

## Introduction

# Weighing the Evidence: Weight Management Insights for Treating Major Mental Illness

Leslie Citrome, M.D., M.P.H.

Second-generation antipsychotics (SGAs), or “atypical” antipsychotics, have become the dominant treatment choice for patients with schizophrenia and have also been used as monotherapy and in combination therapy with lithium and anticonvulsants in the treatment of bipolar disorder. The advantage of SGAs over the older “neuroleptics” has principally been in their lower propensity for extrapyramidal side effects, including tremor, rigidity, and akathisia. Also, evidence has shown that SGAs have a broad spectrum of therapeutic action regarding negative symptoms, including mood dysregulation, hostility, cognitive dysfunction, and comorbid alcohol and substance abuse.<sup>1</sup> However, SGAs are not free of untoward events; one of the most troubling adverse events is treatment-associated weight gain. Weight gain can lead to a cascade of physical health problems, including elevations in blood lipids, development of insulin resistance, hypertension, and ultimately the acceleration of cardiovascular disease and its attendant mortality risk. The SGAs available today differ in their propensity for weight gain; the degree of weight change can also vary from patient to patient. The efficacy of SGAs can also differ from drug to drug and from patient to patient, making medication selection and monitoring for weight gain a complex issue.

The 3 articles in this supplement to *The Journal of Clinical Psychiatry* provide both background information

and practical advice regarding weight gain associated with SGAs. The first article, “Treatment Decisions in Major Mental Illness: Weighing the Outcomes,” examines morbidity and mortality issues in people with serious mental illness and emphasizes a holistic treatment approach. A novel weight control program called “Healthy Living” is discussed in detail.<sup>2</sup> The second article, “The Effectiveness Criterion: Balancing Efficacy Against the Risks of Weight Gain,” provides some additional background material regarding obesity and then uses the lens of “number needed to treat”<sup>3</sup> to examine the results of the Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE) for schizophrenia.<sup>4-6</sup> Predictors of weight gain and recommendations for increased monitoring of patients are also discussed. The supplement concludes with the article “Weight Gain With Atypical Antipsychotics: Evidence and Insights,” which examines energy balance, effects of SGAs and combination treatments on weight, interventions designed to reduce weight gain, and the relationship between SGAs and insulin resistance.<sup>7</sup>

Together these 3 articles provide valuable information that clinicians will find useful for the care of their individual patients.

## REFERENCES

1. Citrome L, Volavka J. Atypical antipsychotics: revolutionary or incremental advance? *Expert Rev Neurother* 2002;2:69-88
2. Vreeland B. Bridging the gap between mental and physical health: a multidisciplinary approach. *J Clin Psychiatry* 2007;68(suppl 4):26-33
3. Citrome L, Stroup TS. Schizophrenia, Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE), and number needed to treat: how can CATIE inform clinicians? *Int J Clin Pract* 2006;60:933-940
4. Lieberman JA, Stroup TS, McEvoy JP, et al. Effectiveness of antipsychotic drugs in patients with chronic schizophrenia. *N Engl J Med* 2005;353:1209-1223
5. McEvoy JP, Lieberman JA, Stroup TS, et al. Effectiveness of clozapine versus olanzapine, quetiapine, and risperidone in patients with chronic schizophrenia who did not respond to prior atypical antipsychotic treatment. *Am J Psychiatry* 2006;163:600-610
6. Stroup TS, Lieberman JA, McEvoy JP, et al. Effectiveness of olanzapine, quetiapine, risperidone, and ziprasidone in patients with chronic schizophrenia following discontinuation of a previous atypical antipsychotic. *Am J Psychiatry* 2006;163:611-622
7. Henderson DC, Copeland PM, Borba CP, et al. Glucose metabolism in patients with schizophrenia treated with olanzapine or quetiapine: a frequently sampled intravenous glucose tolerance test and minimal model analysis. *J Clin Psychiatry* 2006;67:789-797

---

*From the Department of Psychiatry, New York University School of Medicine, New York, and the Nathan S. Kline Institute for Psychiatric Research, Orangeburg, N.Y.*

*The articles in this supplement are derived from the series of audio/Web programs “Weighing the Evidence: Weight Management Insights for Treating Major Mental Illness,” which was broadcast between April and May of 2007 and supported by an educational grant from Eli Lilly and Company.*

*Dr. Citrome is a consultant for Jazz, Bristol-Myers Squibb, Eli Lilly, and GlaxoSmithKline; has received honoraria from AstraZeneca, Eli Lilly, Pfizer, and Abbott; has received research support from Barr, AstraZeneca, Pfizer, Forest, and Janssen; and is a stock shareholder of Abbott, Merck, Eli Lilly, Pfizer, and Cardinal Health.*

*Corresponding author and reprints: Leslie Citrome, M.D., M.P.H., Nathan Kline Institute for Psychiatric Research, 140 Old Orangeburg Rd., Orangeburg, NY 10962 (e-mail: citrome@nki.rfmh.org).*