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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

x QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended June 30, 2015

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to

Commission file number: 001-37526

Zynerba Pharmaceuticals, Inc.
(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	**26-0389433** (I.R.S. Employer Identification Number)
80 W. Lancaster Avenue, Suite 300 Devon, PA (Address of principal executive offices)	**19333** (Zip Code)

(484) 581-7505
(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes x No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☐ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐	Accelerated filer ☐
Non-accelerated filer x (Do not check if a smaller reporting company)	Smaller reporting company ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☐

As of August 27, 2015 there were 8,733,963 shares of Common Stock, $0.001 par value per share, outstanding.

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Statements made in this Quarterly Report that are not statements of historical or current facts, such as those under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations," are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements discuss our current expectations and projections relating to our financial condition, results of operations, plans, objectives, future performance and business. These statements may be preceded by, followed by or include the words "aim," "anticipate," "believe," "estimate," "expect," "forecast," "intend," "outlook," "plan," "potential," "project," "projection," "seek," "may," "could," "would," "will," "should," "can," "can have," "likely," the negatives thereof and other words and terms of similar meaning.

Forward-looking statements are inherently subject to risks, uncertainties and assumptions; they are not guarantees of performance. You should not place undue reliance on these statements. We have based these forward-looking statements on our current expectations and projections about future events. Although we believe that our assumptions made in connection with the forward-looking statements are reasonable, we cannot assure you that the assumptions and expectations will prove to be correct.

You should understand that the following important factors could affect our future results and could cause those results or other outcomes to differ materially from those expressed or implied in our forward-looking statements:

- our estimates regarding expenses, future revenues, capital requirements and timing and availability of and the need for additional financing;
- the success and timing of our preclinical studies and clinical trials;
- the potential results of preclinical studies and clinical trials for ZYN002 and ZYN001;
- our dependence on third parties in the conduct of our preclinical studies and clinical trials;
- the difficulties and expenses associated with obtaining and maintaining regulatory approval of ZYN002 and ZYN001;
- our plans and ability to develop and commercialize ZYN002 and ZYN001;
- the successful development of our commercialization capabilities, including sales and marketing capabilities;
- the size and growth of the potential markets for ZYN002 and ZYN001, market acceptance of ZYN002 and ZYN001 and our ability to serve those markets;
- the rate and degree of market acceptance of ZYN002 and ZYN001;
- legal and regulatory developments in the United States and foreign countries;
- our ability to limit our exposure under product liability lawsuits;
- the success of competing therapies and products that are or become available;
- our exposure to additional scrutiny as a public company;
- our use of the proceeds from our initial public offering ("IPO");
- obtaining and maintaining intellectual property protection for ZYN002 and ZYN001;
- recently enacted and future legislation regarding the healthcare system;
- the performance of third parties upon which we depend, including third-party contract research organizations ("CROs") and third-party manufacturers; and
- our ability to recruit or retain key scientific or management personnel or to retain our executive officers.

In light of these risks and uncertainties, expected results or other anticipated events or circumstances discussed in this Form 10-Q (including the exhibits hereto) might not occur. We undertake no obligation, and specifically decline any obligation, to publicly update or revise any forward-looking statements, even if experience or future developments make it clear that projected results expressed or implied in such statements will not be realized, except as may be required by law.

See the section entitled "Risk Factors" in the final prospectus, dated August 4, 2015, filed with the United States Securities and Exchange Commission (the "SEC") pursuant to Rule 424(b) of the Securities Act of 1933, as amended, on August 5, 2015, relating to the Registration Statement on Form S-1 (File No. 333-205355), and any amendment or supplement thereto (the "Prospectus") for a more complete discussion of these risks and uncertainties and for other risks and uncertainties. Those factors and the other risk factors described therein are not necessarily all of the important factors that could cause actual results or developments to differ materially from those expressed in any of our forward-looking statements. Other unknown or unpredictable factors also could harm our results. Consequently, there can be no assurance that actual results or developments anticipated by us will be realized or, even if substantially realized, that they will have the expected consequences to, or effects on, us. Given these uncertainties, prospective investors are cautioned not to place undue reliance on such forward-looking statements.

PART I – FINANCIAL INFORMATION

Item 1. Condensed Financial Statements (Unaudited).

ZYNERBA PHARMACEUTICALS, INC.
BALANCE SHEETS
(UNAUDITED)

	June 30, 2015	December 31, 2014
Assets		
Current assets:		
Cash and cash equivalents	$ 5,742,764	$ 9,330,681
Deferred offering costs	1,950,921	1,080,199
Prepaid expenses	1,681,097	1,183,949
Total current assets	9,374,782	11,594,829
Property and equipment, net	103,908	19,642
Other assets	2,200	2,200
Total assets	$ 9,480,890	$ 11,616,671
Liabilities, Convertible Preferred Stock and Stockholders' Equity (Deficit)		
Current Liabilities:		
Accounts payable	$ 1,775,466	$ 313,937
Accrued expenses	1,262,726	1,711,473
Deferred grant revenue	1,089,907	1,120,125
Total current liabilities	4,128,099	3,145,535
Commitments and contingencies		
Convertible Preferred Stock:		
Series 1 convertible preferred stock; $0.001 par value; 7,807,502 shares authorized; 6,964,053 shares issued and outstanding at June 30, 2015, and December 31, 2014 (liquidation preference of $14,763,792 at June 30, 2015)	16,522,811	16,522,811
Stockholders' equity (deficit):		
Common stock; $0.001 par value; 50,000,000 shares authorized; 2,029,747 shares issued and outstanding at June 30, 2015 and December 31, 2014	2,030	2,030
Additional paid-in capital	1,975,000	1,975,000
Accumulated deficit	(13,147,050)	(10,028,705)
Total stockholders' equity (deficit)	(11,170,020)	(8,051,675)
Total liabilities, convertible preferred stock and stockholders' equity (deficit)	$ 9,480,890	$ 11,616,671

See accompanying notes to unaudited financial statements.

ZYNERBA PHARMACEUTICALS, INC.
STATEMENTS OF OPERATIONS
(UNAUDITED)

	Three months ended June 30,		Six months ended June 30,	
	2015	2014	2015	2014
Revenues	$ 15,390	$ 64,097	$ 30,218	$ 210,384
Operating expenses:				
Research and development	1,010,989	367,296	1,864,693	653,021
General and administrative	631,474	1,206,188	1,285,247	1,305,892
Total operating expenses	1,642,463	1,573,484	3,149,940	1,958,913
Loss from operations	(1,627,073)	(1,509,387)	(3,119,722)	(1,748,529)
Other income (expense):				
Interest income (expense), net	697	(268)	1,377	(1,485)
Net loss	$ (1,626,376)	$ (1,509,655)	$ (3,118,345)	$ (1,750,014)
Accretion of redeemable convertible preferred stock	—	—	—	(87,954)
Net loss applicable to common stockholders	$ (1,626,376)	$ (1,509,655)	$ (3,118,345)	$ (1,837,968)
Net loss per share basic and diluted	$ (0.80)	$ (2.29)	$ (1.54)	$ (3.19)
Basic and diluted weighted average shares outstanding	2,029,747	659,944	2,029,747	575,820

See accompanying notes to unaudited financial statements.

ZYNERBA PHARMACEUTICALS, INC.
STATEMENT OF CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (DEFICIT)
SIX MONTHS ENDED JUNE 30, 2015
(UNAUDITED)

	Convertible preferred stock Series 1		Stockholders' equity (deficit)				
			Common stock				
	Shares	Amount	Shares	Amount	Additional paid-capital	Accumulated deficit	Total stockholders' equity (deficit)
Balance at January 1, 2015	6,964,053	$16,522,811	2,029,747	$2,030	$1,975,000	$(10,028,705)	$ (8,051,675)
Net loss	—	—	—	—	—	(3,118,345)	(3,118,345)
Balance at June 30, 2015	6,964,053	$16,522,811	2,029,747	$2,030	$1,975,000	$(13,147,050)	$(11,170,020)

See accompanying notes to unaudited financial statements

ZYNERBA PHARMACEUTICALS, INC.
STATEMENTS OF CASH FLOWS
(UNAUDITED)

	Six months ended June 30,	
	2015	2014
Cash flows from operating activities:		
Net loss	$ (3,118,345)	$ (1,750,014)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	4,542	18,762
Forgiveness of accounts payable	—	(180,782)
Common stock issued for services	—	915,958
Changes in operating assets and liabilities:		
Grant receivables	—	34,514
Prepaid expenses and other assets	(497,148)	51,956
Deferred grant revenue	(30,218)	(41,694)
Accounts payable	761,930	339,276
Accrued expenses	(608,747)	(38,211)
Net cash used in operating activities	(3,487,986)	(650,235)
Cash flows from investing activities:		
Purchases of property and equipment	(46,300)	(5,108)
Net cash used in investing activities	(46,300)	(5,108)
Cash flows from financing activities:		
Proceeds from issuance of Series B redeemable convertible preferred stock, net	—	309,411
Proceeds from issuance of common stock	—	1,909
Proceeds from issuance of Series 1 convertible preferred stock, net	—	400,001
Offering costs	(53,631)	—
Net cash (used in) provided by financing activities	(53,631)	711,321
Net (decrease) increase in cash and cash equivalents	(3,587,917)	55,978
Cash and cash equivalents at beginning of period	9,330,681	154,695
Cash and cash equivalents at end of period	5,742,764	210,673
Supplemental disclosures of cash flow information:		
Accrued dividends on redeemable convertible preferred stock	$ —	$ 48,078
Accretion of redeemable convertible preferred stock	—	39,876
Deferred offering costs included in accounts payable and accrued expenses	1,897,290	—
Cash paid for interest	—	1,550

See accompanying notes to unaudited financial statements

ZYNERBA PHARMACEUTICALS, INC.
NOTES TO UNAUDITED FINANCIAL STATEMENTS

(1) Nature of Business and Liquidity

Zynerba Pharmaceuticals, Inc. (the "Company", "we") is a specialty pharmaceutical company focused on developing and commercializing proprietary next-generation synthetic cannabinoid therapeutics formulated for transdermal delivery. The Company was incorporated on January 31, 2007 under the laws of the State of Delaware as AllTranz, Inc. and changed its name to Zynerba Pharmaceuticals, Inc. in August 2014. The Company operated in Lexington, Kentucky until October 2014 when it moved its operations to Pennsylvania.

The Company has incurred losses and negative cash flows from operations since inception and has an accumulated deficit of $13.1 million and $10.0 million as of June 30, 2015 and December 31, 2014, respectively. The Company anticipates incurring additional losses until such time, if ever, that it can generate significant revenues from its product candidates currently in development. The Company's primary source of liquidity has been the issuance of convertible promissory notes and equity securities.

In August 2015, the Company completed its IPO of common stock selling 3,450,000 shares at an offering price of $ 14.00 per share, resulting in gross proceeds of $48.3 million. Net proceeds received after underwriting fees and offering expenses were $42.1 million. In connection with the IPO, all outstanding shares of Series 1 convertible preferred stock converted into 3,704,216 shares of common stock. Management believes that current cash and cash equivalents and the proceeds of the August 2015 IPO are sufficient to fund operations for approximately 24 to 30 months. Substantial additional financings will be needed by the Company to fund its operations, to complete clinical development of and to commercially develop its product candidates. There is no assurance that such financing will be available when needed or on acceptable terms.

Management is currently evaluating different strategies to obtain the required funding of future operations. These strategies may include, but are not limited to: additional funding from current or new investors, borrowings of debt, and/or additional public issuances of the Company's common stock. There can be no assurance that these future funding efforts will be successful.

The Company is subject to those risks associated with any specialty pharmaceutical company that has substantial expenditures for research and development. There can be no assurance that the Company's research and development projects will be successful, that products developed will obtain necessary regulatory approval, or that any approved product will be commercially viable. In addition, the Company operates in an environment of rapid technological change and is largely dependent on the services of its employees and consultants.

(2) Summary of Significant Accounting Policies

a. Basis of Presentation

The accompanying unaudited interim financial statements of the Company have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP") for interim financial information and with the instructions to Form 10-Q and Article 10 or Regulation S-X. In the opinion of management, the accompanying financial statements of the Company, include all normal and recurring adjustments (which consist primarily of accruals, estimates and assumptions that impact the financial statements) considered necessary to present fairly the Company's financial position as of June 30, 2015 and its results of operations for the three and six months ended June 30, 2015 and 2014 and cash flows for the six months ended June 30, 2015 and 2014. Operating results for the six months ended June 30, 2015 are not necessarily indicative of the results that may be expected for the year ending December 31, 2015. The interim financial statements, presented herein, do not contain the required disclosures under GAAP for annual financial statements. The accompanying financial statements should be read in conjunction with the annual audited financial statements and related notes as of and for the year ended December 31, 2014 included in the final prospectus dated August 5, 2015 filed with the SEC.

ZYNERBA PHARMACEUTICALS, INC.
NOTES TO UNAUDITED FINANCIAL STATEMENTS (Continued)

b. Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and reported amounts of revenues and expenses during the reporting period. Actual results could differ from such estimates.

c. Net Loss per Share

Basic loss per share is computed by dividing net loss applicable to common stockholders by the weighted average number of shares of common stock outstanding during each period. Diluted loss per share includes the effect, if any, from the potential exercise or conversion of securities, such as redeemable convertible preferred stock, convertible preferred stock, restricted stock, and stock options, which would result in the issuance of incremental shares of common stock. In computing the basic and diluted net loss per share applicable to common stockholders, the weighted average number of shares remains the same for both calculations due to the fact that when a net loss exists, dilutive shares are not included in the calculation as the impact is anti-dilutive.

The following potentially dilutive securities outstanding as of June 30, 2015 and 2014 have been excluded from the computation of diluted weighted average shares outstanding, as they would be anti-dilutive:

	June 30,	
	2015	2014
Redeemable convertible preferred stock	6,964,053	909,002
Stock options	606,379	—
Unvested restricted stock	579,882	—
	8,150,314	909,002

d. Split of Common Stock

On July 22, 2015, the Board of Directors approved a reverse stock split of the Company's common stock at a ratio of one share for every 1.88 shares previously held. The reverse stock split was effected on July 30, 2015. All common stock share and per share data included in the financial statements reflect the reverse stock split.

e. Recent Accounting Pronouncements

In August 2014, the Financial Accounting Standard Board issued Accounting Standards Update No. 2014-15, *Presentation of Financial Statements-Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern*, which defines management's responsibility to assess an entity's ability to continue as a going concern, and to provide related footnote disclosures if there is substantial doubt about its ability to continue as a going concern. The pronouncement is effective for annual reporting periods ending after December 15, 2016 with early adoption permitted. The adoption of this guidance is not expected to have a material impact on the Company's financial statements.

(3) Fair Value Measurements

The Company utilizes a valuation hierarchy that prioritizes fair value measurements based on the types of inputs used for the various valuation techniques related to its financial assets and financial liabilities. The three levels of inputs used to measure fair value are described as follows:

Level 1 — Unadjusted quoted prices in active markets for identical assets or liabilities.

Level 2 — Observable inputs and quoted prices in active markets for similar assets and liabilities.

ZYNERBA PHARMACEUTICALS, INC.
NOTES TO UNAUDITED FINANCIAL STATEMENTS (Continued)

Level 3 — Unobservable inputs and models that are supported by little or no market activity.

In accordance with the fair value hierarchy described above, the following table sets forth the Company's cash equivalents measured at fair value on a recurring basis:

	Carrying value as of June 30, 2015	Fair Value Measurement as of June 30, 2015		
		Level 1	Level 2	Level 3
Cash equivalents	$ 5,501,377	$5,501,377	—	—

	Carrying value as of December 31, 2014	Fair Value Measurement as of December 31, 2014		
		Level 1	Level 2	Level 3
Cash equivalents	$ 9,004,991	$9,004,991	—	—

(4) Property and Equipment

Property and equipment consisted of the following:

	Estimated useful life (in years)	June 30, 2015	December 31, 2014
Lab equipment	5	$ 4,325	$ 4,325
Computer equipment	3	18,918	17,139
Furniture and fixtures	5	88,810	1,781
Total cost		112,053	23,245
Less accumulated depreciation		(8,145)	(3,603)
Property and equipment, net		$ 103,908	$ 19,642

Depreciation expense was $3,095 and $9,127 for the three months ended June 30, 2015 and 2014, respectively. Depreciation expense was $4,542 and $18,762 for the six months ended June 30, 2015 and 2014, respectively.

(5) Accrued Expenses

Accrued expenses consisted of the following:

	June 30, 2015	December 31, 2014
Deferred offering costs	$ 691,564	$ 1,080,199
Grants payable	—	400,000
Accrued research and development	380,765	—
Other	190,397	231,274
Total accrued expenses	$1,262,726	$ 1,711,473

(6) Stock-Based Compensation

In September 2014, the Company established the 2014 Omnibus Incentive Compensation Plan ("2014 Plan"), which allows for the granting of incentive stock options, nonqualified stock options, stock appreciation rights, stock awards, stock units, performance units and other stock-based awards to purchase an aggregate of 1,288,581 shares of the Company's common stock to employees, officers, directors, consultants, and advisors. In addition, the 2014 Plan provides selected executive employees with the opportunity to receive bonus awards that are considered qualified performance-based compensation.

ZYNERBA PHARMACEUTICALS, INC.
NOTES TO UNAUDITED FINANCIAL STATEMENTS (Continued)

Options issued under the 2014 Plan have a contractual life of 10 years and may be exercisable in cash or as otherwise determined by the board of directors. The Company has granted options to employees and non-employees.

In October and December 2014, the Company entered into employment contracts and agreements in connection with the hiring of its key executives and certain consultants and issued stock options to purchase 542,550 shares of common stock with an exercise price of $3.98 per share and 579,882 shares of restricted common stock that have certain performance-based and time-based vesting criteria. There were no restricted stock awards during the six month period ended June 30, 2015.

In January 2015, the Company entered into an employment contract in connection with the hiring of an executive and issued stock options to purchase 63,829 shares of common stock with an exercise price of $3.98 per share that have certain performance-based and time-based vesting criteria. The stock options vest 25% upon the closing of the Company's IPO and then quarterly over three years following the closing of the Company's IPO.

No expense has been recorded for the stock option grants and restricted stock awards as the vesting of the awards was contingent upon the closing of the Company's IPO. The stock options and restricted stock awards vested 25% upon the closing of the Company's IPO and then will vest quarterly over three years.

The weighted average fair value of stock options granted in the six months ended June 30, 2015 was estimated at $0.73 per share using the Black-Scholes option pricing model with the following assumptions: expected volatility of 76%, risk free interest rate of 2.0%, expected term of 6 years and 0% expected dividend yield.

As of June 30, 2015, there are stock options to purchase 606,379 shares of common stock outstanding and 579,882 shares of restricted stock outstanding. None of the stock options or restricted stock were vested as of June 30, 2015. As of June 30, 2015, 102,320 shares are available for issuance under the 2014 Plan.
The following table summarizes the stock option activity under the 2014 Plan.

	Options	Weighted average exercise price per share
Balance as of December 31, 2014	542,550	$ 3.98
Granted	63,829	$ 3.98
	606,379	$ 3.98

Item 2. ***Management's Discussion and Analysis of Financial Condition and Results of Operations***

You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and related notes appearing elsewhere in this quarterly report. The following discussion contains forward-looking statements that involve risks, uncertainties and assumptions. Our actual results and the timing of certain events could differ materially from those anticipated in these forward-looking statements as a result of many factors. We discuss factors that we believe could cause or contribute to these differences below and elsewhere in this quarterly report, including those set forth under "Forward-looking Statements" and "Risk Factors", and "Risk Factors" in the Company's Prospectus.

Overview

Company Overview

We are a ten-year-old specialty pharmaceutical company focused on developing and commercializing proprietary next-generation synthetic cannabinoid therapeutics formulated for transdermal delivery. Our management team is highly experienced and has a successful history of development, regulatory approval and commercialization of patch and gel transdermal delivery products. We are evaluating two patent-protected product candidates, ZYN002 and ZYN001, in five indications. We intend to study ZYN002 in patients with refractory epilepsy, Fragile X syndrome, ("FXS") and osteoarthritis, ("OA"). We intend to study ZYN001 in patients with fibromyalgia and peripheral neuropathic pain. We believe these product candidates will provide new treatment options for patients, as well as additional treatment options for patients not currently receiving adequate relief from current treatment regimens. We expect to initiate Phase 1 clinical trials for ZYN002 in the second half of 2015 and ZYN001 by mid-2016. We plan to conduct our Phase 1, and possibly Phase 2, clinical trials for ZYN002 in Australia, subject to applicable regulatory approval, and do not expect at this time to file an investigational new drug application, ("IND") with the U.S. Food and Drug Administration, ("FDA"), prior to the commencement of those clinical trials. We must file an IND with the FDA and receive approval from the U.S. Drug Enforcement Agency, ("DEA") prior to commencement of any clinical trials in the United States. We plan to conduct our Phase 1 clinical trials for ZYN001 in the United States, subject to applicable regulatory approval. We plan to submit New Drug Applications for ZYN002 and ZYN001 to the FDA upon completion of all requisite clinical trials.

Cannabinoids are a class of compounds derived from *Cannabis* plants. The two primary cannabinoids contained in *Cannabis* are cannabidiol, ("CBD"), and ∆ 9-tetrahydrocannabinol ("THC"). Clinical and preclinical data suggest that CBD has positive effects on treating refractory epilepsy, FXS and arthritis and THC has positive effects on treating pain. Interest in cannabinoid therapeutics has increased significantly over the past several years as preclinical and clinical data has emerged highlighting the potential efficacy and safety benefits of cannabinoid therapeutics. The cannabinoid therapeutics market is expected to grow significantly due to the potential benefits these products may provide over existing therapies. In addition to ZYN002 and ZYN001 potentially offering first-line therapies to patients suffering from FXS, OA, fibromyalgia and peripheral neuropathic pain, we believe ZYN002 may provide a complementary treatment for patients suffering from epilepsy who are refractory to their current treatment regimens.

ZYN002 is the first and only synthetic CBD formulated as a permeation-enhanced gel for transdermal delivery, which is patent-protected through 2030. CBD is the primary non-psychoactive component of *Cannabis* . In preclinical animal studies, ZYN002's permeation enhancer increased delivery of CBD through the layers of the skin and into the circulatory system. These preclinical studies suggest increased bioavailability, consistent plasma levels and the avoidance of first-pass liver metabolism. In addition, an *in vitro* study performed by us demonstrated that CBD is degraded to THC in an acidic environment such as the stomach. We believe such degradation may lead to increased psychoactive effects, which may be avoided or minimized with the transdermal delivery of ZYN002, which avoids the gastrointestinal tract and potential stomach acid degradation. ZYN002 is targeting treatment of refractory epilepsy, FXS and OA, which collectively affect millions of patients using treatments that currently comprise a multi-billion dollar market. FXS may qualify for orphan drug designation in the United States because the number of patients in the United States with FXS is less than 100,000. We requested orphan drug designation from the FDA in the second half of 2015.

ZYN001 is a pro-drug of THC that enables effective transdermal delivery via a patch and is patent-protected through 2031. In addition, we expect that ZYN001 will be classified by the FDA as a new chemical entity, or NCE. In our preclinical animal studies, ZYN001 demonstrated effective skin permeation with sustained delivery and rapid conversion of ZYN001 to THC. These preclinical studies suggest increased bioavailability, consistent plasma levels and the avoidance of first-pass liver metabolism. In addition, preclinical toxicology models conducted to date have not shown any toxicology or genotoxicity findings. ZYN001 is targeting two pain indications (fibromyalgia and peripheral neuropathic pain) which collectively affect millions of patients using treatments that currently comprise a multi-billion dollar market.

Our key development programs and expected timelines for the development of ZYN002 and ZYN001 are shown in the table below:

Product Candidate	Target Indication	Delivery Method	Current Development Status	Expected Next Steps
ZYN002	Refractory Epilepsy	Permeation-enhanced Gel	Preclinical	2H15: Initiate Phase 1
	Fragile X Syndrome Osteoarthritis			2H16: Initiate Phase 2a
ZYN001	Fibromyalgia	Transdermal Patch	Preclinical	Mid-2016: Initiate Phase 1
	Peripheral Neuropathic Pain			1H17: Initiate Phase 2a

We have never been profitable and have incurred net losses since inception. Our net losses were $1.6 million and $3.1 million for the three and six months ended June 30, 2015, respectively. We expect to incur losses for the foreseeable future, and we expect these losses to increase as we continue our development of, and seek regulatory approvals for, our product candidates. Because of the numerous risks and uncertainties associated with product development, we are unable to predict the timing or amount of increased expenses or when, or if, we will be able to achieve or maintain profitability.

JOBS Act

On April 5, 2012, the Jumpstart Our Business Startups Act of 2012, or JOBS Act, was signed into law. The JOBS Act contains provisions that, among other things, reduce certain reporting requirements for an "emerging growth company." As an "emerging growth company," we are electing not to take advantage of the extended transition period afforded by the JOBS Act for the implementation of new or revised accounting standards, and as a result, we will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth companies. Section 107 of the JOBS Act provides that our decision not to take advantage of the extended transition period is irrevocable.

Subject to certain conditions set forth in the JOBS Act, as an "emerging growth company," we are not required to, among other things, (i) provide an auditor's attestation report on our system of internal controls over financial reporting pursuant to Section 404, (ii) provide all of the compensation disclosure that may be required of non-emerging growth public companies under the Dodd-Frank Wall Street Reform and Consumer Protection Act, (iii) comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements (auditor discussion and analysis), and (iv) disclose certain executive compensation-related items such as the correlation between executive compensation and performance and comparisons of the chief executive officer's compensation to median employee compensation. These exemptions will apply until the fifth anniversary of the completion of our IPO or until we no longer meet the requirements for being and "emerging growth company," whichever occurs first.

Financial Operations Overview

The following discussion sets forth certain components of our statements of operations as well as factors that impact those items.

Revenues —

Our revenues consist of state and federal research grants and fees received from research services for third-party product development. These revenues are recognized when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed or determinable and collectability is reasonably assured.

Research and Development Expenses —

Our research and development expenses consist of expenses incurred in development and preclinical studies relating to our product candidates, including:

- expenses associated with preclinical development;
- personnel-related expenses, such as salaries, benefits, travel and other related expenses, including stock-based compensation;
- payments to third-party contract research organizations (“CROs”), contractor laboratories and independent contractors; and
- depreciation, maintenance and other facility-related expenses.

We expense all research and development costs as incurred. Preclinical development expenses for our product candidates are a significant component of our current research and development expenses. Product candidates in later stage clinical development generally have higher research and development expenses than those in earlier stages of development, primarily due to increased size and duration of the clinical trials. We track and record information regarding external research and development expenses for each grant, study or trial that we conduct. From time to time, we use third-party CROs, contractor laboratories and independent contractors in preclinical studies. We recognize the expenses associated with third parties performing these services for us in our preclinical studies based on the percentage of each study completed at the end of each reporting period.

We incurred research and development expenses of $1.0 million and $1.9 million for the three and six months ended June 30, 2015, respectively.

We expect that our research and development expenses in 2015 and for the next several years will be higher than in 2014 as a result of the work needed for our expected initiation of our Phase 1 clinical trials of ZYN002 in the second half of 2015 and ZYN001 by mid-2016. These expenditures are subject to numerous uncertainties regarding timing and cost to completion. Completion of our preclinical development and clinical trials may take several years or more and the length of time generally varies according to the type, complexity, novelty and intended use of a product candidate. The cost of clinical trials may vary significantly over the life of a project as a result of differences arising during clinical development, including, among others:

- the number of sites included in the clinical trials;
- the length of time required to enroll suitable patients;
- the size of patient populations participating in the clinical trials;
- the duration of patient follow-ups;
- the development stage of the product candidates; and
- the efficacy and safety profile of the product candidates.

Due to the early stages of our research and development, we are unable to determine the duration or completion costs of our development of ZYN002 and ZYN001. As a result of the difficulties of forecasting research and development costs of ZYN002 and ZYN001 as well as the other uncertainties discussed above, we are unable to determine when and to what extent we will generate revenues from the commercialization and sale of an approved product candidate.

General and Administrative Expenses —

General and administrative expenses consist primarily of salaries, benefits and other related costs, including stock-based compensation, for personnel serving in our executive, finance, accounting, legal and human resource functions. Our general and administrative expenses also include facility and related costs not included in research and development expenses, professional fees for legal services, including patent-related expenses, consulting, tax and accounting services, insurance and general corporate expenses. We expect that our general and administrative expenses will increase with the continued development and potential commercialization of our product candidates.

We expect that our general and administrative expenses in 2015 and for the next several years will be higher than in 2014 as we increase our headcount. We also anticipate increased expenses relating to our operations as a public company, including increased costs for the hiring of additional personnel, and for payment to outside consultants, including lawyers and accountants, to comply with additional regulations, corporate governance, internal control and similar requirements applicable to public companies, as well as increased costs for insurance.

Interest Income (Expense), net —

Interest expense consists of interest expense on our note payable that was paid off during 2014. Interest income consists primarily of interest earned on our money market bank account.

Income Taxes —

As of December 31, 2014, we had $6.9 million of federal operating loss carryforwards and $161,000 of research tax credit carryforwards available to offset future taxable income. These operating loss and research tax credit carryforwards will begin to expire in 2028 and 2027, respectively. The Tax Reform Act of 1986, (“Act”) provides for limitation on the use of net operating loss and research and development tax credit carryforwards following certain ownership changes (as defined by the Act) that could limit our ability to utilize these carryforwards. We may have experienced various ownership changes, as defined by the Act, as a result of past financings. Accordingly, our ability to utilize the aforementioned carryforwards may be limited. Additionally, U.S. tax laws limit the time during which these carryforwards may be applied against future taxes; therefore, we may not be able to take full advantage of these carryforwards for federal income tax purposes.

The closing of our IPO in August 2015, together with private placements and other transactions that have occurred since our inception, may trigger, or may have already triggered, an "ownership change" pursuant to Section 382 of the Internal Revenue Code of 1986. If an ownership change is triggered, it will limit our ability to use some of our net operating loss carryforwards. In addition, since we will need to raise substantial additional funding to finance our operations, we may undergo further ownership changes in the future, which could further limit our ability to use net operating loss carryforwards. As a result, if we generate taxable income, our ability to use some of our net operating loss carryforwards to offset U.S. federal taxable income may be subject to limitations, which could result in increased future tax liability to us.

Results of Operations

Comparison of the Three Months Ended June 30, 2015 and June 30, 2014

Revenues

Revenues decreased by $48,707, or 76.0%, to $15,390 for the three months ended June 30, 2015 from $64,097 for the three months ended June 30, 2014. Revenues in each period were entirely related to work performed in connection with grants received. The decrease from 2014 reflected the termination of work on two grants and a temporary slowdown in research activities associated with our remaining grant.

Research and Development Expenses

Research and development expenses increased by $643,693, or 175.3%, to $1.0 million for the three months ended June 30, 2015 from $367,296 for the three months ended June 30, 2014. The increase was primarily the result of increased consulting and compensation expense of approximately $671,000 related to increased product development activities, which was partly offset by lower spending on university contracted services, repair and maintenance and lab supplies.

Our expenditures associated with ZYN002, ZYN001 and other research and development projects for the three months ended June 30, 2015 were $498,319, $339,111 and $173,559, respectively. Our expenditures associated with ZYN001 and our other projects in the three months ended June 30, 2014 were $59,732 and $307,564, respectively; no expenditures were made for ZYN002 during the three month period.

General and Administrative Expenses

General and administrative expenses decreased by $574,714, or 47.6%, to $631,474 for the three months ended June 30, 2015 from $1.2 million for the three months ended June 30, 2014. The decrease was primarily the result of a $1.2 million decrease in consulting costs. Consulting costs for the three months ended June 30, 2014 primarily included $250,000 paid to affiliates of a new investor for the reimbursement of legal fees and $792,000 in non-cash expense recognized on the issuance of common stock to a new investor for consulting services rendered.

The decrease was partly offset by an increase of $282,000 in personnel costs and an increase of $156,000 in professional service costs. In addition, general and administrative expenses for the three months ended June 30, 2014 reflected the benefit of $181,000 related to the forgiveness of accounts payable. The increases in personnel costs and professional service costs were largely the result of our efforts to establish an infrastructure to support our product development activities and the professional service fees related to the preparation for becoming a public company.

Other Income (Expense)

During the three months ended June 30, 2015, the Company recognized $697 in interest income compared to net interest expense of $268 for the three months ended June 30, 2014.

Comparison of the Six Months Ended June 30, 2015 and June 30, 2014

Revenues

Revenues decreased by $180,166, or 85.6%, to $30,218 for the six months ended June 30, 2015 from $210,384 for the six months ended June 30, 2014. Revenues in each period were entirely related to work performed in connection with grants received. The decrease from 2014 reflected the termination of work on two grants and a temporary slowdown in research activities associated with our remaining grant.

Research and Development Expenses

Research and development expenses increased by $1.2 million, or 185.5%, to $1.9 million for the six months ended June 30, 2015 from $653,021 for the six months ended June 30, 2014. The increase was primarily the result of increased consulting and compensation expense of approximately $1.3 million related to increased product development activities, which was partly offset by lower spending on university contracted services, repair and maintenance and lab supplies.

Our expenditures associated with ZYN002, ZYN001 and other research and development projects for the six months ended June 30, 2015 were $780,933, $721,208 and $362,552, respectively. Our expenditures associated with ZYN001 and our other projects in the six months ended June 30, 2014 were $171,261 and $481,760, respectively; no expenditures were made for ZYN002 during the three month period.

General and Administrative Expenses

General and administrative expenses decreased by $20,645, or 1.6%, from the six months ended June 30, 2014. The decrease was primarily the result of a $1.2 million decrease in consulting costs. Consulting costs for the six months ended June 30, 2014 included $250,000 paid to affiliates of a new investor for the reimbursement of legal fees and $792,000 in non-cash expense recognized on the issuance of common stock to a new investor for consulting services rendered.

The decrease was primarily offset by an increase of $584,000 in personnel costs and an increase of $323,000 in professional service costs. In addition, general and administrative expenses for the six months ended June 30, 2014 reflected the benefit of $181,000 related to the forgiveness of accounts payable. The increases in personnel costs and professional service costs were largely the result of our efforts to establish an infrastructure to support our product development activities and the professional service fees related to the preparation for becoming a public company.

Other Income (Expense)

During the six months ended June 30, 2015, the Company recognized $1,377 in interest income compared to net interest expense of $1,485 for the six months ended June 30, 2014.

Liquidity and Capital Resources

Since our inception in 2007, we have devoted most of our cash resources to research and development and general and administrative activities. We have financed our operations primarily with the proceeds from the sale of preferred stock and convertible promissory notes, state and federal grants and research services. To date, we have not generated any revenues from the sale of products, and we do not anticipate generating any revenues from the sales of products for the foreseeable future. We have incurred losses and generated negative cash flows from operations since inception. As of June 30, 2015, our principal sources of liquidity were our cash and cash equivalents, which totaled $5.7 million. Our working capital was $5.2 million as of June 30, 2015.

Equity Financings

For the year ended December 31, 2014, we received net proceeds of $13.2 million from the sale of convertible preferred stock. For the six months ended June 30, 2014, we received net proceeds of $309,411 from the sale of shares of our Series B redeemable convertible preferred stock and $400,001 from the sale of shares of our Series 1 convertible preferred stock. There were no proceeds from equity financings for the six months ended June 30, 2015.

In August 2015 we completed our IPO, selling 3,450,000 shares of common stock at an offering price of $14.00 per share, resulting in gross proceeds of $48.3 million. Net proceeds received after deducting underwriting discounts and commissions and offering expenses were $42.1 million.

Debt

We had no debt outstanding as of June 30, 2015 or December 31, 2014.

In April 2007, we were awarded a grant by the Kentucky Economic Development Finance Authority, or KEDFA, on behalf of the Commonwealth of Kentucky Department of Commercialization and Innovation, or DCI, in the form of a non-interest bearing forgivable loan in the amount of up to $500,000 to be used for the purchase of equipment. The loan was subject to repayment in four annual installments equal to $125,000 and was secured by the assets purchased with the loan funds. The loan contained a provision for the forgiveness of the total loan provided we maintained certain employment positions in existence at the time of the award at the then average annual base salary and created 30 additional high tech employment positions at an average annual base salary of at least $80,000. Under the terms of the initial loan, these existing and new employment positions were to be created by December 31, 2012 and retained through December 31, 2015. In December 2012, KEDFA approved an extension of the deadline for creating the new employment positions to December 31, 2014, with repayment beginning in December 2014. Additionally, the loan provided for partial forgiveness had the Company not fully reached the specified employment creation. In January 2014, we granted KEDFA liens on certain of our patents as security for the forgivable loan. In September 2014, we repaid the forgivable loan balance of $499,996 and KEDFA released its security interest.

Future Capital Requirements

We expect that the net proceeds from our IPO and our existing cash and cash equivalents will be sufficient to fund our operations and capital requirements for 24 to 30 months. We believe that these available funds will be sufficient to complete (i) Phase 1 clinical trials for ZYN002 and three Phase 2a clinical trials for this product candidate, one for each target indication of refractory epilepsy, FXS and OA and (ii) Phase 1 clinical trials for ZYN001 and two Phase 2a clinical trials for this product candidate, one for each target indication of fibromyalgia and peripheral neuropathic pain. However, it is difficult to predict our spending for our product candidates prior to obtaining FDA approval. Moreover, changing circumstances may cause us to expend cash significantly faster than we currently anticipate, and we may need to spend more cash than currently expected because of circumstances beyond our control.

Our expectations regarding future cash requirements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments that we make in the future. We have no current understandings, agreements or commitments for any material acquisitions or licenses of any products, businesses or technologies. We may need to raise substantial additional capital in order to engage in any of these types of transactions.

We expect to continue to incur substantial additional operating losses for at least the next several years as we continue to develop our product candidates and seek marketing approval and, subject to obtaining such approval, the eventual commercialization of our product candidates. If we obtain marketing approval for either of our product candidates, we will incur significant sales, marketing and outsourced manufacturing expenses. In addition, we expect to incur additional expenses to add operational, financial and information systems and personnel, including personnel to support our planned product commercialization efforts. We also expect to incur significant costs to comply with corporate governance, internal controls and similar requirements applicable to us as a public company.

Our future use of operating cash and capital requirements will depend on many forward-looking factors, including the following:

- the initiation, progress, timing, costs and results of preclinical studies and clinical trials for our product candidates;
- the clinical development plans we establish for these product candidates;
- the number and characteristics of product candidates that we develop or may in-license;
- the terms of any collaboration agreements we may choose to execute;

- the outcome, timing and cost of meeting regulatory requirements established by the DEA, the FDA, the European Medicines Agency or other comparable foreign regulatory authorities;
- the cost of filing, prosecuting, defending and enforcing our patent claims and other intellectual property rights;
- the cost of defending intellectual property disputes, including patent infringement actions brought by third parties against us;
- costs and timing of the implementation of commercial scale manufacturing activities; and
- the cost of establishing, or outsourcing, sales, marketing and distribution capabilities for any product candidates for which we may receive regulatory approval in regions where we choose to commercialize our products on our own.

To the extent that our capital resources are insufficient to meet our future operating and capital requirements, we will need to finance our cash needs through public or private equity offerings, debt financings, collaboration and licensing arrangements or other financing alternatives. We have no committed external sources of funds. Additional equity or debt financing or collaboration and licensing arrangements may not be available on acceptable terms, if at all.

If we raise additional funds by issuing equity securities, our stockholders will experience dilution. Debt financing, if available, would result in increased fixed payment obligations and may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. Any debt financing or additional equity that we raise may contain terms, such as liquidation and other preferences that are not favorable to us or our stockholders. If we raise additional funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish valuable rights to our technologies, future revenue streams or product candidates or to grant licenses on terms that may not be favorable to us.

Cash Flows

Six Months Ended June 30, 2014 and June 30, 2015 — The following table summarizes our cash flows from operating, investing and financing activities for the three months ended June 30, 2014 and June 30, 2015.

	Six months ended June 30,	
	2015	2014
Statement of Cash Flows Data:		
Total net cash provided by (used in):		
Operating activities	$(3,487,986)	$(650,235)
Investing activities	(46,300)	(5,108)
Financing activities	(53,631)	711,321
Net (decrease) increase in cash and cash equivalents	$(3,587,917)	$ 55,978

Operating Activities

For the six months ended June 30, 2015, cash used in operations was $3.5 million compared to $650,235 for the six months ended June 30, 2014. The increase from the comparable 2014 period was primarily the result of increased compensation costs related to an increase in the number of employees hired to support our product development activities, an increase in prepaid expenses and a decrease in grant revenue and accrued expenses. The increase in cash used in operations was partially offset by an increase in accounts payable.

We expect cash used in operating activities to continue to increase in 2015 as compared to 2014 due to an expected increase in our operating losses associated with ongoing development of our product candidates.

Investing Activities

For the six months ended June 30, 2015 and June 30, 2014, cash used in investing activities was $46,300 and $5,108, respectively, representing the cost of computer equipment, furniture and fixtures associated with the establishment of our new corporate headquarters.

Financing Activities

Cash used in financing activities was $53,631 in the six months ended June 30, 2015, representing direct costs related to our IPO. In the six months ended June 30, 2014, cash provided by financing activities was $711,321, resulting from the issuance of shares of our Series B redeemable convertible preferred stock and our Series 1 convertible preferred stock.

Initial Public Offering

In August 2015, we completed our IPO, selling 3,450,000 shares at an offering price of $14.00 per share resulting in gross proceeds of $48.3 million. Net proceeds received after underwriting fees and offering expenses were approximately $42.1million. In connection with the closing of the IPO, all outstanding shares of our Series 1 convertible preferred stock were converted into an aggregate of 3,704,216 shares of common stock. Based on our current operating plans, we expect that the net proceeds from our IPO and our existing cash and cash equivalents will be sufficient to fund our operations and capital requirements for 24 to 30 months. We believe that these available funds will be sufficient to complete (i) Phase 1 clinical trials for ZYN002 and three Phase 2a clinical trials for this product candidate, one for each target indication of refractory epilepsy, FXS and OA, and (ii) Phase 1 clinical trials for ZYN001 and two Phase 2a clinical trials for this product candidate, one for each target indication of fibromyalgia and peripheral neuropathic pain. However, it is difficult to predict our spending for our product candidates prior to obtaining FDA approval. Moreover, changing circumstances may cause us to expend cash significantly faster than we currently anticipate, and we may need to spend more cash than currently expected because of circumstances beyond our control.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements, except for operating leases, or relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities.

Item 3. ***Quantitative and Qualitative Disclosures About Market Risk***

We are exposed to various market risks, which may result in potential losses arising from adverse changes in market rates, such as interest rates and foreign exchange rates. We do not enter into derivatives or other financial instruments for trading or speculative purposes and do not believe we are exposed to material market risk with respect to our cash and cash equivalents.

We currently have no operations outside the United States, but we have contracted with third parties to manufacture our product candidates and conduct clinical trials outside of the United States. At this time, such manufacturing and research costs are paid for in U.S. dollars and, therefore, are not subject to fluctuations in exchange rates. If we conduct additional clinical trials outside of the United States in the future, we may be required or may choose to pay for those clinical trials in a local foreign currency and could incur foreign currency exchange rate risk.

As of June 30, 2015, we had cash and cash equivalents of $5.7 million consisting primarily of cash and money market accounts. We do not engage in any hedging activities against changes in interest rates or foreign currency exchange rates. Because of the short-term maturities of our cash and cash equivalents, we do not believe that an immediate 10% increase in interest rates would have any significant impact on the realized value of our investments.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of June 30, 2015. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as of June 30, 2015, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control Over Financial Reporting

No change in our internal control over financial reporting occurred during the fiscal quarter ended June 30, 2015 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings.

We are not currently a party to any legal proceedings.

Item 1A. Risk Factors.

You should carefully consider the risk factors described under the heading “Risk Factors” in the Company’s Prospectus. There were no material changes to the risk factors disclosed in the Company’s Prospectus.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

Recent Sales of Unregistered Securities

In August 2015, we granted options to purchase an aggregate of 1,001,977 shares of our common stock with an exercise price of $14.00 per share to eight employees and six directors.

We believe these transactions were exempt from registration under the Securities Act in reliance upon Section 4(a)(2) of the Securities Act, or Regulation D promulgated thereunder, or Rule 701 promulgated under Section 3(b) of the Securities Act as transactions by an issuer not involving any public offering or pursuant to benefit plans and contracts relating to compensation as provided under Rule 701. The recipients of the securities in each of these transactions represented their intentions to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were placed upon the stock certificates issued in these transactions. All recipients had adequate access, through their relationships with us, to information about the Company.

Use of Proceeds

Our IPO was effected through a Registration Statement on Form S-1 (File No. 333-205355) that was declared effective by the SEC on August 4, 2015, which registered an aggregate of 3,450,000 shares of our common stock. On August 10, 2015, 3,450,000 shares of common stock were sold on our behalf at an IPO price of $14.00 per share, including 450,000 shares of common stock upon the exercise by the underwriters of their option to purchase additional shares at the IPO price, for aggregate gross proceeds of $48.3 million. As of the date of filing this report, the offering has terminated, and all of the securities registered pursuant to the offering have been sold prior to termination. Jefferies LLC and Piper Jaffray & Co. acted as joint book-running managers in the IPO, and Canaccord Genuity Inc. and Oppenheimer & Co. Inc. acted as co-managers in the IPO.

On August 10, 2015 we received proceeds from the IPO of $44.8 million, which was net of underwriting discounts and commissions of approximately $3.5 million. Of this amount, we intend to pay estimated offering expenses of approximately $2.8 million. The balance of the funds totaling approximately $42.1 million shall be used in a manner consistent with the use of proceeds from the IPO as described in the Prospectus under “Use of Proceeds.”

The foregoing expenses are a reasonable estimate of the expenses incurred by us in the offering and do not represent the exact amount of expenses incurred. All of the foregoing expenses were direct or indirect payments to persons other than (i) our directors, officers or any of their associates; (ii) persons owning 10% or more of our common stock; or (iii) our affiliates.

There has been no material change in the use of proceeds from the IPO as described in the Prospectus under “Use of Proceeds.”

Purchase of Equity Securities

We did not purchase any of our registered equity securities during the period covered by this Quarterly Report on Form 10-Q.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

None.

Item 5. Other Information.

Not applicable

Item 6. Exhibits.

The exhibits filed as part of this Quarterly Report on Form 10-Q are set forth on the Exhibit Index, which Exhibit Index is incorporated herein by reference.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

ZYNERBA PHARMACEUTICALS, INC.

Date: August 27, 2015

By: /s/ ARMANDO ANIDO
Armando Anido
Chief Executive Officer
(Principal executive officer)

Date: August 27, 2015

By: /s/ RICHARD A. BARON
Richard A. Baron
Chief Financial Officer
(Principal financial and accounting officer)

EXHIBIT INDEX

3.1	Sixth Amended and Restated Certificate of Incorporation of Zynerba Pharmaceuticals, Inc., incorporated by reference to the designated exhibit of the Company's Current Report on Form 8-K filed on August 10, 2015.
3.2	Amended and Restated Bylaws of Zynerba Pharmaceuticals, Inc., incorporated by reference to the designated exhibit of the Company's Current Report on Form 8-K filed on August 10, 2015.
10.1	Amended and Restated 2014 Omnibus Incentive Compensation Plan, incorporated by reference to Exhibit 10.19(A) of the Company's Registration Statement on Form S-1 (File No. 333-205355), filed on June 30, 2015.
10.2	Amendment to the Amended and Restated 2014 Omnibus Incentive Compensation Plan, incorporated by reference to Exhibit 10.19(B) of Amendment No. 1 to the Company's Registration Statement on Form S-1 (File No. 333-205355), filed on July 23, 2015.
10.3	Form of Incentive Stock Option Grant under Amended and Restated 2014 Omnibus Incentive Compensation Plan, incorporated by reference to Exhibit 10.19(C) of the Company's Registration Statement on Form S-1 (File No. 333-205355), filed on June 30, 2015.
10.4	Form of Nonqualified Stock Option Grant under Amended and Restated 2014 Omnibus Incentive Compensation Plan, incorporated by reference to Exhibit 10.19(D) of the Company's Registration Statement on Form S-1 (File No. 333-205355), filed on June 30, 2015.
10.5	Form of Restricted Stock Grant Agreement under Amended and Restated 2014 Omnibus Incentive Compensation Plan, incorporated by reference to Exhibit 10.19(E) of the Company's Registration Statement on Form S-1 (File No. 333-205355), filed on June 30, 2015.
10.6	Form of Indemnification Agreement for directors and officers, incorporated by reference to Exhibit 10.20 of Amendment No. 1 to the Company's Registration Statement on Form S-1 (File No. 333-205355), filed on July 23, 2015.
31.1	Certification of Chief Executive Officer pursuant to Rules 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith).
31.2	Certification of Chief Financial Officer pursuant to Rules 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith).
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished herewith).
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished herewith).

Exhibit 31.1

CERTIFICATION

I, Armando Anido, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Zynerba Pharmaceuticals, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By: /s/ Armando Anido
Name: Armando Anido
Title: Chairman and Chief Executive Officer

Dated: August 27, 2015

Exhibit 31.2

CERTIFICATION

I, Richard A. Baron, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Zynerba Pharmaceuticals, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By: /s/ Richard A. Baron
Name: Richard A. Baron
Title: Chief Financial Officer and Treasurer

Dated: August 27, 2015

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the quarterly report of Zynerba Pharmaceuticals, Inc. (the "Company") on Form 10-Q for the fiscal quarter ended June 30, 2015 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Armando Anido, Chairman and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Armando Anido
Armando Anido
Chairman and Chief Executive Officer

Dated: August 27, 2015

Exhibit 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the quarterly report of Zynerba Pharmaceuticals, Inc. (the "Company") on Form 10-Q for the fiscal quarter ended June 30, 2015 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Richard A. Baron, Chief Financial Officer and Treasurer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Richard A. Baron
Richard A. Baron
Chief Financial Officer and Treasurer

Dated: August 27, 2015