Aripiprazole: A Novel Atypical Antipsychotic Drug With a Uniquely Robust Pharmacology

Marilyn A Davies, Douglas J. Sheffler, and Bryan L. Roth

Departments of Biochemistry, Psychiatry and Neurosciences, Case Western Reserve University Medical School, and Department of Psychiatry, University Hospitals of Cleveland, Ohio, USA

Keywords: Aripiprazole — Atypical antipsychotics — Bipolar disorder — Schizophrenia

ABSTRACT

Aripiprazole (Abilify®) is an atypical antipsychotic drug that has been recently introduced for clinical use in the treatment of schizophrenia. Aripiprazole has a unique pharmacologic profile that includes partial agonism at several G-protein coupled receptors (GPCRs) [especially dopamine (D2) and 5-HT1A] and antagonistic action at others (especially 5-HT2A). Clinical trials indicate that aripiprazole is effective in treating the positive and negative symptoms of schizophrenia. In short-term studies rapid onset of action (within one week) has been demonstrated. Preliminary data indicate that aripiprazole may also be effective in the treatment of manic symptoms of bipolar disorder. At recommended doses, aripiprazole appears to be safe and well tolerated in most adult patients with schizophrenia and schizoaffective disorder. There is only limited information available on the use of aripiprazole in children and adolescents, and pilot data suggest that a revised dosing strategy, based on weight, is indicated in this population. In the long-term studies, the use of aripiprazole was associated with continued efficacy, good compliance and increased time-to-relapse.

Aripiprazole represents the first functionally selective atypical antipsychotic drug.

Address correspondence and reprint requests to: Bryan L. Roth MD, PhD, Rm W441, Department of Biochemistry, Case Western Reserve University Medical School, 2109 Adelbert Road, Cleveland, OH 44106, USA. Tel.: +1 (216) 368-2730 Fax: +1 (216) 368-3419. E-mail: bryan.roth@case.edu

Disclosure. Dr. Bryan L. Roth served as a consultant for Bristol-Myers Squibb, Otsuka Pharmaceuticals, Eli Lilly, Pfizer, Neotherapeutics, Arena Pharmaceuticals, Memory Pharmaceuticals, SK Corporation and Forest Pharmaceuticals.