# CNS SPECTRUMS®

THE INTERNATIONAL JOURNAL OF NEUROPSYCHIATRIC MEDICINE

# **EXPERT REVIEW SUPPLEMENT**

# THE IMPACT, IDENTIFICATION, AND MANAGEMENT OF ATTENTION-DEFICIT/HYPERACTIVITY DISORDER IN ADULTS

#### **AUTHORS**

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#### **ABSTRACT**

Attention-deficit/hyperactivity disorder (ADHD) was originally believed to be a childhood condition that did not progress through adolescence and into adulthood. However, it is now understood that impairments associated with this disorder do persist into adulthood in up to two thirds of affected patients. Nevertheless, the presenting symptoms typically change over time, and common comorbidities, such as depression, bipolar disorder, and anxiety disorders, often become more pronounced in adults. These developments can combine to compromise timely identification of the disorder in adults and delay or prevent effective treatment. There is now a considerable body of evidence that describes the neuropsychological basis for ADHD, and functional imaging studies in adults with ADHD support the hypothesis that these patients fail to utilize the most efficient pathways to process information. Both dopamine and norepinephrine are believed to play an important role in the development of ADHD. Over the past decade, there has been substantial progress in the diagnosis and management of ADHD in adults. Although amphetamines continue to be first-line therapy, new treatment options may improve the overall benefit-risk profile in many patients.

This expert review supplement will explore important considerations in applying the latest advances in the knowledge base regarding this disorder to everyday clinical practice. Lenard A. Adler, MD, discusses the scope of the problem posed by ADHD as children with the disorder become adolescents and adults, including the challenges of recognizing a disease that presents differently in adults compared to its traditional manifestation in children. Jeffrey H. Newcorn, MD, addresses some of the practical aspects of diagnosis and management of ADHD, including an overview of pharmacologic options. Lastly, Stephen V. Faraone, PhD, examines the impact of adult ADHD in society, and discusses methods to reduce the impact of the disorder, in part by understanding how ADHD affects the patient's day-to-day life.

#### EXPERT REVIEW SUPPLEMENT

An expert panel review of clinical challenges in psychiatry

## **Accreditation Statement/Credit Designation**





This activity has been planned Irvine and implemented in accordance SCHOOL OF MEDICINE with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsor-

ship of University of California, Irvine School of Medicine and The Physicians Academy for Clinical and Management Excellence. University of California, Irvine School of Medicine is accredited by the ACCME to provide continuing medical education for physicians.

The University of California, Irvine School of Medicine designates this educational activity for a maximum of 2 AMA PRA Category 1 Credits<sup>TM</sup>. Physicians should only claim credit commensurate with the extent of their participation in the activity.

## **Faculty Disclosure Policy Statement**

It is the policy of the University of California, Irvine School of Medicine and the University of California CME Consortium to ensure balance, independence, objectivity, and scientific rigor in all CME activities.

#### Unlabeled Use Statement/Resolution

This CME activity presents information on the treatment of attention-deficit/hyperactivity disorder (ADHD) in adolescents and adults. The faculty disclose that discussion may include use of certain drugs or classes of drug in an off-label setting: use of modafinil as treatment for patients with ADHD; use of the anti-depressant buproprion or the norepinephrine inhibitor atomoxetine to treat patients with ADHD and comorbid depression; the use of lisdexamfetamine to treat ADHD in patients older than 12 years of age with comorbid bipolar disorder; and the use of stimulant medications (as a class) in patients with a known or suspected substance abuse disorder, especially the use of long-acting, extended release stimulant formulations that are generally considered more difficult to abuse and to have less likeability.

The supplement has been peer-reviewed for evidence-base and fair balance.

## **California Assembly Bill 1195**

California Assembly Bill 1195 requires continuing medical education activities with patient care components to include curriculum in the subjects of cultural and linguistic competency. It is the intent of the bill, which went into effect on July 1, 2006, to encourage physicians and surgeons, CME providers in the state of California, and the Accreditation Council for Continuing Medical Education to meet the cultural and linguistic concerns of a diverse patient population through appropriate professional development. The planners, speakers and authors of this CME activity have been encouraged to address issues relevant in their topic area. Resources and information about AB1195 can be found on our website at http://cme.uci.edu.

#### **Intended Audience**

This activity has been designed for psychiatrists, general practitioners, pediatricians, and other health care professionals involved in the management of adolescent to adult ADHD.

## **Educational Objectives**

At the conclusion of this activity, participants will be better able to:

- Recognize the impact of ADHD on the lives of adults, including comorbid substance abuse, impaired and potentially dangerous driving performance, and underachievement in the workplace and resulting employment difficulties
- Select and incorporate available screening, assessment, and diagnostic approaches into clinical practice, in order to more effectively diagnose ADHD in adolescent and adult populations
- Consider important factors in pharmacotherapy for ADHD, and understand the possible role of nonpharmacologic interventions

## Faculty Affiliations and Disclosures

Lenard A. Adler, MD, is a consultant to Abbott, Cephalon, Cortex, Eli Lilly, Merck, Novartis, Ortho-McNeil, Pfizer, and Shire; is on the speaker's bureau of Shire; and has received research/grant support from Abbott, Bristol-Myers Squibb, Cortex, Eli Lilly, Merck, the National Institute of Mental Health, Neurosearch, Novartis, Ortho-McNeil, Pfizer, and Shire.

Jeffrey H. Newcorn, MD, is an advisor for Cephalon, Cortex, Eli Lilly, Lupin, Novartis, Ortho-McNeil, Pfizer, and Shire; and is on the speaker's bureaus of Eli Lilly, Novartis, Ortho-McNeil, and Shire.

Stephen V. Faraone, PhD, is a consultant to and on the speaker's bureaus of Cephalon, Eli Lilly, Novartis, Ortho-McNeil, and Shire as well as a consultant to Noven.

#### **Acknowledgment of Commercial Support**

This activity is jointly sponsored by University of California, Irvine School of Medicine and The Physicians Academy for Clinical and Management Excellence.

This activity is supported by an educational grant from McNeil Pediatrics division of McNeil-PPC, Inc., administered by Ortho-McNeil Janssen Scientific Affairs, LLC.

#### To Receive Credit for this Activity

To complete this CME activity, the participant must read the supplement, successfully complete the posttest (with a minimum score of 70%) on pages 18 and 19 and evaluation, and submit these forms to the attention of Amy Klopfenstein, 60 East 42nd Street, Suite 1022, New York, NY 10165 or by fax at 781-939-2675. A certificate will be mailed within 30 days of receipt.

Release Date: December 15, 2007. Expiration Date: December 14, 2008.

Estimated time to complete this activity: 2 hours

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CNS Spectrums (ISSN 1092-8529) is published monthly by MBL Communications. Inc. 333 Hudson Street. 7th Floor. New York, NY 10013. One-year subscription rates; domestic \$120: foreign \$195; in-training \$85. For subscriptions: Tel: 212-328-0800; Fax: 212-328-0600; Web: www.cnsspectrums.com. Single issues: \$15 - email ks@mblcommunications.com.

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