

NEWS

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Clinical Data, Inc. Announces Positive Results from Second Phase III Trial of Vilazodone for Depression

- On Track to File NDA This Year -

- Conference Call to Discuss Results Today at 8:30 am EST -

NEWTON, Mass. – **June 2, 2009** – Clinical Data, Inc. (NASDAQ: CLDA) today announced positive top-line results from the second of two Phase III trials of its investigational compound, vilazodone, for the treatment of major depressive disorder (MDD). In the study, vilazodone achieved statistically significant results on the primary endpoint and secondary efficacy endpoints related to MDD. Study results suggest that vilazodone was generally well-tolerated and the efficacy and safety data were consistent with the findings from the previous Phase III trial. In addition, study findings corroborate that effects of vilazodone on sexual function were comparable to placebo, an important finding since many antidepressants have been associated with causing or exacerbating sexual dysfunction. A statistically significant improvement in the symptoms of anxiety associated with MDD was also observed. Clinical Data intends to file these data as the second of two positive registration studies in support of a New Drug Application (NDA) with the U.S. Food and Drug Administration (FDA) for vilazodone for the treatment of MDD by the end of 2009.

“We are delighted with these top-line Phase III results, which provide further evidence of the potential of vilazodone as a first-in-class drug for the treatment of depression,” said Carol R. Reed, MD, Executive Vice President and Chief Medical Officer of Clinical Data. “Physicians and patients continue to seek new treatment options for MDD. With a new, dual mechanism of action and the potential for a favorable safety profile, we believe that, if approved, vilazodone will have broad clinical utility for the treatment of MDD. The positive results from this study, coupled with the results of the prior Phase III and long-term safety studies, will provide the basis for our NDA filing later this year for vilazodone for the treatment of depression.”

Separately, the Phase III study also sought to replicate a proprietary biomarker that had been identified in the first Phase III trial as potentially associated with response to vilazodone. Although this goal was not met, biomarker analyses remain ongoing. “While our lead biomarker of response to vilazodone did not replicate in this trial, it is one in a series of candidate biomarkers that we will continue to evaluate,” continued Dr. Reed.

Vilazodone, if approved, would represent a first-in-class drug for the treatment of depression, due to its novel dual mechanism of action as both a potent and selective serotonin reuptake inhibitor (SSRI) and a partial agonist of the 5-hydroxytryptamine 1a (5-HT_{1A}) receptor. Thus, vilazodone combines

first-line therapy for MDD with 5-HT_{1A} partial agonism, an accepted adjunctive treatment for MDD and a first-line therapy for anxiety disorders.

This second Phase III study was a randomized, double-blind, placebo-controlled trial of 481 patients with MDD conducted at 12 sites in the United States. The study achieved its primary endpoint of demonstrating a reduction in the symptoms of depression, as measured by a statistical separation from placebo, in the Montgomery-Åsberg Depression Rating Scale (MADRS) total score after up to 8 weeks of treatment (p=0.007, ITT/LOCF). Vilazodone also met a key secondary endpoint as demonstrated by a statistically significant reduction in depression symptoms, compared to placebo, as measured by mean change from baseline on the Hamilton Depression Rating Scale (HAM-D17, p=0.021). These two rating scales are the most common psychometric measures of response to antidepressants used in clinical trials. There was also a statistically significant improvement in symptoms of anxiety associated with depression, as measured by the Hamilton Anxiety Rating Scale (HAM-A, p=0.038). The effects of vilazodone on sexual function were comparable to placebo, as measured by a validated sexual function scale, the Changes in Sexual Function Questionnaire (CSFQ).

Vilazodone was generally well tolerated. The discontinuation rate due to adverse events for patients on vilazodone was 4.3% vs. 1.7% for those treated with placebo. In this study, the most common adverse events associated with vilazodone included diarrhea (31% vilazodone vs. 11% placebo), nausea (26% vs. 6%), and headache (13% vs. 10%). One patient out of 240 patients randomized to the vilazodone group discontinued the trial due to diarrhea and three patients due to nausea.

In September 2007, Clinical Data announced that vilazodone demonstrated both statistical and clinical significance on primary and secondary endpoints for efficacy in its first Phase III trial. The Company has also completed its long-term safety study of vilazodone, exceeding the typical exposure requirements for an NDA filing.

"Clinical Data has successfully completed two Phase III trials for vilazodone, an extraordinary achievement for our Company which has continued to deliver positive results within aggressive timeframes," said Drew Fromkin, President and CEO of Clinical Data. "We will continue to work diligently to complete the NDA process and commercialize vilazodone. Our success with vilazodone provides a strong foundation for our pursuit of first-in-class or best-in-category therapies, including Stedivaze, a vasodilator for cardiac stress imaging, which is expected to begin a Phase III program shortly."

Conference Call Information:

Date: Tuesday, June 2, 2009

Time: 8:30 a.m. ET

Internet: The live webcast can be accessed at www.clda.com through the Investor Relations tab.

Telephone: Domestic dial 877-340-7912; International dial 719-325-4904

Access code for both domestic and international callers: 2637742

About Depression and the Antidepressant Market

According to the National Institute of Mental Health (NIMH), 18.1 million Americans suffered from depression in 2007. In addition, major depressive disorder is the leading cause of disability in individuals ages 15–44. IMS Health's National Prescription Audit reported more than 200 million prescriptions for antidepressants in 2008. The Surgeon General's Office also estimates that 5.3% of

American adults, approximately 17 million people, suffer from depressive illness. It is believed that some people may be genetically predisposed to depression and that it may be possible to identify certain genetic biomarkers that might help to predict the likelihood of a patient's pharmacological response to a given antidepressant.

About Clinical Data, Inc.

Clinical Data is a biotechnology company focused on the discovery, development and commercialization of targeted therapeutics: From Targeted Science to Better Healthcare[®]. Clinical Data is leveraging advances in molecular discovery to provide tangible benefits for patients, healthcare professionals and payors worldwide. The Company is advancing its late-stage, first-in-class or potential best-in-category drug candidates including vilazodone, for the treatment of depression, and Stedivaze, a vasodilator for cardiac stress imaging, to be followed by promising drug candidates in other therapeutic areas such as inflammatory diseases and oncology. Coupled with its biomarker expertise and portfolio of intellectual property, Clinical Data plans to develop and commercialize targeted therapeutics, as well as genetic and pharmacogenomic tests to detect serious diseases and help predict drug safety, tolerability, and efficacy, thereby improving patient health while reducing costs. To learn more, please visit the Company's website at www.clda.com.

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SAFE HARBOR STATEMENT UNDER THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

This press release contains certain forward-looking information and statements that are intended to be covered by the safe harbor for forward looking statements provided by the Private Securities Litigation Reform Act of 1995. Forward-looking statements are statements that are not historical facts. Words such as "expect(s)", "feel(s)", "believe(s)", "will", "may", "anticipate(s)" and similar expressions are intended to identify forward-looking statements. These statements include, but are not limited to, statements about our ability to obtain regulatory approval for, and successfully introduce vilazodone; our ability to expand our long-term business opportunities; and all other statements regarding future performance. All such information and statements are subject to certain risks and uncertainties, the effects of which are difficult to predict and generally beyond the control of the Company, that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. These risks and uncertainties include, but are not limited to, whether vilazodone will advance further in the clinical trials process and whether and when, if at all, vilazodone will receive final approval from the U.S. Food and Drug Administration and equivalent foreign regulatory agencies and for which indications; whether vilazodone will be successfully marketed if approved; the extent to which

genetic markers are predictive of clinical outcomes and drug efficacy and safety; the strength of our intellectual property rights; competition from pharmaceutical, biotechnology and diagnostics companies; the development of and our ability to take advantage of the market for pharmacogenetic and biomarker products and services; general economic downturns; and those risks identified and discussed by Clinical Data in its filings with the U.S. Securities and Exchange Commission. Readers are cautioned not to place undue reliance on these forward looking statements that speak only as of the date hereof. Clinical Data does not undertake any obligation to republish revised forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events. Readers are also urged to carefully review and consider the various disclosures in Clinical Data's SEC periodic and interim reports, including but not limited to its Annual Report on Form 10-K for the fiscal year ended March 31, 2008, Quarterly Report on Form 10-Q for the fiscal quarter ended December 31, 2008, and Current Reports on Form 8-K filed from time to time by the Company.

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