

**CONCLUSIONS:** This case report supports rTMS paired with cognitive training to be a safe and tolerable treatment for early-onset AD. However, more treatment cycles must be completed before conclusions about its efficacy can be determined.

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### CME on Pharmacogenomics Testing Improves Knowledge, Competence, and Confidence Related to Implementing Testing in Practice

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**ABSTRACT:** Study Objective(s): Pharmacogenomics (PGx) testing, in particular combinatorial PGx testing, represents a potential means for delivering personalized treatment selection for patients with psychiatric disorders. The goal of this educational intervention was to educate clinicians about the role of PGx testing in neuropsychiatric conditions such as MDD, how these novel tests may be implemented into clinical practice, and how results may be used to inform decision-making.

**METHOD:** Psychiatrists (n=830) participated in an online enduring CME activity on PGx testing in psychiatric disorders

- The format was a 30-minute 2-person discussion (launched December 7, 2018)
- Data from this activity were collected for 30 days after launch
- Effectiveness of education for the CME activities was analyzed using 3 multiple-choice and 1 self-efficacy question (5-point Likert-type scale), presented as pre-/post-CME repeated pairs
- A paired samples t-test was conducted to examine improvements in mean confidence pre and post

Participant knowledge, competence, and confidence change in pre- to post-CME responses were calculated

**RESULTS:** Overall, 72% of psychiatrists (n=830) had knowledge or competence that was reinforced or improved as a result of education.

#### FOLLOWING EDUCATION:

- \* 56% and 12% of psychiatrists had reinforcement and improvement, respectively, in knowledge related to the clinical benefits of PGx-guided treatment strategies

- 61% and 8% of psychiatrists had reinforcement and improvement, respectively, in competence related to interpreting PGx tests for patients with neuropsychiatric disorders
- Within the group of psychiatrists with reinforced and improved knowledge/competence, there was a 30% increase in their confidence using PGx tests to help guide treatment decisions for patients with major depressive disorder (MDD) (M pre=2.14, post=2.77, scale 1 to 5)
- Confidence in the use of PGx testing was correlated with likelihood of considering PGx testing for patients with MDD

**CONCLUSIONS:** Online CME aided in psychiatrists' knowledge, competence, and confidence in using pharmacogenomics testing in patients with psychiatric disorders. Funding Acknowledgements: Supported by an independent educational grant from Myriad Neuroscience, formerly Assurex Health

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### Efficacy and Safety of SEP-363856, a Novel Psychotropic Agent with a Non-D2 Mechanism of Action, in the Treatment of Schizophrenia

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**ABSTRACT:** Background: SEP-363856 is a novel psychotropic agent that has shown broad efficacy in animal models of schizophrenia and depression. Its antipsychotic effects appear to be mediated by agonist activity at both trace amine-associated receptor 1 (TAAR1) and 5-HT1A receptors. Notably, SEP-363856 does not bind to any dopaminergic, serotonergic (except 5-HT1A), glutamatergic, or other neuroreceptors thought to mediate the effects of currently available antipsychotics. The aim of this study was to evaluate the efficacy and safety of SEP-363856 in acutely symptomatic patients with schizophrenia.

**METHOD:** Patients aged 18-40 years meeting DSM-5 criteria for schizophrenia (PANSS total score  $\geq 80$ ) were randomized, double-blind, to 4-weeks of flexible-dose SEP-363856 (50 or 75 mg/d) or placebo. Efficacy measures included the Positive and Negative Syndrome Scale (PANSS) total score (primary), PANSS subscale scores, and the Clinical Global Impressions-Severity (CGI-S) score. Change from baseline in primary and secondary measures were analyzed using a mixed model for repeated measures (MMRM) analysis.