Impact of Psilocybin on Motor Function in Healthy Participants: A Phase 1, Randomised, Triple-Blind, Dose-Finding Study

CNS Drugs

Online Resource 2: Safety Data

Authors

Dr Chiranth Bhagavan[1]
Professor Olivia Carter[2]
Dr Glenn Nielsen[3]
Professor David Berlowitz[4,5]
Ms Sara Issak[5,6]
Associate Professor Sabine Braat[7,8]
Dr Sophie Zaloumis[7,8]
Mr Zachary Attard[4,5]
Ms Gina Oliver[1]
Ms Deanne Mayne[9]
Dr James Rucker[10,11]
Dr Matthew Butler[10,11]
Dr Orwa Dandash[1]
Dr Alexander Bryson*[12,13,14]
Professor Richard A. Kanaan*[1]

*Contributed equally to the paper

Corresponding author:

Dr Chiranth Bhagavan
Email: cbhagavan@student.unimelb.edu.au
Address: Department of Psychiatry, University of Melbourne, Austin Health, 145 Studley Rd, Heidelberg VIC 3084, Australia

Affiliations:
[1] Department of Psychiatry, University of Melbourne, Austin Health, Heidelberg, VIC, Australia
[2] Melbourne School of Psychological Sciences, University of Melbourne, Parkville, VIC, Australia
[3] Neurosciences, City St George's, University of London, London, United Kingdom
[4] Institute for Breathing and Sleep, Austin Health, Heidelberg, VIC, Australia
[5] Department of Physiotherapy, Melbourne School of Health Sciences, The University of Melbourne, Carlton, VIC, Australia
[6] Department of Physiotherapy, Epworth Healthcare, Camberwell, VIC, Australia
[7] Centre for Epidemiology and Biostatistics, Melbourne School of Population and Global Health, The University of Melbourne, Melbourne, VIC, Australia
[8] MISCH (Methods and Implementation Support for Clinical Health) Research Hub, Faculty of Medicine, Dentistry and Health Sciences, University of Melbourne, Melbourne, VIC, Australia
[9] FND Hope International, Salmon, Idaho, United States
[10] Department of Psychological Medicine, Institute of Psychiatry, Psychology & Neuroscience, King's College London, London, United Kingdom
[11] South London & Maudsley NHS Foundation Trust, Bethlem Royal Hospital, Beckenham, United Kingdom
[12] Florey Institute of Neuroscience & Mental Health, Parkville, VIC, Australia
[13] Department of Neurology, Melbourne Health, Parkville, VIC, Australia
[14] Department of Neurology, Eastern Health, Box Hill, VIC, Australia

Contents

Adverse Events

Table S2.1: Adverse Events During or Post-Dosing, by Severity, Relatedness to Psilocybin, Type, and Classification as an Adverse Reaction, Significant Safety Issue, or Serious Adverse Event

	5mg	10mg	15mg	20mg	Total
Adverse reaction					
adverse event which is unrelated to psilocybin)	1 (10)	1 (5)	0 (0)	0 (0)	2 (3)
adverse reaction (an event which is possibly/probably/definitely related to psilocybin)	9 (90)	18 (95)	24 (100)	11 (100)	62 (97)
Significant Safety Issue during study					
No	10 (100)	19 (100)	24 (100)	11 (100)	64 (100)
Adverse event during dosing	6 (60)	15 (79)	13 (54)	5 (45)	39 (61)
Name of adverse event during dosing					
Anxiety	0 (0)	0 (0)	0 (0)	2 (40)	2 (5)
Dizziness	0 (0)	1 (7)	2 (15)	1 (20)	4 (10)
Drowsiness or sedation	0 (0)	2 (13)	1 (8)	0 (0)	3 (8)
Dry mouth	0 (0)	0 (0)	1 (8)	0 (0)	1 (3)
Hand tremor	0 (0)	1 (7)	0 (0)	0 (0)	1 (3)
Increased urinary frequency	1 (17)	1 (7)	1 (8)	0 (0)	3 (8)
Jaw stiffness	0 (0)	1 (7)	0 (0)	0 (0)	1 (3)
Lightheadedness	0 (0)	1 (7)	0 (0)	0 (0)	1 (3)
Muscle soreness	1 (17)	0 (0)	0 (0)	0 (0)	1 (3)
Nausea with or without vomiting	2 (33)	4 (27)	4 (31)	1 (20)	11 (28)
Restlessness	0 (0)	0 (0)	1 (8)	0 (0)	1 (3)
Rhinorrhoea and lacrimation	0 (0)	1 (7)	1 (8)	1 (20)	3 (8)
Tiredness	1 (17)	0 (0)	0 (0)	0 (0)	1 (3)
Weakness	0 (0)	2 (13)	1 (8)	0 (0)	3 (8)
Yawning	1 (17)	1 (7)	1 (8)	0 (0)	3 (8)
Severity of adverse event during dosing					
Nil	1 (17)	2 (13)	0 (0)	0 (0)	3 (8)
Mild (an event tolerated by the participant, causing minimal discomfort and not interfering in everyday activities)	5 (83)	13 (87)	12 (92)	5 (100)	35 (90)
Moderate (an event sufficiently discomforting to interfere with normal everyday activities)	0 (0)	0 (0)	1 (8)	0 (0)	1 (3)
Serious adverse event during dosing					
No	6 (100)	15 (100)	13 (100)	5 (100)	39 (100)
Relatedness of adverse event to psilocybin during dosing					
not assessable	0 (0)	1 (7)	0 (0)	0 (0)	1 (3)
possibly related	1 (17)	7 (47)	5 (38)	1 (20)	14 (36)
probably related	5 (83)	7 (47)	7 (54)	2 (40)	21 (54)
definitely related	0 (0)	0 (0)	1 (8)	2 (40)	3 (8)
Relatedness of adverse event to psilocybin during dosing					
No	0 (0)	1 (7)	0 (0)	0 (0)	1 (3)
Yes	6 (100)	14 (93)	13 (100)	5 (100)	38 (97)

Adverse reaction during dosing					
adverse event which is unrelated to psilocybin)	0 (0)	1 (7)	0 (0)	0 (0)	1 (3)
adverse reaction (an event which is possibly/probably/definitely related to psilocybin)	6 (100)	14 (93)	13 (100)	5 (100)	38 (97)
Significant Safety Issue during dosing					
No	6 (100)	15 (100)	13 (100)	5 (100)	39 (100)
Adverse event post-dosing	4 (40)	4 (21)	11 (46)	6 (55)	25 (39)
Name of adverse event post-dosing					
Body ache	0 (0)	1 (25)	0 (0)	1 (17)	2 (8)
Drowsiness or sedation	1 (25)	0 (0)	1 (9)	0 (0)	2 (8)
Feeling cold inside	0 (0)	0 (0)	1 (9)	0 (0)	1 (4)
Feeling flushed in the face	0 (0)	0 (0)	1 (9)	0 (0)	1 (4)
Feeling run down	1 (25)	0 (0)	0 (0)	0 (0)	1 (4)
Headache	1 (25)	2 (50)	3 (27)	2 (33)	8 (32)
Hot and cold	0 (0)	0 (0)	1 (9)	0 (0)	1 (4)
Lightheadedness	0 (0)	0 (0)	1 (9)	0 (0)	1 (4)
Nausea with or without vomiting	1 (25)	0 (0)	1 (9)	0 (0)	2 (8)
Sound sensitivity	0 (0)	0 (0)	0 (0)	1 (17)	1 (4)
Tiredness	0 (0)	1 (25)	1 (9)	1 (17)	3 (12)
Warmth	0 (0)	0 (0)	0 (0)	1 (17)	1 (4)
Weakness	0 (0)	0 (0)	1 (9)	0 (0)	1 (4)
Severity of adverse event post-dosing					
Nil	2 (50)	0 (0)	0 (0)	1 (17)	3 (12)
Mild (an event tolerated by the participant, causing minimal discomfort and not interfering in everyday activities)	2 (50)	4 (100)	6 (55)	5 (83)	17 (68)
Moderate (an event sufficiently discomforting to interfere with normal everyday activities)	0 (0)	0 (0)	4 (36)	0 (0)	4 (16)
Severe (an event that prevents normal everyday activities)	0 (0)	0 (0)	1 (9)	0 (0)	1 (4)
Serious adverse event post-dosing					
No	4 (100)	4 (100)	11 (100)	6 (100)	25 (100)
Relatedness of adverse event to psilocybin post-dosing					
not assessable	1 (25)	0 (0)	0 (0)	0 (0)	1 (4)
possibly related	2 (50)	4 (100)	10 (91)	6 (100)	22 (88)
probably related	1 (25)	0 (0)	1 (9)	0 (0)	2 (8)
Relatedness of adverse event to psilocybin post-dosing					
No	1 (25)	0 (0)	0 (0)	0 (0)	1 (4)
Yes	3 (75)	4 (100)	11 (100)	6 (100)	24 (96)
Adverse reaction post-dosing					
adverse event which is unrelated to psilocybin)	1 (25)	0 (0)	0 (0)	0 (0)	1 (4)
adverse reaction (an event which is possibly/probably/definitely related to psilocybin)	3 (75)	4 (100)	11 (100)	6 (100)	24 (96)
Significant Safety Issue post-dosing					
No	4 (100)	4 (100)	11 (100)	6 (100)	25 (100)

Values refer to the number (%) of adverse events.

Vital Signs

Table S2.2: Vital Signs

	5mg	10mg	15mg	20mg
Systolic blood pressure (mmHg)	N=7	N=12	N=11	N=6
Baseline (pre-dosing)	125.0 (116.0-132.0)	124.0 (119.0-135.5)	119.0 (113.0-138.0)	118.0 (112.0-132.0)
0.5 hour post-dosing	123.5 (114.0-131.0)	130.0 (122.0-140.5)	130.0 (123.0-141.0)	127.0 (117.0-160.0)
0.5 hour post-dosing (change from baseline)	-6.5 (-11.0-3.0)	4.0 (0.0-11.5)	8.0 (-7.0-15.0)	6.5 (-6.0-15.0)
1 hour post-dosing	133.0 (125.0-133.0)	134.0 (125.5-142.5)	132.0 (123.0-147.0)	133.0 (133.0-150.0)
1 hour post-dosing (change from baseline)	3.0 (1.0-8.0)	4.5 (1.5-13.0)	4.0 (-1.0-15.0)	5.0 (2.0-14.0)
3 hours post-dosing	124.0 (120.0-134.0)	139.0 (122.0-148.0)	135.0 (133.0-145.0)	133.0 (123.0-140.0)
3 hours post-dosing (change from baseline)	2.0 (-5.0-5.0)	7.0 (3.0-17.0)	10.0 (5.0-14.0)	8.0 (-5.0-14.0)
5 hours post-dosing	128.0 (120.0-134.0)	125.5 (118.5-139.5)	131.0 (121.0-141.0)	126.0 (125.0-146.0)
5 hours post-dosing (change from baseline)	0.0 (-7.0-7.0)	0.0 (-6.0-11.5)	2.0 (-3.0-6.0)	3.5 (-4.0-7.0)
Diastolic blood pressure (mmHg)				
Baseline (pre-dosing)	82.0 (79.0-86.0)	80.0 (77.5-83.5)	82.0 (78.0-84.0)	82.0 (78.0-89.0)
0.5 hour post-dosing	81.5 (78.0-85.0)	86.5 (82.0-93.5)	85.0 (82.0-94.0)	88.0 (75.0-90.0)
0.5 hour post-dosing (change from baseline)	0.5 (-4.0-3.0)	4.5 (-0.5-11.0)	3.0 (0.0-15.0)	0.5 (-2.0-15.0)
1 hour post-dosing	88.0 (83.0-92.0)	88.0 (83.5-90.5)	94.0 (84.0-99.0)	89.0 (85.0-94.0)
1 hour post-dosing (change from baseline)	3.5 (0.0-7.0)	6.5 (2.5-11.0)	10.0 (6.0-18.0)	14.0 (-4.0-18.0)
3 hours post-dosing	78.0 (77.0-93.0)	86.0 (78.0-94.0)	90.0 (81.0-95.0)	86.0 (79.0-97.0)
3 hours post-dosing (change from baseline)	4.0 (-7.0-5.0)	6.0 (-4.0-11.0)	4.0 (0.0-16.0)	4.0 (-6.0-14.0)
5 hours post-dosing	87.0 (77.0-92.0)	82.0 (74.5-87.5)	81.0 (73.0-94.0)	81.0 (72.0-91.0)
5 hours post-dosing (change from baseline)	5.0 (-5.0-7.0)	2.0 (-8.5-7.0)	1.0 (-5.0-6.0)	1.5 (-12.0-7.0)
Pulse rate (per minute)				
Baseline (pre-dosing)	75.0 (55.0-88.0)	79.5 (68.5-83.0)	80.0 (64.0-83.0)	75.0 (65.0-80.0)
0.5 hour post-dosing	63.0 (49.0-65.0)	78.0 (68.5-89.0)	76.0 (65.0-82.0)	78.0 (64.0-79.0)
0.5 hour post-dosing (change from baseline)	-11.5 (-13.0-0.0)	-3.0 (-8.5-12.5)	0.0 (-4.0-11.0)	-4.5 (-6.0--3.0)
1 hour post-dosing	65.5 (50.0-74.0)	79.5 (67.5-86.0)	75.0 (70.0-80.0)	76.0 (76.0-80.0)
1 hour post-dosing (change from baseline)	-6.0 (-17.0--1.0)	4.0 (-8.0-8.0)	2.0 (-6.0-6.0)	-6.0 (-10.0--2.0)
3 hours post-dosing	62.0 (56.0-78.0)	79.0 (67.0-96.0)	76.0 (70.0-80.0)	80.0 (74.0-82.0)
3 hours post-dosing (change from baseline)	-4.0 (-10.0-2.0)	7.0 (-7.0-16.0)	5.0 (-9.0-10.0)	2.0 (-8.0-6.0)
5 hours post-dosing	70.0 (64.0-84.0)	87.0 (71.0-90.0)	80.0 (74.0-88.0)	89.5 (85.0-92.0)
5 hours post-dosing (change from baseline)	-2.0 (-5.0-5.0)	5.5 (-1.5-11.5)	-1.0 (-4.0-8.0)	6.5 (3.0-9.0)
Oxygen saturation (% at room air)				
Baseline (pre-dosing)	99.0 (97.0-99.0)	98.0 (98.0-98.5)	98.0 (98.0-99.0)	96.0 (95.0-98.0)
0.5 hour post-dosing	99.0 (98.0-99.0)	98.5 (97.0-99.0)	98.0 (98.0-99.0)	98.0 (97.0-98.0)
0.5 hour post-dosing (change from baseline)	1.0 (0.0-1.0)	0.0 (-1.0-1.5)	0.0 (0.0-1.0)	0.0 (-1.0-0.0)
1 hour post-dosing	98.5 (98.0-99.0)	98.0 (97.0-99.0)	98.0 (98.0-99.0)	98.0 (97.0-98.0)

1 hour post-dosing (change from baseline)	1.0 (-1.0-1.0)	0.5 (-1.5-1.0)	0.0 (-1.0-1.0)	0.0 (-1.0-0.0)
3 hours post-dosing	98.0 (97.0-99.0)	98.0 (95.0-98.0)	98.0 (97.0-98.0)	97.0 (97.0-98.0)
3 hours post-dosing (change from baseline)	0.0 (-1.0-1.0)	-1.0 (-3.0-0.0)	0.0 (-1.0-1.0)	0.0 (-1.0-0.0)
5 hours post-dosing	98.0 (98.0-99.0)	98.0 (95.5-98.0)	97.0 (96.0-98.0)	96.5 (96.0-98.0)
5 hours post-dosing (change from baseline)	0.0 (-1.0-0.0)	-1.0 (-2.5-0.5)	-1.0 (-2.0-0.0)	-1.0 (-2.0--1.0)

Data are presented as median (interquartile range).