 10.1% in the 1mg group

COMP360 psilocybin therapy development moving forward

- Complete final analysis of all data and endpoints to further inform path forward
- Hold an end-of-phase II meeting with FDA to discuss topline data and continue discussions around development path and phase III design
 - Meeting anticipated Q1 2022
- Pending FDA meeting outcome, we anticipate advancing to phase III by Q3 2022
- Continue expanding our pipeline of indications beyond treatment-resistant depression and post-traumatic stress disorder
- Additional indications are currently being researched via investigator initiated studies which may provide signal generation for future COMP360 psilocybin therapy studies

Thank you
for your time

Any questions?

