



October 1, 2014

## Zafgen Announces Initiation of Phase 3 Trial of Beloranib in Prader-Willi Syndrome

BOSTON, Oct. 1, 2014 (GLOBE NEWSWIRE) -- Zafgen, Inc. (Nasdaq:ZFGN), a biopharmaceutical company dedicated to significantly improving the health and well-being of patients affected by obesity and complex metabolic disorders, today announced that the Company has initiated the first Phase 3 clinical trial, in the United States, with its lead product candidate, beloranib, in the treatment of Prader-Willi syndrome (PWS). PWS is a rare disease and the most common known genetic cause of life-threatening obesity. It is a complex metabolic syndrome characterized by hyperphagia (unrelenting hunger) and obesity resulting from impaired functioning of the hypothalamus.

The "bestPWS" trial (Beloranib Efficacy Safety and Tolerability in PWS), is a randomized, double-blind, placebo-controlled trial in obese adolescents (12 years of age and older) and adults with Prader-Willi syndrome to evaluate food-related behaviors, total body fat mass, and safety of beloranib. The bestPWS trial is expected to enroll 84 patients at 14 sites across the United States. Patients enrolled will be randomized to receive placebo, 1.8mg or 2.4mg of twice weekly subcutaneous injections during the randomized treatment period of six months. Patients who complete study treatment will have the option to enter a six month open label extension study where all participants will receive beloranib.

The two primary efficacy endpoints are planned to be changes in hyperphagia-related behaviors and/or total body fat mass from baseline to the end of randomized treatment. Key secondary endpoints include changes in lipid parameters and body weight. Additional assessments include quality of life (QoL) impact for patients and caregivers.

"The initiation of the bestPWS Phase 3 trial is a major milestone for Zafgen as we work toward our ultimate goal of improving the lives of patients affected by PWS and bringing beloranib to market," said Dr. Thomas Hughes, Ph.D., Chief Executive Officer. "We are committed to the development of beloranib, which has the potential to be the first therapy to help improve hyperphagia and body fat content, for which no treatment options are currently available. We currently expect to report on initial six-month data from this study in the fourth quarter of 2015."

"PWS is a devastating condition that leads to life-threatening obesity and affects patients and caretakers alike," said Dr. Jennifer Miller, Pediatric Endocrinologist and Associate Professor of Medicine at University of Florida Health. "This Phase 3 trial is a significant step in meeting the urgent need for novel and effective treatment options that have the potential to positively impact the lives of patients and families living with this disease."

Zafgen has been granted orphan drug status in both the United States and the European Union for beloranib for the treatment of PWS.

According to Zafgen's license agreements with CKD Pharma and other licensors, the initiation of the first Phase 3 trial with beloranib will trigger milestone payments of \$6.7 million (primarily to CKD).

For more information about the trial, please visit [www.clinicaltrials.gov](http://www.clinicaltrials.gov).

### About Beloranib

Beloranib is a novel, first-in-class injectable small molecule therapy with a unique mechanism of action that reduces hunger while stimulating the use of stored fat as an energy source. Beloranib is a potent inhibitor of MetAP2, an enzyme that modulates the activity of key cellular processes that control metabolism. MetAP2 inhibitors work, at least in part, by directing MetAP2 binding to cellular stress mediators, and, thus, reducing the tone of signals that drive lipid synthesis by the liver and fat storage throughout the body. In this manner, MetAP2 inhibition increases metabolism of fat as an energy source. Zafgen holds exclusive worldwide rights (exclusive of South Korea) for the development and commercialization of beloranib. Zafgen exclusively licensed beloranib from Chong Kun Dang (CKD) Pharmaceutical Corp. of South Korea.

### About Prader-Willi Syndrome

Prader-Willi syndrome (PWS), the most common known genetic cause of life-threatening obesity, results in constant and unrelenting hunger that drives patients with PWS to engage in problematic hunger-related behaviors and gain excessive weight. As a result, many of those affected become morbidly obese and suffer significant mortality. There is currently no cure for this disease. Although the cause is complex, it results from a deletion or loss of function of a cluster of genes on the 15th chromosome. PWS typically causes low muscle mass and function, short stature, incomplete sexual development, and a chronic feeling of hunger that, coupled with a metabolism that utilizes drastically fewer calories than normal, can lead to

excessive eating and life-threatening obesity. PWS occurs in males and females equally and in all races, with the same incidence around the world. Prevalence estimates have ranged from 1:8,000 to 1:50,000.

## About Zafgen

Zafgen (Nasdaq:ZFGN) is a biopharmaceutical company dedicated to significantly improving the health and well-being of patients affected by obesity and complex metabolic disorders. Zafgen is focused on developing novel therapeutics that treat the underlying biological mechanisms through the MetAP2 pathway. Beloranib, Zafgen's lead product candidate, is a novel, first-in-class, twice-weekly subcutaneous injection being developed for the treatment of multiple indications, including severe obesity in two rare diseases, Prader-Willi syndrome and obesity caused by hypothalamic injury, including craniopharyngioma-associated obesity; and severe obesity in the general population. Zafgen aspires to improve the lives of patients through targeted treatments and has assembled a team accomplished in bringing therapies to patients with both rare and prevalent metabolic diseases.

## Safe Harbor Statement

Various statements in this release concerning Zafgen's future expectations, plans and prospects, including without limitation, Zafgen's expectations regarding beloranib as a treatment for PWS and other forms of severe obesity, its expectations with respect to the timing and success of its clinical trials, the expected timing of additional clinical trials, its plans regarding commercialization of beloranib and its expectations relating to available cash and cash equivalents at the end of 2014 may constitute forward-looking statements for the purposes of the safe harbor provisions under The Private Securities Litigation Reform Act of 1995 and other federal securities laws. Forward-looking statements can be identified by terminology such as "anticipate," "believe," "could," "could increase the likelihood," "estimate," "expect," "intend," "is planned," "may," "should," "will," "will enable," "would be expected," "look forward," "may provide," "would" or similar terms, variations of such terms or the negative of those terms. Actual results may differ materially from those indicated by these forward-looking statements as a result of various important factors, including, without limitation, Zafgen's ability to successfully demonstrate the efficacy and safety of its drug candidates, the pre-clinical and clinical results for its product candidates, which may not support further development of product candidates, actions of regulatory agencies, which may affect the initiation, timing and progress of clinical trials, obtaining, maintaining and protecting intellectual property, Zafgen's ability to enforce its patents against infringers and defend its patent portfolio against challenges from third parties, competition from others developing products for similar uses, Zafgen's ability to manage operating expenses, Zafgen's ability to obtain additional funding to support its business activities and establish and maintain strategic business alliances and new business initiatives, Zafgen's dependence on third parties for development, manufacture, marketing, sales and distribution of products, the outcome of litigation, and unexpected expenditures, as well as those risks more fully discussed in the section entitled "Risk Factors" in the final prospectus related to Zafgen's initial public offering filed with the Securities and Exchange Commission pursuant to Rule 424(b) of the Securities Act, as well as discussions of potential risks, uncertainties, and other important factors in Zafgen's subsequent filings with the Securities and Exchange Commission. In addition, any forward-looking statements represent Zafgen's views only as of today and should not be relied upon as representing its views as of any subsequent date. Zafgen explicitly disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise.

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