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Cerecor Reports Encouraging Topline Data from a NIH Sponsored Proof-of-Concept Trial of CERC-501 in Treatment-Resistant Depression

Clinically Meaningful Improvements Observed at Day 3

BALTIMORE, MD -- (Marketwired) -- 05/01/17 -- Cerecor Inc. (NASDAQ: CERC), a clinical-stage biopharmaceutical company developing treatments to make a difference in the lives of patients with neurological and psychiatric disorders, today announced topline clinical results from a small, proof-of-concept clinical trial sponsored by the National Institute of Mental Health ("NIMH") of the National Institutes of Health. This was a Phase 2 trial of CERC-501, a potent and selective oral kappa opioid receptor ("KOR") antagonist, in treatment resistant depression ("TRD") conducted under the leadership of Dr. Maurizio Fava of Massachusetts General Hospital ("MGH").

In this sequential parallel comparison design ("SPCD") trial entitled,*Proof of Concept Trial of CERC-501 Augmentation of Antidepressants Therapy in Treatment Resistant Depression,* CERC-501 showed a clinically meaningful 2.0-point difference from placebo on the Hamilton Rating Scale for Depression - 6 - items ("HAM-D-6"), change from baseline to 72 hours, which served as the primary efficacy measure. A 2.0-point difference between CERC-501 and placebo on the HAM-D-6 is comparable to a 4.0-point difference on the Hamilton Depression Rating Scale-17 (HDRS-17). Clinically meaningful differences were also observed across multiple, pre-specified, secondary outcome measures:

- Number of Responders (50% or greater reduction) on the HAM-D-6 at 72 hours
- Change in Montgomery-Asberg Depression Rating Scale ("MADRS")
- Change in the Perceived Stress Scale ("PSS")
- Change in Clinical Global Impression Severity ("CGI-S")
- Clinical Global Impression Improvement ("CGI-I") Score
- Change in Symptoms of Depression Questionnaire ("SDQ")
- Change in Positive Affect Scale ("PAS")

"These results provide additional support for the development of CERC-501 as an adjunctive treatment of major depressive disorder ('MDD')," said Uli Hacksell, Ph.D., Chief Executive Officer and Chairman of Cerecor. "We want to thank the NIMH for supporting the trial."

The trial was a randomized, double-blind, placebo-controlled, SPCD designed study in subjects with treatment resistant depression on stable antidepressant therapy. Subjects participated in two sequential 72 hour periods and received CERC-501 (10 mg or 20 mg) or

placebo. Placebo non-responders in Period 1 were re-randomized to either study drug or placebo in Period 2. Subjects received treatment at the beginning of each period. The results of Period 1 and 2 were averaged. The five-site trial was terminated early due to recruitment issues and eight subjects in total were randomized. Statistical testing was not performed due to the early termination and small sample size.

CERC-501 was generally well-tolerated with no serious adverse events reported and no discontinuations due to adverse events with CERC-501.

"The performance of CERC-501 in this Phase 2 proof-of-concept study is consistent with our original expectations when we designed the study," said Maurizio Fava, MD, Director of the Division of Clinical Research and Executive Vice Chair, Department of Psychiatry at MGH, and the principle investigator of the trial. "The results on the Perceived Stress Scale showed changes that have not historically been seen in only 3 days of treatment with standard antidepressants. In this experiment, at Day 3, subjects treated with adjunctive CERC-501 had a 3.5 point decrease from baseline while placebo treated patients had a 0.5-point increase in the Perceived Stress Scale."

Analysis of the data set is ongoing and will be presented by the study investigators at a future scientific conference in 2017.

About CERC-501

CERC-501 is a potent and selective oral KOR antagonist being developed as an adjunctive treatment of MDD and a therapy for substance use disorders. KORs have been shown to play an important role in stress, mood and addiction. CERC-501 has been observed to have activity in animal models of depression, substance withdrawal and dependence, and it has been generally well-tolerated in five human clinical trials.

Currently, three externally-funded clinical trials are being conducted to evaluate the use of CERC-501 in treating depressive symptoms, stress-related smoking relapse and cocaine addiction, respectively. One study is being conducted under the auspices of the National Institute of Mental Health, the second is a collaboration between Cerecor and Yale University with funding from the National Institutes of Health and the third is being conducted at Rockefeller University Hospital with funding from a private foundation.

The National Institute on Alcohol Abuse and Alcoholism at the National Institutes of Health has given Cerecor a $1.0 million grant to progress the development of CERC-501 for the treatment of Alcohol Use Disorder ("AUD"). In addition, the Department of Defense has provided research funding to conduct a study of CERC-501 in animal models for co-morbid Post-Traumatic Stress Disorder and AUD.

About Cerecor

Cerecor is a clinical-stage biopharmaceutical company developing innovative drug candidates to make a difference in the lives of patients with neurological and psychiatric disorders. In addition to CERC-501, Cerecor has three other novel compounds in development: CERC-301, CERC-611 and CERC-406.

CERC-301 is an oral, NR2B selective, NMDA receptor antagonist being developed as an

adjunctive treatment of MDD. CERC 301 may have the potential to be a first-in-class medication that may significantly reduce depressive symptoms in a matter of days. In a recent Phase 2 trial in MDD, CERC-301 missed the primary endpoint but the 20 mg dose showed signals of efficacy at day 2. Cerecor intends to present additional data from this trial at the American Society of Clinical Psychopharmacologists Annual Meeting, May 29 - June 2, 2017, and is currently evaluating multiple development options for CERC-301.

CERC-611 is a potent and selective Transmembrane AMPA Receptor Regulatory Proteins ("TARP")-γ8-dependent α-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid ("AMPA") receptor antagonist, which Cerecor plans to develop as an adjunctive therapy for the treatment of partial-onset seizures with or without secondarily generalized seizures in patients with epilepsy.

Cerecor has one preclinical stage asset, CERC-406, a brain penetrant catechol-O-methyltransferase inhibitor with potential precognitive activity.

Forward-Looking Statements

This press release may include forward-looking statements made pursuant to the Private Securities Litigation Reform Act of 1995. Forward-looking statements are statements that are not historical facts. Such forward-looking statements are subject to significant risks and uncertainties that are subject to change based on various factors (many of which are beyond Cerecor's control), which could cause actual results to differ from the forward-looking statements. Such statements may include, without limitation, statements with respect to Cerecor's plans, objectives, projections, expectations and intentions and other statements identified by words such as "projects," "may," "will," "could," "would," "should," "continue," "seeks," "aims," "predicts," "believes," "expects," "anticipates," "estimates," "intends," "plans," "potential" or similar expressions (including their use in the negative), or by discussions of future matters such as the development of product candidates or products, potential attributes and benefits of product candidates, the expected timing of the commencement of clinical trials, the expected timing of data from clinical trials, and other statements that are not historical. These statements are based upon the current beliefs and expectations of Cerecor's management but are subject to significant risks and uncertainties, including those detailed in Cerecor's filings with the Securities and Exchange Commission. Actual results may differ from those set forth in the forward-looking statements. Except as required by applicable law, Cerecor expressly disclaims any obligations or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in Cerecor's expectations with respect thereto or any change in events, conditions or circumstances on which any statement is based.

For more information about the Company and its products, please visitwww.cerecor.com.

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