Sage Therapeutics Receives Notification of PDUFA Extension for ZULRESSO™ (brexanolone) Injection

November 20, 2018

PDUFA goal date extended to March 19, 2019 to finalize REMS

No additional clinical data or information requested by the FDA

CAMBRIDGE, Mass.--(BUSINESS WIRE)--Nov. 20, 2018-- Sage Therapeutics, Inc. (NASDAQ: SAGE), a clinical-stage biopharmaceutical company developing novel medicines to treat life-altering central nervous system (CNS) disorders, today announced that the U.S. Food and Drug Administration (FDA) has extended the Prescription Drug User Fee Act (PDUFA) date for its Priority Review of the New Drug Application (NDA) for ZULRESSO™ (brexanolone) injection for the treatment of postpartum depression (PPD). The previously disclosed December 19, 2018 PDUFA goal date has been extended by a period of three months to March 19, 2019.

After the recent positive FDA Advisory Committee meeting, Sage submitted a proposed Risk Evaluation and Mitigation Strategies (REMS) program with Elements to Ensure Safe Use (ETASU) in response to the FDA's request. Under PDUFA VI, FDA can elect to extend the PDUFA goal date by three months for submission of a REMS with ETASU not submitted in the original NDA, and FDA has elected to do so. The FDA has not requested any additional clinical data or any additional information from the Company as part of the extension.

"Our primary goal remains bringing treatment to women suffering from PPD as quickly as possible. In light of this unexpected delay, we will work diligently with the FDA to ensure that the unmet medical need of women suffering with PPD can be addressed expeditiously," said Jeff Jonas, M.D., chief executive officer of Sage.

If approved, ZULRESSO is expected to be scheduled by the U.S. Drug Enforcement Administration (DEA), consistent with other approved GABAergic therapies. The DEA is required to issue an interim final rule controlling the drug within 90 days of approval. Preparations continue for a potential U.S. commercial launch of ZULRESSO for the treatment of PPD, which is now planned for June 2019, if the NDA is approved and post-DEA scheduling.

ZULRESSO has been granted Breakthrough Therapy Designation and is the first medicine under FDA review specifically for the treatment of PPD, the most common medical complication of childbirth. It is estimated that PPD affects approximately one in nine women who have given birth in the U.S. and 400,000 women annually. Symptoms of PPD may include sadness, anxiety, irritability, withdrawing from friends or family, having trouble bonding with her baby and thinking about harming herself or, more rarely, her baby.

On November 2, 2018, the FDA Psychopharmacologic Drugs Advisory Committee (PDAC) and Drug Safety and Risk Management Advisory Committee (DSaRM) jointly voted (17 yes, 1 no) that data support the favorable benefit-risk profile of ZULRESSO for the treatment of PPD when administered by qualified staff in a facility that has been certified under a REMS program. The committees based their joint recommendation on the safety and efficacy data from three placebo-controlled clinical studies.

About Postpartum Depression

Postpartum depression (PPD) is a distinct and readily identified major depressive disorder that is the most common medical complication of childbirth, affecting a subset of women typically commencing in the third trimester of pregnancy or within four weeks after giving birth. PPD may have devastating consequences for a woman and for her family, which may include significant functional impairment, depressed mood and/or loss of interest in her newborn, and associated symptoms of depression such as loss of appetite, difficulty sleeping, motor challenges, lack of concentration, loss of energy and poor self-esteem. Suicide is the leading cause of maternal death following childbirth. Postpartum depression is estimated to affect approximately one in nine women who have given birth in the U.S. and 400,000 women annually. More than half of these cases may go undiagnosed without proper screening. There are no FDA approved therapies specifically indicated for PPD and there is a high unmet medical need for improved pharmacological therapy in PPD.

About ZULRESSO™ (brexanolone) Injection

Brexanolone is an allosteric modulator of both synaptic and extrasynaptic $GABA_A$ receptors. Allosteric modulation of neurotransmitter receptor activity results in varying degrees of desired activity rather than complete activation or inhibition of the receptor. ZULRESSO™ (brexanolone) injection has completed Phase 3 clinical development for postpartum depression and a New Drug Application is currently under review with the U.S. Food and Drug Administration. ZULRESSO for the treatment of PPD has been granted Breakthrough Therapy Designation by the FDA and PRIority MEdicines (PRIME) designation from the European Medicines Agency (EMA). The FDA has conditionally accepted the proprietary name ZULRESSO for Sage's intravenous formulation of brexanolone.

About Sage Therapeutics

Sage Therapeutics is a clinical-stage biopharmaceutical company committed to developing novel medicines to transform the lives of patients with life-altering CNS disorders. Sage's lead product candidate, ZULRESSO™ (brexanolone) injection, has completed Phase 3 clinical development for postpartum depression and a New Drug Application is currently under review with the U.S. Food and Drug Administration. Sage is developing a portfolio of novel product candidates targeting critical CNS receptor systems, including SAGE-217, which is in Phase 3 development in major depressive disorder and postpartum depression. For more information, please visit www.sagerx.com.

Forward-Looking Statements

Various statements in this release concern Sage's future expectations, plans and prospects, including without limitation statements regarding: our expectations regarding the possible approval of our NDA filing for ZULRESSO™ (brexanolone) injection; the potential for ZULRESSO to be the first medication specifically indicated for PPD; our estimates of the prevalence of PPD; and other statements regarding our business and portfolio. These forward-looking statements are neither promises nor guarantees of future performance, and are subject to a variety of risks and uncertainties, many of which are beyond our control, which could cause actual results to differ materially from those contemplated in these forward-looking statements, including the risks that: the FDA may not agree with the recommendations of the joint Advisory Committee, and, despite the recommendation, may determine that the clinical and non-clinical data we have generated to date are insufficient to gain regulatory approval to launch and commercialize our product in PPD or may determine that additional trials or data are necessary in order to obtain approval; the FDA may not complete its review of our filing within the target timelines; the actual size of the PPD patient population may be significantly lower than our estimates and, even if ZULRESSO is successfully approved for PPD, it may only be used to treat a subset of the PPD population, particularly given the intravenous (IV) mode of administration, limitations on site of administration to a certified healthcare facility monitored by a qualified healthcare provider, and the necessity for a REMS; we may encounter unexpected safety, tolerability or other issues with ZULRESSO in ongoing clinical trials or in commercial use, if approved; we may not be able to successfully demonstrate the efficacy and safety of any of our other product candidates at each stage of development; success of any of our product candidates in early stage clinical trials may not be repeated or observed in ongoing or future studies of our product candidates; ongoing and future clinical results may not

support further development or be sufficient to gain regulatory approval to market our product candidates; and we may encounter technical and other unexpected hurdles in the development and manufacture of our product candidates; as well as those risks more fully discussed in the section entitled "Risk Factors" in our most recent Quarterly Report on Form 10-Q, and discussions of potential risks, uncertainties, and other important factors in our subsequent filings with the Securities and Exchange Commission. In addition, any forward-looking statements represent our views only as of today and should not be relied upon as representing our views as of any subsequent date. We explicitly disclaim any obligation to update any forward-looking statements.

View source version on businesswire.com: https://www.businesswire.com/news/home/20181120005168/en/

Source: Sage Therapeutics, Inc.

Investor Contact:
Paul Cox
617-299-8377
paul.cox@sagerx.com

Media Contact:
Maureen L. Suda
585-355-1134
maureen.suda@sagerx.com