IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Gabrielle Gobbi and Danilo De Gregorio — Confirmation No:

Serial No.: 18/102,296 — Group No.:

Filing or 371(c) Date: January 27th, 2023 — Examiner:

Entitled: ADMINISTRATION OF MODULATORS OF 5-HT AND / OR AMPA RECEPTORS FOR TREATING NEUROLOGICAL CONDITIONS

Examiner:

The following documents, which are also identified in the Form PTO/SB/429 filed herewith, are submitted for your consideration as being of potential relevance to the examination of the present application:

1. LEA (2020) "Perceived outcomes of psychedelic microdosing as self-managed therapies for mental and substance use disorders" Psychopharmacology. 237:1521-1532.

2. POLITO & STEVENSON (2019) "A systematic study of microdosing psychedelics" PLoS One. 14(2):1-26.

3. THESTONEDYOGAGIRL (2019) "30 Day Microdoing Experiment" Retrieved 20 September 2023. https://www.reddit.com/r/microdosing/comments/ctkz2k/30_day_microdosing_experiment/

4. FADIMAN & KORB (2019) "Might Microdosing Psychedelics Be Safe and Beneficial? An Initial Exploration" Journal of Psychoactive Drugs. 51(2):118-122.

5. HUTTEN (2019) "Motives and Side-Effects of Microdosing With Psychedelics Among Users" International Journal of Neuropsychopharmacology. 22(7):426-434.

6. JOHNSTAD (2018) "Powerful substances in tiny amounts: An interview study of psychedelic microdosing" Nordic Studies on Alcohol and Drugs. 35(1):39-51.

7. TETRISDROID (2018) "Microdosing for Anxiety and Depression" Retrieved 19 September 2023. https://erowid.org/experiences/exp.php?ID=108178

8. Intl. Pat. Doc. No. 2020/157569 (2020) "METHODS AND COMPOSITIONS COMPRISING A 5HT RECEPTOR AGONIST FOR THE TREATMENT OF PSYCHOLOGICAL, COGNITIVE, BEHAVIORAL, AND/OR MOOD DISORDERS" (Filed 29 January 2020)

9. RESIDENTPURPLE (2018) "IV LSD experience reports" Retrieved 4 October 2023. https://www.reddit.com/r/LSD/comments/a2yrk1/iv_lsd_experience_reports/

10. Pfizer Inc. (2018) "PATIENT HEALTH QUESTIONNAIRE (PHQ-9)" Retrieved from 19 June 2018. URL: https://web.archive.org/web/20180619082559/https:/med.stanford.edu/fastlab/research/imapp/msrs/_jcr_content/main/accordion/accordion_content3/download_256324296/file.res/PHQ9%20id%20date%2008.03.pdf

11. CDC (2018) "Mental Health Conditions: Depression and Anxiety" Retrieved from 31 December 2018. URL: https://web.archive.org/web/20181231203416/https:/www.cdc.gov/tobacco/campaign/tips/diseases/depression-anxiety.html

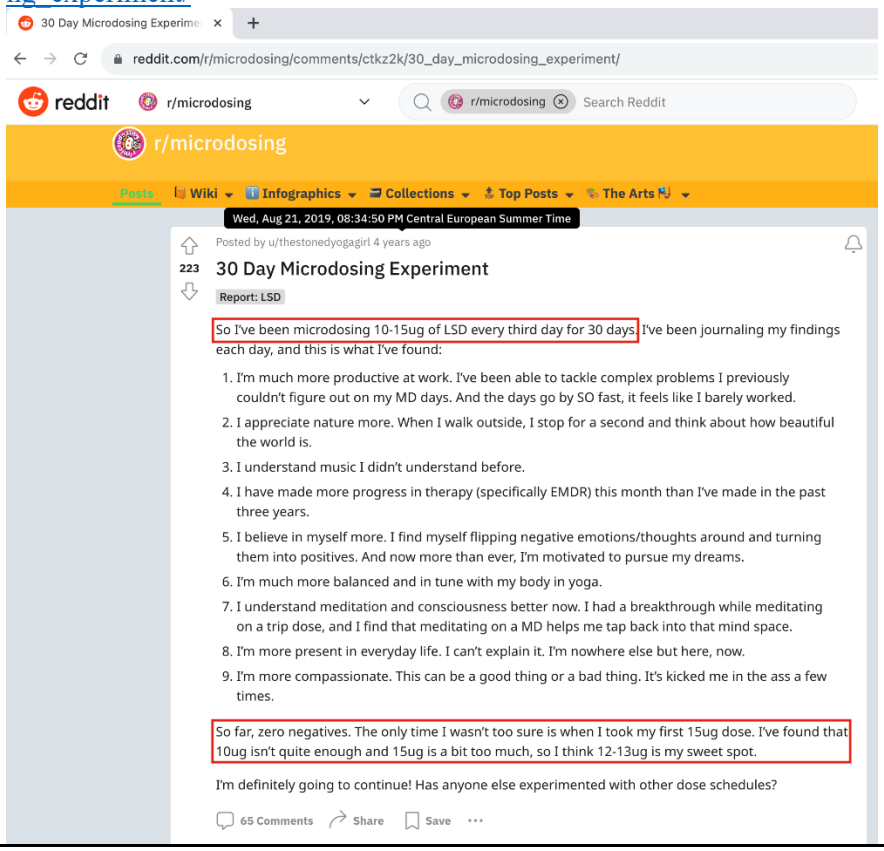
12. SPITZER (2020) "GAD-7 Anxiety" Retrieved from 03 June 2020. URL: https://web.archive.org/web/20200603023323/https:/adaa.org/sites/default/files/GAD-7_Anxiety-updated_0.pdf

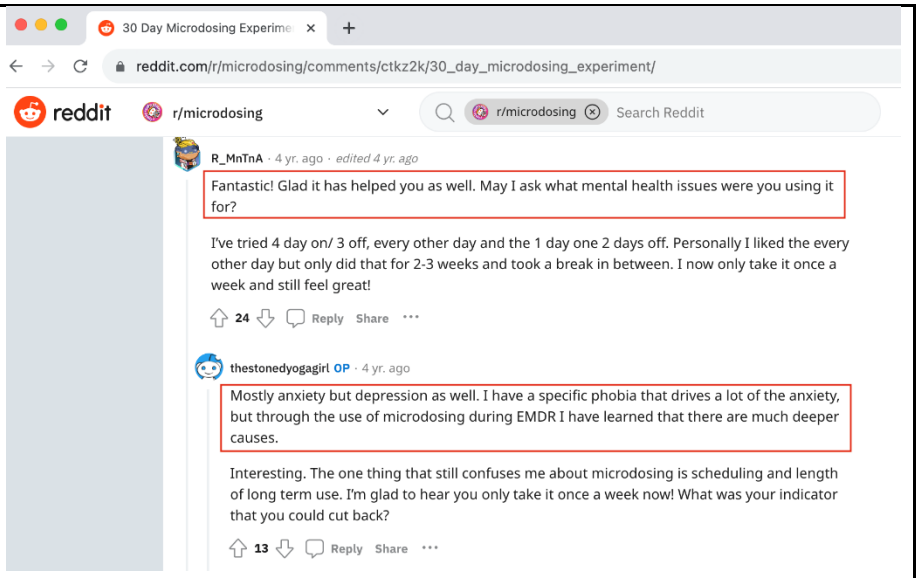
13. MAYO CLINIC (2018) "Anxiety Disorders" Retrieved from 14 November 2018. URL: https://web.archive.org/web/20181114083639/https:/www.mayoclinic.org/diseases-conditions/anxiety/symptoms-causes/syc-20350961

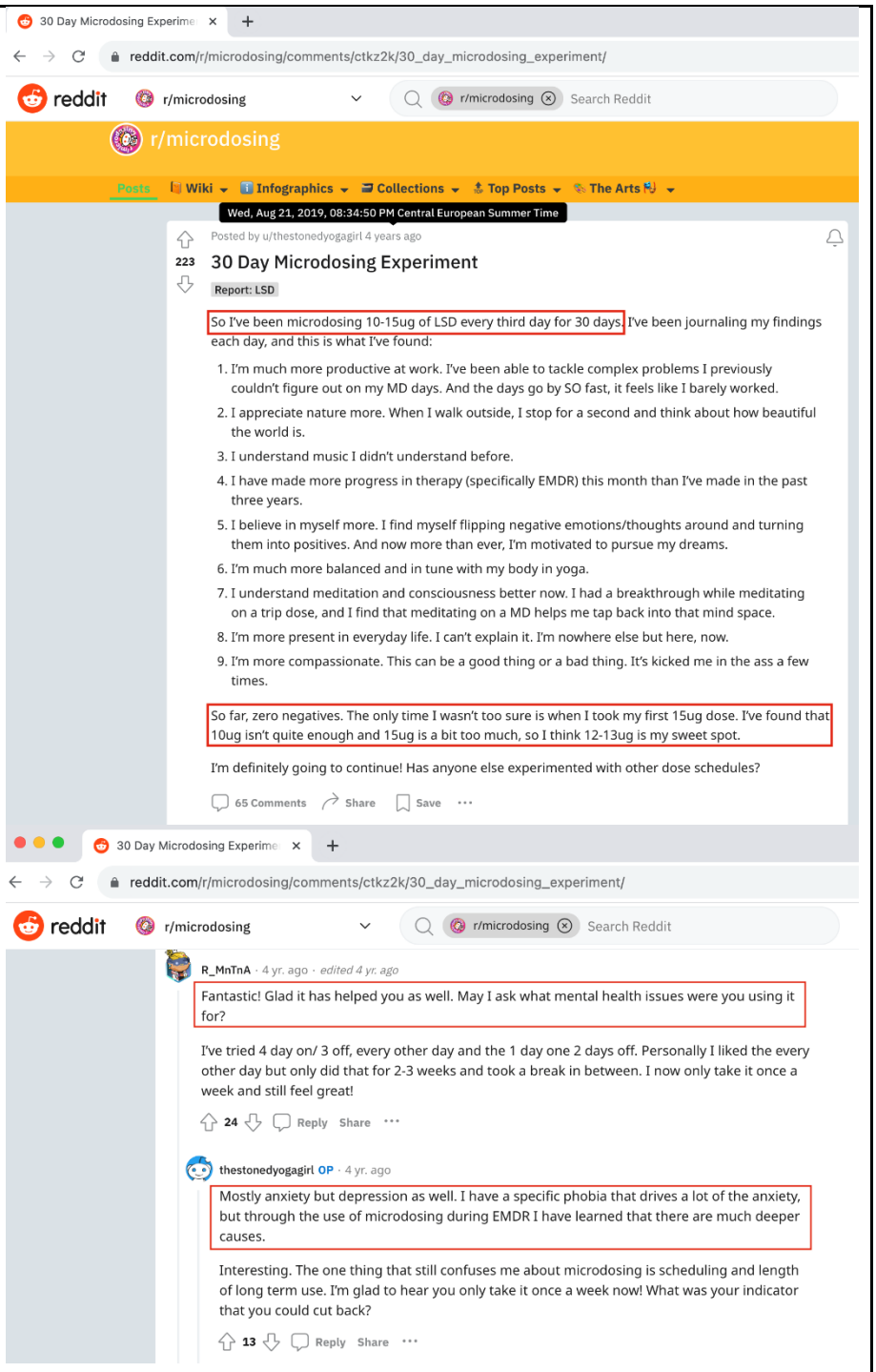
14. ANONYMOUS (2017) "The Freelance Writer Using LSD for Depression" Retrieved from 24 October 2017. URL: https://www.thecut.com/2017/10/microdosing-lsd-depression-coping-diaries.html

Attached hereto is a claim chart providing a concise description of the relevance of each reference in the document list to the elements of the presently pending claims.

U.S.S.N. 18/102,296 Pending Claims	References
1-23. (Canceled)	
24. A method for improving the symptoms of a neuropsychiatric condition, in an individual in need thereof, the method comprising: **a.** administering to the individual a therapeutically effective amount of lysergic acid diethylamide (LSD), or a pharmaceutically acceptable salt thereof, on a first day; and **b.** administering to the individual the therapeutically effective amount of the lysergic acid diethylamide (LSD), or a pharmaceutically acceptable salt thereof, on a second day, the second day being at least	1. LEA (2020) "Perceived outcomes of psychedelic microdosing as self-managed therapies for mental and substance use disorders" Psychopharmacology. 237:1521-1532. From **p. 1522 "Microdosing** refers to the ingestion of l**ow to very low doses of psychedelic drugs** (typically between 5 and 10% of a standard dose) on a routine schedule (e.g., every third day) **without** the intention of **experiencing effects typically experienced at higher psychedelic doses** (e.g., visual distortions, mystical experiences)..." From **p. 1524 "**Thirty-nine percent of **respondents reported that they primarily microdosed as mental health or substance use therapies**, including **for depression (21.3%)**, **anxiety (6.9%)**, other **mental health conditions including PTSD and ADHD (8.9%)**, and **cessation or reduction of alcohol and other drug use**." From **p. 1524 "Fourteen percent** of respondents **microdosed every day, 11.3% every second day, 26.6% every third day, 14.8% every fourth day**, 18.2% once a week or less often and the remaining 15.5% had a different dosing schedule or no fixed schedule. The **median LSD microdose** reported by respondents was **11 micrograms** (interquartile range 10–20)."

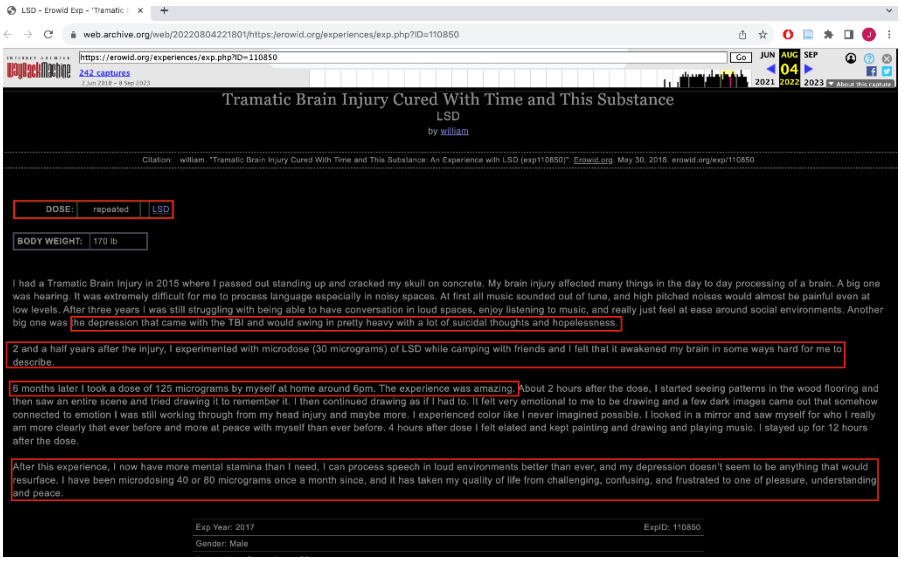
one day after the first day. wherein at least one of the therapeutically effective amount of lysergic acid diethylamide (LSD) is insufficient to provide a hallucinogenic experience.	2. POLITO & STEVENSON (2019). "A systematic study of microdosing psychedelics" PLoS One. 14(2):1-26. From **p. 2 "**So, for example, **a microdose of lysergic acid diethylamide (LSD) might be 6–25 micrograms**, or a microdose of psilocybin might be .1 to .5 grams of dried mushrooms [3]. **People microdose using** a wide range of different substances, although **LSD** and psilocybin are the **most commonly** discussed in online forums [4]." From **p. 2** "**People follow** a variety of **different schedules when microdosin**g, sometimes **taking a dose each day**..." 3. THESTONEDYOGAGIRL (2019) "30 Day Microdoing Experiment" Retrieved 20 September 2023. https://www.reddit.com/r/microdosing/comments/ctkz2k/30_day_microdosing_experiment/ 

	
25. The method of claim 24, wherein the second day is at least 1 day after the first day.	1. LEA (2020) "Perceived outcomes of psychedelic microdosing as self-managed therapies for mental and substance use disorders" Psychopharmacology. 237:1521-1532. From **p. 1524 "Fourteen percent** of respondents **microdosed every day, 11.3% every second day, 26.6% every third day, 14.8% every fourth day**, 18.2% once a week or less often and the remaining 15.5% had a different dosing schedule or no fixed schedule. The **median LSD microdose** reported by respondents was **11 micrograms** (interquartile range 10–20)." 3. THESTONEDYOGAGIRL (2019) "30 Day Microdoing Experiment" Retrieved 20 September 2023. https://www.reddit.com/r/microdosing/comments/ctkz2k/30_day_microdosing_experiment/



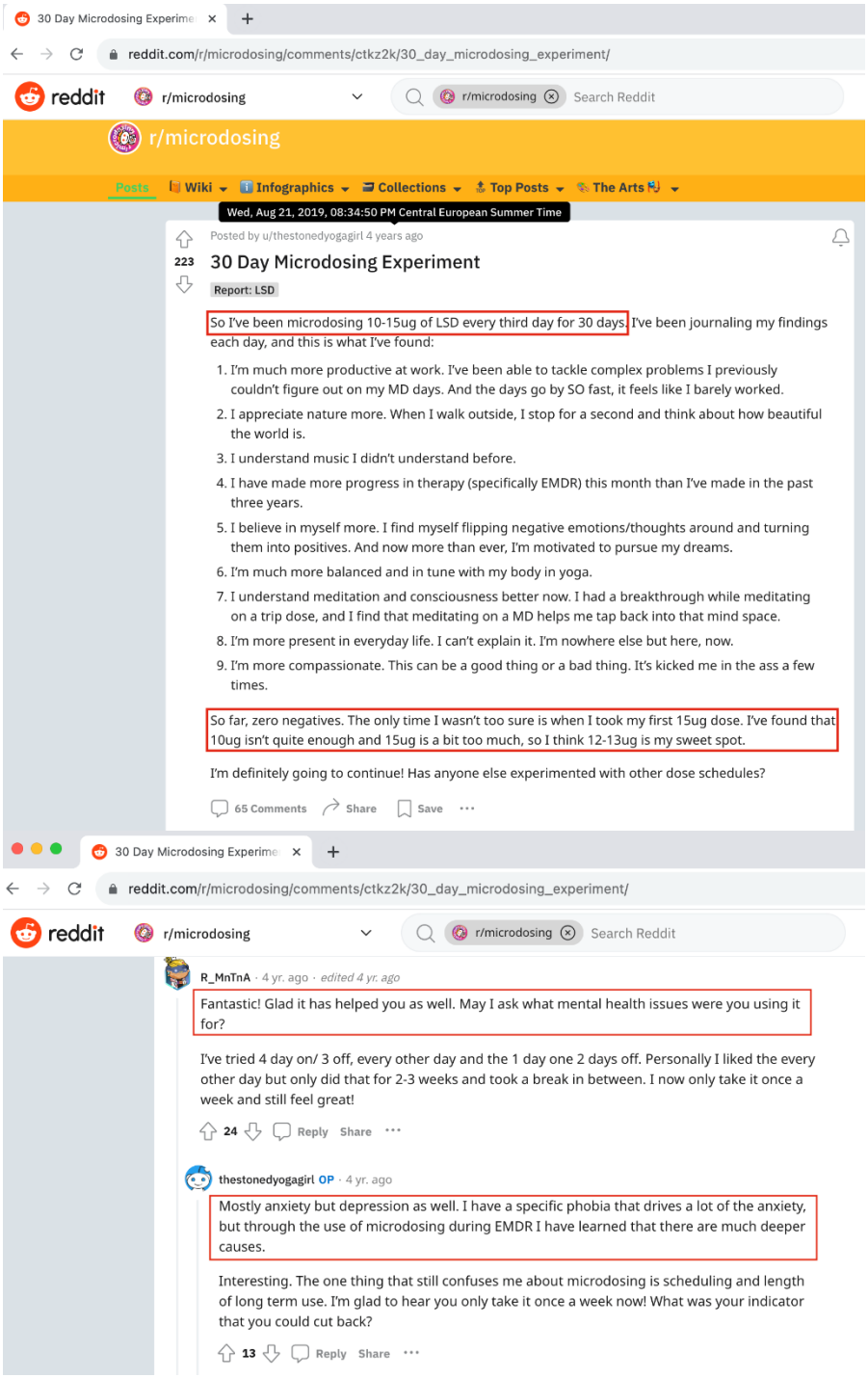
4. FADIMAN & KORB (2019) "Might Microdosing Psychedelics Be Safe and Beneficial? An Initial Exploration" Journal of Psychoactive Drugs. 51(2):118-122.

	From **p. 118** "... **using a** psychedelic in the **microdose** range (10 micrograms) **every three days** was determined to be safe across a wide variety of individuals and conditions." From **p. 120** "When they filled out their enrollment form, **most people said they had suffered from depressed mood** in the last month. Both **people** who **reported** that they were **diagnosed with major depressive disorder**, **bipolar disorder**, and **other mood disorders**, and those who did not report this diagnosis reported negative affect scores that improved with microdosing for longer than 14 days." From **p. 118** "Participant reports suggested that s**paced but repeated microdoses** were followed by i**mprovements in negative moods, especially depression**, and **increases in positive moods**. Increased energy, improved work effectiveness, and improved health habits were observed in **clinical** and non-clinical **populations**. Smaller samples described **alleviation of symptoms in migraine headaches, pre-menstrual syndromes, traumatic brain injury**, shingles, and other conditions not previously associated with psychedelic use."
26. The method of claim 24, wherein the second day is at least 7 days after the first day.	*From application of interest 18/102,296 paragraph [0037] "In some embodiments, the modulator of the AMPA receptor and/or the 5-HT2A receptor is an ergoline, or a pharmaceutically acceptable salt, solvate, metabolite, derivative, or prodrug thereof.* ***In some embodiments, the modulator*** *of the AMPA receptor and/or the 5-HT2A receptor is* ***LSD****, or a pharmaceutically acceptable salt, solvate, metabolite, derivative, or prodrug thereof."* *From application of interest 18/102,296 paragraph [0039] "In some instances,* ***the modulator of the*** *AMPA receptor and/or the* ***5-HT2A receptor****, or the pharmaceutically acceptable salt, solvate, metabolite, derivative, or prodrug thereof,* ***is administered to the individual at an amount of at most 200 micrograms (mcg)."*** 4. FADIMAN & KORB (2019) "Might Microdosing Psychedelics Be Safe and Beneficial? An Initial Exploration" Journal of Psychoactive Drugs. 51(2):118-122. From **p. 120 "**M**ost people who continued to microdose** after their research month chose to do so less frequently—**most commonly once a week or once a month**." From **p. 118** "... **using a** psychedelic in the **microdose** range (10 micrograms) every three days was determined to be safe across a wide variety of individuals and conditions." 5. WILLIAM (2018) "Tramatic Brain Injury Cured With Time and This Substance" Retrieved 2 October 2023.

	https://web.archive.org/web/20220804221801/https:/erowid.org/experiences/exp.php?ID=110850 
27. The method of claim 24, wherein the method further comprises administering to the individual the therapeutically effective amount of the LSD, or a pharmaceutically acceptable salt thereof on a third day, wherein the third day is between the first and second day.	1. LEA (2020) “Perceived outcomes of psychedelic microdosing as self-managed therapies for mental and substance use disorders” Psychopharmacology. 237:1521-1532. From **p. 1524** “Fourteen percent of respondents microdosed every day, 11.3% every second day, **26.6% every third day**, 14.8% every fourth day, 18.2% once a week or less often and the remaining 15.5% had a different dosing schedule or no fixed schedule.” From **p. 1524** "The mean age at commencement of microdosing was 29 years (SD = 12.1), **most respondents (78.5%) had microdosed for up to 6 months in total**, and primarily microdosed psilocybin (46.4%) or LSD/1P-LSD (45.0%) (Table 1)." 2. POLITO & STEVENSON (2019) “A systematic study of microdosing psychedelics” PLoS One. 14(2):1-26. From **p. 2 “**People follow a variety of different schedules when microdosing, sometimes **taking a dose each day** but much more frequently interspersing dosing days with rest days. One common schedule is to **microdose every three days** [7]. The idea behind this regimen is that there may be a residual effect from each microdose that lasts one to two days afterwards. Most popular press stories on microdosing have mentioned this three day cycle [8,9].” From **p. 2** “The current popularity of **microdosing** can be traced back to a book, **The Psychedelic Explorers Guide by James Fadiman** [1]. This was the first publication to describe microdosing in detail. **Fadiman outlined the purported benefits of regular microdosing, with a**

	recommendation to follow a three-day cycle, and guidelines for appropriate doses."
28. The method of claim 24, wherein the method further comprises administering to the individual the therapeutically effective amount of the LSD, or a pharmaceutically acceptable salt thereof on a third day, wherein the third day is after the second day.	1. LEA (2020) "Perceived outcomes of psychedelic microdosing as self-managed therapies for mental and substance use disorders" Psychopharmacology. 237:1521-1532. From **p. 1522 "Microdosing** refers to the ingestion of l**ow to very low doses of psychedelic drugs** (typically between 5 and 10% of a standard dose) on a routine schedule (e.g., every third day) **without** the intention of **experiencing effects typically experienced at higher psychedelic doses** (e.g., visual distortions, mystical experiences)..." From **p. 1524 "**Thirty-nine percent of **respondents reported that they primarily microdosed as mental health or substance use therapies**, including **for depression (21.3%)**, **anxiety (6.9%)**, other **mental health conditions including PTSD and ADHD (8.9%)**, and **cessation or reduction of alcohol and other drug use**." From **p. 1524 "**Fourteen percent of respondents microdosed every day, 11.3% every second day, **26.6% every third day, 14.8% every fourth day**, 18.2% once a week or less often and the remaining 15.5% had a different dosing schedule or no fixed schedule."
29. The method of claim 24, wherein the first day is no less than one day apart from the second day and the second day is no less than one day apart from the third day.	4. FADIMAN & KORB (2019) "Might Microdosing Psychedelics Be Safe and Beneficial? An Initial Exploration" Journal of Psychoactive Drugs. 51(2):118-122. From **p. 118** "... **using a** psychedelic in the **microdose** range (10 micrograms) **every three days** was determined to be safe across a wide variety of individuals and conditions." From **p. 120** "When they filled out their enrollment form, **most people said they had suffered from depressed mood** in the last month. Both **people** who **reported** that they were **diagnosed with major depressive disorder**, **bipolar disorder**, and **other mood disorders**, and those who did not report this diagnosis reported negative affect scores that improved with microdosing for longer than 14 days." From **p. 118** "Participant reports suggested that s**paced but repeated microdoses** were followed by i**mprovements in negative moods, especially depression**, and **increases in positive moods**. Increased energy, improved work effectiveness, and improved health habits were observed in **clinical** and non-clinical **populations**. Smaller samples described **alleviation of symptoms in migraine headaches, pre-menstrual syndromes, traumatic brain injury**, shingles, and other conditions not previously associated with psychedelic use."

3. THESTONEDYOGAGIRL (2019) “30 Day Microdoing Experiment” Retrieved 20 September 2023. https://www.reddit.com/r/microdosing/comments/ctkz2k/30_day_microdosing_experiment/

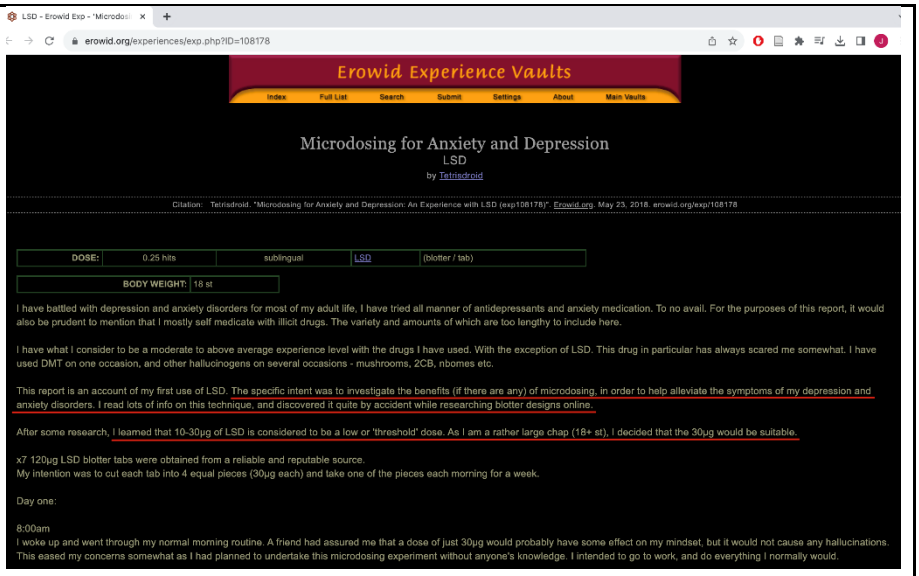


30. The method of claim 24, wherein the therapeutically effective amount of the LSD is administered at least once daily for at least two days.	1. LEA (2020) "Perceived outcomes of psychedelic microdosing as self-managed therapies for mental and substance use disorders" Psychopharmacology. 237:1521-1532. From **p. 1524 "Fourteen percent** of respondents **microdosed every day,** 11.3% every second day, 26.6% every third day, 14.8% **every** fourth day, 18.2% once a week or less often and the remaining 15.5% had a different dosing schedule or no fixed schedule. The **median LSD microdose** reported by respondents was **11 micrograms** (interquartile range 10–20)."
31. The method of claim 24, wherein the therapeutically effective amount of the LSD, or the pharmaceutically acceptable salt thereof, is less than or equal to 200 mcg.	1. LEA (2020) "Perceived outcomes of psychedelic microdosing as self-managed therapies for mental and substance use disorders" Psychopharmacology. 237:1521-1532. From **p. 1522 "Microdosing** refers to the ingestion of l**ow to very low doses of psychedelic drugs** (typically between 5 and 10% of a standard dose) on a routine schedule (e.g., every third day) **without** the intention of **experiencing effects typically experienced at higher psychedelic doses** (e.g., visual distortions, mystical experiences)..." From **p. 1524 "**Thirty-nine percent of **respondents reported that they primarily microdosed as mental health or substance use therapies**, including **for depression (21.3%)**, **anxiety (6.9%)**, other **mental health conditions including PTSD and ADHD (8.9%)**, and **cessation or reduction of alcohol and other drug use**." From **p. 1524 "Fourteen percent** of respondents **microdosed every day, 11.3% every second day, 26.6% every third day, 14.8% every fourth day**, 18.2% once a week or less often and the remaining 15.5% had a different dosing schedule or no fixed schedule. The **median LSD microdose** reported by respondents was **11 micrograms** (interquartile range 10–20)." 5. HUTTEN (2019) "Motives and Side-Effects of Microdosing With Psychedelics Among Users" International Journal of Neuropsychopharmacology. 22(7):426-434. From **p. 427** "Another commonly reported motivation and subsequent outcome is the **alleviation of psychological symptoms including depressive mood and anxiety** and/or physiological symptoms such as pain..." From **p. 430**

	Table 3. Number (percentage) of respondents who indicated use of one of the listed substances as a microdose, with the self-reported dose in mode and the percentage of respondents who did not know the dose or failed to complete this item Psychedelic users per substance | Microdose details | Users who do not know the dose or did not fill out this question Substance | n (%) | Amount, mg | Dose range, mg (min–max) | Do not know, n (%) | Missing, n (%) 1P-LSD | 129 (11.6) | 0.01 | 0.0005–75 | 9 (7.0) | 9 (7.0) 2Cs | 22 (2.0) | 3–4 | 0.75–25 | 3 (13.6) | 3 (13.6) 5-MeO-DMT | 5 (0.4) | 0.005 | 0.005–7 | – | 2 (40.0) ALD-52/1A-LSD | 41 (3.7) | 0.01 | 0.0005–75 | 3 (7.3) | 6 (14.6) Ayahuasca | 15 (1.3) | 14 | 14–500 | 10 (66.7) | 2 (13.3) DMT | 64 (5.7) | 10 | 00.5–25 | 19 (29.7) | 15 (23.4) LSD | 666 (59.7) | 0.01 | 0.00001–500 | 113 (17.0) | 60 (9.0) MDMA/ecstasy | 71 (6.4) | 50 | 0.02–100 | 18 (25.4) | 21 (29.6) Mescaline | 26 (2.3) | 50 | 0.3–1000 | 14 (53.8) | 4 (15.4) NBOMes | 9 (0.8) | 0.5–50 | 0.5–50 | 3 (33.3) | 4 (44.4) Other | 60 (5.4) | 5 | 0.01–1000 | 15 (25.0) | 24 (40.0) Psilocybin | 645 (57.8) | 500 | 0.025–8000 | 146 (22.6) | 93 (14.4) Salvinorin A | 31 (2.8) | 0.2 | 0.2–200 | 16 (51.6) | 10 (32.3) Abbreviations: 1P-LSD, 1-propionyl-lysergic acid diethylamide; 2C, 2-ethylamine; 5-MeO-DMT, 5-methoxy-N,N-dimethyltryptamine; ALD-52/1A-LSD, 1-Acetyl-N,N-diethyllysergamide; DMT, N,N-dimethyltryptamine; LSD, lysergic acid diethylamide; MDMA, 3,4,-methylenedioxymethamphetamine; NBOMe, N-benzyl Methoxy. 2. POLITO & STEVENSON (2019) "A systematic study of microdosing psychedelics" PLoS One. 14(2):1-26. From **p. 9** "Some reports of **LSD doses** were in a format such as "1/10th dose", in such cases **we estimated typical doses as 100ug**."
32. The method of claim 24, wherein the therapeutically effective amount of the LSD, or the pharmaceutically acceptable salt thereof, is less than or equal to 100 mcg.	1. LEA (2020) "Perceived outcomes of psychedelic microdosing as self-managed therapies for mental and substance use disorders" Psychopharmacology. 237:1521-1532. From **p. 1522 "Microdosing** refers to the ingestion of l**ow to very low doses of psychedelic drugs** (typically between 5 and 10% of a standard dose) on a routine schedule (e.g., every third day) **without** the intention of **experiencing effects typically experienced at higher psychedelic doses** (e.g., visual distortions, mystical experiences)..." From **p. 1524 "**Thirty-nine percent of **respondents reported that they primarily microdosed as mental health or substance use therapies**, including **for depression (21.3%)**, **anxiety (6.9%)**, other **mental health conditions including PTSD and ADHD (8.9%)**, and **cessation or reduction of alcohol and other drug use**." From **p. 1524 "Fourteen percent** of respondents **microdosed every day, 11.3% every second day, 26.6% every third day, 14.8% every fourth day**, 18.2% once a week or less often and the remaining 15.5% had a different dosing schedule or no fixed schedule. The **median LSD microdose** reported by respondents was **11 micrograms** (interquartile range 10–20)." 5. HUTTEN (2019) "Motives and Side-Effects of Microdosing With Psychedelics Among Users" International Journal of Neuropsychopharmacology. 22(7):426-434.

	Table 3. Number (percentage) of respondents who indicated use of one of the listed substances as a microdose, with the self-reported dose in mode and the percentage of respondents who did not know the dose or failed to complete this item | | Psychedelic users per substance | Microdose details | | Users who do not know the dose or did not fill out this question | | | Substance | n (%) | Amount, mg | Dose range, mg (min–max) | Do not know, n (%) | Missing, n (%) | | 1P-LSD | 129 (11.6) | 0.01 | 0.0005–75 | 9 (7.0) | 9 (7.0) | | 2Cs | 22 (2.0) | 3–4 | 0.75–25 | 3 (13.6) | 3 (13.6) | | 5-MeO-DMT | 5 (0.4) | 0.005 | 0.005–7 | – | 2 (40.0) | | ALD-52/1A-LSD | 41 (3.7) | 0.01 | 0.0005–75 | 3 (7.3) | 6 (14.6) | | Ayahuasca | 15 (1.3) | 14 | 14–500 | 10 (66.7) | 2 (13.3) | | DMT | 64 (5.7) | 10 | 00.5–25 | 19 (29.7) | 15 (23.4) | | LSD | 666 (59.7) | 0.01 | 0.00001–500 | 113 (17.0) | 60 (9.0) | | MDMA/ecstasy | 71 (6.4) | 50 | 0.02–100 | 18 (25.4) | 21 (29.6) | | Mescaline | 26 (2.3) | 50 | 0.3–1000 | 14 (53.8) | 4 (15.4) | | NBOMes | 9 (0.8) | 0.5–50 | 0.5–50 | 3 (33.3) | 4 (44.4) | | Other | 60 (5.4) | 5 | 0.01–1000 | 15 (25.0) | 24 (40.0) | | Psilocybin | 645 (57.8) | 500 | 0.025–8000 | 146 (22.6) | 93 (14.4) | | Salvinorin A | 31 (2.8) | 0.2 | 0.2–200 | 16 (51.6) | 10 (32.3) | Abbreviations: 1P-LSD, 1-propionyl-lysergic acid diethylamide; 2C, 2-ethylamine; 5-MeO-DMT, 5-methoxy-N,N-dimethyltryptamine; ALD-52/1A-LSD, 1-Acetyl-N,N-diethyllysergamide; DMT, N,N-dimethyltryptamine; LSD, lysergic acid diethylamide; MDMA, 3,4,-methylenedioxymethamphetamine; NBOMe, N-benzyl Methoxy. 2. POLITO & STEVENSON (2019) "A systematic study of microdosing psychedelics" PLoS One. 14(2):1-26. From **p. 9** "Some reports of **LSD doses** were in a format such as "1/10th dose", in such cases **we estimated typical doses as 100ug**."
33. The method of claim 24, wherein the therapeutically effective amount of the LSD, or the pharmaceutically acceptable salt thereof, is less than or equal to 60 mcg.	1. LEA (2020) "Perceived outcomes of psychedelic microdosing as self-managed therapies for mental and substance use disorders" Psychopharmacology. 237:1521-1532. From **p. 1522 "Microdosing** refers to the ingestion of l**ow to very low doses of psychedelic drugs** (typically between 5 and 10% of a standard dose) on a routine schedule (e.g., every third day) **without** the intention of **experiencing effects typically experienced at higher psychedelic doses** (e.g., visual distortions, mystical experiences)..." From **p. 1524 "**Thirty-nine percent of **respondents reported that they primarily microdosed as mental health or substance use therapies**, including **for depression (21.3%)**, **anxiety (6.9%)**, other **mental health conditions including PTSD and ADHD (8.9%)**, and **cessation or reduction of alcohol and other drug use**." From **p. 1524 "Fourteen percent** of respondents **microdosed every day, 11.3% every second day, 26.6% every third day, 14.8% every fourth day**, 18.2% once a week or less often and the remaining 15.5% had a different dosing schedule or no fixed schedule. The **median LSD microdose** reported by respondents was **11 micrograms** (interquartile range 10–20)." 5. HUTTEN (2019) "Motives and Side-Effects of Microdosing With Psychedelics Among Users" International Journal of Neuropsychopharmacology. 22(7):426-434.

	Table 3. Number (percentage) of respondents who indicated use of one of the listed substances as a microdose, with the self-reported dose in mode and the percentage of respondents who did not know the dose or failed to complete this item Psychedelic users per substance: Substance, n (%) Microdose details: Amount, mg; Dose range, mg (min–max) Users who do not know the dose or did not fill out this question: Do not know, n (%); Missing, n (%) 1P-LSD 129 (11.6) 0.01 0.0005–75 9 (7.0) 9 (7.0) 2Cs 22 (2.0) 3–4 0.75–25 3 (13.6) 3 (13.6) 5-MeO-DMT 5 (0.4) 0.005 0.005–7 – 2 (40.0) ALD-52/1A-LSD 41 (3.7) 0.01 0.0005–75 3 (7.3) 6 (14.6) Ayahuasca 15 (1.3) 14 14–500 10 (66.7) 2 (13.3) DMT 64 (5.7) 10 00.5–25 19 (29.7) 15 (23.4) LSD 666 (59.7) 0.01 0.00001–500 113 (17.0) 60 (9.0) MDMA/ecstasy 71 (6.4) 50 0.02–100 18 (25.4) 21 (29.6) Mescaline 26 (2.3) 50 0.3–1000 14 (53.8) 4 (15.4) NBOMes 9 (0.8) 0.5–50 0.5–50 3 (33.3) 4 (44.4) Other 60 (5.4) 5 0.01–1000 15 (25.0) 24 (40.0) Psilocybin 645 (57.8) 500 0.025–8000 146 (22.6) 93 (14.4) Salvinorin A 31 (2.8) 0.2 0.2–200 16 (51.6) 10 (32.3) Abbreviations: 1P-LSD, 1-propionyl-lysergic acid diethylamide; 2C, 2-ethylamine; 5-MeO-DMT, 5-methoxy-N,N-dimethyltryptamine; ALD-52/1A-LSD, 1-Acetyl-N,N-diethyllysergamide; DMT, N,N-dimethyltryptamine; LSD, lysergic acid diethylamide; MDMA, 3,4,-methylenedioxymethamphetamine; NBOMe, N-benzyl Methoxy.
34. The method of claim 32, wherein the therapeutically effective amount of the LSD, or the pharmaceutically acceptable salt thereof, is about 20 mcg to about 50 mcg.	6. JOHNSTAD (2018) "Powerful substances in tiny amounts: An interview study of psychedelic microdosing" Nordic Studies on Alcohol and Drugs. 35(1):39-51. From **p. 44** "Doses were usually constrained to about a tenth of a full dose. For **LSD**, **this amounted to** somewhere between 10 and **25 mcg**..." From **p. 44 "**The most commonly described effects were health related, with a benign influence noted especially on states of **depression and anxiety**..." From **p. 45** "**Therapeutic effect was also reported for pain management** and for a range of conditions including **obsessive-compulsive disorder (OCD), post-traumatic stress disorder (PTSD), narcolepsy, and migraines**."
35. The method of claim 34, wherein the therapeutically effective amount of the LSD, or the pharmaceutically acceptable salt thereof, is about 25 mcg to about 35 mcg.	7. TETRISDROID (2018) "Microdosing for Anxiety and Depression" Retrieved 19 September 2023. https://erowid.org/experiences/exp.php?ID=108178



LSD - Erowid Exp - 'Microdosi

erowid.org/experiences/exp.php?ID=108178

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Microdosing for Anxiety and Depression

LSD

by Tetrisdroid

Citation: Tetrisdroid. "Microdosing for Anxiety and Depression: An Experience with LSD (exp108178)". Erowid.org. May 23, 2018. erowid.org/exp/108178

DOSE:	0.25 hits	sublingual	LSD	(blotter / tab)

BODY WEIGHT:	18 st

I have battled with depression and anxiety disorders for most of my adult life. I have tried all manner of antidepressants and anxiety medication. To no avail. For the purposes of this report, it would also be prudent to mention that I mostly self medicate with illicit drugs. The variety and amounts of which are too lengthy to include here.

I have what I consider to be a moderate to above average experience level with the drugs I have used. With the exception of LSD. This drug in particular has always scared me somewhat. I have used DMT on one occasion, and other hallucinogens on several occasions - mushrooms, 2CB, nbomes etc.

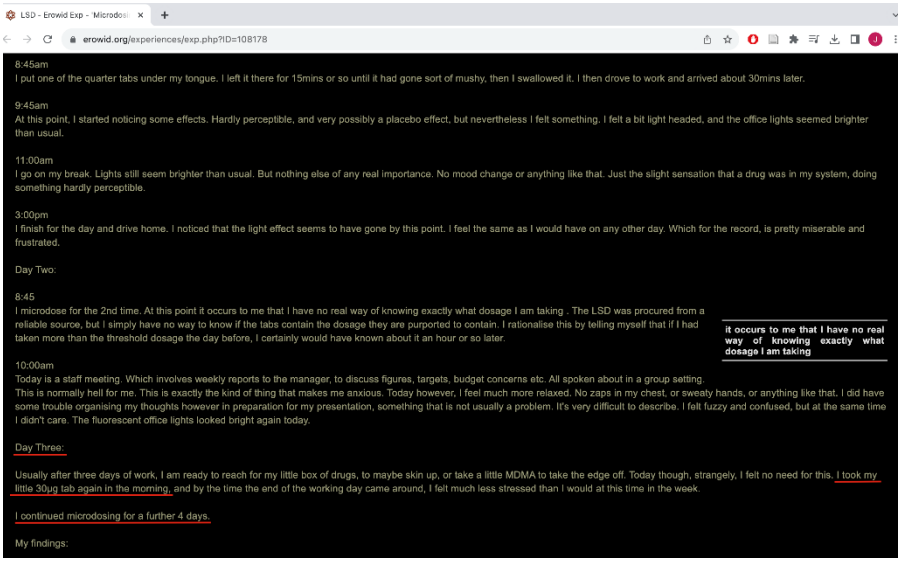
This report is an account of my first use of LSD. The specific intent was to investigate the benefits (if there are any) of microdosing, in order to help alleviate the symptoms of my depression and anxiety disorders. I read lots of info on this technique, and discovered it quite by accident while researching blotter designs online.

After some research, I learned that 10-30µg of LSD is considered to be a low or 'threshold' dose. As I am a rather large chap (18+ st), I decided that the 30µg would be suitable.

x7 120µg LSD blotter tabs were obtained from a reliable and reputable source.
My intention was to cut each tab into 4 equal pieces (30µg each) and take one of the pieces each morning for a week.

Day one:

8:00am
I woke up and went through my normal morning routine. A friend had assured me that a dose of just 30µg would probably have some effect on my mindset, but it would not cause any hallucinations. This eased my concerns somewhat as I had planned to undertake this microdosing experiment without anyone's knowledge. I intended to go to work, and do everything I normally would.



LSD - Erowid Exp - 'Microdosi

erowid.org/experiences/exp.php?ID=108178

8:45am
I put one of the quarter tabs under my tongue. I left it there for 15mins or so until it had gone sort of mushy, then I swallowed it. I then drove to work and arrived about 30mins later.

9:45am
At this point, I started noticing some effects. Hardly perceptible, and very possibly a placebo effect, but nevertheless I felt something. I felt a bit light headed, and the office lights seemed brighter than usual.

11:00am
I go on my break. Lights still seem brighter than usual. But nothing else of any real importance. No mood change or anything like that. Just the slight sensation that a drug was in my system, doing something hardly perceptible.

3:00pm
I finish for the day and drive home. I noticed that the light effect seems to have gone by this point. I feel the same as I would have on any other day. Which for the record, is pretty miserable and frustrated.

Day Two:

8:45
I microdose for the 2nd time. At this point it occurs to me that I have no real way of knowing exactly what dosage I am taking . The LSD was procured from a reliable source, but I simply have no way to know if the tabs contain the dosage they are purported to contain. I rationalise this by telling myself that if I had taken more than the threshold dosage the day before, I certainly would have known about it an hour or so later.

it occurs to me that I have no real way of knowing exactly what dosage I am taking

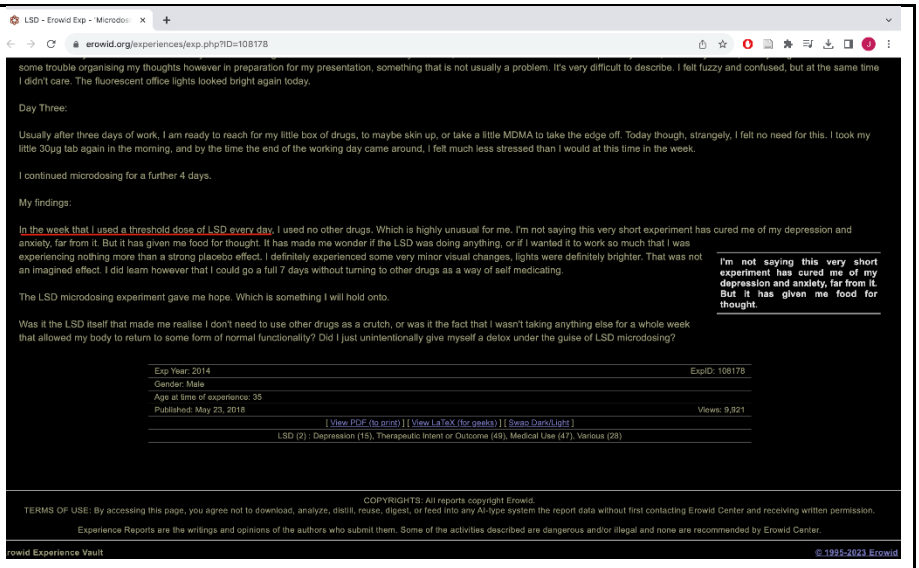
10:00am
Today is a staff meeting. Which involves weekly reports to the manager, to discuss figures, targets, budget concerns etc. All spoken about in a group setting.
This is normally hell for me. This is exactly the kind of thing that makes me anxious. Today however, I feel much more relaxed. No zaps in my chest, or sweaty hands, or anything like that. I did have some trouble organising my thoughts however in preparation for my presentation, something that is not usually a problem. It's very difficult to describe. I felt fuzzy and confused, but at the same time I didn't care. The fluorescent office lights looked bright again today.

Day Three:

Usually after three days of work, I am ready to reach for my little box of drugs, to maybe skin up, or take a little MDMA to take the edge off. Today though, strangely, I felt no need for this. I took my little 30µg tab again in the morning, and by the time the end of the working day came around, I felt much less stressed than I would at this time in the week.

I continued microdosing for a further 4 days.

My findings:

	
36. The method of claim 24, wherein the therapeutically effective amount of the LSD, or a pharmaceutically acceptable salt thereof, is administered to the individual in need thereof as a controlled release formulation to the individual in need thereof.	8. Intl. Pat. Doc. No. 2020/157569 (2020) "METHODS AND COMPOSITIONS COMPRISING A 5HT RECEPTOR AGONIST FOR THE TREATMENT OF PSYCHOLOGICAL, COGNITIVE, BEHAVIORAL, AND/OR MOOD DISORDERS" (Filed 29 January 2020) From **Claim 1**: "**A method of managing a neurological condition or one or more symptoms thereof in a subject in need thereof**, comprising administering to the subject a pharmaceutical composition comprising: a) **a therapeutically effective amount of one or more 5HT receptor agonist** or a pharmaceutically acceptable salt, solvate, metabolite, derivative, or prodrug thereof; and b) a pharmaceutically acceptable excipient wherein **the therapeutically effective amount of the 5HT receptor agonist or a pharmaceutically acceptable salt, solvate, metabolite, derivative, or prodrug thereof is provided to the subject in need thereof in an amount insufficient to provide an adverse side effect, such as hallucinogenic experience**." From **Claim 2**: "**A method of treating the symptoms of a neurological condition in a subject suffering from or susceptible to the neurological condition**, comprising administering to the subject a pharmaceutical composition comprising: a) a **therapeutically effective amoun**t of **one or more 5HT receptor agonist** or a pharmaceutically acceptable salt, solvate, metabolite, derivative, or prodrug thereof; and b) a pharmaceutically acceptable excipient; **wherein the therapeutically effective amount of the 5HT receptor agonist** or a pharmaceutically acceptable salt, solvate, metabolite, derivative, or prodrug thereof is **provided to the subject in need thereof**

	in an amount insufficient to provide an adverse side effect, such as hallucinogenic experience." From **Claim 3**: " The method of any one of the preceding claims, wherein **the 5HT receptor agonist** or a pharmaceutically acceptable salt, solvate, metabolite, derivative, or prodrug thereof **is present in an amount of from about 0.1 mg to about 50 mg (e.g. about 0.1 mg to about 10 mg, about 0.2 mg to about 5 mg, about 10 mg to about 50 mg, or the like)**." From **Claim 7**: "**The method of any one of the preceding claims**, wherein **the pharmaceutical composition comprises a controlled release component.**" From **Claim 18**: "The method of any one of the preceding claims, wherein **the pharmaceutical composition further comprises an effective amount of a second agent**." From **Claim 21**: " The method of claim 18, wherein the second agent is a stimulant, an antihistamine, an antiemetic, an antidepressant, an anti-inflammatory, a growth factor, a lithium compound, resveratrol, phosphatidylcholine, curcumin, magnesium, melatonin, pregnenolone, ginseng, **lysergic acid diethylamide**, or combinations thereof."
37. The method of claim 24, wherein the neuropsychiatric condition is an anxiety or depression disorder.	1. LEA (2020) "Perceived outcomes of psychedelic microdosing as self-managed therapies for mental and substance use disorders" Psychopharmacology. 237:1521-1532. From **p. 1524 "**Thirty-nine percent of **respondents reported that they primarily microdosed as mental health** or substance use **therapies**, including **for depression (21.3%)**, **anxiety (6.9%)...**" From **p. 1524 "Fourteen percent** of respondents **microdosed every day, 11.3% every second day, 26.6% every third day, 14.8% every fourth day**, 18.2% once a week or less often and the remaining 15.5% had a different dosing schedule or no fixed schedule. The **median LSD microdose** reported by respondents was **11 micrograms** (interquartile range 10–20)."
38. The method of claim 37, wherein the anxiety disorder is social anxiety.	1. LEA (2020) "Perceived outcomes of psychedelic microdosing as self-managed therapies for mental and substance use disorders" Psychopharmacology. 237:1521-1532. From **p. 1524 "**Over half of **respondents** (56.7%) had ever been **diagnosed with a mental disorder** (excluding substance use disorders), including...**social anxiety disorder, 14.5%**…" From **p. 1524 "Fourteen percent** of respondents **microdosed every day, 11.3% every second day, 26.6% every third day, 14.8% every fourth day**, 18.2% once a week or less often and the remaining 15.5% had a different dosing schedule or no fixed schedule. The **median LSD**

	microdose reported by respondents was **11 micrograms** (interquartile range 10–20)."
39. The method of claim 37, wherein the anxiety disorder is generalized anxiety disorder.	1. LEA (2020) "Perceived outcomes of psychedelic microdosing as self-managed therapies for mental and substance use disorders" Psychopharmacology. 237:1521-1532. From **p. 1524 "**Over half of **respondents** (56.7%) had ever been **diagnosed with a mental disorder** (excluding substance use disorders), including...**generalised anxiety disorder, 25.4%**…" From **p. 1524 "Fourteen percent** of respondents **microdosed every day, 11.3% every second day, 26.6% every third day, 14.8% every fourth day**, 18.2% once a week or less often and the remaining 15.5% had a different dosing schedule or no fixed schedule. The **median LSD microdose** reported by respondents was **11 micrograms** (interquartile range 10–20)."
40. The method of claim 24, wherein the symptoms of the neuropsychiatric condition are physical, behavioral, emotional, mental, or a combination thereof.	1. LEA (2020) "Perceived outcomes of psychedelic microdosing as self-managed therapies for mental and substance use disorders" Psychopharmacology. 237:1521-1532. From **p. 1524 "**Over half of respondents (56.7%) had ever been diagnosed with a **mental disorder** (excluding substance use disorders), including **depression (41.2%), anxiety disorders (32.0%; generalised anxiety disorder, 25.4%; social anxiety disorder, 14.5%; panic disorder/panic attacks, 12.5%), ADHD (19.5%), PTSD (15.6%), bipolar disorder (7.4%), personality disorder (5.1%), eating disorder (4.8%), obsessive compulsive disorder (4.7%) and schizophrenia (1.0%)**. The median number of diagnosed mental disorders was 1 (interquartile range 0–3). Forty-four percent of all respondents had been prescribed psychiatric medications and 8.1% were prescribed these at the time of the survey. Sixty-five percent of respondents had ever seen a counsellor or psychotherapist for their mental health. **At the time of the survey, 17.5% of respondents showed at least moderate levels of depression on the PHQ-9, and 12.6% showed at least moderate levels of anxiety on the GAD-7** (Table 1)." From **p. 1524 "Fourteen percent** of respondents **microdosed every day, 11.3% every second day, 26.6% every third day, 14.8% every fourth day**, 18.2% once a week or less often and the remaining 15.5% had a different dosing schedule or no fixed schedule. The **median LSD microdose** reported by respondents was **11 micrograms** (interquartile range 10–20)." 10. Pfizer Inc. (2018) "PATIENT HEALTH QUESTIONNAIRE (PHQ-9)" Retrieved from 19 June 2018. URL: https://web.archive.org/web/20180619082559/https:/med.stanford.edu/fastl

ab/research/imapp/msrs/_jcr_content/main/accordion/accordion_content3/download_256324296/file.res/PHQ9%20id%20date%2008.03.pdf

From **p. 1**

PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

ID #: _____ **DATE:** _____

Over the last 2 weeks, how often have you been bothered by any of the following problems? *(use "✓" to indicate your answer)*	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or the opposite—being so figety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead, or of hurting yourself	0	1	2	3
		add columns	+	+
(Healthcare professional: For interpretation of TOTAL, please refer to accompanying scoring card).		TOTAL:		

10. If you checked off *any problems*, how *difficult* have these problems made it for you to do your work, take care of things at home, or get along with other people?	Not difficult at all _____ Somewhat difficult _____ Very difficult _____ Extremely difficult _____

A2663B 10-04-2005

From **p. 2** "For initial diagnosis:
1. Patient completes PHQ-9 Quick Depression Assessment.
2. If there are at least 4 3s in the shaded section (including Questions #1 and #2), consider a depressive disorder. Add score to determine severity.

Consider Major Depressive Disorder
- if there are at least 5 3s in the shaded section (one of which corresponds to Question #1 or #2)

	Consider Other Depressive Disorder **- if there are 2-4 3s in the shaded section (one of which corresponds to Question #1 or #2)** Note: Since **the questionnaire relies on patient self-report**, all responses should be verified by the clinician, and a definitive diagnosis is made on clinical grounds taking into account how well the patient understood the questionnaire, as well as other relevant information from the patient. **Diagnoses of Major Depressive Disorder or Other Depressive Disorder also require impairment of social, occupational, or other important areas of functioning** (Question #10) and ruling out normal bereavement, a history of a Manic Episode (Bipolar Disorder), and a physical disorder, medication, or other drug as the biological cause of the depressive symptoms" 11. CDC (2018) "Mental Health Conditions: Depression and Anxiety" Retrieved from 31 December 2018. URL: https://web.archive.org/web/20181231203416/https:/www.cdc.gov/tobacco/campaign/tips/diseases/depression-anxiety.html From **webpage "**What Is Depression? Depression is more than just feeling down or having a bad day. When a sad mood lasts for a long time and interferes with normal, everyday functioning, you may be depressed. **Symptoms of depression include:** • **Feeling sad or anxious often or all the time** • **Not wanting to do activities that used to be fun** • **Feeling irritable, easily frustrated, or restless** • **Having trouble falling asleep or staying asleep** • **Waking up too early or sleeping too much** • **Eating more or less than usual or having no appetite** • **Experiencing aches, pains, headaches, or stomach problems that do not improve with treatment** • **Having trouble concentrating, remembering details, or making decisions** • **Feeling tired, even after sleeping well** • **Feeling guilty, worthless, or helpless** • **Thinking about suicide or hurting yourself**" 12. SPITZER (2020) "GAD-7 Anxiety" Retrieved from 03 June 2020. URL: https://web.archive.org/web/20200603023323/https:/adaa.org/sites/default/files/GAD-7_Anxiety-updated_0.pdf

From **PDF**

GAD-7 Anxiety

Over the last two weeks, how often have you been bothered by the following problems?	Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxious, or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it is hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling afraid, as if something awful might happen	0	1	2	3

Column totals _____ + _____ + _____ + _____ =

Total score _____

If you checked any problems, how difficult have they made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all ☐ Somewhat difficult ☐ Very difficult ☐ Extremely difficult ☐

Source: Primary Care Evaluation of Mental Disorders Patient Health Questionnaire (PRIME-MD-PHQ). The PHQ was developed by Drs. Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke, and colleagues. For research information, contact Dr. Spitzer at ris8@columbia.edu. PRIME-MD® is a trademark of Pfizer Inc. Copyright© 1999 Pfizer Inc. All rights reserved. Reproduced with permission

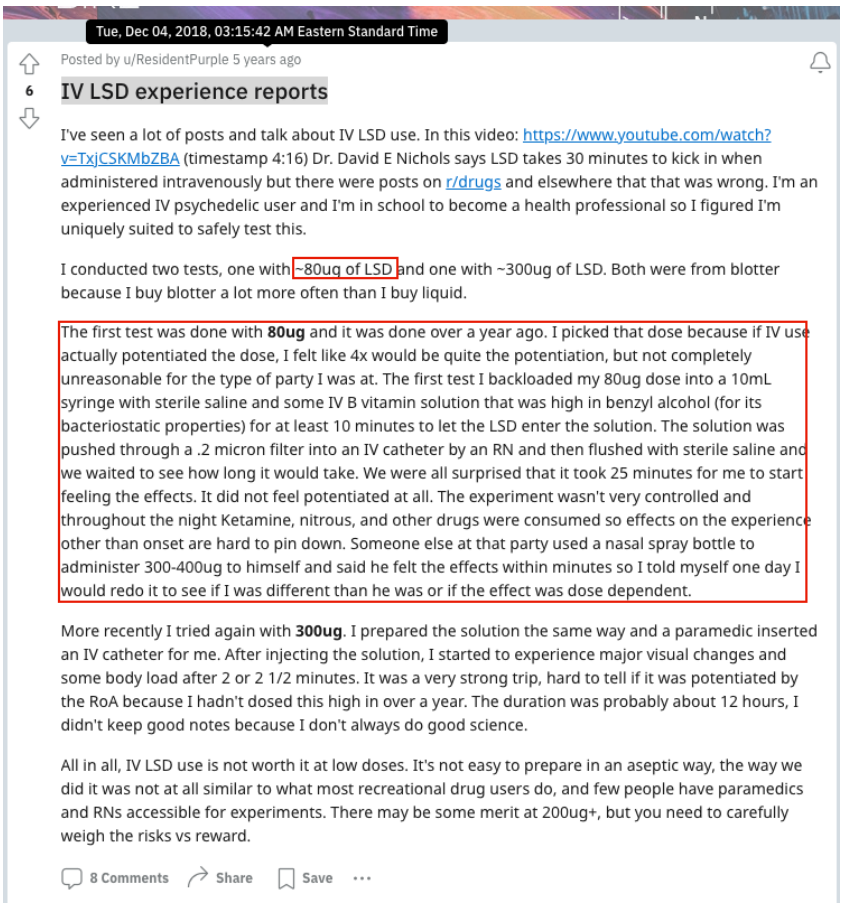
From **PDF** "**Scoring GAD-7 Anxiety Severity**
This is calculated by assigning scores of 0, 1, 2, and 3 to the response categories, respectively, of "not at all," "several days," "more than half the days," and "nearly every day."
GAD-7 total score for the seven items ranges from 0 to 21.
0–4: minimal anxiety
5–9: mild anxiety
10–14: moderate anxiety
15–21: severe anxiety"

13. MAYO CLINIC (2018) "Anxiety Disorders" Retrieved from 14 November 2018. URL: https://web.archive.org/web/20181114083639/https:/www.mayoclinic.org/diseases-conditions/anxiety/symptoms-causes/syc-20350961

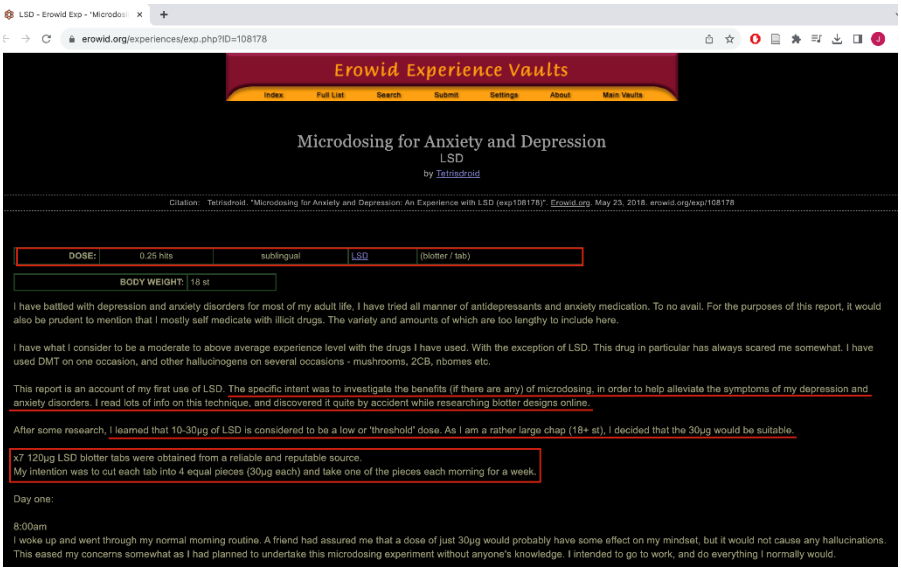
From **webpage** "**Common anxiety signs and symptoms include:**

- **Feeling nervous, restless or tense**
- **Having a sense of impending danger, panic or doom**
- **Having an increased heart rate**
- **Breathing rapidly (hyperventilation)**
- **Sweating**
- **Trembling**
- **Feeling weak or tired**

	• **Trouble concentrating or thinking about anything other than the present worry** • **Having trouble sleeping** • **Experiencing gastrointestinal (GI) problems** • **Having difficulty controlling worry** • **Having the urge to avoid things that trigger anxiety**"
41. The method of claim 24, wherein the therapeutically effective amount of the LSD, or a pharmaceutically acceptable salt thereof, is administered as an oral formulation, intravenous formulation, or an intraparietal formulation to the individual in need thereof.	*From application of interest 18/102,296 paragraph [0037] "In some embodiments, the modulator of the AMPA receptor and/or the 5-HT2A receptor is an ergoline, or a pharmaceutically acceptable salt, solvate, metabolite, derivative, or prodrug thereof.* ***In some embodiments, the modulator*** *of the AMPA receptor and/or the 5-HT2A receptor is* ***LSD****, or a pharmaceutically acceptable salt, solvate, metabolite, derivative, or prodrug thereof."* *From application of interest 18/102,296 paragraph [0039] "In some instances,* ***the modulator of the*** *AMPA receptor and/or the* ***5-HT2A receptor****, or the pharmaceutically acceptable salt, solvate, metabolite, derivative, or prodrug thereof,* ***is administered to the individual at an amount of at most 200 micrograms (mcg)."*** 5. HUTTEN (2019) "Motives and Side-Effects of Microdosing With Psychedelics Among Users" International Journal of Neuropsychopharmacology. 22(7):426-434. From **p. 427** "Another commonly reported motivation and subsequent outcome is the **alleviation of psychological symptoms including depressive mood and anxiety** and/or physiological symptoms such as pain..." From **p. 428** "An overview of route of administration and frequency of use per psychedelic for microdosing is presented in **Table 4**..." **Table 4.** Number (percentage) of respondents who indicated to (have) use(d) the listed psychedelic substance to microdose via the listed route of administration[a] and the corresponding frequency of use (Mean (SD), range Route of administration, n (%) / Frequency of microdosing per week | Substance	Number of respondents who answered, n (%)	Oral	Sublingual	Inspiration	Intranasal	Ocular	Cutaneous	Rectal	Other	Number of respondents who answered N (%)	Frequency of dosing per week M (SD)	Range of dosing per week (min–max)
---	---	---	---	---	---	---	---	---	---	---	---	---
1P-LSD	120 (77.5)	71 (55.0)	28 (21.7)	–	–	–	–	1 (0.8)	–	76 (58.9)	2.13 (2.23)	0.001–14
2Cs	13 (59.1)	11 (50.0)	–	–	1 (4.5)	–	–	1 (4.5)	–	10 (45.5)	2.89 (4.11)	0.2–14
5-MeO-DMT	2 (30.0)	1 (20.0)	–	–	–	–	–	1 (20.0)	–	2 (40.0)	7.5 (9.19)	1–14
ALD-52/ 1A-LSD	28 (68.3)	18 (43.9)	9 (22.0)	–	–	–	–	1 (2.4)	–	22 (53.7)	2.23 (2.82)	0.005–14
Ayahuasca	7 (46.7)	5 (33.3)	–	1 (6.7)	–	–	–	1 (6.7)	–	6 (40.0)	4.37 (5.16)	0.25–14
DMT	35 (54.7)	2 (3.1)	–	32 (50.0)	–	–	–	1 (1.6)	–	25 (39.1)	2.26 (3.17)	0.002–14
LSD	491 (73.7)	387 (58.1)	99 (14.9)	–	1 (0.2)	1 (0.2)	–	1 (0.2)	2 (0.3)	384 (57.7)	2.02 (1.89)	0.0001–15
MDMA/ ecstasy	34 (47.9)	24 (33.8)	2 (2.8)	–	7 (9.9)	–	–	1 (1.4)	–	19 (26.8)	2.08 (3.46)	0.005–14
Mescaline	12 (46.2)	11 (42.3)	–	–	–	–	–	1 (3.8)	–	6 (23.1)	3.46 (5.26)	0.25–14
NBOMes	3 (33.3)	–	2 (22.2)	–	–	–	–	1 (11.1)	–	3 (33.3)	5.67 (7.23)	1–14
Other	26 (43.3)	16 (26.7)	–	6 (10.0)	2 (3.3)	–	1 (1.7)	1 (1.7)	–	21 (35.0)	6.78 (6.98)	0.5–30
Psilocybin	416 (64.5)	415 (64.3)	–	–	–	–	–	1 (0.2)	–	325 (78.3)	3.74 (3.35)	0.001–30
Salvinorin A	15 (45.4)	3 (9.7)	2 (6.5)	8 (25.8)	–	–	–	1 (3.2)	1 (3.2)	8 (25.8)	2.63 (4.65)	0.01–14	 Abbreviations: 1P-LSD, 1-propionyl-lysergic acid diethylamide; 2C, 2-ethylamine; 5-MeO-DMT, 5-methoxy-N,N-dimethyltryptamine; ALD-52/1A-LSD, 1-Acetyl-N,N-diethyllysergamide; DMT, N,N-dimethyltryptamine; LSD, lysergic acid diethylamide; MDMA, 3,4,-methylenedioxymethamphetamine; NBOMe, N-benzyl Methoxy. aRoute of administration: "injection" is not shown, as no respondent reported injection as route of administration. Hutten et al. | 431 From **p. 428 "...** the **frequency of microdosing ranges between 2 and 7 times per week**, depending on the substance. For instance, **57% up to**

	78% of the respondents that microdosed with LSD and psilocybin **reported to use microdosing several times per week, ranging between 2 and 4 times per week**." 9. RESIDENTPURPLE (2018) "IV LSD experience reports" Retrieved 4 October 2023. https://www.reddit.com/r/LSD/comments/a2yrk1/iv_lsd_experience_reports/  Tue, Dec 04, 2018, 03:15:42 AM Eastern Standard Time Posted by u/ResidentPurple 5 years ago 6 **IV LSD experience reports** I've seen a lot of posts and talk about IV LSD use. In this video: https://www.youtube.com/watch?v=TxjCSKMbZBA (timestamp 4:16) Dr. David E Nichols says LSD takes 30 minutes to kick in when administered intravenously but there were posts on r/drugs and elsewhere that that was wrong. I'm an experienced IV psychedelic user and I'm in school to become a health professional so I figured I'm uniquely suited to safely test this. I conducted two tests, one with ~80ug of LSD and one with ~300ug of LSD. Both were from blotter because I buy blotter a lot more often than I buy liquid. The first test was done with **80ug** and it was done over a year ago. I picked that dose because if IV use actually potentiated the dose, I felt like 4x would be quite the potentiation, but not completely unreasonable for the type of party I was at. The first test I backloaded my 80ug dose into a 10mL syringe with sterile saline and some IV B vitamin solution that was high in benzyl alcohol (for its bacteriostatic properties) for at least 10 minutes to let the LSD enter the solution. The solution was pushed through a .2 micron filter into an IV catheter by an RN and then flushed with sterile saline and we waited to see how long it would take. We were all surprised that it took 25 minutes for me to start feeling the effects. It did not feel potentiated at all. The experiment wasn't very controlled and throughout the night Ketamine, nitrous, and other drugs were consumed so effects on the experience other than onset are hard to pin down. Someone else at that party used a nasal spray bottle to administer 300-400ug to himself and said he felt the effects within minutes so I told myself one day I would redo it to see if I was different than he was or if the effect was dose dependent. More recently I tried again with **300ug**. I prepared the solution the same way and a paramedic inserted an IV catheter for me. After injecting the solution, I started to experience major visual changes and some body load after 2 or 2 1/2 minutes. It was a very strong trip, hard to tell if it was potentiated by the RoA because I hadn't dosed this high in over a year. The duration was probably about 12 hours, I didn't keep good notes because I don't always do good science. All in all, IV LSD use is not worth it at low doses. It's not easy to prepare in an aseptic way, the way we did it was not at all similar to what most recreational drug users do, and few people have paramedics and RNs accessible for experiments. There may be some merit at 200ug+, but you need to carefully weigh the risks vs reward. 8 Comments Share Save ...
42. The method of claim 41, wherein the oral formulation is in a solid form or a liquid form.	6. JOHNSTAD (2018) "Powerful substances in tiny amounts: An interview study of psychedelic microdosing" Nordic Studies on Alcohol and Drugs. 35(1):39-51. From **p. 44 "**Some indicated that their **microdose regimen** was informed by extant literature on psychedelic microdosing. These were some typical statements about dosage: '**I normally cut up a single blotter of 100 or 150 mcg into 8 pieces, giving microdoses in the range of 12.5 to 18.75 mcg.** (ID38)'"

7. TETRISDROID (2018) “Microdosing for Anxiety and Depression” Retrieved 19 September 2023. https://erowid.org/experiences/exp.php?ID=108178



14. ANONYMOUS (2017) “The Freelance Writer Using LSD for Depression” Retrieved from 24 October 2017. URL: https://www.thecut.com/2017/10/microdosing-lsd-depression-coping-diaries.html

From **webpage** “**Some people cut up their tabs but I do something called “volumetric dosing” — you take a quantity of liquid to correspond to the dosage of the tab. I take one 100 microgram tab of LSD and dissolve it in 50 ml of distilled water — and 50 ml of vodka so the water doesn’t get moldy. Then I squirt 4.5 micrograms into my mouth…**

… **7 a.m.: When I wake up, I can feel that LSD-like energy again, like my brain is charged.** I’m more upbeat and silly around my mom. **The more I microdose, the more likely I am to feel an afterglow**.

Overall, I really feel like my depression is subsiding and I may even increase my dose slightly…”

Electronic Acknowledgement Receipt

EFS ID:	48778853
Application Number:	18102296
International Application Number:	
Confirmation Number:	9615
Title of Invention:	ADMINISTRATION OF MODULATORS OF 5-HT AND / OR AMPA RECEPTORS FOR TREATING NEUROLOGICAL CONDITIONS
First Named Inventor/Applicant Name:	Gabriella GOBBI
Customer Number:	21971
Filer:	Sisi Li
Filer Authorized By:	
Attorney Docket Number:	55554-705.301
Receipt Date:	30-OCT-2023
Filing Date:	27-JAN-2023
Time Stamp:	16:34:00
Application Type:	

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$72
RAM confirmation Number	E20230TG33585400
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Authorized User	

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2	Third-Party Submission Under 37 CFR 1.290	Third-party-preissuance-submission.pdf	74931 c25e9f197b9fe4b8c0e0d6544cbd303e6fe332fa	no	5
Warnings:					
Information:					
3	Request for Notification of Non-compliant Third-Party Submission	Third-party-notification-request.pdf	23616 97511919c6741f3e21ca212ba60644c03b3bd5cc	no	1
Warnings:					
Information:					
4	Concise Description of Relevance	Claims_Chart.pdf	2094431 c6ed3ae22a85968fa33b17c7707594b3ab37402d	no	23
Warnings:					
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5	Evidence of Publication	1_Lea2020.pdf	410611 108f1a74328e06f08e8bca1475e59ed27339cd7a	no	12
Warnings:					
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6	Evidence of Publication	2_Polito2019.pdf	1181902 dce9cdea3f5a2f7a05022a54ba87efdb2ce83bfe	no	26
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7	Evidence of Publication	4_Fadiman2019.pdf	795155 9a1fd7465bfaf61419696c33aa540f6718e027da	no	6
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8	Evidence of Publication	5_Hutten2019.pdf	1358671 abe572d11e03a32ac8455fd1105c87d3ca7b3ff9	no	9
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9	Evidence of Publication	6_JOHNSTAD2018.pdf	234020 95feec307828eb1cf9c077755823c5c1759775e3	no	13
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10	Evidence of Publication	8_WO2020157569A1.pdf	8268202 e1007a21a49945f50ace9efaa9a0312aad96c5e6	no	139
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11	Evidence of Publication	3_THESTONEDYOGAGIRL2019.pdf	414373 58b282074e08972f20bdf91b00b89eed5c3d7831	no	2
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12	Evidence of Publication	7_TETRISDROID2018.pdf	707162 bee1999e97b31882b397f95dc4ce619528fb793a	no	2
Warnings:					
Information:					
13	Evidence of Publication	9_RESIDENTPURPLE2018.pdf	379912 2a2a932b46da318adb8b5f0933e88dba872f486f	no	1
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14	Evidence of Publication	10_PHQ9.pdf	188421 2b81af3624facf80299db33f75310ebb2e00d62a	no	2
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Information:					
15	Fee Worksheet (SB06)	fee-info.pdf	37398 cb170ab89163852b7fa12c09bc79a494d0cfdbcc	no	2
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Electronic Acknowledgement Receipt

EFS ID:	48779022
Application Number:	18102296
International Application Number:	
Confirmation Number:	9615
Title of Invention:	ADMINISTRATION OF MODULATORS OF 5-HT AND / OR AMPA RECEPTORS FOR TREATING NEUROLOGICAL CONDITIONS
First Named Inventor/Applicant Name:	Gabriella GOBBI
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Application Type:	

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Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$72
RAM confirmation Number	E20230TG40586302
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1	Concise Description of Relevance	Concise-description-generated.pdf	39505 52b42de1b6a2a0a746ddb1e6a48a87faddaf3450	no	5
Warnings:					
Information:					
2	Third-Party Submission Under 37 CFR 1.290	Third-party-preissuance-submission.pdf	60689 26479bc8082ba99dae9ad40c439ad014803da43f	no	3
Warnings:					
Information:					
3	Request for Notification of Non-compliant Third-Party Submission	Third-party-notification-request.pdf	23614 eb16b70e81f43318d96b1a61b3e98fec997e640f	no	1
Warnings:					
Information:					
4	Concise Description of Relevance	Claims_Chart.pdf	2094431 c6ed3ae22a85968fa33b17c7707594b3ab37402d	no	23
Warnings:					
Information:					
5	Evidence of Publication	11_CDC.pdf	963340 0a362fdae254862bffd3ac7f19ba89f9d823cf16	no	4
Warnings:					
Information:					
6	Evidence of Publication	13_MAYOCLINIC.pdf	632720 b62e1c1b72d0e0d265cb4dccfe8353cc6ca94bca	no	5
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7	Evidence of Publication	14_THECUT.pdf	1793668 ae2a5591b88e70a347c5576a8ec4bdd7961ac189	no	3
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9	Fee Worksheet (SB06)	fee-info.pdf	37397 8d3848c6d0c7d5ae39f5edf46bd8437eab435d45	no	2
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