Aripiprazole Lauroxil Phase 3 Schizophrenia Study Results Published in Journal of Clinical Psychiatry

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— Once-Monthly Injectable Medicine Significantly Improved Schizophrenia Symptoms —

— Multiple Dose Strengths May Offer Flexibility To Address Individual Patient Needs —

— Data from Study Served as Basis for NDA Filing With FDA Action Date of Aug. 22, 2015 —

DUBLIN--(BUSINESS WIRE)--Alkermes plc (NASDAQ: ALKS) today announced the publication of results from its phase 3 clinical trial of aripiprazole lauroxil for the treatment of schizophrenia in the *Journal of Clinical Psychiatry*. Data from the trial showed that multiple dose strengths of aripiprazole lauroxil administered once monthly demonstrated statistically significant reductions in schizophrenia symptoms, compared to placebo. Aripiprazole lauroxil is an investigational, novel, long-acting injectable atypical antipsychotic for the treatment of schizophrenia designed to offer patients an alternative to oral antipsychotic medicines that must be taken daily. Aripiprazole lauroxil was developed based on Alkermes' proprietary LinkeRx® technology and is designed to provide dosing flexibility to address the unique needs of patients with schizophrenia. Once in the body, aripiprazole lauroxil converts to aripiprazole, a molecule that is commercially available under the name ABILIFY®. Results of the study served as the basis for Alkermes' New Drug Application (NDA) to the U.S. Food and Drug Administration (FDA) to gain marketing approval of aripiprazole lauroxil for the treatment of schizophrenia, with a regulatory action date of Aug. 22, 2015.

> "Aripiprazole lauroxil is designed to help address the real-world, individual needs of patients and healthcare providers by providing dosing flexibility in a ready-to-use format."

"This published study adds to the body of evidence that is influencing the evolution of the treatment landscape for schizophrenia, as more physicians are now recognizing the potential benefits of long-acting injectable antipsychotics and considering their use earlier in disease progression," said study author Henry Nasrallah, M.D., Chair, Department of Neurology and Psychiatry at Saint Louis University School of Medicine. "These statistically significant efficacy data demonstrated aripiprazole lauroxil's ability to provide clinically meaningful symptom control, showing its potential as a new treatment option to help people with schizophrenia."

The phase 3, randomized, multicenter, double-blind, placebo-controlled study of aripiprazole lauroxil evaluated 623 patients with schizophrenia. Patients treated once monthly with either 441 mg or 882 mg of aripiprazole lauroxil demonstrated statistically significant reductions from baseline in Positive and Negative Syndrome Scale (PANSS) total scores at Week 12, compared to placebo. The improvement from baseline to Week 12 in PANSS total scores was clinically meaningful and statistically significant in both aripiprazole lauroxil dose groups, with a placebo-adjusted mean PANSS score reduction of 10.9 points for the 441 mg dose group ($p<0.001$) and 11.9 points for the 882 mg dose group ($p<0.001$). In addition to meeting the prespecified primary efficacy endpoint of PANSS total score reduction, the study also met the prespecified key secondary endpoint of improvement on the Clinical Global Impression – Improvement (CGI-I) scale for each aripiprazole lauroxil group versus placebo at Week 12 ($p<0.001$). Both of the aripiprazole lauroxil dosing groups demonstrated significant improvement at all post-baseline visits. Furthermore, all other secondary endpoints were found to be statistically significant across both doses.

Aripiprazole lauroxil was generally well tolerated in the phase 3 study. The most common adverse events in the study were insomnia, akathisia and headache.

"Schizophrenia is a serious, chronic disease, and healthcare providers need new, innovative treatment options to address the individual needs of patients," said Elliot Ehrich, M.D., Chief Medical Officer of Alkermes. "Aripiprazole lauroxil is designed to help address the real-world, individual needs of patients and healthcare providers by providing dosing flexibility in a ready-to-use format."

Study Design

The phase 3, randomized, multicenter, double-blind, placebo-controlled study was designed to assess the efficacy, safety and tolerability of aripiprazole lauroxil in patients experiencing acute exacerbation of schizophrenia. The trial included adult patients who met the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision* (*DSM-IV-TR*®) criteria for schizophrenia and had a PANSS total score of 70 or higher at study baseline.

A total of 623 patients were randomized to receive once-monthly intramuscular injections of aripiprazole lauroxil 441 mg, aripiprazole lauroxil 882 mg or a matching placebo injection of either low volume or high volume for 12 weeks. Following randomization, patients received their first injection along with daily oral study drug for the first three weeks. Patients randomized to the two aripiprazole lauroxil treatment groups received oral aripiprazole for those initial three weeks, while patients randomized to the placebo group received matching oral placebo for three weeks. A total of 596 patients were included in the full analysis set, as defined by those who received at least one dose of study drug and had at least one primary efficacy assessment following administration of study drug.

The primary efficacy endpoint of the study was the mean change from baseline at Week 12 in PANSS total score, using an analysis of covariance (ANCOVA) with a last observation carried forward (LOCF) approach. The Hommel procedure was used for multiple hypothesis testing. Efficacy was also analyzed using a mixed model for repeated measures (MMRM) as a sensitivity analysis.

All participants in the double-blind portion of the study were eligible to continue in an open-label phase and receive aripiprazole lauroxil for an additional 12 months. The objective of the extension phase of the study is to assess the safety and long-term durability of effect of once-monthly

aripiprazole lauroxil.

About Aripiprazole Lauroxil

Aripiprazole lauroxil is an injectable atypical antipsychotic with one-month and extended-duration formulations in development for the treatment of schizophrenia. Once in the body, aripiprazole lauroxil converts to aripiprazole, which is commercially available under the name ABILIFY®. As a long-acting investigational medication based on Alkermes' proprietary LinkeRx ® technology, aripiprazole lauroxil is designed to have multiple dosing options and to be administered in a ready-to-use, pre-filled product format.

About Schizophrenia and Long-Acting Medicines

Schizophrenia is a chronic, severe and disabling brain disorder. The disease is marked by positive symptoms (hallucinations and delusions) and negative symptoms (depression, blunted emotions and social withdrawal), as well as by disorganized thinking. An estimated 2.4 million American adults have schizophrenia,1 with men and women affected equally. Worldwide, it is estimated that one person in every 100 develops schizophrenia, which is one of the most serious types of mental illness. Long-acting injectable antipsychotics provide patients with blood concentrations of active drug that remain within a therapeutic range for an extended period of time2 and allow healthcare providers to track patient adherence.3

About Alkermes

Alkermes plc is a fully integrated, global biopharmaceutical company developing innovative medicines for the treatment of central nervous system (CNS) diseases. The company has a diversified commercial product portfolio and a substantial clinical pipeline of product candidates for chronic diseases that include schizophrenia, depression, addiction and multiple sclerosis. Headquartered in Dublin, Ireland, Alkermes plc has an R&D center in Waltham, Massachusetts; a research and manufacturing facility in Athlone, Ireland; and a manufacturing facility in Wilmington, Ohio. For more information, please visit Alkermes' website at www.alkermes.com.

Note Regarding Forward-Looking Statements

Certain statements set forth in this press release constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, including, but not limited to, statements concerning: the company's expectations and timeline for regulatory action by the FDA relating to the NDA submission for aripiprazole lauroxil for the treatment of schizophrenia; and the potential therapeutic value, attributes, and commercial potential of aripiprazole lauroxil. The company cautions that forward-looking statements are inherently uncertain. Although the company believes that such statements are based on reasonable assumptions within the bounds of its knowledge of its business and operations, the forward-looking statements are neither promises nor guarantees and they are necessarily subject to a high degree of uncertainty and risk. Actual performance and results may differ materially from those expressed or implied in the forward-looking statements due to various risks and uncertainties. These risks and uncertainties include, among others: whether aripiprazole lauroxil will be approved by regulatory authorities for the treatment of schizophrenia by Aug. 22, 2015 or at all; if approved, whether aripiprazole lauroxil will be commercialized successfully; whether aripiprazole lauroxil could be shown ineffective or unsafe; and those risks described in the Alkermes plc Annual Report on Form 10-K for the fiscal year ended Dec. 31, 2014, and in any other subsequent filings made by the company with the U.S. Securities and Exchange Commission (SEC), which are available on the SEC's website at www.sec.gov. The information contained in this press release is provided by the company as of the date hereof, and, except as required by law, the company disclaims any intention or responsibility for updating or revising any forward-looking information contained in this press release.

LinkeRx® is a registered trademark of Alkermes Pharma Ireland Limited. ABILIFY® is a registered trademark of Otsuka Pharmaceutical Co., Ltd. *DSM-IV-TR*® is a registered trademark of the American Psychiatric Association.

1National Alliance on Mental Illness. Accessed on June 8, 2015 from http://www.nami.org/Learn-More/Mental-Health-Conditions/Schizophrenia.
2Patel MX and David AS. Why aren't depot antipsychotics prescribed more often and what can be done about it? *Adv Psychiatr Treat*, 2005; 11: 203-213.
3Kane JM et al. Guidelines for depot antipsychotic treatment in schizophrenia. *Eur Neuropsychopharmacol*, 1998; 8(1): 55-66.

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