Psilocybin administration to healthy participants: safety and feasibility in a placebo-controlled study

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Background
Treatment-resistant depression remains a significant health-care problem, with a moderate rate of remission of 41% in a recent meta-analysis.1,2 A recent double-blind, placebo-controlled, phase I trial of COMP360 (psilocybin) reported that 77% of participants in the psilocybin arm versus 38% in the placebo arm experienced an improvement ≥ 20% in Hamilton Depression Rating Scale (HDRS) score at 2 weeks post-administration.3

Methods
Study design
This was a phase I, randomised, double-blind, placebo-controlled study to evaluate the effects of 10mg and 25mg COMP360 (psilocybin) compared with placebo in healthy participants, conducted at the Maudsley Hospital, London, UK.4

Participants
Participants were recruited from local universities and were aged 18–65 years. All participants were required to have no psychiatric history, history of substance abuse, history of cardiovascular disease, or a history of a neurological disorder.5

Exclusion criteria
Participants were excluded if they had a history of severe psychiatric conditions, including schizophrenia, bipolar disorder, suicidal ideation, or a history of a neurological disorder.6

Informed consent
Informed consent was obtained from all participants before any study procedures were performed.7

Results
Participant disposition and demographics
Figure 2 presents participant disposition. A total of 90 participants were randomly assigned to 10mg psilocybin (n=30), 25mg psilocybin (n=30), or placebo (n=30). Eight participants were excluded: four withdrew consent, one was excluded due to protocol violation, and three were excluded due to adverse event (AE). Eight participants were lost to follow-up. The final analysis consisted of 78 participants: 30 in the 10mg psilocybin arm, 30 in the 25mg psilocybin arm, and 18 in the placebo arm (n=89).

Adverse events
No serious adverse events (SAEs) were reported. There were 11 AEs reported (7 in the 25mg psilocybin arm, 3 in the 10mg psilocybin arm, and 1 in the placebo arm). The AEs were all mild or moderate in severity. No AEs led to withdrawal from the study.

Conclusions
Psilocybin administration was well tolerated in healthy participants and results support further investigation of simultaneous 1:1 therapeutic administration.

References

Disclosures
The authors reported no conflicts of interest.

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