

similar treatments for the control of somatic diseases. The fact of imagining a scene where oneself is the one suffering from a disease, shows preferences in the use of psychotropic drugs for the management of schizophrenia where the profile of side-effects and efficacy has a more equitable balance: starting from comparable effectiveness, we prefer treatments associated with a perception of fewer side-effects

19 Real World Patient-Reported Outcomes Following Pharmacogenomic Testing

Nichole Rigby, MS¹; Jennifer Ma¹; Joseh Boland¹; Danile Van Dorm, PharmD¹; Daniel Dowd, PharmD¹; and David Krause, MD¹

¹ Genomind, King of Prussia, PA

ABSTRACT: Background: The use of pharmacogenomics (PGx) testing has the potential to accelerate response to psychopharmacologic therapy (Rx) and improve outcomes; accordingly PGx use to select appropriate Rx is increasing. One such commercially available test is the Genecept Assay (the Assay [Genomind]) which measures variants of 18 genes (12 pharmacodynamic and 6 CYP450) for which response, tolerability or exposure to various Rx has been reported. Recent interest in genetics has led patients (pts) to be stewards of their own genetic data. In 2017 we launched a Patient Gateway to allow pts to retrieve their genetic results, have access to mental health information, and record outcomes following use of the Assay.

OBJECTIVE: To assess the effectiveness of Rx recommendations following use of the Assay, as reported on a purpose-built patient portal.

METHOD: Pts receiving the Assay were invited to visit an online, interactive portal. Pts providing informed consent (IC) were asked to record their baseline overall health using a 4-point modified patient global index (m-PGI) of severity. Pts also recorded their conditions, medications, and supplements, and various symptoms. Pts were invited to visit the portal ad libitum and re-rate their overall health using the m-PGI. These data were then combined with the pts' genetic results using custom scripts in Python (v 3.6.4) and R (v 3.5.1). All identifying data were removed. Pts included in this analysis responded (at least) twice to the health questionnaire. New medications were subsequently scored as concordant, discordant, or indeterminate with the Assay's recommendations, using predetermined criteria. We report the initial results for this subgroup herein.

RESULTS: Since launch 9,401 unique patient profiles were created on the Gateway; 5,207 (55%) of these provided IC. Of these, 410 provided at least 2 m-PGI scores. Seventy-three (73) of these pts reported scores at least 4 weeks apart and started 222 medications in the interim. 69.4% of pts identified as female; 70.8% had a diagnosis of generalized anxiety disorder, while 50.0% and 31.9% had diagnoses of major depressive disorder and post-traumatic stress disorder, respectively. 60.2% of pts reported improvement on the m-PGI of ≥ 1 unit; 20% had a ≥ 2 -unit improvement. Pts reporting improvement were more likely (77% vs 66%); to have been placed on medication that were concordant with the assay than those who were not improved, although this difference did not reach statistical significance.

CONCLUSION: In this naturalistic, virtual trial of a PGx assay to guide pharmacotherapy in individuals with mental health illness, most users reported improvement in overall health. More pts whose medication was reported as concordant with the Assay reported improvement than those with discordant medications. Data collection is ongoing and updated data will be provided. Funding Acknowledgements: Genomind

20 The Need for Speed: Adjunctive Triple Chronotherapy in the Accelerated Treatment of Acute Depression and Suicidality in the Adolescent Population

Diane Hurd, PMHNP¹; Eric Arzubi, MD²; Mariela Rojas Herrera, MD³; Nicholas Coombs, MS⁴; and Jeannine Brant, PhD, APRN, AOCN, FAAN⁵

¹ Psychiatric Nurse Practitioner, Behavioral Health Center, Billings Clinic, Billings, MT

² Child Adolescent Psychiatrist, Chair of Psychiatry, Billings Clinic, Billings, MT

³ Child Adolescent Psychiatrist, Director of the Psychiatric Youth Treatment Unit, Billings Clinic, Billings, MT

⁴ Data Analyst, Collaborative Science & Innovation, Billings Clinic, Billings, MT

⁵ Nurse Scientist, Collaborative Science and Innovation, Billings Clinic, Billings, MT

ABSTRACT: Objective: This pilot study aims to explore the feasibility and proof of concept of triple chronotherapy (TCT) as a non-pharmacological, adjunctive intervention in the treatment of acute depression and suicidality in the adolescent population.

METHOD: Thirty-one adolescents with moderate to severe depression were included in the study. Each participant

underwent a 4-day intervention (TCT) which consisted of one night of sleep deprivation followed by three days of sleep phase advancement and daily bright light therapy. Primary outcomes were feasibility and depression, as measured by Hamilton Depression Scale-17 (HAMD-17) scores. Secondary outcomes included severity of illness, anxiety, self-harm, insomnia, and suicidality.

RESULTS: Twenty-nine (94%) adolescents completed the TCT protocol. Twenty-six (84%) of the 31 enrolled patients experienced a reduction in depressive symptoms of at least 50% from baseline; 24 (77%) achieved remission, defined as a HAMD-17 score less than 8. Secondary outcomes showed significant improvement following the 4-day TCT intervention; improvement was sustained through the 7–10 day and 1-month follow-up periods.

CONCLUSION: This pilot study determined TCT to be a feasible, safe, accelerated, and promising adjunctive treatment for acute depression in the adolescent population. This study has been submitted for publication and is currently under review.

21 Patient Preferences Concerning the Efficacy and Side-effect Profile of Schizophrenia Medication: A Survey of Patients Living with Schizophrenia

Eric D Achtyes, MD, MS¹; Adam Simmons, MPH²; Anna Skabeev, MD, MBA³; Ying Jiang, PhD⁴; Patricia Marcy, BSN⁵; Nikki Levy, BS⁶; and Peter J Weiden, MD⁷

¹ Associate Professor of Psychiatry and Director of the Division of Psychiatry and Behavioral Medicine, Michigan State University College of Human Medicine, Grand Rapids, MI

² Director, Clinical Program Management, Alkermes, Inc., Waltham, MA

³ Associate Director, Patient Engagement, Alkermes, Inc., Waltham, MA

⁴ Director, Biostatistics, Alkermes, Inc., Waltham, MA

⁵ Executive Director, Vanguard Research Group, North Shore-LIJ Health System, FL

⁶ Vice President, Patient Engagement, Alkermes, Inc., Waltham, MA

⁷ Senior Director, Medical Affairs, Alkermes, Inc., Waltham, MA

ABSTRACT: Study objective: Patient-reported outcomes and preferences rely on reports of the status of a patient's health condition that comes directly from the patient, without interpretation or qualification by clinicians or investigators. Patient-reported outcomes and preferences have become an accepted approach in drug development. As part of this effort, we assessed the relative importance to patients with schizophrenia of

trying a new antipsychotic that might improve symptoms in the context of common antipsychotic side effects, especially weight gain. Information from surveys such as this one can provide pilot guidance about what might be acceptable versus unacceptable trade-offs when considering new therapies for schizophrenia.

METHODS: We prospectively administered a cross-sectional survey to 250 patients with clinical diagnoses of schizophrenia or schizoaffective disorder, aged ≥ 18 years, from five US outpatient community clinics, regarding the importance of efficacy and side effects on treatment decisions involving medications. Sixty-four percent ($n = 160$) of the patients were male; mean age was 43 years (range: 18–72 years); mean weight was 91 kg (range: 49–182 kg); and mean body mass index was 30.3 kg/m² (range: 15.3–63.3 kg/m²).

RESULTS: Patients rated both efficacy and side effects as important attributes of medication for schizophrenia treatment, with 88.5% identifying the ability to think more clearly as an important property of their medication. Patients identified efficacy and side effects as important drivers to take their prescribed medicine (endorsed as very or most important by 94.3% and 84.0% of patients, respectively). Patients identified weight gain, physical restlessness and somnolence as significant side effects of current treatments for schizophrenia (very/most important by 61.5%, 60.4%, and 58.9%, respectively). When asked about willingness to change antipsychotics, anticipated weight gain had a strong negative influence on willingness to try a new antipsychotic, with 44.9% of patients declining to try a medication that would lead to a weight gain of 3–5 kg, and 70.8% of patients declining for an anticipated weight gain of 5–9 kg.

CONCLUSION: Patients living with schizophrenia or schizoaffective disorder are influenced by many factors when considering whether to take their prescribed medication, including efficacy and side effects. It is important for clinicians to assess patient-specific concerns and develop a comprehensive treatment plan to maximize adherence to prescribed therapies.

Funding Acknowledgements: This study was funded by Alkermes, Inc.

22 Using Light to Unveil Depression: The Role of Optogenetics

Aurelio Lourenco Diniz¹; Freddy Escobar-Montealegre, MD²; and Marcela Pellegrini Peçanha, PhD³

¹ Medical Student, Pontifical Catholic University of São Paulo, Sorocaba, São Paulo, Brazil