## Introduction

## Recent Advances in Treatments for Schizophrenia

John M. Kane, MD, Chair

significant advances have been made in treatments for schizophrenia since the introduction of chlorpromazine, the first antipsychotic medication, in the 1950s. Although antipsychotics are the cornerstone of pharmacologic treatment of schizophrenia, room for improvement remains, because many patients do not respond adequately to or cannot tolerate available agents. To provide the best care for their patients with schizophrenia and most effectively use the expanding pool of available treatments, psychiatrists need to be familiar with the clinical and pharmacologic profile of all currently available antipsychotics, including the most recently introduced agents.

The goal of this supplement, which is based on a series of teleconferences with experts in this area, is to provide clinicians with an overview of currently available antipsychotics and their benefits and risks, review the most desirable characteristics to look for in new antipsychotics, and give clinicians a detailed overview of the 3 newest antipsychotics.

In the first article, Dr Rajiv Tandon discusses the effectiveness, safety, and tolerability of currently available antipsychotics. He notes that no consistent differences in efficacy have been found among available agents, with the exception of clozapine's superior efficacy for treatmentresistant schizophrenia. He highlights the multiple therapeutic benefits of agents that can produce potent antipsychotic effects without significant extrapyramidal symptoms or weight and metabolic abnormalities. He concludes that it is not clinically useful to make a categorical distinction between first- and second-generation antipsychotics, given the great variability in side effect profiles within these 2 classes. Instead, he recommends that "choice of antipsychotic medication should be based on individual preference, prior treatment response and side effect experience, medical history and risk factors, and adherence history, with side effect profile a major determinant of antipsychotic choice."

In the second article in the supplement, Dr Christoph U. Correll discusses characteristics clinicians would want to see in an ideal antipsychotic medication and considers how available agents measure up, drawing on pooled data analyses and meta-analyses of agents that have been in use long

Corresponding author: John M. Kane, MD, The Zucker Hillside Hospital, 75-59 263rd St, Glen Oaks, NY (psychiatry@nshs.edu).

J Clin Psychiatry 2011;72(suppl 1):3 (doi:10.4088/JCP.10075su1.00)

© Copyright 2011 Physicians Postgraduate Press, Inc.

enough to be included in such studies. Desirable properties he cites include comparable efficacy for positive symptoms, agitation, and aggression; better efficacy for negative and cognitive symptoms, relapse prevention, treatment-resistant illness, and associated comorbid problems (eg, depression, anxiety, and substance abuse); improved tolerability and subjective acceptability to patients; and improved ability to promote better functioning, subjective well-being, quality of life, and, ultimately, recovery. He also stresses the need to develop drug-specific biomarkers that can predict response in specific patient groups, an exciting new area of research.

The 3 most recently introduced antipsychotics have not been in use long enough to be included in the types of analyses Dr Correll reviewed. To help clinicians better understand how to use these new agents, we include a separate article on each. Dr Steven G. Potkin reviewed data on asenapine, Dr Leslie Citrome reviewed data on iloperidone, and I reviewed data on lurasidone. To make these articles as helpful as possible to clinicians, we followed exactly the same outline in all 3 so that it would be easy to compare information across the articles. In each case, we provided an overview of the drug's development and then reviewed information on its pharmacologic profile (pharmacokinetics and pharmacodynamics), efficacy in short- and longer-term trials, and safety and tolerability in short- and longer-term trials (including adverse effects and long-term health effects). For each drug, the author also provided a section giving guidance on how best to use that new agent in clinical practice.

We hope that the information in this supplement will help clinicians optimize their use of existing antipsychotics to improve individual outcomes, better understand the clinical profiles of the 3 most recently introduced antipsychotics, and better evaluate emerging data as new agents are introduced to the market.

Author affiliation: Department of Psychiatry, The Zucker Hillside Hospital, Glen Oaks, and Department of Psychiatry, Hofstra North Shore-LIJ School of Medicine, Hempstead, New York.

Potential conflicts of interest: In the past 12 months, Dr Kane has been a consultant for, a shareholder of, or received honoraria from the following: Alkermes, Amgen, Bristol-Myers Squibb, Cephalon, Eli Lilly, ICI Therapeutics, Janssen, Johnson & Johnson, Lundbeck, MedAvante, Merck, Novartis, Otsuka, Pierre Fabre, Roche, and Sunovion.

Funding/support: This Supplement was derived from the planning teleconference series "Recent Advances in Treatments for Schizophrenia," which was held in January and February 2011. The author acknowledges Ruth Ross, MA, Project Manager, Healthcare Global Village, for editorial assistance. The teleconference and the preparation and dissemination of this article and supplement were supported by an educational grant from Sunovion Pharmaceuticals Inc.