

Zynerba Pharmaceuticals Reports Third Quarter 2017 Financial Results and Operational Highlights

November 14, 2017

DEVON, Pa., Nov. 14, 2017 (GLOBE NEWSWIRE) -- [Zynerba Pharmaceuticals](#), Inc. (NASDAQ:ZYNE), a clinical-stage specialty pharmaceutical company dedicated to developing and commercializing innovative pharmaceutically-produced transdermal cannabinoid treatments, today reported financial results for the third quarter ended September 30, 2017 and provided an overview of recent operational highlights.

"We announced important data during the third quarter, including remarkable Phase 2 data from our FAB-C study of ZYN002 in children and adolescents with Fragile X syndrome," said Armando Anido, Chairman and Chief Executive Officer. "We achieved the primary endpoint and numerous secondary endpoints with statistical significance compared to baseline, and anticipate moving into a pivotal program in Fragile X in the first half of 2018. Additionally, we look forward to outlining our path forward in Epilepsy, and meeting with the FDA to discuss our OA pivotal program in the first quarter of 2018."

Third Quarter 2017 and Recent Highlights

ZYN002 in Fragile X Syndrome (FXS)

Announced Positive Results from FAB-C Open Label Exploratory Phase 2 Clinical Trial of ZYN002 Cannabidiol (CBD) Gel in Pediatric and Adolescent Fragile X Syndrome Patients; Company Expects to Initiate Pivotal Program in the First Half of 2018

A total of 20 patients were enrolled into the 12-week open label Phase 2 FAB-C trial to evaluate ZYN002 cannabidiol (CBD) gel in pediatric and adolescent patients with FXS.

- The study successfully met its primary endpoint, achieving a 46% improvement ($p < 0.0001$) in the total score of Anxiety, Depression, and Mood Scale (ADAMS) at week twelve compared to baseline;
- The results of the secondary endpoints reinforce those demonstrated in the ADAMS. For example, ZYN002 also achieved clinically meaningful and statistically significant improvements compared to baseline in all measures of the Aberrant Behavior Checklist for Fragile X (ABC-FXS), which address the key symptoms of FXS including social avoidance, temper tantrums, repetitive movements, and hyperactivity;
- ZYN002 was shown to be extremely well tolerated, and the safety profile was consistent with previously released data from clinical trials;
- Thirteen (13) of the 18 patients completing the study have enrolled into the 52-week open label extension and remain in the trial;
- The Company anticipates that it will meet with the U.S. Food and Drug Administration (FDA) in the first quarter of 2018 to discuss the results of the study and next steps, including a pivotal program expected to initiate in the first half of 2018; and
- The FDA has granted orphan-drug designation to Zynerba for the use of CBD for the treatment of FXS.

ZYN002 in Osteoarthritis

Announced Important Results from Phase 2 STOP Clinical Trial for ZYN002 CBD Gel in Adult Osteoarthritis Patients; Study Achieved Key Secondary Endpoints with Statistical Significance

Three hundred and twenty (320) patients were randomized into the double-blind, placebo-controlled Phase 2 STOP trial in osteoarthritis of the knee.

- Statistically significant results were achieved for a number of secondary endpoints, though the study did not achieve its primary endpoint of change from baseline in the weekly mean of the 24-hour average worst pain score at week 12;
- Importantly, the composite responder analysis (defined as a ≥ 30 percent reduction in worst average daily pain scores and a ≥ 20 percent improvement in the WOMAC physical function score) for 250 mg daily of ZYN002 4.2% CBD gel achieved statistical significance ($p = 0.016$). This composite responder endpoint is consistent with the FDA guidelines requiring the use of both pain and function endpoints in pivotal osteoarthritis programs;
- ZYN002 was shown to be extremely well tolerated and the safety profile was consistent with previously released data from clinical trials; and
- Zynerba anticipates that it will meet with the FDA in the first quarter of 2018 to discuss the results of the study. The Company expects to initiate a pivotal Phase 2/3 program in 2018.

ZYN002 in Focal Seizures

Announced Results from Phase 2 STAR 1 Clinical Trial for ZYN002 CBD Gel in Adult Epilepsy Patients with Focal Seizures

A total of 188 patients were randomized in the Phase 2 STAR 1 double-blind, placebo-controlled clinical trial in adult patients with refractory epilepsy.

- ZYN002 did not demonstrate a statistically significant reduction of focal seizures during the treatment period compared to the baseline period for either the high or low dose cohorts compared to placebo;
- The Company believes that the study failed to achieve its endpoints primarily due to a bimodal distribution of patient responses on placebo; approximately 24% of patients receiving placebo achieved >50% reductions in focal seizures, while the other approximately 76% of placebo patients showed no improvement or worsening of focal seizures; and
- ZYN002 was shown to be extremely well tolerated and the safety profile was consistent with previously released data from the Phase 1 trials.

Dosing Continues in the Phase 2 STAR 2 Open-Label Extension Trial for ZYN002 CBD Gel in Adult Epilepsy Patients; Clinically Meaningful Responses Achieved in Patients on ZYN002 for at least 6 Months

As of November 13, 2017, one hundred (100) patients remain in the STAR 2 open label trial, designed to evaluate long-term safety and tolerability of ZYN002 CBD gel across a range of doses. In the open-label extension study, patients are receiving ZYN002 for up to 52 weeks.

- Eighty-nine (89) patients have reached six months of drug exposure in STAR 2; and
- Clinically meaningful reductions in seizures (>50%) have been observed in patients on ZYN002 for at least six months.

Data from the ZYN002 epilepsy program have been accepted for poster presentation at the 2017 American Epilepsy Society (AES) Meeting.

Further analysis of data from STAR 1 and STAR 2 will clarify the study design and inclusion / exclusion criteria ahead of a new Phase 2 clinical study in epilepsy. The Company expects to outline its path forward in epilepsy in the first quarter of 2018.

ZYN001 Phase 1 Evaluation

Dosing Continues in the Phase 1 Program for ZYN001 Pro-drug of Tetrahydrocannabinol (THC) Delivered via Transdermal Patch

Dosing is underway in a Phase 1 program to assess ZYN001, a patent-protected, pro-drug of THC delivered via a patch. This first in man study is a randomized, double-blind, placebo-controlled Phase 1 trial. The safety, tolerability and pharmacokinetic profile of a single dose of ZYN001 versus placebo is initially being evaluated. Several formulations and patch wear times ranging from 24 hours to 7 days will be assessed in up to 48 healthy subjects. Based on results from the single dose portion of this trial, two formulations will be evaluated in multiple patch applications for 14 days in up to 32 healthy subjects who will be randomized 3:1 to ZYN001 or placebo. Results from this study are now expected in the first half of 2018. These data will inform the planned Phase 2 program for ZYN001, now expected to initiate in 2018.

Third Quarter 2017 Financial Results

As of September 30, 2017, cash and cash equivalents were \$66.3 million, compared to \$70.2 million as of June 30, 2017. Research and development expenses for the third quarter of 2017 were \$5.8 million, including stock-based compensation of \$0.6 million. General and administrative expenses for the third quarter of 2017 were \$2.8 million, including stock-based compensation expense of \$1.1 million. Net loss for the third quarter of 2017 was \$8.3 million with basic and diluted net loss per share of \$0.63.

Recent Equity Financing

On June 9, 2017, we entered into an Open Market Sales Agreement, or "at-the-market" (ATM) offering program, with Jefferies LLC, pursuant to which we may sell, from time to time, up to \$50 million of our common stock. From September 28, 2017 through October 26, 2017, the Company has sold and issued 296,594 shares under its ATM program, at a weighted average selling price of \$10.74 per share, for gross proceeds of \$3.2 million. Net proceeds after deducting underwriting and commissions and offering expenses were \$3.0 million. None of the proceeds were settled prior to September 30, 2017, and therefore the cash for the sale of these common shares will be recorded in the fourth quarter.

Financial Outlook

The Company believes that the cash and cash equivalent position of \$66.3 million as of September 30, 2017 is sufficient to develop five Phase 3-ready programs and initiate at least one pivotal program and fund operations and capital requirements into 2019.

About Zynerba Pharmaceuticals, Inc.

Zynerba Pharmaceuticals (NASDAQ:ZYNE) is dedicated to improving the lives of people with severe health conditions where there is a high unmet medical need by developing and commercializing pharmaceutically-produced transdermal cannabinoid medicines designed to meet the rigorous efficacy and safety standards established by global regulatory agencies. Through the discovery and development of these life-changing medicines, Zynerba seeks to improve the lives of patients battling severe, chronic health conditions including Fragile X syndrome, epilepsy, osteoarthritis, fibromyalgia and peripheral neuropathic pain. Learn more at www.zynerba.com and follow the Company 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 ZYN002 or ZYN001 from the U.S. Food and Drug Administration (FDA) or foreign regulatory authorities; even if ZYN002 or ZYN001 are approved, the Company may not be able to obtain the label claims that it is seeking from the FDA. In addition, the Company's cash and cash equivalents may not be sufficient to support its operating plan for as long as anticipated. 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 success, cost and timing of the Company's product development activities, studies and clinical trials; the success of competing products that are or become available; 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.

ZYNERBA PHARMACEUTICALS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)

	Three months ended		Nine months ended	
	September 30, 2017	September 30, 2016	September 30, 2017	September 30, 2016
Revenue	\$ —	\$ —	\$ —	\$ 7,250
Operating expenses:				
Research and development	5,753,764	4,504,097	16,978,016	11,880,264
General and administrative	2,795,839	1,493,461	7,640,489	4,649,948
Total operating expenses	8,549,603	5,997,558	24,618,505	16,530,212
Loss from operations	(8,549,603)	(5,997,558)	(24,618,505)	(16,522,962)
Other income (expense):				
Interest income	161,930	22,747	363,350	53,243
Foreign exchange gain (loss)	76,468	(6,270)	361,450	(49,668)
Total other income (expense)	238,398	16,477	724,800	3,575
Loss before income taxes	(8,311,205)	(5,981,081)	(23,893,705)	(16,519,387)
Income tax benefit	—	—	—	(27,543)
Net loss	\$ (8,311,205)	\$ (5,981,081)	\$ (23,893,705)	\$ (16,491,844)
Net loss per share - basic and diluted	\$ (0.63)	\$ (0.67)	\$ (1.87)	\$ (1.86)
Basic and diluted weighted average shares outstanding	13,098,914	8,912,508	12,743,332	8,865,854
Non-cash stock-based compensation included above:				
Research and development	\$ 591,898	\$ 292,385	\$ 1,722,456	\$ 916,036
General and administrative	1,130,745	513,019	2,544,260	1,465,906
Total	\$ 1,722,643	\$ 805,404	\$ 4,266,716	\$ 2,381,942

ZYNERBA PHARMACEUTICALS, INC.
CONSOLIDATED BALANCE SHEETS
(Unaudited)

	September 30, 2017	December 31, 2016
Assets		
Current assets:		
Cash and cash equivalents	\$ 66,251,286	\$ 30,965,791
Incentive and tax receivables	3,617,956	3,613,943
Prepaid expenses and other current assets	3,010,144	1,830,958
Total current assets	72,879,386	36,410,692
Property and equipment, net	190,370	143,382

Other assets	200		200
Total assets	\$ 73,069,956		\$ 36,554,274
Liabilities and Stockholders' Equity			
Current liabilities:			
Accounts payable	\$ 3,116,100		\$ 1,848,084
Accrued expenses	4,479,292		4,284,907
Deferred grant revenue	833,975		833,975
Total current liabilities	8,429,367		6,966,966
Stockholders' equity:			
Common stock	13,257		9,995
Additional paid-in capital	134,489,599		75,545,875
Accumulated deficit	(69,862,267)	(45,968,562
Total stockholders' equity	64,640,589		29,587,308
Total liabilities and stockholders' equity	\$ 73,069,956		\$ 36,554,274

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