

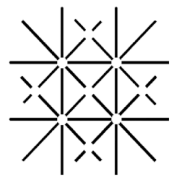
PSYCHEDELICS: FROM DRUG TO MEDICATION

Matthias E. Liechti

Clinical Pharmacology

University Hospital Basel

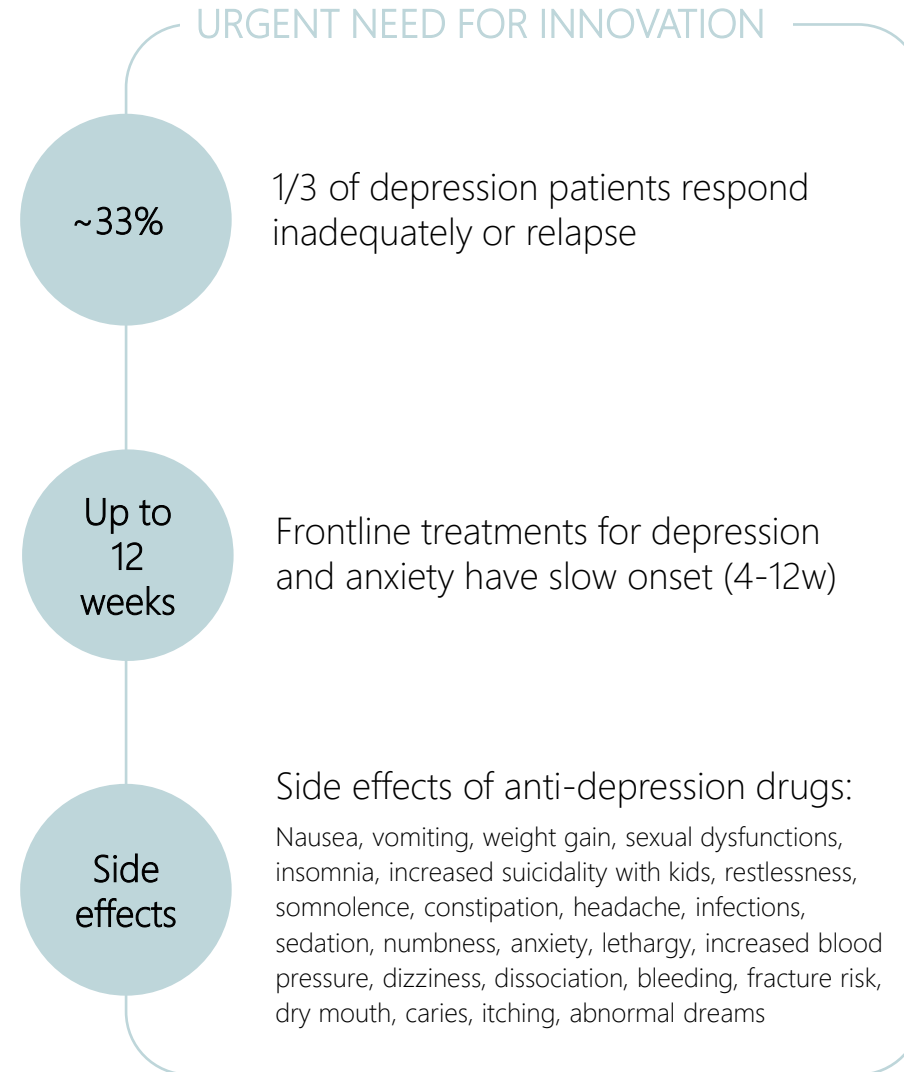
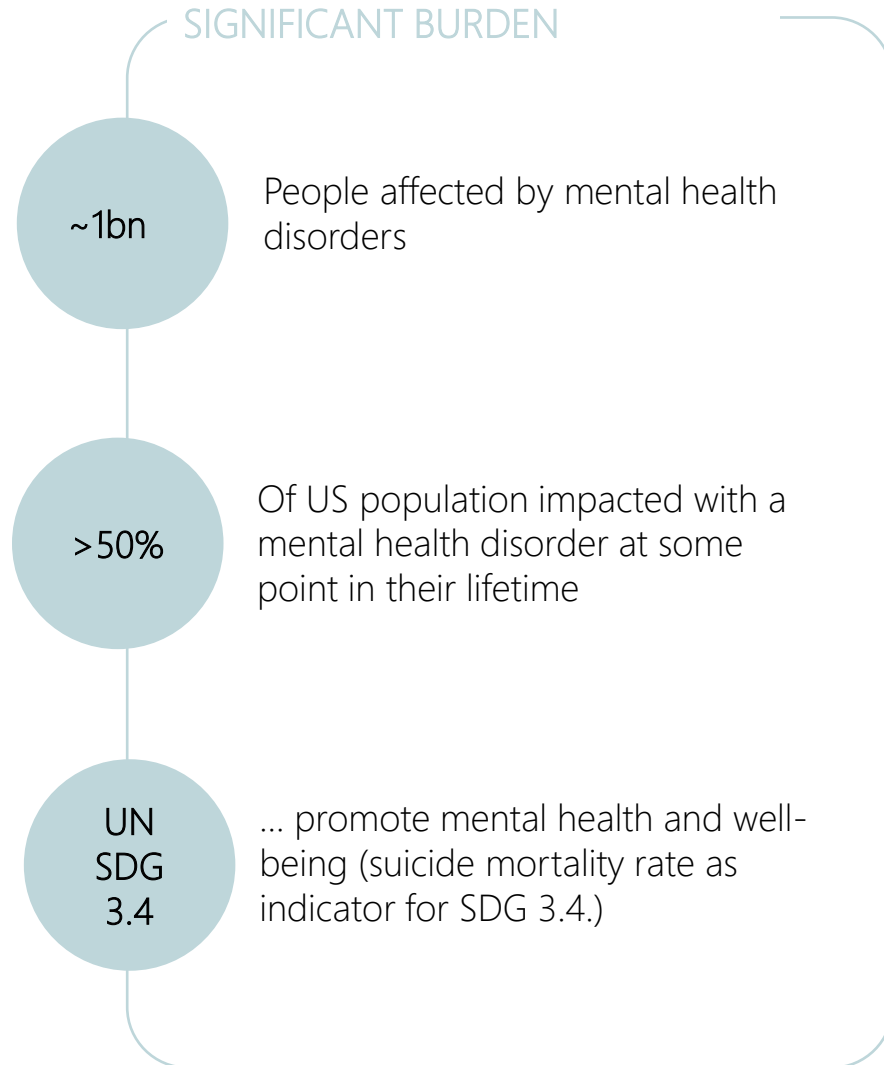
Switzerland



Uni Basel



WHY ARE NEW MENTAL HEALTH TREATMENTS SO IMPORTANT?



WHY AND WHY NOW?

- Limited efficacy, little innovation
- Ketamine, ECT
- Cannabis commercialization



A POPULATION STUDY

Psychedelics not linked to mental health problems or suicidal behavior

Serious psychological distress

K6-scale

Mental health treatment

Inpatient

Outpatient

Medication

Needed but did not receive

Suicidal

Thought about killing self

Planned to kill self

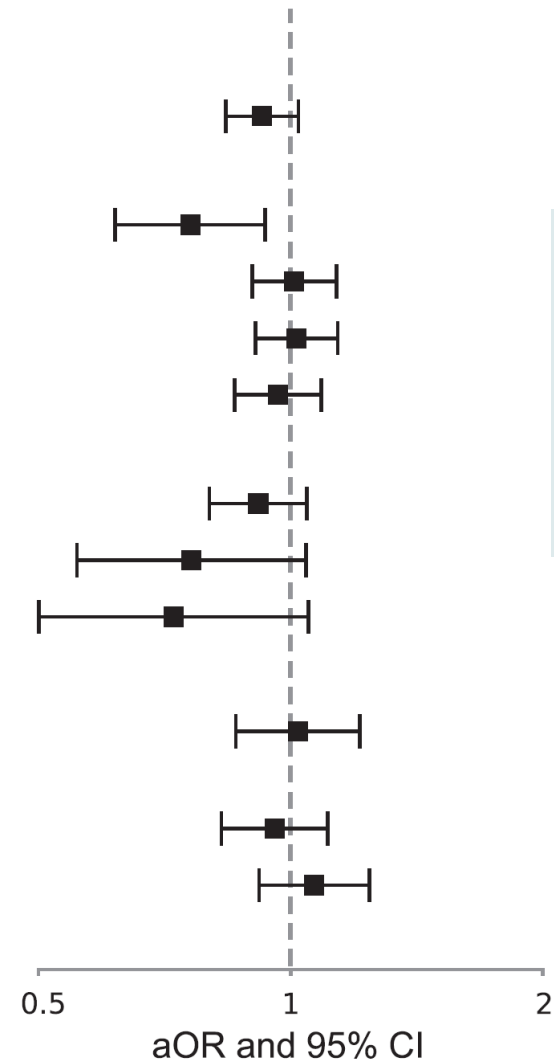
Attempted to kill self

Depression and anxiety

Symptoms of major depressive episode

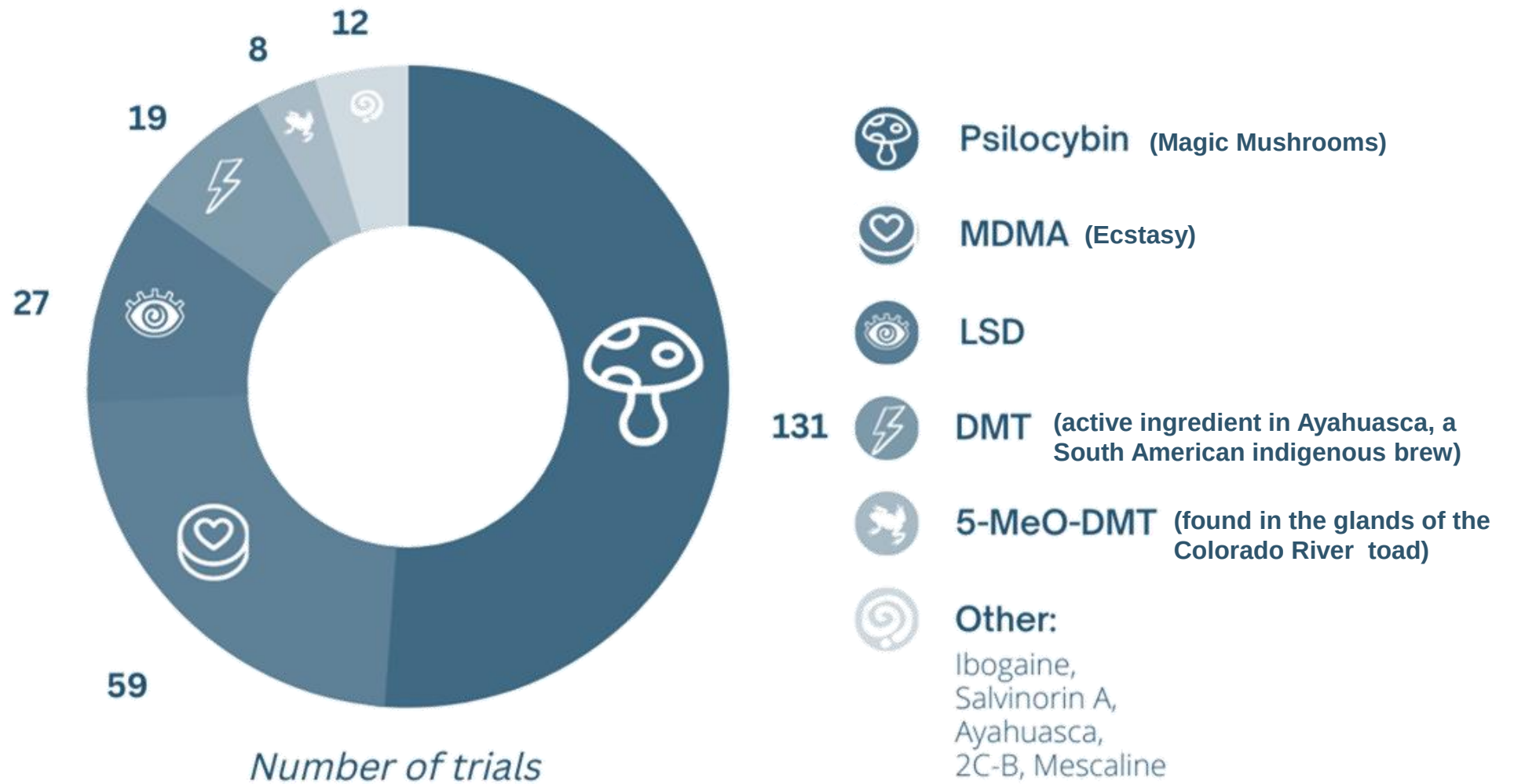
Diagnosis of depression

Diagnosis of anxiety disorder

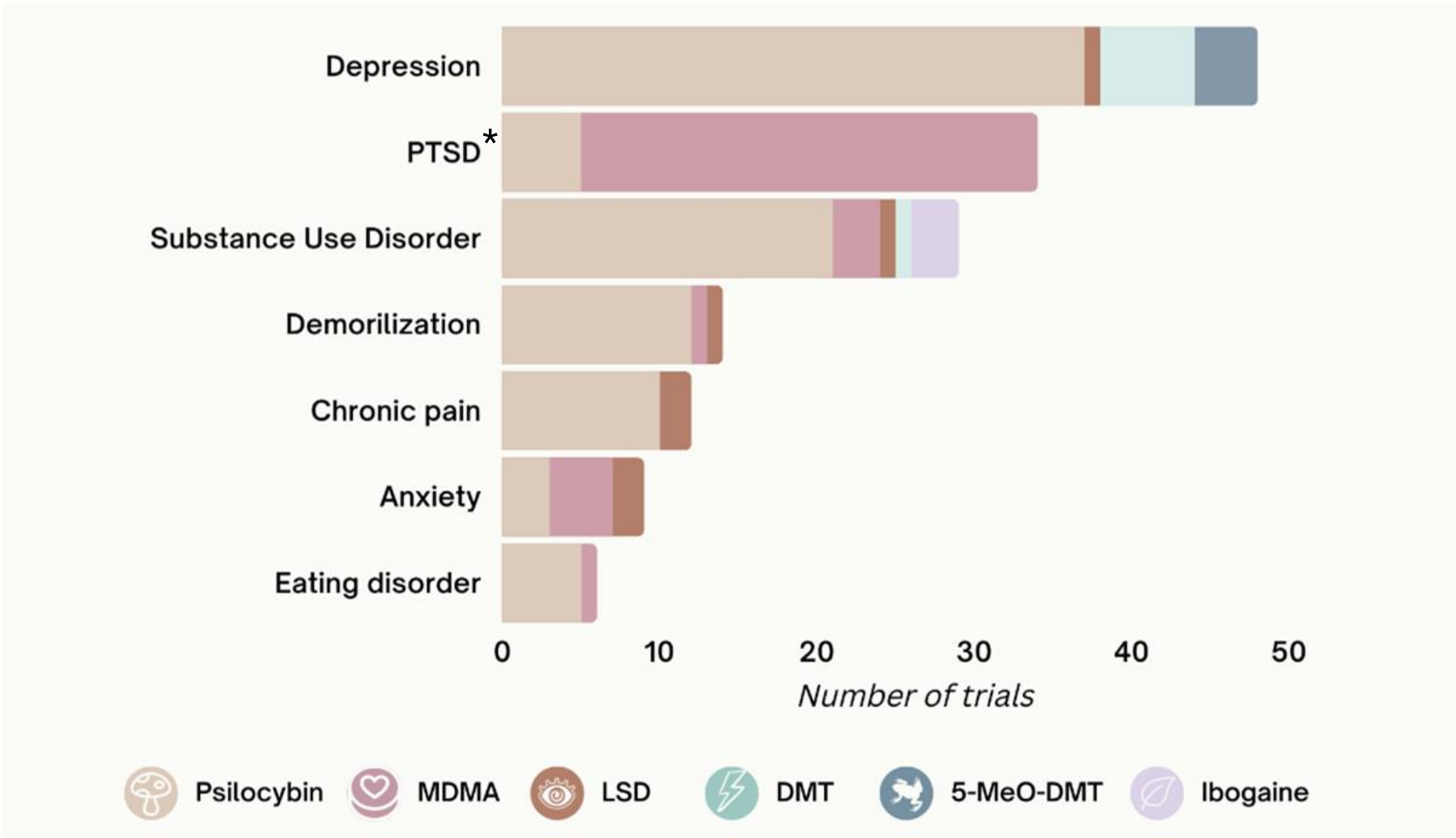


Population study in US;
Total N=135'000
Psychedelic user
N=20'000

PSYCHEDELIC CLINICAL TRIALS

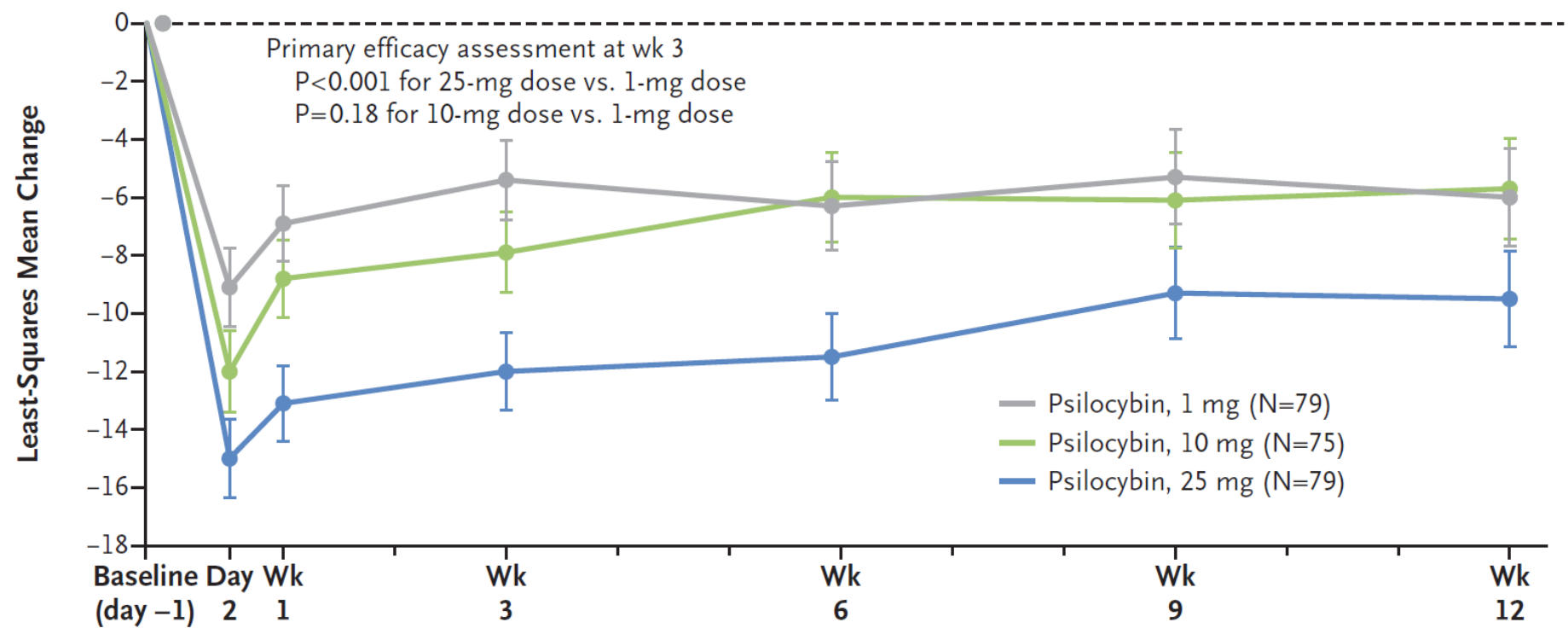


CONDITIONS BEING INVESTIGATED



* Posttraumatic Stress Disorder

SINGLE-DOSE PSILOCYBIN FOR A TREATMENT-RESISTANT EPISODE OF MAJOR DEPRESSION

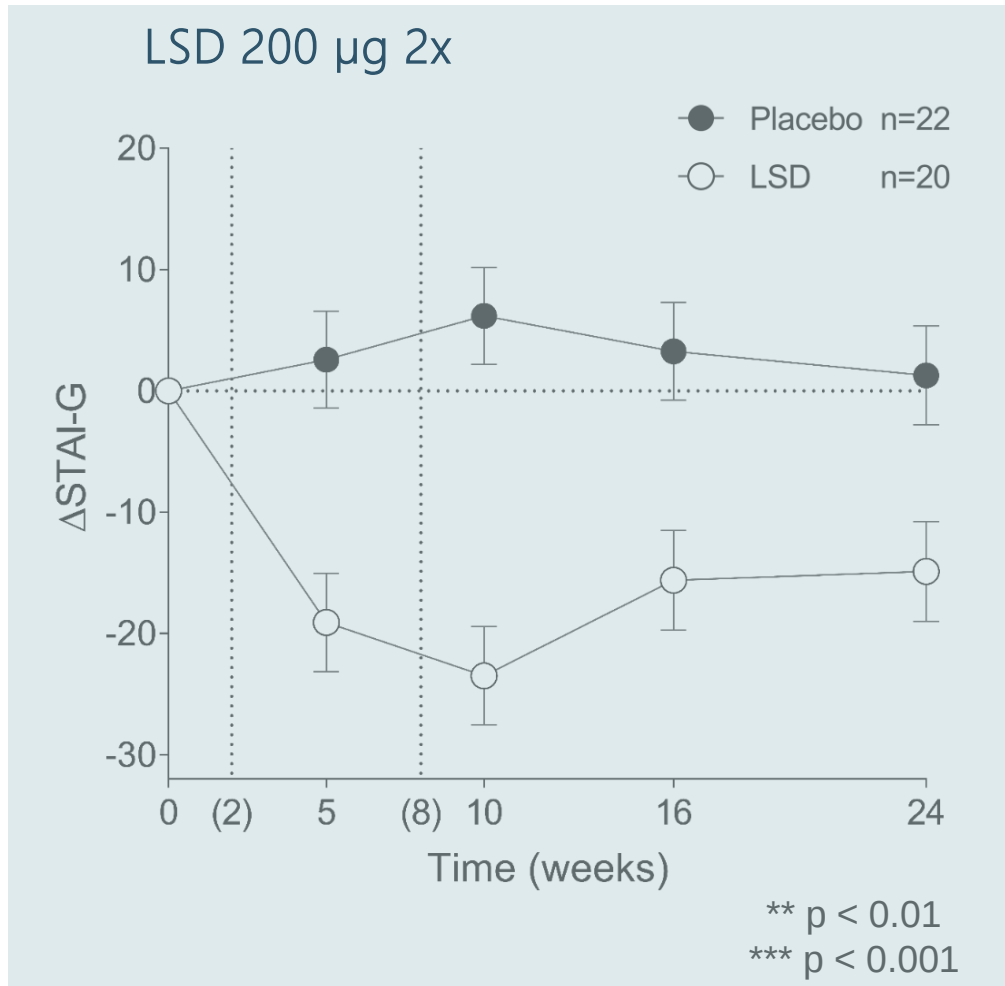


N=233; Psilocybin 25 mg vs. 10 mg vs. 1 mg

PSILOCYBIN IMPROVED TREATMENT-RESISTANT DEPRESSION IN PHASE 2b STUDY

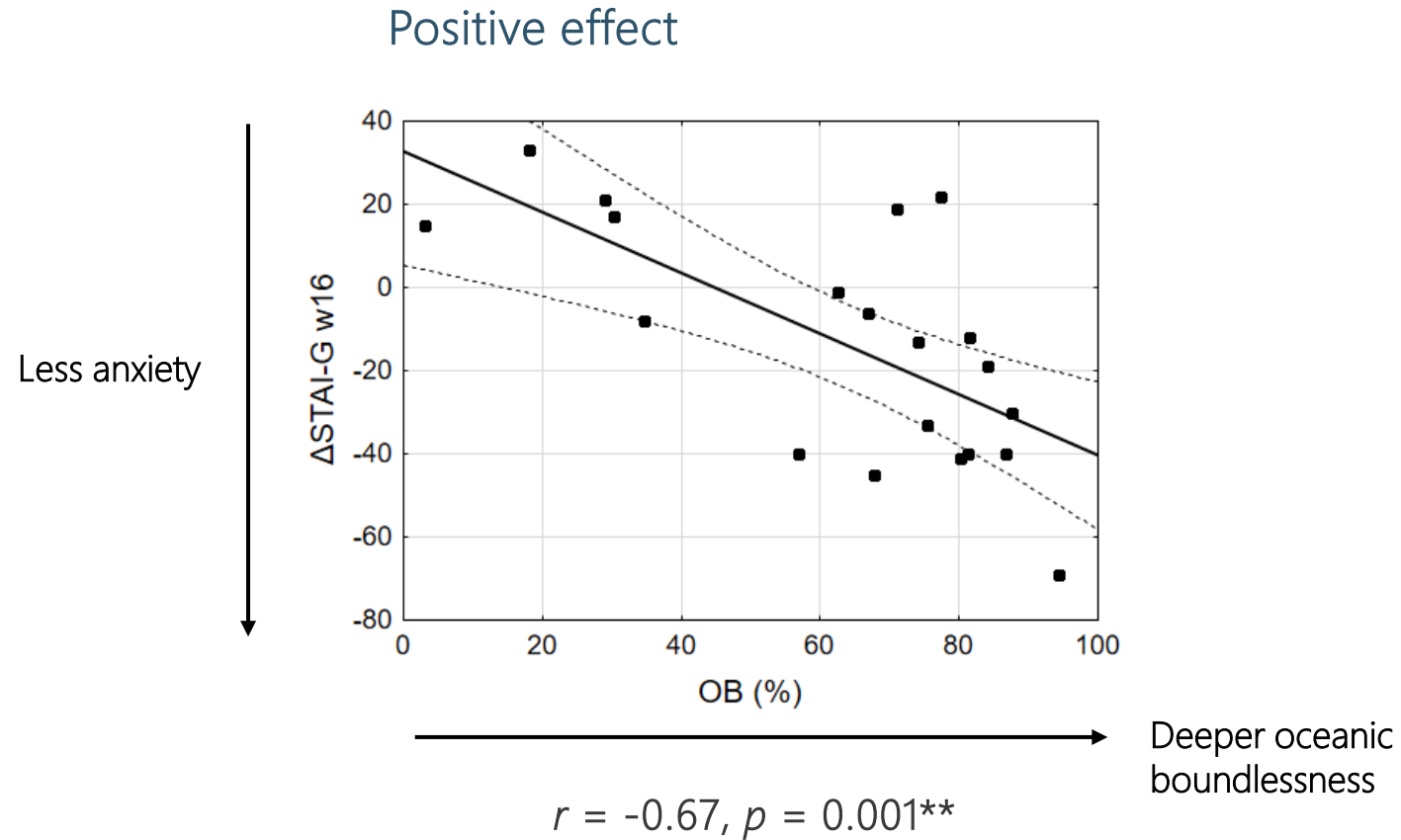
- 36.7% (29 patients) in 25mg group showed response at week 3, compared with 17.7% (14 patients) in 1mg group
- 29.1% (23 patients) in 25mg group were in remission at week 3, compared with 7.6% (6 patients) in 1mg group
- 24.1% (19 patients) in 25mg group were sustained responders at week 12, compared with 10.1% (8 patients) in 1mg group
- Treatment-emergency serious adverse event (TESAE) incidence
 - 6.3% (5 patients) in 25mg group
 - 8.0% (6 patients) in 10 mg group
 - 1.3% (1 patient) in 1mg group

LSD RAPIDLY AND SUSTAINABLY REDUCES ANXIETY IN PATIENTS WITH ANXIETY DISORDERS



- Rapid, long-lasting and significant reductions in anxiety at 16 weeks post-treatment in LSD group
 - Mean change from baseline difference = -16.2
95% confidence interval [CI] = -27.8 to -4.5
 $p = 0.007$
- Clinical response ($\geq 30\%$ reduction of STAI-G scores):
 - 65% in LSD group vs 9% in placebo group
($p = 0.003$)

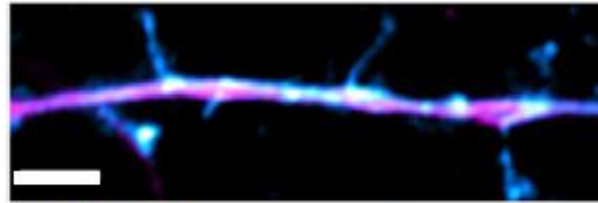
ACUTE EFFECT CORRELATES WITH THERAPEUTIC EFFECT



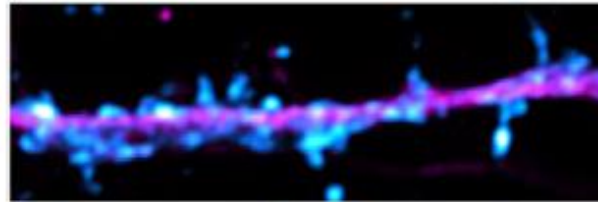
Psychedelic drugs such as psilocybin and LSD can induce an experience known as **oceanic boundlessness**, which is characterized by a feeling of oneness with the world and a sense of awe.

PSYCHEDELICS PROMOTE BRAIN PLASTICITY

Vehicle = Placebo



LSD



Psilocin

