The New and the Old of Newer is Better

Joshua A. Gordon, M.D., Ph.D. Columbia University New York State Psychiatric Institute

May 29, 2025 ASCP





- What does "better" mean?
- Are psychedelics better?
- How do we evaluate better?
- How are we trying to get better?





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MDMA for PTSD

nature medicine

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nature > nature medicine > articles > article

Article Open access Published: 14 September 2023

MDMA-assisted therapy for moderate to severe PTSD: a randomized, placebo-controlled phase 3 trial

Jennifer M. Mitchell ^I, <u>Marcela Ot'alora G.</u>, <u>Bessel van der Kolk</u>, <u>Scott Shannon</u>, <u>Michael Bogenschutz</u>, <u>Yevgeniy Gelfand</u>, <u>Casey Paleos</u>, <u>Christopher R. Nicholas</u>, <u>Sylvestre Quevedo</u>, <u>Brooke Balliett</u>, <u>Scott</u> <u>Hamilton</u>, <u>Michael Mithoefer</u>, <u>Sarah Kleiman</u>, <u>Kelly Parker-Guilbert</u>, <u>Keren Tzarfaty</u>, <u>Charlotte Harrison</u>, <u>Alberdina de Boer</u>, <u>Rick Doblin</u>, <u>Berra Yazar-Klosinski</u> & <u>MAPP2 Study Collaborator Group</u>

Nature Medicine 29, 2473–2480 (2023) Cite this article





MDMA

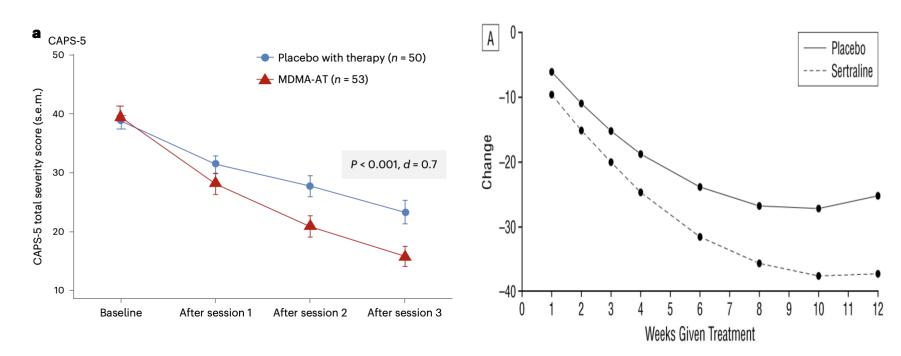
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COLUMBIA

COLUMBIA UNIVERSITY

DEPARTMENT OF PSYCHIATRY

Sertraline



Original Article

May 2001

Multicenter, Double-blind Comparison of Sertraline and Placebo in the Treatment of Posttraumatic Stress Disorder

Jonathan R. T. Davidson, MD; Barbara O. Rothbaum, PhD; Bessel A. van der Kolk, MD; et al.

» Author Affiliations | Article Information Arch Gen Psychiatry. 2001;58(5):485-492. doi:10.1001/archpsyc.58.5.485



FREE

Psilocybin for Depression



The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

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Trial of Psilocybin versus Escitalopram for Depression

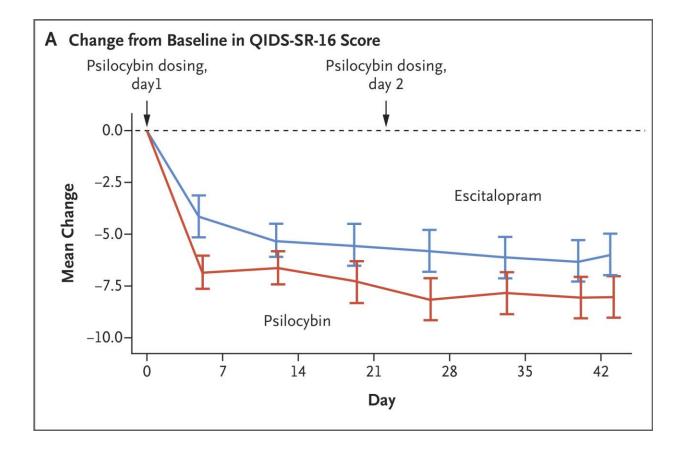
Authors: Robin Carhart-Harris, Ph.D., Bruna Giribaldi, B.Sc., Rosalind Watts, D.Clin.Psy., Michelle Baker-Jones, B.A., Ashleigh Murphy-Beiner, M.Sc., Roberta Murphy, M.D., Jonny Martell, M.D., Allan Blemings, M.Sc., David Erritzoe, M.D., and David J. Nutt, M.D. Author Info & Affiliations

Published April 14, 2021 | N Engl J Med 2021;384:1402-1411 | DOI: 10.1056/NEJMoa2032994 | <u>VOL. 384 NO. 15</u> <u>Copyright © 2021</u>





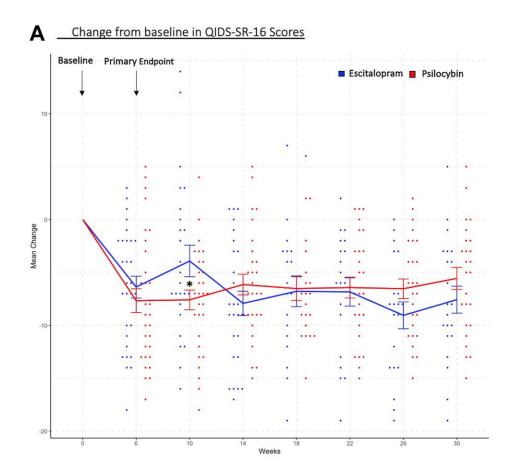
Psilocybin vs. Escitalopram







Psilocybin vs. Escitalopram



Erritzoe et al., eClinical Medicine, 2024





- What does "better" mean?
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 - 2nd gen/depot antipsychotics: Comparative effectiveness
 - Xanomeline-Trospium: Cost-effectiveness
- How are we trying to get better?





The CATIE Trial



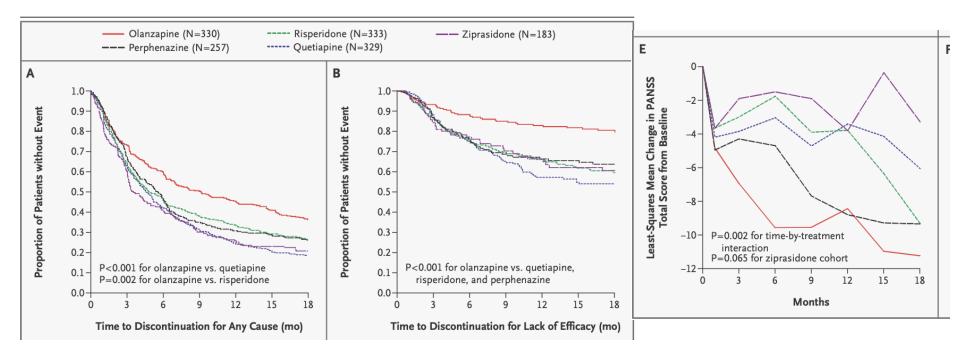
Effectiveness of Antipsychotic Drugs in Patients with Chronic Schizophrenia

Jeffrey A. Lieberman, M.D., T. Scott Stroup, M.D., M.P.H., Joseph P. McEvoy, M.D., Marvin S. Swartz, M.D., Robert A. Rosenheck, M.D., Diana O. Perkins, M.D., M.P.H., Richard S.E. Keefe, Ph.D., Sonia M. Davis, Dr.P.H., Clarence E. Davis, Ph.D., Barry D. Lebowitz, Ph.D., Joanne Severe, M.S., and John K. Hsiao, M.D., for the Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE) Investigators*





Conclusion: Olanzapine is Better Tolerated







Long-acting Injectables

The Journal of Clinical Psychiatry

SCHIZOPHRENIA/SCHIZOAFFECTIVE DISORDERS

SUPPLEMENT ARTICLE | SEPTEMBER 30, 2016

The Use of Long-Acting Injectable Antipsychotics in Schizophrenia: Evaluating the Evidence

Christoph U. Correll, MD (Chair); Leslie Citrome, MD, MPH; Peter M. Haddad, MD; John Lauriello, MD; Mark Olfson, MD, MPH; Stephen M. Calloway; John M. Kane, MD

J Clin Psychiatry 2016;77(suppl 3):1-24





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Long-acting Injectables

Summary and conclusions. LAIs are superior to placebo for acute and maintenance treatment of schizophrenia. Superiority of LAIs over oral antipsychotics is most pronounced in mirror-image studies that arguably are more representative of usual care patients and practices. In general, LAIs appear to be similar to one another in terms of relapse prevention, although differences in other domains have been reported.

Summary and conclusions. Nonadherence in patients with schizophrenia is common and difficult to detect. Although LAIs may provide one method to help improve treatment adherence, only a minority of medication nonadherent patients receive them. Significant reductions in health care utilization or costs associated with schizophrenia have been demonstrated in some studies of LAI antipsychotics, although other studies have not demonstrated these effects and showed cost-neutrality or even greater cost.





Is Newer Better?



The NEW ENGLAND JOURNAL of MEDICINE

VISUAL ABSTRACT

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Xanomeline–Trospium for Schizophrenia

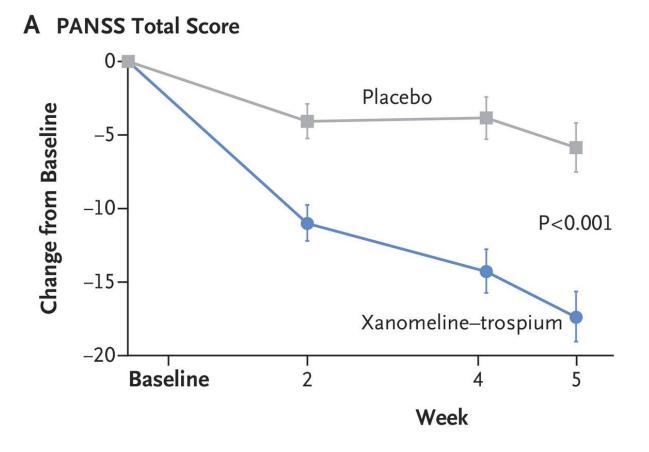
 February 24, 2021
 DOI: 10.1056/NEJMdo005976
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Is Newer Better?







Replication

131 Placebo

with placebo

5-wk Treatment

JAMA Psychiatry

RCT: Efficacy and Safety of Xanomeline-Trospium in Schizophrenia

POPULATION

191 Males, 65 Females



Adults aged 18-65 y with schizophrenia experiencing acute psychosis **Mean (SD), 43.1 (11.8) y**

SETTINGS/LOCATIONS

sites

30 Inpatient

US/Ukraine

INTERVENTION 256 Participants randomized



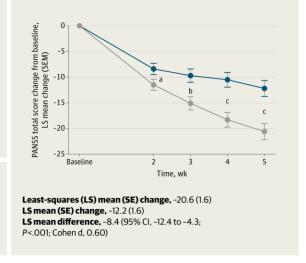
125 Oral xanomeline-trospium 5-wk Treatment with xanomeline-trospium, titrated to 125 mg/30 mg twice a day

PRIMARY OUTCOME

Change from baseline to week 5 in Positive and Negative Syndrome Scale (PANSS) total score with xanomeline-trospium vs placebo (range, 30-210 points; higher scores = greater symptom severity: 30, absent; 120, moderate; 210, extreme)

FINDINGS

Xanomeline-trospium significantly reduced PANSS total score from baseline to week 5 compared with placebo



Kaul I, Sawchak S, Walling DP, et al. Efficacy and safety of xanomeline-trospium in schizophrenia: a randomized clinical trial. JAMA Psychiatry. Published online May 1, 2024. doi:10.1001/jamapsychiatry.2024.0785

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Cost-Effectiveness Analysis



Schizophrenia

An assessment of xanomeline tartrate/trospium chloride (KarXT)





Base-Case Results

Treatment with KarXT results in less time with diabetes and greater QALYs, greater life years, and greater evLYs. Using a placeholder annual cost of \$20,000 per year, the intervention costs are greater, but there are fewer non-intervention costs resulting from fewer relapses and treatment-emergent adverse events. Table 4.3 reports the base-case model outcomes for each arm of the model.

Table 4.3. Results for the Base-Case

Treatment	KarXT Cost	Total Cost	Years With Diabetes	QALYs	Life Years	evLYs
KarXT*	\$42,000	\$350,000	4.00	10.39	16.25	10.41
Aripiprazole	\$0	\$327,000	4.40	10.25	16.18	10.25

evLYs: equal-value life years, QALYs: quality-adjusted life years

*Assuming a KarXT placeholder price of \$20,000 per year.

Table 4.4. Incremental Cost-Effectiveness Ratios for the Base Case

Treatn	nent	Cost per QALY Gained	Cost per Life Year Gained	Cost per evLY Gained	Cost per Year Without Diabetes	
KarXT*		\$163,000	\$347,000	\$146,000	\$60,000	

evLY: equal-value life year, QALY: quality-adjusted life year

*Assuming a KarXT placeholder price of \$20,000 per year.





Cost-Effectiveness Analysis

Interventions of Interest:

• Xanomeline tartrate/trospium chloride (Cobenfy, KarXT, Bristol Myers Squibb)

The independent appraisal committee voted that current evidence is not adequate to demonstrate superior net health benefits for KarXT compared to generically available aripiprazole.

If long-term data confirm KarXT's benefits and lack of weight gain, it would achieve common thresholds for cost-effectiveness if priced between \$16,000 to \$20,000 per year.





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 - Involvement of lived experience
 - Learning Healthcare





AMP Schizophrenia

Schizophrenia

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nature > schizophrenia > editorials > article

Editorial Open access Published: 15 April 2025

Pathways to prevention: the Accelerating Medicines Partnership® Schizophrenia (AMP® SCZ) Program

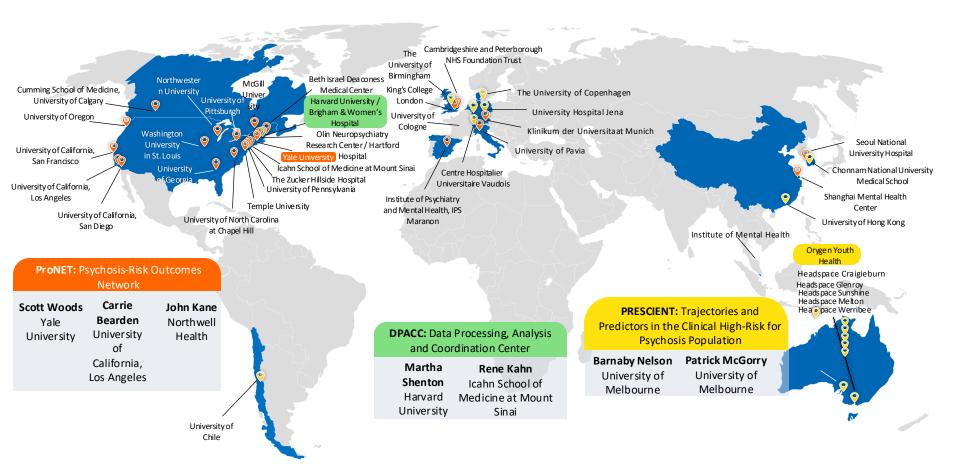
Barnaby Nelson [™], Martha E. Shenton, Scott W. Woods & the Accelerating Medicines Partnership® Schizophrenia (AMP® SCZ)

Schizophrenia 11, Article number: 62 (2025) Cite this article





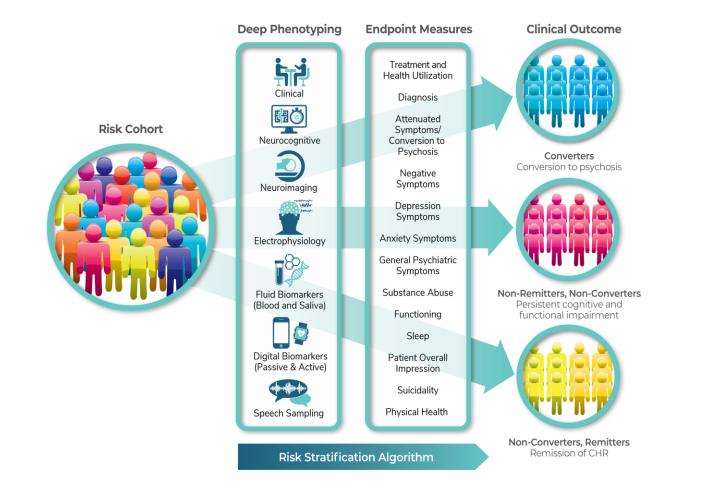
A Global Research Network for Secondary Prevention in Psychosis







Moving Earlier: AMP-Schizophrenia







Integrating Lived Experience

Schizophrenia

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Comment Open access Published: 07 April 2025

Bridging Science and Hope: integrating and Communicating Lived experience in Accelerating Medicines Partnership® Schizophrenia Program

Ameneh Asgari-Targhi, Beier Yao, Lisa Brown, Suzanne Garcia, Arundati Nagendra, Kota Chin, Tashrif Billah, Nora Penzel, Omar John, Nicholas Prunier, Simone Veale, Elana Kotler, Grace R. Jacobs, Ming Zhan, Michael J. Coleman, Sylvain Bouix, Ofer Pasternak, Guillermo Cecci, Justin T. Baker, Daniel H. Mathalon, Sinead M. Kelly, Cheryl M. Corcoran, Abraham Reichenberg, Inge Winter-van Rossum, the Accelerating Medicines Partnership® Schizophrenia (AMP® SCZ), ... Tina Kapur 🏻 + Show authors

Schizophrenia 11, Article number: 57 (2025) Cite this article

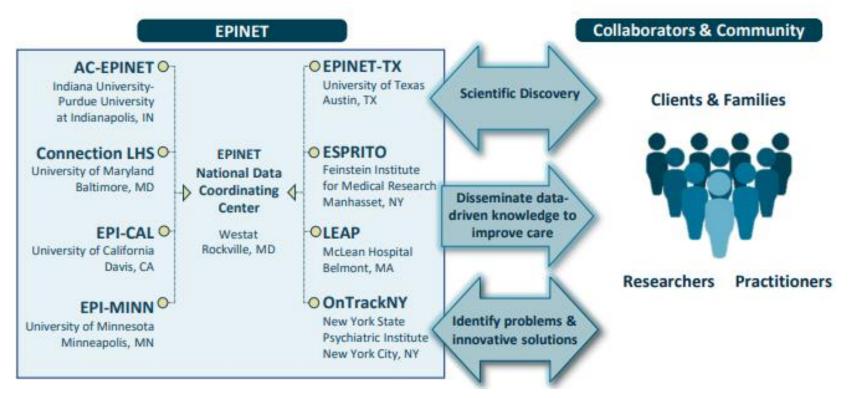




Building a Learning Healthcare System for Early Psychosis



Accelerating advances in early psychosis care, recovery outcomes, and scientific discovery through a national early psychosis learning health care partnership



https://www.cmhnetwork.org/news/nimh-launches-the-early-psychosis-intervention-network-epinet-a-national-learning-health-care-system/





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