UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended March 31, 2017

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: 001-33277

MADRIGAL PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)

Four Tower Bridge 200 Barr Harbor Drive, Suite 400 West Conshohocken, Pennsylvania (Address of principal executive offices)

19428 (Zip Code)

04-3508648

(I.R.S. Employer Identification No.)

Registrant's telephone number, including area code: (484) 380-9263

Former name, former address and former fiscal year, if changed since last report:

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 🗵 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 \boxtimes No \square

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

Large accelerated filer \Box

Non-accelerated filer □ (Do not check if a smaller reporting company)

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

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 May 5, 2017, the registrant had 12,167,405 shares of common stock outstanding.

Accelerated filer \Box

Smaller reporting company ⊠ Emerging growth company □

MADRIGAL PHARMACEUTICALS, INC.

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PART I - FINANCIAL INFORMATION

Item 1. Financial Statements.

MADRIGAL PHARMACEUTICALS, INC. Condensed Consolidated Balance Sheets (in thousands, except share and per share amounts) (unaudited)

	March 31, 2017	D	ecember 31, 2016
Assets			
Current assets:			
Cash and cash equivalents	\$ 8,215	\$	19,145
Marketable securities	31,912		21,355
Prepaid expenses and other current assets	 225		707
Total current assets	40,352		41,207
Property and equipment, net	 5		3
Total assets	\$ 40,357	\$	41,210
Liabilities and Stockholders' Equity			
Current liabilities:			
Accounts payable	\$ 2,780	\$	762
Accrued expenses	 3,126		4,038
Total current liabilities	5,906		4,800
Total liabilities	 5,906		4,800
Stockholders' equity:			
Preferred stock, par value \$0.0001 per share authorized: 5,000,000 shares at March 31, 2017 and			
December 31, 2016; no shares issued and outstanding at each of March 31, 2017 and December 31, 2016	—		
Common stock, par value \$0.0001 per share authorized: 200,000,000 shares at March 31, 2017 and			
December 31, 2016, respectively; 12,167,405 and 11,951,866 shares issued and outstanding at March 31,			
2017 and December 31, 2016, respectively	1		1
Additional paid-in-capital	115,692		111,691
Accumulated other comprehensive income	64		25
Accumulated deficit	 (81,306)		(75,307)
Total stockholders' equity	34,451		36,410
Total liabilities and stockholders' equity	\$ 40,357	\$	41,210

See accompanying notes to condensed consolidated financial statements.

MADRIGAL PHARMACEUTICALS, INC. Condensed Consolidated Statements of Operations (in thousands, except share and per share amounts) (unaudited)

	Three Months Ended March 31,		
	 2017		2016
Revenues:			
Total revenues	\$ 	\$	
Operating expenses:			
Research and development	4,380		516
General and administrative	1,695		222
Total operating expenses	 6,075		738
Loss from operations	 (6,075)		(738)
Interest expense	_		(975)
Interest income	76		_
Net loss	\$ (5,999)	\$	(1,713)
Net loss per common share:			
Basic and diluted net loss per common share	\$ (0.50)	\$	(9.72)
Basic and diluted weighted average number of common shares outstanding	11,955,739		176,158

See accompanying notes to condensed consolidated financial statements.

MADRIGAL PHARMACEUTICALS, INC. Condensed Consolidated Statements of Comprehensive Loss (in thousands) (unaudited)

	Three Months Ended March 31,			
	 2017		2016	
Net Loss	\$ (5,999)	\$	(1,713)	
Other comprehensive income (loss):				
Unrealized gain on available-for-sale securities	39		_	
Comprehensive loss	\$ (5,960)	\$	(1,713)	

See accompanying notes to condensed consolidated financial statements.

MADRIGAL PHARMACEUTICALS, INC. Condensed Consolidated Statements of Cash Flows (in thousands) (unaudited)

	Three Months H March 31,				
		2017		2016	
Cash flows from operating activities:					
Net loss	\$	(5,999)	\$	(1,713)	
Adjustments to reconcile net loss to net cash used in operating activities:				())	
PIK interest expense on convertible promissory notes payable — related parties				970	
Stock-based compensation expense		602			
Changes in operating assets and liabilities:					
Accounts receivable - related parties				7	
Prepaid expenses and other current assets		520		(103)	
Accounts payable		2,018		368	
Accrued expense		(912)		28	
Accrued interest — related party		—		5	
Net cash used in operating activities		(3,771)		(438)	
Cash flows from investing activities:					
Purchases of marketable securities		(22,119)		—	
Sales and maturities of marketable securities		11,563			
Purchases of property and equipment		(2)		_	
Net cash used in investing activities		(10,558)			
Cash flows from financing activities:					
Proceeds from issuance of common stock, net of transaction costs		3,399			
Proceeds from convertible notes — related parties				750	
Net cash provided by financing activities		3,399		750	
Net decrease in cash and cash equivalents		(10,930)		312	
Cash and cash equivalents at beginning of period		19,145		306	
Cash and cash equivalents at end of period	\$	8,215	\$	618	

See accompanying notes to condensed consolidated financial statements.

MADRIGAL PHARMACEUTICALS, INC. Notes to Condensed Consolidated Financial Statements (Unaudited)

1. Organization, Business and Basis of Presentation

Organization and Business

Madrigal Pharmaceuticals, Inc. (the "Company" or "Madrigal") is a clinical-stage pharmaceutical company developing novel, high-quality, small-molecule drugs addressing major unmet needs in cardiovascular and metabolic diseases. The Company's lead compound, MGL-3196, is being advanced for non-alcoholic steatohepatitis ("NASH"), a liver disease that commonly affects people with metabolic diseases such as obesity and diabetes, and indications in dyslipidemia, particularly genetic dyslipidemias such as familial hypercholesterolemia ("FH"), including both homozygous and heterozygous forms of the disease. The Company initiated a Phase 2 study of MGL-3196 in NASH in October 2016. In February 2017, the Company initiated a Phase 2 study of MGL-3196 in patients with Heterozygous Familial Hypercholesterolemia ("HeFH").

Madrigal was originally incorporated as a private company ("Private Madrigal") on August 19, 2011 and commenced operations in September 2011. On July 22, 2016, Private Madrigal completed a reverse merger (the "Merger") into Synta Pharmaceuticals Corp. ("Synta") (see Note 3). Upon the consummation of the Merger, the historical financial statements of Private Madrigal became the Company's historical financial statements. Accordingly, the historical financial statements of Private Madrigal are included in the comparative prior periods. The Company, or Madrigal, as used in the accompanying notes to the unaudited condensed consolidated financial statements, refers to Private Madrigal prior to the completion of the Merger and Public Madrigal subsequent to the completion of the Merger.

Basis of Presentation

Certain information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States ("GAAP") have been condensed or omitted. Accordingly, the unaudited condensed consolidated financial statements do not include all information and footnotes required by GAAP for complete annual financial statements. However, we believe that the disclosures included in these financial statements are adequate to make the information presented not misleading. The unaudited condensed financial statements, in the opinion of management, reflect all adjustments, which include normal recurring adjustments, necessary for a fair statement of such interim results. The interim results are not necessarily indicative of the results that we will have for the full year ended December 31, 2017 or any subsequent period. These unaudited condensed financial statements should be read in conjunction with the audited consolidated financial statements and the notes to those statements for the year ended December 31, 2016.

2. Summary of Significant Accounting Policies

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect certain reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting periods. The Company bases its estimates on historical experience and various other assumptions that management believes to be reasonable under the circumstances. Changes in estimates are recorded in the period in which they become known. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Company considers all highly liquid investments with original maturities of three months or less at the date of purchase to be cash equivalents. The Company maintains its cash in bank accounts, the balance of which, at times, exceeds Federal Deposit Insurance Corporation insured limits.

The primary objective of the Company's investment activities is to preserve its capital for the purpose of funding operations and the Company does not enter into investments for trading or speculative purposes. The Company's cash is deposited in highly rated financial institutions in the United States. The Company invests in money market funds and high-grade, short-term commercial paper and corporate bonds, which management believes are subject to minimal credit and market risk.

Marketable Securities

Marketable securities consist of investments in high-grade corporate obligations, and government and government agency obligations that are classified as available-for-sale. Since these securities are available to fund current operations they are classified as current assets on the consolidated balance sheets.

The Company adjusts the cost of available-for-sale debt securities for amortization of premiums and accretion of discounts to maturity. The Company includes such amortization and accretion as a component of interest income, net. Realized gains and losses and declines in value, if any, that the Company judges to be other-than-temporary on available-for-sale securities are reported as a component of interest income, net. To determine whether an other-than-temporary impairment exists, the Company considers whether it intends to sell the debt security and, if the Company does not intend to sell the debt security, it considers available evidence to assess whether it is more likely than not that it will be required to sell the security before the recovery of its amortized cost basis. During the three months ended March 31, 2017 and 2016, the Company determined it did not have any securities that were other-than-temporarily impaired.

Marketable securities are stated at fair value, including accrued interest, with their unrealized gains and losses included as a component of accumulated other comprehensive income or loss, which is a separate component of stockholders' equity. The fair value of these securities is based on quoted prices and observable inputs on a recurring basis. Realized gains and losses are determined on the specific identification method. During the three months ended March 31, 2017 and 2016, the Company did not have any realized gains or losses on marketable securities.

Fair Value of Financial Instruments

The carrying amounts of the Company's financial instruments, which include cash equivalents, and marketable securities, approximate their fair values. The fair value of the Company's financial instruments reflects the amounts that would be received upon sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value hierarchy has the following three levels:

Level 1-quoted prices in active markets for identical assets and liabilities.

Level 2—observable inputs other than Level 1 inputs. Examples of Level 2 inputs include quoted prices in active markets for similar assets or liabilities and quoted prices for identical assets or liabilities in markets that are not active.

Level 3—unobservable inputs that reflect the Company's own assumptions about the assumptions market participants would use in pricing the asset or liability.

Financial assets and liabilities are classified in their entirety within the fair value hierarchy based on the lowest level of input that is significant to the fair value measurement. The Company measures the fair value of its marketable securities by taking into consideration valuations obtained from third-party pricing sources. The pricing services utilize industry standard valuation models, including both income and market based approaches, for which all significant inputs are observable, either directly or indirectly, to estimate fair value. These inputs include reported trades of and broker-dealer quotes on the same or similar securities, issuer credit spreads, benchmark securities and other observable inputs. As of March 31, 2017, the Company's financial assets valued based on Level 1 inputs consisted of cash and cash equivalents in a money market fund and its financial assets valued based on Level 2 inputs consisted of high-grade corporate bonds and commercial paper. During the three months ended March 31, 2017 and 2016, the Company did not have any transfers of financials assets between Levels 1 and 2. As of March 31, 2017, the Company did not have any financial liabilities that were recorded at fair value on a recurring basis on the balance sheet.



Research and Development Costs

Research and development costs are expensed as incurred. Research and development costs are comprised of costs incurred in performing research and development activities, including internal costs (including stock-based compensation), costs for consultants, and other costs associated with the Company's preclinical and clinical programs. In particular, Madrigal has conducted safety studies in animals, optimized and implemented the API manufacturing, and conducted Phase 1 & 2 clinical trials, all of which are considered research and development expenditures.

Patents

Costs to secure and defend patents are expensed as incurred and are classified as general and administrative expense in the Company's statements of operations.

Stock-Based Compensation

The Company recognizes stock-based compensation expense based on the grant date fair value of stock options granted to employees, officers and directors. The Company uses the Black-Scholes option pricing model to determine the grant date fair value as management believes it is the most appropriate valuation method for its option grants. The Black-Scholes model requires inputs for risk-free interest rate, dividend yield, volatility and expected lives of the options.

Certain of the employee stock options granted by the Company are structured to qualify as incentive stock options (ISOs). Under current tax regulations, the Company does not receive a tax deduction for the issuance, exercise or disposition of ISOs if the employee meets certain holding requirements. If the employee does not meet the holding requirements, a disqualifying disposition occurs, at which time the Company may receive a tax deduction. The Company does not record tax benefits related to ISOs unless and until a disqualifying disposition is reported. In the event of a disqualifying disposition, the entire tax benefit is recorded as a reduction of income tax expense. The Company has not recognized any income tax benefit for its share-based compensation arrangements due to the fact that the Company does not believe it is more likely than not it will realize the related deferred tax assets.

Income Taxes

The Company uses the asset and liability method to account for income taxes. Deferred tax assets and liabilities are determined based on the expected future tax consequences of temporary differences between the Company's financial statement carrying amounts and the tax basis of assets and liabilities using enacted tax rates expected to be in effect in the years in which the differences are expected to reverse. The Company currently maintains a 100% valuation allowance on its deferred tax assets.

Basic and Diluted Loss Per Common Share

Basic net loss per share is computed using the weighted average number of common shares outstanding during the period, excluding restricted stock that has been issued but is not yet vested. Diluted net loss per common share is computed using the weighted average number of common shares outstanding and the weighted average dilutive potential common shares outstanding using the treasury stock method. However, for the three months ended March 31, 2017 and 2016, diluted net loss per share is the same as basic net loss per share as the inclusion of weighted average shares of unvested restricted common stock and common stock issuable upon the exercise of stock options would be anti-dilutive.

The following table summarizes outstanding securities not included in the computation of diluted net loss per common share as their inclusion would be anti-dilutive:

	March 31	,
	2017	2016
Common stock options	925,011	_
Unvested restricted common stock	157,262	_
Conversion option on promissory notes — related parties	—	560,598

Recent Accounting Pronouncements

In March 2016, the the Financial Accounting Standards Board (the "FASB") issued Accounting Standards Update ("ASU") No. 2016-09, "Compensation— Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting," which was designed to simplify several aspects of the accounting for share-based payment transactions, including, among other things, guidance related to accounting for income taxes, modification of the criteria for classification of awards as either equity awards or liability awards where an employer withholds shares from an employee's share-based award for tax withholding purposes, and classification on the statement of cash flows of cash payments to a tax authority by an employer that withholds shares from an employee's award for tax withholding purposes. The amendments in this ASU are effective for annual periods beginning after December 15, 2016, and interim periods within those annual periods. The Company adopted ASU No. 2016-09 effective January 1, 2017. There was no significant impact from the adoption of ASU No. 2016-09 because the Company currently maintains a 100% valuation allowance on its deferred tax assets.

In August 2016, the FASB issued ASU No. 2016-15, "Statement of Cash Flows (Topic 230): Clarification of Certain Cash Receipts and Cash Payments." The objective of ASU No. 2016-15 is to eliminate the diversity in practice related to the classification of certain cash receipts and payments in the statement of cash flows, by adding or clarifying guidance on eight specific cash flow issues. For public business entities, ASU 2016-15 is effective for annual and interim reporting periods beginning after December 15, 2017, with early adoption permitted. ASU 2015-16 provides that the amendments in the update should be applied retrospectively to all periods presented, unless deemed impracticable, in which case, prospective application is permitted. The Company is currently evaluating the impact this standard may have on its financial statements.

In January 2016, the FASB issued ASU No. 2016-01, "Financial Instruments—Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities," which amends the guidance in U.S. generally accepted accounting principles on the classification and measurement of financial instruments. Changes to the current guidance primarily affect the accounting for equity investments, financial liabilities under the fair value option, and the presentation and disclosure requirements for financial instruments. In addition, the ASU clarifies guidance related to the valuation allowance assessment when recognizing deferred tax assets resulting from unrealized losses on available-for-sale debt securities. The amendments in this ASU are effective for fiscal years and interim periods beginning after December 15, 2017, and are to be adopted by means of a cumulative-effect adjustment to the balance sheet at the beginning of the first reporting period in which the guidance is effective. Early adoption is not permitted except for the provision to record fair value changes for financial liabilities under the fair value option resulting from instrument-specific credit risk in other comprehensive income. The Company is currently evaluating the impact this standard may have on its financial statements.

3. Reverse Merger

On July 22, 2016, the Company, Synta and Saffron Merger Sub, Inc., a wholly-owned subsidiary of Synta ("Merger Sub"), completed their merger transaction pursuant to which Merger Sub merged with and into the Company with the Company becoming a wholly-owned subsidiary of Synta and the surviving corporation of the Merger. Each outstanding share of Private Madrigal common stock was converted into 0.1593 shares of common stock of the post-merger combined company. As a result, Synta issued 7.3 million shares of common stock to the stockholders of Private Madrigal in exchange for the outstanding common shares of Private Madrigal. For accounting purposes, the Company was considered to have acquired Synta in the Merger. The Company was determined to be the accounting acquirer based upon the terms of the Merger Agreement and other factors including: (i) Madrigal security holders owned approximately 64% of the voting interests of the combined company immediately following the closing of the Merger; (ii) directors appointed by Madrigal hold a majority of board seats in the combined company; and (iii) Madrigal management hold a majority of the key positions in the management of the combined company's assets and liabilities continue to be recorded at their historical carrying amounts and the historical operations that are reflected in the financial statements are those of the Company.

Immediately prior to the closing of the Merger, Synta completed a one-for-35 reverse stock split. Following the reverse stock split and the Merger, the postmerger combined company had approximately 11.3 million shares outstanding and the former stockholders of the Company owned approximately 64% of the outstanding capital stock of the post-merger combined company. The impact of the recapitalization of the Company has been retroactively applied to all periods presented.

4. Liquidity and Uncertainties

The Company is subject to risks common to development stage companies in the Bio-Pharmaceutical industry including, but not limited to, uncertainty of product development and commercialization, dependence on key personnel, uncertainty of market acceptance of products and product reimbursement, product liability, uncertain protection of proprietary technology, potential inability to raise



additional financing necessary for development and commercialization, and compliance with the U.S. Food and Drug Administration and other government regulations.

The Company has incurred losses since inception, including approximately \$6.0 million for the three months ended March 31, 2017, resulting in an accumulated deficit of approximately \$81.3 million as of March 31, 2017. Management expects to incur losses for the foreseeable future. Subsequent to the reverse merger, the Company has funded its operations primarily through proceeds from sales of the Company's common stock under the October 2015 Sales Agreement (as defined below).

The Company believes that its cash, cash equivalents and marketable securities at March 31, 2017 will be sufficient to fund operations past one year from the issuance of these financial statements. To meet its future capital needs beyond our assessment period, the Company will need to raise additional capital through debt or equity financings, collaborations, partnerships or other strategic transactions. However, there can be no assurance that the Company will be able to complete any such transactions on acceptable terms or otherwise. The inability of the Company to obtain sufficient funds on acceptable terms when needed could have a material adverse effect on the Company's business, results of operations and financial condition. The Company also has the ability to delay certain research activities and related clinical expenses if necessary due to liquidity concerns until a date in which those concerns are relieved.

5. Cash, Cash Equivalents and Marketable Securities

A summary of cash, cash equivalents and available-for-sale marketable securities held by the Company as of March 31, 2017 and December 31, 2016 is as follows (in thousands):

	March 31, 2017										
	Cost		Unrealized Cost gains				Unrealized losses			Fair value	
Cash and cash equivalents:											
Cash (Level 1)	\$	1,911	\$		\$		\$	1,911			
Money market funds (Level 1)		6,304		—		—		6,304			
Corporate debt securities due within 3 months of date of purchase (Level 2)				_		—					
Total cash and cash equivalents		8,215						8,215			
Marketable securities:											
Corporate debt securities due within 1 year of date of purchase (Level 2)		31,848		64				31,912			
Total cash, cash equivalents and marketable securities	\$	40,063	\$	64	\$	_	\$	40,127			

	December 31, 2016							
	Cost		Unrealized gains					Fair value
Cash and cash equivalents:								
Cash (Level 1)	\$	5,651	\$	_	\$	_	\$	5,651
Money market funds (Level 1)		13,494		—		_		13,494
Corporate debt securities due within 3 months of date of purchase (Level 2)		—		_		_		_
Total cash and cash equivalents		19,145		_				19,145
Marketable securities:								
Corporate debt securities due within 1 year of date of purchase (Level 2)		21,330		25		_		21,355
Total cash, cash equivalents and marketable securities	\$	40,475	\$	25	\$	_	\$	40,500

6. Convertible Promissory Notes — Related Parties

Prior to the Merger, the Company was financed via issuances of convertible promissory notes, designated as "the September 14, 2011 Notes", "the September 16, 2011 Notes", and "the March 1, 2016 Notes", respectively (collectively "the Notes"). The Notes accrued interest at 8% per annum, compounded monthly, and were collateralized by all assets of the Company.

Effective April 13, 2016, in connection with execution of the Merger Agreement, the Notes were amended and restated, primarily to provide for mandatory conversion upon completion of the Merger. On that same date, the lenders collectively waived all accrued and unpaid interest under all of the convertible notes. The total accrued and waived interest amounted to \$13,680,000. The lenders also agreed that no additional interest on these notes would be accrued through the date on which the Merger was consummated or terminated. Also on April 13, 2016, the Company reduced the convertible notes payable by the waived accrued interest less \$2,456,000 of accrued interest for the period April 14, 2016 through the maturity date of December 31, 2016, as required under Troubled Debt Restructuring accounting guidance. The net waived interest of \$11,224,000 was recorded as an increase in Additional Paid in Capital ("APIC") at the time of the amendment, as the notes were held by related parties. The remaining \$2,456,000 of accrued interest was recorded as an increase in APIC upon conversion at the Merger.

During the period March 1, 2016 through the Merger, the lenders provided convertible promissory note financing of \$8,500,000 in cash. Additionally, on April 13, 2016, one of the lenders exchanged \$500,000 of Advances Payable for an equal amount of convertible promissory notes.

7. Stockholders' Equity (Deficit)

Common Stock

Each common stockholder is entitled to one vote for each share of common stock held. The common stock will vote together with all other classes and series of stock of the Company as a single class on all actions to be taken by the Company's stockholders. Each share of common stock is entitled to receive dividends, as and when declared by the Company's board of directors.

The Company has never declared cash dividends on its common stock and does not expect to do so in the foreseeable future.

At-The-Market Issuance Sales Agreement

In October 2015, the Company entered into an at-the-market issuance sales agreement (the October 2015 Sales Agreement), with Cowen and Company, LLC (Cowen), pursuant to which the Company may issue and sell shares of its common stock, having an aggregate offering price of up to \$100 million, from time to time, at the Company's option, through Cowen as its sales agent. Sales of common stock through Cowen may be made by any method that is deemed an "at-the-market" offering as defined in Rule 415 promulgated under the Securities Act of 1933, as amended, including by means of ordinary brokers' transactions at market prices, in block transactions or as otherwise agreed by the Company and Cowen. Subject to the terms and conditions of the October 2015 Sales Agreement, Cowen will use commercially reasonable efforts consistent with its normal trading and sales practices to sell the company may impose). The Company is not obligated to make any sales of its common stock under the October 2015 Sales Agreement. Any shares sold will be sold pursuant to an effective shelf registration statement on Form S-3 (file no. 333-206135). The Company will pay Cowen a commission of up to 3% of the gross proceeds. The October 2015 Sales Agreement may be terminated by the Company at any time upon 10 days' notice.

As of March 31, 2017, 597,256 shares have been sold to-date under the October 2015 Sales Agreement for an aggregate of approximately \$9.6 million in gross proceeds. Net proceeds to the Company were approximately \$9.4 million after deducting commissions and other transactions costs. Of those shares sold, 215,539 were sold in 2017 for an aggregate of approximately \$3.5 million in gross proceeds, and \$3.4 million in net proceeds. Approximately \$90.4 million remained reserved under the Company's shelf registration statement and the applicable prospectus supplement for possible future issuance under the October 2015 Sales Agreement.

8. Stock-based Compensation

In June 2015, upon obtaining stockholder approval at its annual shareholder meeting, the Company implemented its new 2015 Stock Plan. The 2015 Stock Plan replaced the 2006 Stock Plan which was terminated upon adoption of the 2015 Stock Plan. Shares of common stock reserved for outstanding awards under the 2006 Stock Plan that lapse or are canceled will be added back to the share reserve available for future awards under the 2015 Stock Plan. The 2015 Stock Plan The 2015 Stock Plan provides for the grant of incentive stock options, non-statutory stock options, restricted stock and other stock-based compensation awards to employees, officers, directors and consultants of the Company. The administration of the 2015 Stock Plan is under the general supervision of the compensation committee

of the board of directors. The exercise price of the stock options is determined by the compensation committee of the board of directors, provided that incentive stock options are granted with an exercise price not less than fair market value of the common stock on the date of grant and expire no later than ten years from the date the option is granted. As of March 31, 2017, the Company had options outstanding to purchase 925,011 shares of its common stock, which includes options outstanding under its 2006 Stock Plan that was terminated in June 2015. As of March 31, 2017, 510,261 shares were available for future issuance.

The following table summarizes stock option activity during the three months ended March 31, 2017:

	Shares	 hted average ercise price
Outstanding at January 1, 2017	784,011	\$ 10.70
Options granted	141,000	15.80
Options exercised	—	
Options cancelled	<u> </u>	—
Outstanding at March 31, 2017	925,011	\$ 11.48
Exercisable at March 31, 2017	149,882	\$ 12.78

The total cash received by the Company as a result of stock option exercises was \$0 in each of the three months ended March 31, 2017 and 2016. The weighted-average grant date fair values, based on the Black-Scholes option model, of options granted during the three months ended March 31, 2017 was \$12.69.

Restricted Common Stock

The Company's share-based compensation plan provides for awards of restricted shares of common stock to employees, officers, directors and consultants to the Company. Restricted stock awards are subject to forfeiture if employment or service terminates during the prescribed retention period. Restricted shares vest over the service period. There were 157,262 unvested restricted shares outstanding at a weighted average grant date fair value of \$10.06 at March 31, 2017 and December 31, 2016.

Stock-Based Compensation Expense

Stock-based compensation expense during the three months ended March 31, 2017 and 2016 was as follows (in thousands):

Three Months Ended March 31,				
2	017	2	016	
\$	454	\$	_	
	148		_	
\$	602	\$		
\$	138	\$	_	
	464			
\$	602	\$		
	2 \$ \$ \$ \$ \$		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	

Unrecognized stock-based compensation expense as of March 31, 2017 was as follows (in thousands):

	comj	ecognized stock pensation spense	Weighted average remaining period (in years)	
Stock options	\$	5,783	2.83	
Restricted stock		1,210	2.21	
Total	\$	6,993	2.72	

9. Related Party Transactions

Related party financing

Certain related party lenders provided financing to the Company prior to the Merger, which was subsequently converted to equity at the time of the Merger. For the three months ended March 31, 2016, the Company incurred approximately \$975 thousand of interest expense to related party lenders.

Consulting agreement

The Company had a consulting agreement with its former Chief Executive Officer, who is also a stockholder of the Company. The consultant was paid \$0 and \$41 thousand, respectively, for the three months ended March 31, 2017 and 2016. On July 22, 2016, this consulting agreement was replaced by an employment agreement for the position of Chief Medical Officer, Executive Vice President, Research and Development, upon the completion of the Merger.

10. Commitments and Contingencies

The Company has a Research, Development and Commercialization Agreement with Hoffmann-La Roche ("Roche") which grants the Company a sole and exclusive license to develop, use, sell, offer for sale and import any Licensed Product as defined by the agreement.

The agreement requires future milestone payments to Roche, the remainder of which total \$10 million and are earned by the commencement of Phase 2 and Phase 3 clinical trials as well as future regulatory approval in the United States and Europe of a product developed from MGL-3916. A single-digit royalty payment range is based on net sales of products developed from MGL-3196, subject to certain reductions. In October 2016 the Company commenced a Phase 2 study in Non-Alcoholic Steatohepatitis (NASH), which triggered a milestone payment under the agreement. Except as described above, the Company has not achieved any additional product development or regulatory milestones to date and has no Licensed Product sales for the quarters ended March 31, 2017 and 2016.

During 2016, the Company has entered into several customary contractual arrangements and letters of intent in preparation for and in support of the expected Phase 2 clinical trials.



SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements that are based on our beliefs and assumptions and on information currently available to us. Forward-looking statements include information concerning our expectations for the timing of clinical study results, and the timing and success of future development of MGL-3196, our possible or assumed future results of operations and expenses, business strategies and plans, capital needs and financing plans, trends, market sizing, competitive position, industry environment and potential growth opportunities, among other things. Forward-looking statements that are not historical facts and, in some cases, can be identified by terms such as "anticipates," "believes," "could," "estimates," "expects," "intends," "may," "plans," "potential," "predicts," "projects," "seeks," "should," "will," "would" or similar expressions and the negatives of those terms.

Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements, including those described in "Risk Factors" and elsewhere in this report. Given these uncertainties, you should not place undue reliance on these forward-looking statements.

Any forward-looking statement made by us in this report speaks only as of the date on which it is made. Except as required by law, we disclaim any obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

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

The consolidated financial statements, included elsewhere in this Quarterly Report on Form 10-Q, and this Management's Discussion and Analysis of Financial Condition and Results of Operations should be read together with our audited financial statements and accompanying notes for year ended December 31, 2016 and the related Management's Discussion and Analysis of Financial Condition and Results of Operations, both of which are included in our Annual Report on Form 10-K. In addition to historical information, this discussion and analysis contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Operating results are not necessarily indicative of results that may occur for the full fiscal year or any other future period.

Overview

We are a clinical-stage biopharmaceutical company focused on the development and commercialization of innovative therapeutic candidates for the treatment of cardiovascular, metabolic and liver diseases. Our lead product candidate, MGL-3196, is a proprietary, liver-directed, selective thyroid hormone receptor- β , or THR- β , agonist that can potentially be used to treat a number of disease states with high unmet medical need. We are developing MGL-3196 for non-alcoholic steatohepatitis, or NASH, and we have initiated a Phase 2 clinical trial in this indication. We are also developing MGL-3196 for dyslipidemia, particularly genetic dyslipidemias such as familial hypercholesterolemia, or FH, including both homozygous and heterozygous forms of the disease. We have initiated a Phase 2 clinical trial in heterozygous FH (HeFH) patients and we are planning to conduct a proof-of-concept clinical trial in homozygous FH (HoFH) patients. MGL-3196 is a once-daily oral pill that has been studied in four completed Phase 1 trials in a total of 129 subjects. MGL-3196 appeared to be safe and well-tolerated in these trials, which included a single ascending dose trial, a multiple ascending dose trial, and two drug interaction trials with statins.

Basis of Presentation

Research and Development Expenses

Research and development expenses primarily consist of costs associated with our research activities, including the preclinical and clinical development of our product candidates. We expense our research and development expenses as incurred. We contract with clinical research organizations to manage our clinical trials under agreed upon budgets for each study, with oversight by our clinical program managers. We account for nonrefundable advance payments for goods and services that will be used in future research and development activities as expenses when the service has been performed or when the goods have been received. Manufacturing expense includes costs associated with drug formulation development and drug production. We do not track employee and facility related research and development costs by project, as we typically use our employee and infrastructure resources across multiple research and development programs. We believe that the allocation of such costs would be arbitrary and not be meaningful.

Our research and development expenses consist primarily of:

- external expenses paid to clinical trial sites, contract research organizations, laboratories, database software and consultants that conduct clinical trials;
- expenses related to development and production of nonclinical and clinical trial supplies, including fees paid to contract manufacturers;
- expenses related to preclinical studies;
- expenses related to compliance with drug development regulatory requirements; and
- other allocated expenses, which include direct and allocated expenses for depreciation of equipment and other supplies.

We expect to continue to incur substantial expenses related to our development activities for the foreseeable future as we conduct our Phase 2 clinical program, manufacturing and toxicology studies. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials, additional drug manufacturing requirements, and later stage toxicology studies such as carcinogenicity studies. Our research and development expenses increased between 2016 and 2017, and we



expect that our research and development expenses will increase substantially in the future. The process of conducting preclinical studies and clinical trials necessary to obtain regulatory approval is costly and time consuming. The probability of success for each product candidate is affected by numerous factors, including preclinical data, clinical data, competition, manufacturing capability and commercial viability. Accordingly, we may never succeed in achieving marketing approval for any of our product candidates.

Completion dates and costs for our clinical development programs as well as our research program can vary significantly for each current and future product candidate and are difficult to predict. As a result, we cannot estimate with any degree of certainty the costs we will incur in connection with the development of our product candidates at this point in time. We expect that we will make determinations as to which programs and product candidates to pursue and how much funding to direct to each program and product candidate on an ongoing basis in response to the scientific success of early research programs, results of ongoing and future clinical trials, our ability to enter into collaborative agreements with respect to programs or potential product candidates, as well as ongoing assessments as to each current or future product candidate's commercial potential.

General and Administrative Expenses

General and administrative expenses consist primarily of management costs, costs associated with obtaining and maintaining our patent portfolio, professional fees for accounting, auditing, consulting and legal services, and allocated overhead expenses.

We expect that our general and administrative expenses may increase in the future as we expand our operating activities, maintain and expand our patent portfolio and incur additional costs associated with being a public company and maintaining compliance with exchange listing and U.S. Securities and Exchange Commission, or SEC, requirements. We expect these potential increases will likely include management costs, legal fees, accounting fees, directors' and officers' liability insurance premiums and expenses associated with investor relations.

Critical Accounting Policies and Estimates

Our management's discussion and analysis of our financial condition and results of operations are based on our financial statements which have been prepared in accordance with U.S. generally accepted accounting principles, or GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets and liabilities, and expenses and the disclosure of contingent assets and liabilities at the date of the financial statements. On an ongoing basis, we evaluate our estimates and judgments, including those related to accrued research and development expenses. We base our estimates on historical experience, known trends and events, and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ materially from these estimates under different assumptions or conditions. There have been no significant and material changes in our critical accounting policies and significant judgments and estimates during the three months ended March 31, 2017, as compared to those disclosed in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 filed with the SEC on March 31, 2017.

Results of Operations

Three Months Ended March 31, 2017 Compared with Three Months Ended March 31, 2016

Revenues

We had no revenues for the three months ended March 31, 2017 and March 31, 2016.

The following table provides comparative unaudited results of operations for the three months ended March 31, 2017 and 2016:

		Three Mor Marc		led	Increase / Decr	ease			
		2017		2016	\$	%			
	(dollars in thousands)								
Research and Development Expenses	\$	4,380	\$	516	3,864	749%			
General and Administrative Expenses		1,695		222	1,473	664%			
Interest Expense (Income)		(76)		975	(1,051)	(108)%			
	\$	5,999	\$	1,713	4,286	250%			

Research and Development Expenses

Our research and development expenses were \$4.4 million for the three months ended March 31, 2017, compared to \$0.5 million for the three months ended March 31, 2016. Research and development expenses increased in 2017 due primarily to the expenses incurred to conduct and support the two Phase 2 studies for MGL-3196, which commenced in the fourth quarter of 2016 and the first quarter of 2017, respectively. Our increased research and development expenses include a \$2.1 million increase in contract research organization costs directly associated with the two Phase 2 studies. These increases also include \$0.6 million in compensation expenses related to employee hiring that occurred upon and following the consummation of the Merger. We expect our research and development expenses to increase over time as we advance our clinical and preclinical development programs for MGL-3196.

General and Administrative Expenses

Our general and administrative expenses were \$1.7 million for the three months ended March 31, 2017, compared to \$0.2 million for the three months ended March 31, 2016. The increase in general and administrative expenses in 2017 was primarily due to a \$0.9 million increase in compensation expense related to employee hiring that occurred upon and following consummation of the Merger. Additional increases were a result of expenses related to operating a public company. We believe our general and administrative expenses may increase over time as we advance our technology into clinical programs and as a result of our obligations as a public reporting company, both of which will likely result in an increase in our headcount, consulting services and certain overhead needed to support those efforts.

Interest Expense and Income

Our net interest income was approximately \$0.1 million, and our net interest expense was \$1.0 million for the three months ended March 31, 2017 and 2016, respectively. The decrease in interest expense was primarily due to the conversion of all outstanding promissory notes to equity upon the consummation of the Merger.

Liquidity and Capital Resources

As of March 31, 2017, we had cash, cash equivalents and marketable securities of \$40.1 million. To date, we have funded our operations primarily through the issuance of convertible debt, the proceeds from the Merger, and proceeds from sales of our common stock under our at-the market issuance agreement with Cowen and Company, LLC, or the ATM Program. We believe that our cash and cash equivalents at March 31, 2017 will be sufficient to fund our operations past one year from the issuance of these financial statements.

Our primary uses of capital are, and we expect will continue to be, funding our research efforts and the development of our product candidates, compensation and related expenses, hiring additional staff, including clinical, scientific, operational, financial and management personnel, and costs associated with operating as a public company. We expect to incur substantial expenditures in the foreseeable future for the development and potential commercialization of our product candidates.

We plan to continue to fund losses from operations and capital funding needs through future equity and/or debt financings, as well as potential additional collaborations or strategic partnerships with other companies. The sale of additional equity or convertible debt could result in additional dilution to our stockholders. The incurrence of indebtedness would result in debt service obligations and could result in operating and financing covenants that would restrict our operations. We can provide no assurance that financing will be available in the amounts we need or on terms acceptable to us, if at all. If we are not able to secure adequate additional funding, we may be forced to delay, make reductions in spending, extend payment terms with suppliers, liquidate assets where possible, and/or suspend or curtail planned programs. Any of these actions could materially harm our business.

Cash Flows

The following table provides a summary of our net cash flow activity:

	Three Months Ended March 31,			
	2017 2016		2016	
	(dollars in thousands)			
Net cash used in operating activities	\$ (3,771)	\$	(438)	
Net cash used by investing activities	(10,558)		—	
Net cash provided by financing activities	 3,399		750	
Net increase (decrease) in cash and cash equivalents	\$ (10,930)	\$	312	

Net cash used in operating activities was \$3.8 million for the three months ended March 31, 2017, compared to \$0.4 million for the three months ended March 31, 2016. The use of cash in these periods principally resulted from our losses from operations, as adjusted for non-cash charges for stock-based compensation, and changes in our working capital accounts.

Net cash used by investing activities was \$10.6 million for the three months ended March 31, 2017, compared to zero for the three months ended March 31, 2016. Net cash used by investing activities for the three months ended March 31, 2017 consisted of \$22.1 million of purchases of marketable securities for our investment portfolio, partially offset by \$11.6 million from sales and maturities of marketable securities.

Net cash provided by financing activities was \$3.4 million for the three months ended March 31, 2017, compared to \$0.8 million for the three months ended March 31, 2016. Net cash provided by financing activities for the three months ended March 31, 2017 consisted of net proceeds from the issuance of common stock under the ATM Program. Net cash provided by financing activities for the three months ended March 31, 2016 consisted of net proceeds from the issuance of related party convertible notes.

Contractual Obligations and Commitments

No significant changes to contractual obligations and commitments occurred during the three months ended March 31, 2017, as compared to those disclosed in our Annual Report on Form 10-K filed on March 31, 2017.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements as defined in the rules and regulations of the SEC.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Interest Rate Risk

Our cash and cash equivalents as of March 31, 2017 consisted of readily available checking and money market funds. Our primary exposure to market risk is interest income sensitivity, which is affected by changes in the general level of U.S. interest rates. However, because of the short-term nature of the instruments in our portfolio, a sudden change in market interest rates would not be expected to have a material impact on our financial condition and/or results of operations. We do not believe that our cash or cash equivalents has significant risk of default or illiquidity. While we believe our cash and cash equivalents do not contain excessive risk, we cannot provide absolute assurance that in the future its investments will not be subject to adverse changes in market value. In addition, we maintain significant amounts of cash and cash equivalents at one or more financial institutions that are in excess of federally insured limits.

Effects of Inflation

Inflation generally affects us with increased cost of labor and clinical trial costs. We do not believe that inflation and changing prices had a significant impact on our results of operations for any periods presented herein.

Item 4. Controls and Procedures.

Definition and Limitations of Disclosure Controls

Our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) are controls and other procedures that are designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act, such as this Quarterly Report, is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures are also designed to ensure that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure. Our management evaluates these controls and procedures on an ongoing basis.

Our Chief Executive Officer and our Chief Financial Officer, after evaluating the effectiveness of our disclosure controls and procedures, believe that our disclosure controls and procedures were effective as of the end of the period covered by this Quarterly Report.

Limitations on the Effectiveness of Controls and Procedures

In designing and evaluating our disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable, not absolute, assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply judgment in evaluating the benefits of possible controls and procedures relative to their costs. The design of any disclosure controls and procedures also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting during the quarter ended March 31, 2017 that have materially affected or are reasonably likely to materially affect our internal control over financial reporting.

Remediation Activities

As previously disclosed in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, our management corrected the calculation of our earnings per share. The convertible promissory notes of Private Madrigal that gave rise to the material weakness no longer exist as a result of the completion of the merger, and we do not expect these conditions to recur.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings.

We are currently not a party to any material legal proceedings.

Item 1A. Risk Factors.

There have been no material changes to the risk factors included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

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

None.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

None.

Item 6. Exhibits.

The exhibits filed or furnished 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.

MADRIGAL PHARMACEUTICALS, INC.

Date: May 11, 2017	By:	/s/ Paul A. Friedman Paul A. Friedman, M.D. Chief Executive Officer (Principal Executive Officer)
Date: May 11, 2017	By:	/s/ Marc R. Schneebaum Marc R. Schneebaum Chief Financial Officer (Principal Financial and Accounting Officer)
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EXHIBIT INDEX

		Incorporated by Reference				
Exhibit Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Filed Herewith
31.1	Certification of Principal Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
31.2	Certification of Principal Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					Х
32.1*	Certifications of Principal Executive Officer and Principal Financial Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					Х
101.INS	XBRL Instance Document.					Х
101.SCH	XBRL Taxonomy Extension Schema Document.					Х
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.					Х
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.					Х
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.					Х
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.					Х

* The certifications attached as Exhibit 32.1 that accompany this Quarterly Report pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, shall not be deemed "filed" by the registrant for purposes of Section 18 of the Exchange Act and are not to be incorporated by reference into any of the registrant's filings under the Securities Act or the Exchange Act, irrespective of any general incorporation language contained in any such filing.

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO EXCHANGE ACT RULES 13a-14(a) AND 15d-14(a) AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Paul A. Friedman, M.D., certify that:

- 1. I have reviewed this Quarterly Report on Form 10-Q of Madrigal 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(s) 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(s) 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.

/s/ Paul A. Friedman, M.D. Paul A. Friedman, M.D. Chief Executive Officer and Chairman of the Board (Principal Executive Officer) Date: May 11, 2017

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT TO EXCHANGE ACT RULES 13a-14(a) AND 15d-14(a) AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Marc R. Schneebaum, certify that:

- 1. I have reviewed this Quarterly Report on Form 10-Q of Madrigal 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(s) 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(s) 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.

/s/ Marc R. Schneebaum Marc R. Schneebaum Senior Vice President and Chief Financial Officer (Principal Financial Officer) Date: May 11, 2017

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

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Subsections (a) and (b) of Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. Section 1350)), each of the undersigned officers of Madrigal Pharmaceuticals, Inc., a Delaware corporation (the "Company"), does hereby certify, to such officer's knowledge, that:

The Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2017 (the "Form 10-Q") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and the information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: May 11, 2017

/s/ Paul A. Friedman, M.D. Paul A. Friedman, M.D. Chief Executive Officer and Chairman of the Board (Principal Executive Officer)

Dated: May 11, 2017

/s/ Marc R. Schneebaum Marc R. Schneebaum Senior Vice President and Chief Financial Officer (Principal Accounting and Financial Officer)

These certifications accompany the Form 10-Q, are not deemed filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.