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, MS<sup>1</sup>; Adam Simmons, MPH<sup>2</sup>; Anna Skabeev, MD, MBA<sup>3</sup>; Ying Jiang, PhD<sup>4</sup>; Patricia Marcy, BSN<sup>5</sup>; Nikki Levy, BS<sup>6</sup>; and Peter J Weiden, MD<sup>7</sup>

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

<sup>2</sup> Director, Clinical Program Management, Alkermes, Inc., Waltham, MA

<sup>3</sup> Associate Director, Patient Engagement, Alkermes, Inc., Waltham, MA

 <sup>4</sup> Director, Biostatistics, Alkermes, Inc., Waltham, MA
<sup>5</sup> Executive Director, Vanguard Research Group, North Shore-LIJ Health System, FL

<sup>6</sup> Vice President, Patient Engagement, Alkermes, Inc., Waltham, MA

<sup>7</sup> 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 crosssectional survey to 250 patients with clinical diagnoses of schizophrenia or schizoaffective disorder, aged  $\geq 18$ 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/m<sup>2</sup> (range: 15.3–63.3 kg/m<sup>2</sup>).

**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 Diniz<sup>1</sup>; Freddy Escobar-Montealegre, MD<sup>2</sup>; and Marcela Pellegrini Peçanha, PhD<sup>3</sup>

<sup>1</sup> Medical Student, Pontifical Catholic University of São Paulo, Sorocaba, São Paulo, Brazil