Zynerba Pharmaceuticals Presents Data on Zygel™ at the 55th Gatlinburg Conference

April 12, 2023

Zygel continued to be well-tolerated with long-term administration and maintained clinically meaningful improvements in children and adolescents with Fragile X syndrome

Zygel achieved statistically significant and clinically meaningful improvements from baseline in multiple efficacy assessments and was generally well-tolerated through 38 weeks of treatment in INSPIRE, a Phase 2 trial with Zygel in children and adolescents with 22q

DEVON, Pa., April 12, 2023 (GLOBE NEWSWIRE) -- Zynerba Pharmaceuticals, Inc. (Nasdaq: ZYNE), the leader in innovative pharmaceutically-produced transdermal cannabinoid therapies for orphan neuropsychiatric disorders, is presenting two posters at the 55th Gatlinburg Conference, being held April 10-13, 2023, in Kansas City, Mo. Copies of the posters are available on the Zynerba corporate website at www.zynerba.com/publications.

“New interim results from the open-label extension trial continue to support the long-term safety and sustained effectiveness of Zygel in children and adolescents with Fragile X syndrome (FXS), with the greatest improvements seen in those with complete methylation of their *FMR1* gene, the population for the primary efficacy analysis in our pivotal RECONNECT trial,” said Armando Anido, Chairman and Chief Executive Officer of Zynerba. “In addition, we believe data from the Phase 2 INSPIRE trial suggest the potential of Zygel as a treatment of anxiety and other behavioral symptoms in children and adolescents with 22q.”

The presentation titled, “*Long-term Safety and Sustained Efficacy of ZYN002 Cannabidiol Transdermal Gel in Children and Adolescents with Fragile X Syndrome (ZYN2-CL-017)*,” includes data demonstrating that in the ongoing long-term safety and efficacy trial of Zygel in children and adolescents with FXS, Zygel was well-tolerated with long-term administration with up to 45 months of exposure. Patients with complete methylation, who match the primary efficacy population in the ongoing confirmatory trial, RECONNECT, achieved and maintained clinically meaningful changes in Social Avoidance over 24 months, further supporting this design enhancement for RECONNECT.

The poster titled, “*An Open-Label Tolerability and Efficacy Study of ZYN002 (Cannabidiol) Administered as a Transdermal Gel to Children and Adolescents with 22q11.2 Deletion Syndrome (INSPIRE)*,” shows that through 38-weeks of treatment, statistically significant improvements were seen in children and adolescents treated with Zygel in the Pediatric Anxiety Rating Scale (PARS-R), all five scales of the Anxiety, Depression and Mood Scale (ADAMS), and all five subscales of the Aberrant Behavior Checklist – Community (ABC-C). These results are consistent with the previously reported 14-week treatment data suggesting a positive risk-benefit profile for Zygel in improving anxiety-related and other behavioral symptoms in children and adolescents with 22q when added to standard of care.

About RECONNECT

RECONNECT is a Phase 3 trial of Zygel in patients with FXS ages 3 through 22 years. The trial was designed based upon learnings from the initial Phase 3 trial, CONNECT-FX, which demonstrated potential effectiveness of Zygel in patients with 100% methylation of their *FMR1* gene. RECONNECT is actively enrolling participants 3 through 22 years of age. More information about the trial, including how to be contacted regarding potential participation, is available at www.fragilexhelp.com.

About Zygel

Zygel is the first and only pharmaceutically-manufactured cannabidiol formulated as a patent-protected permeation-enhanced clear gel, designed to provide consistent drug delivery into the bloodstream transdermally (i.e. through the skin). Recent studies suggest that cannabidiol may modulate the endocannabinoid system and improve certain behavioral symptoms associated with neuropsychiatric conditions. Zygel is an investigational drug product in development for the potential treatment of behavioral symptoms associated with Fragile X syndrome (FXS) and 22q11.2 deletion syndrome (22q). The Company has received orphan drug designation for cannabidiol, the active ingredient in Zygel, from the FDA and the European Commission in the treatment of FXS and the treatment of 22q. Additionally, Zygel has been designated a Fast Track development program for treatment of behavioral symptoms of FXS.

About Zynerba Pharmaceuticals, Inc.

Zynerba Pharmaceuticals is the leader in innovative pharmaceutically-produced transdermal cannabinoid therapies for orphan neuropsychiatric disorders. We are committed to improving the lives of patients and their families living with severe, chronic health conditions including Fragile X syndrome and 22q11.2 deletion syndrome. 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. 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 expectations, projections and estimates regarding expenses, future revenue, capital requirements, incentive and other tax credit eligibility, collectability and timing, and availability of and the need for additional financing; 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 U.S. Food and Drug Administration, the European Medicines Agency and other 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; the Company's expectations regarding its ability to obtain and adequately maintain sufficient intellectual property protection for its product candidates; the extent to which health epidemics and other outbreaks of communicable diseases, including COVID-19, could disrupt our operations or adversely affect our business and financial conditions; and the extent to which inflation or global instability, including political instability, may disrupt our business operations or our financial condition. 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.

Zynerba Contacts

Peter Vozzo
ICR Westwicke
Office: 443.213.0505
Cell: 443.377.4767
Peter.Vozzo@Westwicke.com