Zynerba Pharmaceuticals Announces Achievement of Patient Screening Target for Pivotal Trial of Zygel™ in Fragile X Syndrome

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- Company Expects to Complete Randomization in February 2020 -

- Topline Results from Pivotal CONNECT-FX Study Remain On Track for the Second Quarter of 2020 -

DEVON, Pa., Feb. 03, 2020 (GLOBE NEWSWIRE) -- Zynerba Pharmaceuticals, Inc. (NASDAQ:ZYNE), the leader in innovative pharmaceutically-produced transdermal cannabinoid therapies for rare and near-rare neuropsychiatric disorders, today announced that it has successfully achieved its patient screening target in its 14-week pivotal CONNECT-FX (**C**linical study **o**f Ca**nn**abidiol (CBD) in Childr**e**n and Adoles**c**en**t**s with **F**ragile **X**) trial assessing the efficacy and safety of Zygel™ CBD Gel in children and adolescents ages three to 17 with full mutation Fragile X syndrome (FXS). As a result, all clinical sites have been informed that screening has now closed and the Company expects to meet or exceed its target of 204 patients randomized. Topline results are expected to be announced late in the second quarter of 2020.

"This is an important milestone for patients with Fragile X syndrome and their caregivers as we move toward completion of enrollment in this pivotal trial," commented Armando Anido, Chief Executive Officer of Zynerba. "I would like to thank all of our clinical investigators and their staff for their assistance thus far. Through strict entry criteria and overall trial design, we expect to enhance the study's ability to demonstrate a strong signal of activity and minimize response variability. Having now achieved our screening target, we remain confident that we will announce topline results late in the second quarter of this year."

The multi-national randomized, double-blind, placebo-controlled, 14-week CONNECT-FX trial is assessing the efficacy and safety of Zygel for the treatment of children and adolescents with FXS. At least 204 male and female patients with Fragile X syndrome, confirmed with the full mutation of the FMR1 gene, are being enrolled at clinical sites in the United States, Australia, and New Zealand. Patients are being been randomized 1:1 to either trial drug or placebo. The primary endpoint is the change from baseline to the end of the treatment period in the Aberrant Behavior Checklist-Community FXS Specific (ABC-C_{FXS}) Social Avoidance subscale. The key secondary endpoints are the change from baseline to the end of the treatment period in the ABC-C_{FXS} Irritability subscale score, the ABC-C_{FXS} Socially Unresponsive/Lethargic subscale score, and improvement in Clinical Global Impression - Improvement (CGI-I) anchored to behavioral symptoms of FXS evaluated at the end of the treatment period.

The Company expects to disclose topline results of this study late in the second quarter of 2020. If the results are positive, the Company expects to meet with the U.S. Food and Drug Administration (FDA) to determine acceptability of the data as a basis to submit its New Drug Application (NDA) for Zygel in FXS in the second half of 2020, with potential approval by mid-year 2021.

Patients must complete screening prior to randomization into a clinical trial to determine if the candidate is appropriate for inclusion in the trial based on certain inclusion and exclusion criteria. These may include baseline assessment of behavior severity, any concomitant medications including over-the-counter (OTC) medications the patient is taking, the patient's medical history including genetic confirmation of their FXS diagnosis, and results of neurological, physical, lab, and diagnostic exams.

About Zygel™
Zygel (CBD gel) is the first and only pharmaceutically-manufactured CBD formulated as a patent-protected permeation-enhanced clear gel, designed to provide controlled drug delivery into the bloodstream transdermally (i.e. through the skin). Recent studies suggest that Fragile X Syndrome (FXS) and other neuropsychiatric conditions may be associated with a disruption in the endocannabinoid (EC) system. Clinical and anecdotal data suggest that CBD may modulate the EC system and improve certain core social and behavioral autism-related symptoms, including social avoidance and anxiety.

About Zynerba Pharmaceuticals, Inc.
Zynerba Pharmaceuticals is the leader in pharmaceutically-produced transdermal cannabinoid therapies for rare and near-rare neuropsychiatric disorders. We are committed to improving the lives of patients and their families living with severe, chronic health conditions including Fragile X syndrome, autism spectrum disorder, 22q11.2 deletion syndrome, and a heterogeneous group of rare and ultra-rare epilepsies known as developmental and epileptic encephalopathies. Learn more at www.zynerba.com and follow us on Twitter at @ZynerbaPharma.

Cautionary Note on Forward-Looking Statements
This press release contains forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995. We may, in some cases, use terms such as "predicts," "believes," "potential," "proposed," "continue," "estimates," "anticipates," "expects," "plans," "intends," "may," "could," "might," "will," "should" or other words that convey uncertainty of future events or outcomes to identify these forward-looking statements. Such statements are subject to numerous important factors, risks and uncertainties that may cause actual events or results to differ materially from the Company's current expectations. For example, there can be no guarantee that the Company will obtain approval for Zygel from the U.S. Food and Drug Administration (FDA) or foreign regulatory authorities; even if Zygel is approved, the Company may not be able to obtain the label claims that it is seeking from the FDA. Management's expectations and, therefore, any forward-looking statements in this press release could also be affected by risks and uncertainties relating to a number of other factors, including the following: the Company's cash and cash equivalents may not be sufficient to support its operating plan for as long as anticipated; the Company's ability to obtain additional funding to support its clinical development programs; the results, cost and timing of the Company's clinical development programs, including any delays to such clinical trials relating to enrollment or site initiation; clinical results for the Company's product candidates may not be replicated or continue to occur in additional trials and may not otherwise support further development in a specified indication or at all; actions or advice of the FDA and foreign regulatory agencies may affect the design,

initiation, timing, continuation and/or progress of clinical trials or result in the need for additional clinical trials; the Company's ability to obtain and maintain regulatory approval for its product candidates, and the labeling under any such approval; the Company's reliance on third parties to assist in conducting pre-clinical and clinical trials for its product candidates; delays, interruptions or failures in the manufacture and supply of the Company's product candidates the Company's ability to commercialize its product candidates; the size and growth potential of the markets for the Company's product candidates, and the Company's ability to service those markets; the Company's ability to develop sales and marketing capabilities, whether alone or with potential future collaborators; the rate and degree of market acceptance of the Company's product candidates; and the Company's expectations regarding its ability to obtain and adequately maintain sufficient intellectual property protection for its product candidates. This list is not exhaustive and these and other risks are described in the Company's periodic reports, including the annual report on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, filed with or furnished to the Securities and Exchange Commission and available at www.sec.gov. Any forward-looking statements that the Company makes in this press release speak only as of the date of this press release. The Company assumes no obligation to update forward-looking statements whether as a result of new information, future events or otherwise, after the date of this press release.

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