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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 September 30, 2016

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	**04-3508648**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
Four Tower Bridge 200 Barr Harbor Drive, Suite 400 West Conshohocken, Pennsylvania	**19428**
(Address of principal executive offices)	(Zip Code)

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

Former name, former address and former fiscal year, if changed since last report: **Synta Pharmaceuticals Corp.**

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 ☒ 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. (Check one):

Large accelerated filer ☐	Accelerated filer ☐
Non-accelerated filer ☐ (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 November 11, 2016, the registrant had 11,570,149 shares of common stock outstanding.

MADRIGAL PHARMACEUTICALS, INC.

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PART I - FINANCIAL INFORMATION

Item 1. Financial Statements.

MADRIGAL PHARMACEUTICALS, INC.
Condensed Consolidated Balance Sheets
(Unaudited)

	September 30, 2016	December 31, 2015
Assets		
Current assets:		
Cash and cash equivalents	$ 8,393,302	$ 306,249
Marketable securities	31,164,553	—
Other receivable — related party	—	7,332
Prepaid expenses and other current assets	1,632,783	50,000
Total current assets	41,190,638	363,581
Property and equipment, net	1,476	—
Goodwill and other intangibles assets	315,070	—
Total assets	$ 41,507,184	$ 363,581
Liabilities and Stockholders' Deficit		
Current liabilities:		
Accounts payable	$ 1,159,836	$ 102,293
Accrued expenses	2,755,554	70,203
Convertible promissory notes payable — related parties	—	48,595,166
Advances payable — related party	—	500,000
Accrued interest on advances — related party	—	9,278
Total current liabilities	3,915,390	49,276,940
Total liabilities	3,915,390	49,276,940
Stockholders' equity:		
Preferred stock, par value $0.0001 per share authorized: 5,000,000 shares at September 30, 2016 and December 31, 2015; no shares issued and outstanding at each of September 30, 2016 and December 31, 2015	—	—
Common stock, par value $0.0001 per share authorized: 200,000,000 and 50,000,000 shares at September 30, 2016 and December 31, 2015, respectively; 11,570,149 and 1,105,820 shares issued and outstanding at September 30, 2016 and December 31, 2015, respectively	1,157	111
Additional paid-in-capital	105,161,301	6,120
Accumulated other comprehensive income	(12,485)	—
Accumulated deficit	(67,558,179)	(48,919,590)
Total stockholders' equity (deficit)	37,591,794	(48,913,359)
Total liabilities and stockholders' equity	41,507,184	363,581

See accompanying notes to condensed consolidated financial statements.

MADRIGAL PHARMACEUTICALS, INC.
Condensed Consolidated Statements of Operations
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Revenues:				
Total revenues	$ —	$ —	$ —	$ —
Operating expenses:				
Research and development	7,804,921	682,588	10,409,502	1,653,922
General and administrative	6,285,597	197,441	7,058,345	660,642
Total operating expenses	14,090,518	880,029	17,467,847	2,314,564
Loss from operations	(14,090,518)	(880,029)	(17,467,847)	(2,314,564)
Interest income (expense), net	41,778	(919,805)	(1,170,742)	(2,647,530)
Net loss	$ (14,048,740)	$ (1,799,834)	$ (18,638,589)	$ (4,962,094)
Net loss per common share:				
Basic and diluted net loss per common share	$ (1.34)	$ (0.25)	$ (2.24)	$ (0.68)
Basic and diluted weighted average number of common shares outstanding	10,462,182	7,253,655	8,329,548	7,253,655

See accompanying notes to condensed consolidated financial statements.

MADRIGAL PHARMACEUTICALS, INC.
Condensed Consolidated Statements of Comprehensive Loss
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Net loss	$ (14,048,740)	$ (1,799,834)	$ (18,638,589)	$ (4,962,094)
Other comprehensive income (loss):				
Unrealized gain (loss) on available-for-sale securities	(12,485)	—	(12,485)	—
Comprehensive loss	$ (14,061,225)	$ (1,799,834)	$ (18,651,074)	$ (4,962,094)

See accompanying notes to condensed consolidated financial statements.

MADRIGAL PHARMACEUTICALS, INC.
Condensed Consolidated Statements of Cash Flows
(Unaudited)

	Nine Months Ended September 30,	
	2016	2015
Cash flows from operating activities:		
Net loss	$ (18,638,589)	$ (4,962,094)
Adjustments to reconcile net loss to net cash used in operating activities:		
PIK interest expense on convertible promissory notes payable — related parties	1,206,853	2,647,529
Stock-based compensation expense and share based payments	8,102,939	—
Changes in operating assets and liabilities:		
Other receivable — related parties	7,332	44,494
Prepaid expense	282,158	(50,000)
Accounts payable	269,743	329,562
Accrued expense	(3,563,700)	(55,000)
Accrued interest — related party	5,677	—
Net cash used in operating activities	(12,327,587)	(2,045,509)
Cash flows from investing activities:		
Cash received from merger transaction	5,849,278	—
Purchases of marketable securities	(2,994,698)	—
Sales and maturities of marketable securities	8,578,846	—
Purchases of property and equipment	(1,476)	—
Net proceeds from the sale of property and equipment	482,440	—
Net cash provided by in investing activities	11,914,390	—
Cash flows from financing activities:		
Proceeds from convertible notes — related parties	8,500,250	1,450,000
Proceeds from advances—related party	—	500,000
Net cash provided by financing activities	8,500,250	1,950,000
Net increase (decrease) in cash and cash equivalents	8,087,053	(95,509)
Cash and cash equivalents at beginning of period	306,249	148,066
Cash and cash equivalents at end of period	$ 8,393,302	$ 52,557
Supplemental disclosure of non-cash financing activities:		
Exchange of related party advances payable for convertible notes	500,000	—
Related party debt restructuring	13,680,000	—

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") was incorporated on August 19, 2011 and commenced operations in September 2011. On September 14, 2011, the Company entered into an Assignment and Issuance Agreement pursuant to which the Company was assigned the rights, title and interest in and to the tangible and intangible assets owned by Bay City Capital Fund IV, L.P. ("Lender A") and Bay City Capital Fund IV Co-Investment Fund, L.P ("Lender B" and together with Lender A, "BCC"), in exchange for the assumption of outstanding convertible promissory notes, including accrued interest, in the amount of approximately $23,400,000 (see Note 6). Assets contributed to the Company were primarily intangible assets related to several drug development programs of VIA Pharmaceuticals, Inc. ("VIA"), which was an investee company of BCC.

The underlying assets of VIA transferred to BCC and subsequently contributed to the Company were notionally valued at $3 million. BCC credit bid $3 million for the VIA assets as part of an assignment for the benefit of creditors process. Due to the common control nature of the transaction and in accordance with accounting principles generally accepted in the United States of America ("GAAP"), the assigned assets and liabilities were recorded by the Company at their respective carryover basis which was zero for the tangible and intangible assets and $23.4 million for the assumed debt. In 2012, Madrigal entered into a transaction with Tallikut Pharmaceuticals, Inc. ("Tallikut") whereby Madrigal sold certain assets to Tallikut in exchange for the assumption of $2 million of convertible promissory notes. On July 22, 2016 the Company 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 Madrigal become the Company's historical financial statements. Accordingly, the historical financial statements of Madrigal are included in the comparative prior periods.

The Company is developing novel, high-quality small-molecule drugs addressing major unmet needs in cardiovascular and metabolic diseases. The 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 LDL-cholesterol lowering. The Company initiated a Phase II study of MGL-3196 in NASH in October of this year.

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 (U.S. 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, 2016 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, 2015.

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 and nine months ended September 30, 2016 and 2015, 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 and nine months ended September 30, 2016 and 2015, 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 September 30, 2016, 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 and nine months ended September 30, 2016 and 2015, the Company did not have any transfers of financials assets between Levels 1 and 2. As of September 30, 2016, 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 I & II 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. Patent expenses were approximately $131,000 and $20,000 for the quarters ended September 30, 2016 and 2015, respectively and $169,000 and $160,000 for the nine months ended September 30, 2016 and 2015, respectively.

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 and nine months ended September 30, 2016 and 2015, 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:

	September 30,	
	2016	2015
Common stock options	909,977	—
Unvested restricted common stock	158,334	—

Recent Accounting Pronouncements

In August 2016, the Financial Accounting Standards Board (the "FASB") issued Accounting Standards Update ("ASU") No. 2016-15, "Statement of Cash Flows (Topic 230): Clarification of Certain Cash Receipts and Cash Payments." The objective of ASU 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 our financial statements.

In March 2016, the FASB, issued ASU No. 2016-09, "Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting," which changes the accounting for certain aspects of share-based payments to employees. The amendments in this ASU require the recognition of the income tax effects of awards in the income statement when the awards vest or are settled, thus eliminating additional paid-in capital pools. The standard also allows the employer to repurchase more of an employee's shares for tax withholding purposes without triggering liability accounting. In addition, the standard allows for a policy election to account for tax forfeitures as they occur rather than on an estimated basis. The amendments in this ASU are effective for annual periods beginning after December 15, 2016, and interim periods within those annual periods. The Company is currently evaluating the impact of adopting this standard.

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 of adopting this standard.

In August 2014, the FASB issued ASU 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*. This ASU is intended to define management's responsibility to evaluate whether there is substantial doubt about an organization's ability to continue as a going concern within one year of the date of issuance of the entity's financial statements and to provide related footnote disclosures. This guidance is effective for fiscal years ending after December 15, 2016, with early application permitted. If this standard had been adopted as of September 30, 2016, the Company believes that it would have concluded there was not substantial doubt about its ability to continue as a going concern. However, the Company faces risks and uncertainties, as further described in Note 1, Nature of Business, that would have been considered in this analysis. The adoption of this guidance may have an effect on the Company's disclosures in future periods.

In June 2014, the FASB issued ASU No. 2014-12, *—Compensation—Stock Compensation (Topic 718), Accounting for Share-Based Payments When the Terms of an Award Provide That a Performance Target Could Be Achieved after the Requisite Service Period*. ASU No. 2014-12 requires that a performance target that affects vesting and that could be achieved after the requisite service period be treated as a performance condition. The amendments in this update apply prospectively to all share-based payment awards that are granted or modified on or after the effective date, or retrospectively to all awards with performance targets that are outstanding as of the beginning of the earliest annual period presented in the consolidated financial statements, and to all new or modified awards thereafter. ASU No. 2014-12 is effective for annual periods and interim periods within those annual periods, beginning after December 15, 2015. The Company adopted ASU No. 2014-12 effective January 1, 2016.

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 common shares of private Madrigal. For accounting purposes, the Company is considered to be acquiring 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 own 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. As the accounting acquirer, the Company's assets and liabilities continue to be recorded at their historical carrying amounts and the historical operations that will be reflected in the financial statements will be 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 post-merger 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.

Upon the closing of the merger transaction, the Company incurred an expense for a success fee of $750,000 in cash plus $500,000 settled in shares of the post-merger combined company's common stock with a third party financial advisor.

Purchase Price

Pursuant to the Merger Agreement, Synta issued to Madrigal stockholders a number of shares of Synta common stock representing approximately 64% of the outstanding shares of common stock of the combined company. The purchase price, which represents the consideration transferred to Synta stockholders in the reverse merger is calculated based on the number of shares of common stock of the combined company that Synta stockholders will own as of the closing of the merger, which consists of the following:

Number of shares of the combined company to be owned by Synta stockholders(1)		4,032,734
Multiplied by the fair value of Synta common stock(2)	$	9.48
Purchase price (in thousands)	$	38,236

(1) Represents the number of shares of common stock of the combined company that Synta stockholders owned as of the closing of the merger pursuant to the Merger Agreement, including restricted stock awards and common stock underlying outstanding restricted stock units attributed to pre-combination services rendered by certain Synta employees and directors. This amount is calculated as 3,937,309 shares of Synta common stock outstanding as of July 22, 2016, including unvested restricted common stock, plus 95,425 shares of Synta common stock issuable pursuant to restricted stock units, net of tax withholdings, that vested immediately upon closing of the merger. The number of shares of common stock Synta issued to Madrigal stockholders was 7,253,655, calculated pursuant to the terms of the Merger Agreement based on Synta's common stock outstanding as of July 22, 2016.

(2) The fair value of Synta common stock used in determining the purchase price was $9.48, which was derived from the $0.2709 per share closing price of Synta common stock on July 21, 2016, the current price at the time of the closing, adjusted for the 1-for-35 reverse stock split.

Under the acquisition method of accounting, the total purchase price is allocated to the acquired tangible and intangible assets and assumed liabilities of Synta based on their estimated fair values as of the merger closing date. The excess of the purchase price over the fair value of assets acquired and liabilities assumed, if any, is allocated to goodwill. The allocation of the purchase price to the acquired assets and liabilities assumed of Synta based on the fair values as of July 22, 2016 is as follows (in thousands):

Cash, cash equivalents and marketable securities	$	42,611
Prepaid expenses and other currents assets		1,715
Property and equipment, net		482
Accounts payable, accrued expenses and other liabilities		(7,019)
Term loans and capital lease obligations		(18)
In-process research and development		150
Goodwill		315
Net assets acquired	$	38,236

The application of the acquisition method of accounting is dependent upon certain valuations and other studies that have yet to be completed. The purchase price allocation will remain preliminary until Madrigal management determines the final fair values of assets acquired and liabilities assumed. The final allocation may include (1) changes in fair values of property and equipment, (2) changes in allocations to in-process research and development and goodwill based on the results of certain valuations and other studies that have yet to be completed and (3) other changes to assets and liabilities.

Convertible Promissory Notes-Related Parties

Immediately prior to the consummation of the merger, the September 14, 2011, September 16, 2011 and March 1, 2016 (amended and restated April 13, 2016) convertible note issuances outstanding totaling $45.1 million on July 22 were converted into 7.1 million shares of common stock of the Company pursuant to their respective amended and restated terms.

Bonus Plan Awards

Pursuant to the terms of the Change in Control Bonus Plan, the participants therein received 0.6 million shares of common stock of the Company from certain former stockholders of the Company in connection with the merger, which represented 7.87% of Madrigal's common shares outstanding at the time of the merger. The Company recorded $5.4 million in stock compensation associated with the transaction (see Note 9).

Stock Based Compensation

Following the consummation of the merger, the Company issued a combined 208,255 shares of restricted common stock and 557,386 stock options to purchase shares of common stock to the new Chief Executive Officer, Chief Medical Officer and Executive Vice President, and Chief Financial Officer and Senior Vice President.

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 $18,639,000 for the nine months ended September 30, 2016, resulting in an accumulated deficit of approximately $67,558,000 as of September 30, 2016. Management expects to incur losses for the foreseeable future. To date, the Company has funded its operations primarily through the issuance of convertible debt (see Note 6) and the proceeds from the Merger on July 22, 2016 (see Note 3). The working capital obtained through the merger together with the conversion of all outstanding convertible notes is anticipated to fund the Company's operations for at least the next twelve months from the balance sheet date.

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 September 30, 2016 and December 31, 2015 is as follows:

	September 30, 2016			
	Amortized Cost	Unrealized gains	Unrealized losses	Fair value
Cash and cash equivalents:				
Cash and money market funds (Level 1)	$ 8,393,302	$ —	$ —	$ 8,393,302
Corporate debt securities due within 3 months of date of purchase (Level 2)	—	—	—	—
Total cash and cash equivalents	8,393,302	—	—	8,393,302
Marketable securities:				
Corporate debt securities due within 1 year of date of purchase (Level 2)	31,177,038		(12,485)	31,164,553
Total cash, cash equivalents and marketable securities	$ 39,570,340	$ —	$ (12,485)	$ 39,557,855

	December 31, 2015			
	Amortized Cost	Unrealized gains	Unrealized Losses	Fair value
Cash and cash equivalents:				
Cash and money market funds (Level 1)	$ 306,249	$ —	$ —	$ 306,249
Total cash, cash equivalents and marketable securities	$ 306,249	$ —	$ —	$ 306,249

6. Convertible Promissory Notes — Related Parties

Convertible Promissory Note Amendments:

Effective April 13, 2016, 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 is consummated or terminated. On April 13, 2016, the Company reduced the convertible notes payable by the waived 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.

September 14, 2011 Notes

The Company was assigned convertible promissory notes ("the September 14, 2011 Notes") pursuant to an Assignment and Issuance Agreement with Lender A and Lender B or collectively the "Lender(s)". Lender A and Lender B are stockholders of the Company. Interest on the outstanding principal accrued and compounded monthly at 8% per annum. Accrued and unpaid interest was to be either paid upon principal repayment or converted with the outstanding principal amount. The notes were collateralized by all assets of the Company. The initial maturity date was December 31, 2012 but was amended on various dates extending the maturity date to December 31, 2016. The September 14, 2011 Notes could be converted as follows:

(a) Optional Conversion — Third Party Financing. At any time following the closing of a preferred equity financing with an outside investor ("Third Party"), all outstanding principal and interest ("Accreted Value") may, at the option of the Lenders, be converted into equity securities of the Company, having the same rights, preferences and privileges as the securities issued in the Third Party financing ("Third Party Led Securities"). The numbers of shares to be issued upon such conversion shall be equal to the quotient obtained by dividing (a) the Accreted Value on the date of conversion by (b) eighty percent (80%) of the per share purchase price of the Third Party Led Securities.

(b) Optional Conversion — Series A Preferred Stock. At any time, all Accreted Value may, at the option of the Lenders, be converted into shares of the Company's Series A Preferred Stock. The number of shares of Series A Preferred Stock to be issued upon such conversion shall be equal to the quotient obtained by dividing (a) the Accreted Value on the date of conversion by (b) the original issue prices of the Series A Preferred Stock.

(c) Optional Conversion — Common Stock. At any time, Lenders may convert all or any portion of the Accreted Value of the Note into common shares of the Company with the number of common shares issuable upon such conversion to equal the quotient obtained by dividing (a) the Accreted Value on the date of conversion by (b) 14.29759. Any Third Party Led Securities and Series A Preferred Stock issued to the Lenders shall be convertible at any time at the option of Lenders into common stock of the Company.

(d) Mandatory Conversion. If the principal and interest of the convertible note has not been repaid in full by the maturity date, the Accreted Value shall automatically convert into common stock of the Company. The conversion price shall equal to the per share value of the Company's common stock at the time of conversion.

September 14, 2011 Notes (Amended and Restated April 13, 2016)

On April 13, 2016, the Company amended and restated the terms to modify the conversion terms to include the following:

(a) Optional Conversion — Common Stock. At any time following the date on which the Merger Agreement is terminated as defined in the agreement, Lenders may convert all of the Accreted Value of the Note into common shares of the Company with the number of common shares issuable upon such conversion to equal the quotient obtained by dividing (a) the Accreted Value on the date of conversion by (b) 1.00.

(b) Mandatory Conversion Upon a Merger with Synta. If a Merger was consummated prior to the maturity date all Accreted Value would automatically be converted into shares of Common Stock of the Company. The number of shares of Common Stock to be issued upon such conversion would be equal to the quotient obtained by dividing (a) the Accreted Value on the date of conversion by (b) 1.00.

September 16, 2011 Notes

The Company entered into a Note Purchase Agreement with Lender A and Lender B in which the Company agreed to sell and issue to the Lenders secured convertible promissory notes ("the September 16, 2011 Notes"). Interest on the outstanding principal accrued and compounded monthly at 8% per annum. Accrued and unpaid interest shall either be paid upon principal repayment or converted with the outstanding principal amount. The notes were collateralized by all assets of the Company. The initial maturity date was the earliest of October 31, 2012 or an event of default as defined in the agreement but such notes have been amended on various dates extending the maturity date to December 31, 2016. The September 16, 2011 notes can by converted as follows:

(a) Optional Conversion — Third Party Financing. At any time following the closing of a preferred equity financing with a Third Party, all Accreted Value may, at the option of the Lenders, be converted into equity securities of the Company, having the same rights, preferences and privileges as the securities issued in the Third Party financing. The numbers of shares to be issued upon such conversion shall be equal to the quotient obtained by dividing (a) the Accreted Value on the date of conversion by (b) eighty percent (80%) of the per share purchase price of the Third Party Led Securities.

In addition, the Company shall issue to each Lender, upon conversion of such Lender's note, a warrant to purchase up to the number of shares of Third Party Led Securities sold in such Third Party Financing that equals the quotient obtained by dividing (a) ten percent (10%) of the original principal amount of the notes issued to such Lenders pursuant to the Note Purchase Agreement by (b) the per share purchase price of the Third Party Led Securities. The Company has not issued any warrants to date.

(b) Optional Conversion — Series A Preferred Stock. At any time, all Accreted Value may, at the option of the Lenders, be converted into shares of the Company's Series A Preferred Stock. The number of shares of Series A Preferred Stock to be issued upon such conversion shall be equal to the Quotient obtained by dividing (a) the Accreted Value on the date of conversion by (b) 14.29759.

September 16, 2011 Notes (Amended and Restated April 13, 2016)

On April 13, 2016, the Company amended and restated the terms to modify the conversion terms to include the following:

(a) Optional Conversion — Common Stock. At any time following the date on which the Merger Agreement is terminated as defined in the agreement, Lenders may convert all of the Accreted Value of the Note into common shares of the Company with the number of common shares issuable upon such conversion to equal the quotient obtained by dividing (a) the Accreted Value on the date of conversion by (b) 1.00.

(b) Optional Conversion — Series A Preferred Stock. At any time following the date on which the Merger Agreement is terminated as defined in the agreement, Lenders may convert all of the Accreted Value of the Note into Series A Preferred Stock of the Company, $0.0001 par value per share ("Series A Preferred Stock") with the number of Series A Preferred Stock issuable upon such conversion to equal the quotient obtained by dividing (a) the Accreted Value on the date of conversion by (b) the original issue price of the Series A Preferred Stock, as adjusted for splits, dividends and the like.

(c) Mandatory Conversion Upon a Merger with Synta. If a Merger was consummated prior to the maturity date all Accreted Value would automatically be converted into shares of Common Stock of the Company. The number of shares of Common Stock to be issued upon such conversion would be equal to the quotient obtained by dividing (a) the Accreted Value on the date of conversion by (b) 1.00.

March 1, 2016 Notes

On March 1, 2016, the Company entered into a Note Purchase Agreement with Lender A and Lender B in which the Company agreed to sell and issue to the Lenders secured convertible promissory notes ("the March 1, 2016 Notes") in the amount of up to $2,000,000. Interest on the outstanding principal accrued and compounded monthly at 8% per annum. Accrued and unpaid interest shall either be paid upon repayment or converted with the outstanding principal amount. The notes were collateralized by all assets of the Company. The maturity date is the earliest of December 31, 2016 or an event of default as defined in the agreement. On March 1, 2016, the first closing date, $750,000 aggregate principal amount was issued. The March 1, 2016 notes could be converted as follows:

(a) Optional Conversion — Third Party Financing. At any time following the closing of a preferred equity financing by the Company led by a Third Party, all Accreted Value may, at the option of the Lenders, be converted into equity securities of the Company, having the same rights, preferences and privileges as the securities issued in the Third Party financing . The numbers of shares to be issued upon such conversion shall be equal to the quotient obtained by dividing (a) the Accreted Value on the date of conversion by (b) the per share purchase price of the Third Party Led Securities.

(b) Optional Conversion — Series A Preferred Stock. At any time, all Accreted Value may, at the option of the Lenders, be converted into shares of the Company's Series A Preferred Stock. The number of shares of Series A Preferred Stock to be issued upon such conversion shall be equal to the Quotient obtained by dividing (a) the Accreted Value on the date of conversion by (b) the original issue price of the Series A Preferred Stock.

(c) Optional Conversion — Common Stock. At any time, Lenders may convert all of the Accreted Value of the Note into common shares of the Company with the number of common shares issuable upon such conversion to equal the quotient obtained by dividing (a) the Accreted Value on the date of conversion by (b) the then per share fair market value of Common Stock. Any Third Party Led Securities and Series A Preferred Stock issued to the Lenders shall be convertible at any time at the option of Lenders into common stock of the Company.

March 1, 2016 Notes (Amended and Restated April 13, 2016)

On April 13, 2016, the Company amended and restated the terms of its March 1, 2016 Note Purchase Agreement to increase the principal amount of notes available for issuance to $9,000,000, to be funded at specific dates in accordance with a funding schedule, and to add two additional related party lenders ("Lender C and Lender D"). The notes were collateralized by all assets of the Company and are senior in right of payment to all outstanding indebtedness of the Company. The maturity date is the earliest of December 31, 2016, the date the Merger Agreement is terminated (see Note 3), or an event of default as defined in the agreement. The conversion terms of the March 1, 2016 notes were amended to include the following:

(a) Optional Conversion-Qualified Financing. At any time following the closing of a preferred equity financing of the Company (a "Qualified Financing"), all Accreted Value may, at the option of the Lenders, be converted into equity securities of the Company of the same class and having the same rights, preferences and privileges as the securities issued in the Qualified Financing (the "Qualified Financing Securities"). The number of shares of Qualified Financing Securities to be issued upon such conversion shall be equal to the quotient obtained by dividing (a) the Accreted Value on the date of conversion by (b) the product of 0.85 times the lowest per share purchase price of the Qualified Financing Securities paid by the other investors in the Qualified Financing.

(b) Optional Conversion — Series A Preferred Stock. At any time following the date on which the Merger Agreement is terminated as defined in the agreement, all Accreted Value may, at the option of the Lenders, be converted into shares of the Company's Series A Preferred Stock. The number of shares of Series A Preferred Stock to be issued upon such conversion shall be equal to the Quotient obtained by dividing (a) the Accreted Value on the date of conversion by (b) the original issue price of the Series A Preferred Stock.

(c) Optional Conversion — Common Stock. At any time following the date on which the Merger Agreement is terminated as defined in the agreement, Lenders may convert all of the Accreted Value of the Note into common shares of the Company with the number of common shares issuable upon such conversion to equal the quotient obtained by dividing (a) the Accreted Value on the date of conversion by (b) 1.07581.

(d) Mandatory Conversion Upon a Merger with Synta. If a Merger was consummated prior to the maturity date all Accreted Value would automatically be converted into shares of Common Stock of the Company. The number of shares of Common Stock to be issued upon such conversion would be equal to the quotient obtained by dividing (a) the Accreted Value on the date of conversion by (b) 1.07581.

Lenders A, B, C and D provided convertible promissory note financing of $8,500,000 in cash during the period March 1, 2016 through the Merger. Additionally, on April 13, 2016, Lender D exchanged $500,000 of Advances Payable for an equal amount of convertible promissory notes.

7. Advances Payable — Related Party

On June 29, 2015 and July 30, 2015 a related party agreed to advance the Company a total of $500,000 to be used for working capital requirements. The advances accrued interest at a rate of four percent (4%) per annum compounded annually. On April 13, 2016, these advances were exchanged for $500,000 in convertible promissory notes payable and all accrued interest was waived (see Note 6).

8. 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 (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 Sales Agreement, Cowen will use commercially reasonable efforts consistent with its normal trading and sales practices to sell the common stock based upon the Company's instructions (including any price, time or size limits or other customary parameters or conditions the Company may impose). The Company is not obligated to make any sales of its common stock under the 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 September 30, 2016, no shares have been sold to-date under the October 2015 Sales Agreement.

9. 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 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 September 30, 2016, the Company had options outstanding to purchase 909,977 shares of its common stock, which includes options outstanding under its 2006 Stock Plan that was terminated in June 2015. As of September 30, 2016, 538,093 shares were available for future issuance.

The following table summarizes stock option activity during the nine months ended September 30, 2016:

	Shares	Weighted average exercise price
Outstanding at January 1, 2016	289,350	$ 159.66
Options granted	772,410	9.51
Options exercised	—	—
Options cancelled	(151,783)	207.97
Outstanding at September 30, 2016	909,977	$ 18.61
Exercisable at September 30, 2016	268,567	$ 37.21

The total cash received by the Company as a result of stock option exercises was $0 in each of the nine months ended September 30, 2016 and 2015. The weighted-average grant date fair values, based on the Black-Scholes option model, of options granted during the nine months ended September 30, 2016 was $7.50.

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.

The following table summarizes unvested restricted share activity during the nine months ended September 30, 2016:

	Shares	Weighted average grant date fair value
Outstanding at January 1, 2016	12,192	$ 91.46
Granted	208,765	9.46
Forfeited	(49)	77.00
Vested	(62,574)	22.31
Outstanding at September 30, 2016	158,334	$ 10.67

Stock-Based Compensation Expense

Stock-based compensation expense during the three months and nine months ended September 30, 2016 and 2015 was as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Stock-based compensation expense by type of award:				
Employee stock options	$ 1,346,761	$ —	$ 1,346,761	$ —
Restricted stock	595,317	—	595,317	—
Change in control bonus plan (see Note 3)	5,410,840	—	5,410,840	—
Total stock-based compensation expense	$ 7,352,918	$ —	$ 7,352,918	$ —
Effect of stock-based compensation expense by line item:				
Research and development	$ 5,260,370	$ —	$ 5,260,370	$ —
General and administrative	2,092,548	—	2,092,548	—
Total stock-based compensation expense included in net loss	$ 7,352,918	$ —	$ 7,352,918	$ —

Unrecognized stock-based compensation expense as of September 30, 2016 was as follows:

	Unrecognized stock compensation expense	Weighted average remaining period (in years)
Employee stock options	$ 4,868,528	2.56
Restricted stock	1,498,592	2.68
Total	$ 6,367,120	2.59

10. Related Party Transactions

Related party financing

Lenders A and B have provided financing to the Company since its inception. Lenders A, B, C and D had agreed to provide funding under the April 13, 2016 amended and restated March 1, 2016 agreement. For the nine months ended September 30, 2016 and September 30, 2015, the Company incurred approximately $1,213,000 and $2,648,000, respectively of interest expense to these Lenders which was subsequently waived (see Note 6). This debt was converted to equity at the time of the Merger.

Consulting agreement

The Company had a consulting agreement with its former Chief Executive Officer ("CEO"), who is also a stockholder of the Company. The consulting agreement automatically renewed monthly unless terminated. The consulting agreement could be terminated upon fifteen (15) day notice by the Company or the CEO. The consultant was paid $10,000 and $41,000, respectively, for the three months ended September 30, 2016 and 2015. The consultant was paid $93,000 and $124,000, respectively, for the nine months ended September 30, 2016 and 2015. On July 22, 2016, this consulting agreement was replaced by an employment agreement for the position of Chief Medical Officer ("CMO") upon the completion of the Merger (see Note 3).

11. Commitments and Contingencies

The Company has a Research, Development and Commercialization Agreement with Hoffmann-La Roche ("Roche") which grants 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 $10.8 million and are earned by the commencement of Phase II and Phase III 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 II 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 September 30, 2016 and 2015.

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 II clinical trials.

12. Subsequent Event

In October 2016 the Company announced that the first patient had been dosed in its Phase 2 study of MGL-3196 for the treatment of non-alcoholic steatohepatitis (NASH), which triggered a milestone payment under the Research, Development and Commercialization Agreement with Roche (see Note 11).

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This report 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 include all 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 each of the years in the two year period ended December 31, 2015 included in Exhibit 99.2 of our Current Report on Form 8-K/A. 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. The term "Private Madrigal" refers to Madrigal Pharmaceuticals, Inc. prior to the consummation of the Merger described herein. The term "Synta" refers to Synta Pharmaceuticals Corp. prior to the consummation of the Merger described herein. Unless otherwise indicated, references to the terms "Madrigal," the "Company," "we," "our" and "us" refer to Private Madrigal prior to the consummation of the Merger described herein and Madrigal Pharmaceuticals, Inc. (formerly known as Synta Pharmaceuticals Corp.) upon the consummation of the Merger described herein.

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- ß, or THR-ß, 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 and are planning to conduct 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 are planning to conduct a Phase 2 clinical trial in heterozygous FH patients and to conduct a proof-of-concept clinical trial in homozygous FH 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.

Recent Developments

Reverse Merger

On July 22, 2016, Synta completed its business combination with Private Madrigal in accordance with the terms of an Agreement and Plan of Merger and Reorganization, dated as of April 13, 2016, or the Merger Agreement. Pursuant to the Merger Agreement, Synta formed a wholly-owned subsidiary that merged with and into Private Madrigal, with Private Madrigal surviving the merger and becoming a wholly-owned subsidiary of Synta, or the Merger. In connection with, and prior to the consummation of, the Merger, Synta effected a 1-for-35 reverse stock split of its common stock, or the Reverse Stock Split, and, following the Merger, changed its name to "Madrigal Pharmaceuticals, Inc." All shares and per share amounts have been retrospectively adjusted to give effect to the Reverse Stock Split, except as otherwise disclosed. Following the consummation of the Merger, the business being conducted by Synta became the business conducted by Private Madrigal prior to the consummation of the Merger.

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 clinical 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 the 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 2015 and 2016, 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 and nine months ended September 30, 2016, as compared to those disclosed in our Current Report filed on Form 8-K/A filed on September 2, 2016.

Results of Operations

Three Months Ended September 30, 2016 Compared with Three Months Ended September 30, 2015

Revenues

The Company had no revenues in each of 2016 and 2015.

The following table provides comparative unaudited results of operations for the three months ended September 30, 2016 and 2015:

	Three Months Ended September 30,		2016 to 2015 Change	
	2016	2015	$	%
	(dollars in thousands)			
Research and Development Expenses	$ 7,805	$ 683	7,122	1043%
General and Administrative Expenses	6,286	197	6,089	3091%
Interest Expense (Income)	(42)	920	(962)	(105)%
	$ 14,049	$ 1,800	12,249	681%

Research and Development Expenses

Our research and development expenses were $7.8 million for the three months ended September 30, 2016 compared to $0.7 million for the three months ended September 30, 2015. Research and development expenses increased in 2016 primarily due to a $5.3 million increase in stock based compensation expense incurred primarily as a result of the merger, of which $4.8 million was related to the Change in Control Bonus Plan. Additional increases were a result of increased expenses for our clinical and preclinical development programs for MGL-3196. With the exception of the onetime Change in Control Bonus Plan related expense, 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 $6.3 million for the three months ended September 30, 2016 compared to $0.2 million for the three months ended September 30, 2015. The increase in general and administrative expenses in 2016 was primarily due to a $1.8 million increase in stock based compensation expense incurred primarily as a result of the merger, and expenses related to cost associated with the merger and becoming a public company. With the exception of the merger related expenses, we believe our general and administrative expenses may increase over time as we advance our technology into clinical programs and as a result of becoming 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 interest income was approximately $42,000, and our interest expense was $0.9 million for the three months ended September 30, 2016 and 2015, respectively. The decrease in interest expense was primarily driven by lower interest expense on our convertible notes outstanding. On April 13, 2016, we entered into the Restated Purchase Agreement with certain of our investors whereby such investors committed $9.0 million of financing before the consummation of the Merger. Pursuant to the Restated Purchase Agreement, Bay City Capital agreed to waive all accrued interest on the convertible notes incurred prior to April 13, 2016. In addition, the investors, including Bay City Capital, agreed that no interest would accrue on such convertible notes from the date of the Restated Purchase Agreement through the date the Merger was consummated.

Nine Months Ended September 30, 2016 Compared with Nine Months Ended September 30, 2015

Revenues

The Company had no revenues in each of 2016 and 2015.

The following table provides comparative unaudited results of operations for the nine months ended September 30, 2016 and 2015:

	Nine Months Ended September 30,		2016 to 2015 Change	
	2016	2015	$	%
	(dollars in thousands)			
Research and Development Expenses	$ 10,410	$ 1,654	8,756	529%
General and Administrative Expenses	7,058	661	6,397	968%
Interest Expense (Income)	1,171	2,648	(1,477)	(56)%
	$ 18,639	$ 4,963	13,676	276%

Research and Development Expenses

Our research and development expenses were $10.4 million for the nine months ended September 30, 2016 compared to $1.7 million for the nine months ended September 30, 2015. Research and development expenses increased in 2016 primarily due to a $5.3 million increase in stock based compensation expense incurred primarily as a result of the merger, of which $4.8 million was related to expense from the Change in Control Bonus Plan. Additional increases were a result of increased expenses for our clinical and preclinical development programs for MGL-3196. With the exception of the onetime Change in Control Bonus Plan related expense, 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 $7.1 million for the nine months ended September 30, 2016 compared to $0.7 for the nine months ended September 30, 2015. The increase in general and administrative expenses in 2016 was primarily due to a $1.8 million increase in stock based compensation expense incurred primarily as a result of the merger, and expenses related to costs associated with the merger and becoming a public company. With the exception of the merger related expenses, we believe our general and administrative expenses may increase over time as we advance our technology into clinical programs and as a result of becoming 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

Our interest expense, net was $1.2 million for the nine months ended September 30, 2016 compared to $2.6 million for the nine months ended September 30, 2015. The decrease in interest expense was primarily driven by lower interest expense on our convertible notes outstanding. On April 13, 2016, pursuant to the Restated Purchase Agreement, Bay City Capital agreed to waive all accrued interest on the $36.9 million of convertible notes incurred prior to April 13, 2016. In addition, the investors, including Bay City Capital, agreed that no interest would accrue on such convertible notes from the date of the Restated Purchase Agreement through the date the Merger was consummated.

Liquidity and Capital Resources

As of September 30, 2016, we had cash, cash equivalents and marketable securities of $39.6 million. To date, the Company has funded its operations primarily through the issuance of convertible debt and the proceeds from the Merger. We believe our cash and cash equivalents will be sufficient to fund our operations for at least the next twelve months.

On July 22, 2016, we completed our Merger with Synta which provided $38.2 million in cash, cash equivalents and marketable securities.

Our primary uses of capital are, and we expect will continue to be, funding 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:

	Nine Months Ended September 30,	
	2016	2015
	(dollars in thousands)	
Net cash used in operating activities	$ (12,327)	$ (2,046)
Net cash provided by investing activities	11,914	—
Net cash provided by financing activities	8,500	1,950
Net increase (decrease) in cash and cash equivalents	$ 8,087	$ (96)

Net cash used in operating activities was $12.3 million for the nine months ended September 30, 2016 compared to $1.1 million for the nine months ended September 30, 2015. The use of cash in these periods principally resulted from our losses from operations, including costs related to the Merger, as adjusted for non-cash charges for depreciation and stock-based compensation, and changes in our working capital accounts.

Net cash provided by investing activities was $11.9 million for the nine months ended September 30, 2016. Net cash provided by investing activities for the nine months ended September 30, 2016 consisted of $5.8 million in cash provided from the merger, and a net increase of $5.6 million from the sales and maturities in our investment portfolio.

Net cash provided by financing activities was $8.5 million for the nine months ended September 30, 2016 compared to $2.0 million for the nine months ended September 30, 2015. Net cash provided by financing activities for the nine months ended September 30, 2016 and 2015 consisted of net proceeds from the issuance of related party convertible notes and advances.

Contractual Obligations and Commitments

No significant changes to contractual obligations and commitments occurred during the nine months ended September 30, 2016, as compared to those disclosed in our Current Report filed on Form 8-K/A filed on September 2, 2016.

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 September 30, 2016 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 in our reports filed under the Exchange Act, such as this 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 the Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure. Our management evaluates these controls and procedures on an ongoing basis.

There are inherent limitations to the effectiveness of any system of disclosure controls and procedures. These limitations include the possibility of human error, the circumvention or overriding of the controls and procedures and reasonable resource constraints. In addition, because we have designed our system of controls based on certain assumptions, which we believe are reasonable, about the likelihood of future events, our system of controls may not achieve its desired purpose under all possible future conditions. Accordingly, our disclosure controls and procedures provide reasonable assurance, but not absolute assurance, of achieving their objectives.

Evaluation of disclosure controls and procedures

Our Chief Executive Officer and our Chief Financial Officer, after evaluating the effectiveness of our disclosure controls and procedures, believe that as of the end of the period covered by this report, our disclosure controls and procedures were effective in providing the requisite reasonable assurance that material information required to be disclosed in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding the required disclosure.

Changes in internal control over financial reporting

On July 22, 2016, we completed a reverse merger with Synta Pharmaceuticals Corp. and our management is in the process of evaluating any related changes to our internal control over financial reporting as a result of this integration. Except for any changes relating to this integration, there has been no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the period covered by this report that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings.

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

Item 1A. Risk Factors.

Risks Related to our Business

We have limited operating history, we have incurred significant operating losses since inception and we expect to incur significant operating losses for the foreseeable future. We may never become profitable or, if achieved, be able to sustain profitability.

We have incurred significant operating losses since our inception and expect to incur significant losses for the foreseeable future as we continue our clinical trial and development programs for MGL-3196 and other future product candidates. In the future, we intend to continue to conduct research and development, clinical testing, regulatory compliance and, if MGL-3196 or other future product candidates are approved, sales and marketing activities that, together with anticipated general and administrative expenses, will likely result in us incurring further significant losses for the foreseeable future.

We currently generate no revenue from product sales, and we may never be able to commercialize MGL-3196 or other future product candidates. We do not currently have the required approvals to market MGL-3196 or any other future product candidates, and we may never receive them. We may not be profitable even if we or any of our future development partners succeed in commercializing any of our product candidates. Because of the numerous risks and uncertainties associated with developing and commercializing our product candidates, we are unable to predict the extent of any future losses or when we will become profitable, if at all.

Our business depends on the success of MGL-3196, which is still in clinical development. If we are unable to obtain regulatory approval for or successfully commercialize MGL-3196, our business will be materially harmed.

To date, the sole focus of our product development has been MGL-3196, a liver-directed selective thyroid hormone receptor beta agonist for potential use in non-alcoholic steatohepatitis, or NASH, and FH. Successful continued development and ultimate regulatory approval of MGL-3196 for NASH or genetic dyslipidemias, such as FH, is critical to the future success of our business. We have invested, and will continue to invest, a significant portion of our time and financial resources in the clinical development of MGL-3196. We will need to raise sufficient funds to successfully complete our clinical development program for MGL-3196 in NASH and FH. The future regulatory and commercial success of MGL-3196 is subject to a number of risks, including the following:

- we may not have sufficient financial and other resources to complete the necessary clinical trials for MGL-3196, including but not limited to Phase 2 clinical trials and, later, registrational clinical trials to obtain drug approval;
- the mechanism of action of MGL-3196 is complex and we do not know the degree to which it will translate into a therapeutic benefit, if any, in NASH, FH or any other indication, and we do not know the degree to which the complex mechanism of action may contribute to long term safety issues or adverse events, if any, when MGL-3196 is taken for prolonged periods such as in the treatment of NASH, FH or any other indication;
- we may not be able to obtain adequate evidence from clinical trials of efficacy and safety for MGL-3196 in NASH, FH or any other indication;
- we do not know the degree to which MGL-3196 will be accepted as a therapy by physicians, patients and payors, even if approved;
- in our clinical programs for MGL-3196, we may experience variability in patients, adjustments to clinical trial procedures and the need for additional clinical trial sites, which could delay our clinical trial progress;
- the results of our clinical trials may not meet the level of statistical or clinical significance required by the United States Food and Drug Administration, or FDA, or comparable foreign regulatory bodies for marketing approval;
- patients in our clinical trials may die or suffer other adverse effects for reasons that may or may not be related to MGL-3196, which could delay or prevent further clinical development;
- the standards implemented by clinical or regulatory agencies may change at any time;
- the FDA or foreign clinical or regulatory agencies may require efficacy endpoints for a Phase 3 clinical trial for the treatment of NASH or FH that differ from the endpoints of our current or future trials, which may require us to conduct additional clinical trials;
- if approved for NASH, MGL-3196 will likely compete with the off-label use of currently marketed products and other therapies in development that may reach approval for NASH prior to MGL-3196;
- if approved for FH, MGL-3196 will likely compete with currently approved and marketed products and other therapies in development that may reach approval for FH prior to MGL-3196; and
- we may not be able to obtain, maintain or enforce our patents and other intellectual property rights.

Of the large number of drugs in development in the pharmaceutical industry, only a small percentage results in the submission of a new drug application, or NDA, to the FDA and even fewer are approved for commercialization. Furthermore, even if we do receive regulatory approval to market MGL-3196, any such approval may be subject to limitations on the indicated uses or patient populations for which we may market the products. Accordingly, even if we are able to obtain the requisite financing to continue to fund our development programs, we may be unable to successfully develop or commercialize MGL-3196. If we or any of our future development partners are unable to develop, or obtain regulatory approval for, or, if approved, successfully commercialize MGL-3196, we may not be able to generate sufficient revenue to continue our business.

The results of preclinical studies and early clinical trials are not always predictive of future results. Any product candidate that we advance into clinical trials, including MGL-3196, may not have favorable results in later clinical trials or receive regulatory approval.

Drug development has inherent risk. We will be required to demonstrate through adequate and well-controlled clinical trials that our product candidates are safe and effective, with a favorable benefit-risk profile, for use in our target indications before we can seek regulatory approvals for its commercial sale. Clinical studies are expensive, difficult to design and implement, can take many years to complete and are uncertain as to outcome. Delay or failure can occur at any stage of development, including after commencement of any of our clinical trials. In addition, success in early clinical trials does not mean that later clinical trials will be successful, because later-stage clinical trials may be conducted in broader patient populations and involve different study designs. For instance, our Phase 1 results may not be predictive of any future Phase 2 results. Furthermore, our future trials will need to demonstrate sufficient safety and efficacy in larger patient populations for approval by regulatory authorities. Companies frequently suffer significant setbacks in advanced clinical trials, even after earlier clinical trials have shown promising results. In addition, only a small percentage of drugs under development result in the submission of an NDA to the FDA and even fewer are approved for commercialization.

We cannot be certain that any of our ongoing or future clinical trials will be successful, and any safety concerns observed in any one of our clinical trials in our targeted indications could limit the prospects for regulatory approval of our product candidates in those and other indications.

Because MGL-3196 has not yet received regulatory approval for any indication, it is difficult to predict the time and cost of development and our ability to successfully complete clinical development and obtain the necessary regulatory approvals for commercialization.

MGL-3196 has not yet received regulatory approval for the treatment of NASH, FH or any other indication, and unexpected problems may arise that could cause us to delay, suspend or terminate our development efforts in any or all indications. Further, MGL-3196 has not yet demonstrated efficacy in patients with NASH or FH, and the long-term safety consequences of a liver-directed thyroid hormone receptor beta agonist are not known. Regulatory approval of new product candidates such as MGL-3196 can be more expensive and take longer than approval for candidates for the treatment of more well-understood diseases with previously approved products.

If clinical trials or regulatory approval processes for our product candidates are prolonged, delayed or suspended, we may be unable to commercialize our product candidates on a timely basis, which would require us to incur additional costs and delay our receipt of any revenue from potential product sales.

We cannot predict whether we will encounter problems with any of our completed, ongoing or planned clinical trials that will cause us or any regulatory authority to delay or suspend those clinical trials or delay the analysis of data derived from them. A number of events, including any of the following, could delay the completion of our ongoing and planned clinical trials and negatively affect our ability to obtain regulatory approval for, and to market and sell, a particular product candidate:

- conditions imposed on us by the FDA or other regulatory authorities regarding the scope or design of our clinical trials;
- insufficient supply of our product candidates or other materials necessary to conduct and complete our clinical trials;
- slow enrollment and retention rate of subjects in our clinical trials; and
- serious and unexpected drug-related side effects related to the product candidate being tested.

Commercialization of our product candidates may be delayed by the imposition of additional conditions on our clinical trials by the FDA or any other applicable foreign regulatory authority or the requirement of additional supportive studies by the FDA or such foreign regulatory authority.

We do not know whether our clinical trials will begin as planned, will need to be restructured, or will be completed on schedule, if at all. Delays in the initiation, enrollment or completion of our clinical trials will result in increased development costs for our product candidates, and our financial resources may be insufficient to fund any incremental costs. In addition, if our clinical trials are delayed, our competitors may be able to bring products to market before we do and the commercial viability of our product candidates could be limited.

If we encounter difficulties enrolling patients in our clinical trials, our clinical development activities could be delayed or otherwise adversely affected.

We may not be able to initiate, continue, or complete clinical trials required by the FDA or foreign regulatory agencies for MGL-3196 if we are unable to locate and enroll a sufficient number of eligible patients to participate in these clinical trials. Patient enrollment, a significant factor in the timing to conduct and complete clinical trials, is affected by many factors, including the size and nature of the patient population, the proximity of patients to clinical sites, the eligibility criteria for the trial, the design of the clinical trial, competing clinical trials, and clinicians' and patients' perceptions as to the potential advantages and disadvantages of the product candidate being studied in relation to other available therapies, including any new drugs that may be approved for the indications we are investigating. In the proposed clinical trials, patient willingness to undergo a liver biopsy in our NASH trials, and identification of patients willing to participate in our FH trials due to the rarity of the disease, are also risk factors. Potential patients for MGL-3196 may not be adequately diagnosed or identified with the diseases which we are targeting or may not meet the entry criteria for our studies.

The FDA typically requires sponsors of lipid-lowering product candidates to conduct drug-drug interaction studies with statins because statins may have increased safety risks when administered together with other drug therapies that affect their pharmacokinetic profile. Accordingly, shortly after we submitted an investigational new drug application, or IND, for MGL-3196, the FDA placed a partial clinical hold on MGL-3196 with respect to clinical dosing of MGL-3196 with statins. We conducted our planned clinical dose escalation trials and, later, upon submitting a request to the FDA, the FDA advised us that conducting clinical drug interaction studies between MGL-3196 and statins might be sufficient to address the partial clinical hold. We have completed two clinical drug interaction studies between MGL-3196 and three statins, the results of which were submitted, along with other information, to the FDA in support of our request to the FDA that it remove the partial clinical hold. The timing of the FDA's response may affect the timing or enrollment of clinical trials in which MGL-3196 is dosed concomitantly with statins, including the FH Phase 2 clinical trial and, to a lesser extent, the NASH Phase 2 clinical trial.

We will be required to identify and enroll a sufficient number of patients for each of our ongoing and planned clinical trials of MGL-3196 for NASH and FH indications, respectively. We also may encounter difficulties in identifying and enrolling NASH patients and FH patients with a stage of disease appropriate for our ongoing or future clinical trials. We may not be able to initiate or continue clinical trials if we are unable to locate a sufficient number of eligible patients to participate in the clinical trials required by the FDA or other foreign regulatory agencies. In addition, the process of finding and diagnosing patients may prove costly. Our inability to enroll a sufficient number of patients for any of our clinical trials would result in significant delays or may require us to abandon one or more clinical trials.

Any product candidate in our current or future clinical trials may cause unacceptable adverse events or have other properties that may delay or prevent its regulatory approval or commercialization or limit its commercial potential.

Unacceptable adverse events caused by any of our product candidates in current or future clinical trials could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in the denial of regulatory approval by the FDA or other regulatory authorities for any or all targeted indications and markets. This in turn could prevent us from completing development of or commercializing the affected product candidate and generating revenue from its sale. If any of our product candidates cause unacceptable adverse events in clinical trials, we may not be able to obtain regulatory approval or commercialize such product candidate.

Our product candidates will remain subject to ongoing regulatory review even if they receive marketing approval, and if we fail to comply with continuing regulations, we could lose these approvals and the sale of any approved commercial products could be suspended.

Even if we receive regulatory approval to market a particular product candidate, the manufacturing, labeling, packaging, adverse event reporting, storage, advertising, promotion, and record keeping related to the product will remain subject to extensive regulatory requirements. If we fail to comply with the regulatory requirements of the FDA and other applicable domestic and foreign regulatory authorities, or previously unknown problems with any approved product, manufacturer, or manufacturing process are discovered, we could be subject to administrative or judicially imposed sanctions, including:

- restrictions on the products, manufacturers, or manufacturing processes;
- warning letters;
- civil or criminal penalties;
- fines;
- injunctions;
- product seizures or detentions;
- pressure to initiate voluntary product recalls;
- suspension or withdrawal of regulatory approvals; and
- refusal to approve pending applications for marketing approval of new products or supplements to approved applications.

Our industry is highly competitive, and our product candidates may become obsolete.

We are engaged in a rapidly evolving field. Competition from other pharmaceutical companies, biotechnology companies and research and academic institutions is intense and likely to increase. Many of those companies and institutions have substantially greater financial, technical and human resources than us. Those companies and institutions also have substantially greater experience in developing products, conducting clinical trials, obtaining regulatory approval and in manufacturing and marketing pharmaceutical products. Our competitors may succeed in obtaining regulatory approval for their products more rapidly than we do. Competitors have developed or are in the process of developing technologies that are, or in the future may be, the basis for competitive products. Some of these competitive products may have an entirely different approach or means of accomplishing the desired therapeutic effect than products being developed by us. Our competitors may succeed in developing products that are more effective and/or cost competitive than those we are developing, or that would render our product candidates less competitive or even obsolete. In addition, one or more of our competitors may achieve product commercialization or patent protection earlier than us, which could materially adversely affect our business.

If the FDA or other applicable regulatory authorities approve generic products that compete with any of our or any of our partners' product candidates, the sales of our product candidates would be adversely affected.

Once an NDA or marketing authorization application outside the United States is approved, the product covered thereby becomes a "listed drug" that can, in turn, be cited by potential competitors in support of approval of an abbreviated new drug application in the United States. Agency regulations and other applicable regulations and policies provide incentives to manufacturers to create modified, non-infringing versions of a drug to facilitate the approval of an abbreviated new drug application or other application for generic substitutes in the United States and in nearly every pharmaceutical market around the world. These manufacturers might only be required to conduct a relatively inexpensive study to show that their product has the same active ingredient(s), dosage form, strength, route of administration and conditions of use, or labeling, as our product and that the generic product is bioequivalent to our product, meaning it is absorbed in the body at the same rate and to the same extent as our product. These generic equivalents, which must meet the same quality standards as branded pharmaceuticals, would be significantly less costly than our product to bring to market, and companies that produce generic equivalents are generally able to offer their products at lower prices. Thus, after the introduction of a generic competitor, a significant percentage of the sales of any branded product are typically lost to the generic product. Accordingly, competition from generic equivalents to our product or any of our partners' future products, if any, would materially adversely affect our future revenue, profitability and cash flows and substantially limit our ability to obtain a return on the investments we have made and expect to make in our or any of our partners' product candidates, including MGL-3196.

If physicians and patients do not accept our future products or if the market for indications for which any product candidate is approved is smaller than expected, we may be unable to generate significant revenue, if any.

Even if any of our product candidates obtain regulatory approval, they may not gain market acceptance among physicians, patients, and third-party payers. Physicians may decide not to recommend its treatments for a variety of reasons including:

- timing of market introduction of competitive products;
- demonstration of clinical safety and efficacy compared to other products;
- cost-effectiveness;
- limited or no coverage by third-party payers;
- convenience and ease of administration;
- prevalence and severity of adverse side effects;
- restrictions in the label of the drug;
- other potential advantages of alternative treatment methods; and
- ineffective marketing and distribution support of its products.

If any of our product candidates are approved, but fail to achieve market acceptance or such market is smaller than anticipated, we may not be able to generate significant revenue and our business would suffer.

As we evolve from a company that is primarily involved in clinical development to a company that is also involved in commercialization, we may encounter difficulties in expanding our operations successfully.

As we advance our product candidates through clinical trials, we will need to expand our development, regulatory, manufacturing, and marketing and sales capabilities and may need to further contract with third parties to provide these capabilities. As our operations expand, we likely will need to manage additional relationships with such third parties, as well as additional collaborators, distributors, marketers and suppliers.

Maintaining third party relationships for these purposes will impose significant added responsibilities on members of our management and other personnel. We must be able to effectively manage our development efforts; recruit and train sales and marketing personnel, effectively manage our participation in the clinical trials in which our product candidates are involved and improve our managerial, development, operational and finance systems, all of which may impose a strain on our administrative and operational infrastructure.

If we enter into arrangements with third parties to perform sales, marketing or distribution services, any product revenues that we receive, or the profitability of these product revenues to us, are likely to be lower than if we were to market and sell any products that we develop without the involvement of these third parties. In addition, we may not be successful in entering into arrangements with third parties to sell and market our products or in doing so on terms that are favorable to us. We likely will have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our products effectively. If we do not establish sales and marketing capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our products.

The uncertainty associated with pharmaceutical reimbursement and related matters may adversely affect our business.

Market acceptance and sales of any one or more of our product candidates will depend on reimbursement policies and may be affected by future healthcare reform measures in the United States and in foreign jurisdictions. Government authorities and third-party payers, such as private health insurers and health maintenance organizations, decide which drugs they will cover and establish payment levels. We cannot be certain that reimbursement will be available for any of our product candidates. Also, we cannot be certain that reimbursement policies will not reduce the demand for, or the price paid for, our products. If reimbursement is not available or is available on a limited basis, we may not be able to successfully commercialize any product candidates that we develop.

In the United States, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, also called the Medicare Modernization Act, or MMA, changed the way Medicare covers and pays for pharmaceutical products. The legislation established Medicare Part D, which expanded Medicare coverage for outpatient prescription drug purchases by the elderly but provided authority for limiting the number of drugs that will be covered in any therapeutic class. The MMA also introduced a new reimbursement methodology based on average sales prices for physician-administered drugs. The United States and several foreign jurisdictions are considering, or have already enacted, a number of legislative and regulatory proposals to change the healthcare system in ways that could affect our ability to sell our products profitably. Among policy makers and payers in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access to healthcare. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives. We expect to experience pricing pressures in connection with the sale of any products that we develops due to the trend toward managed healthcare, the increasing influence of health maintenance organizations, and additional legislative proposals.

In March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, or collectively, ACA, became law in the United States. The goal of ACA is to reduce the cost of healthcare and substantially change the way healthcare is financed by both government and private insurers. While we cannot predict what impact on federal reimbursement policies this legislation will have in general or on our business specifically, the ACA may result in downward pressure on pharmaceutical reimbursement, which could negatively affect market acceptance of, and the price we may charge for, any products we develop that receives regulatory approval. We also cannot predict the impact of ACA on us as many of the ACA reforms require the promulgation of detailed regulations implementing the statutory provisions, which have not yet been fully implemented.

If any product liability lawsuits are successfully brought against us or any of our collaborative partners, we may incur substantial liabilities and may be required to limit commercialization of our product candidates.

We face an inherent risk of product liability lawsuits related to the testing of our product candidates in seriously ill patients and will face an even greater risk if product candidates are approved by regulatory authorities and introduced commercially. Product liability claims may be brought against us or our partners by participants enrolled in our clinical trials, patients, healthcare providers or others using, administering or selling any of our future approved products. If we cannot successfully defend ourselves against any such claims, we may incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any of our future approved products;
- injury to our reputation;
- withdrawal of clinical trial participants;
- termination of clinical trial sites or entire trial programs;
- significant litigation costs;
- substantial monetary awards to or costly settlements with patients or other claimants;
- product recalls or a change in the indications for which products may be used;
- loss of revenue;
- diversion of management and scientific resources from our business operations; and
- the inability to commercialize our product candidates.

If any of our product candidates are approved for commercial sale, we will be highly dependent upon consumer perceptions of us and the safety and quality of our products. We could be adversely affected if we are subject to negative publicity. We could also be adversely affected if any of our products or any similar products distributed by other companies prove to be, or are asserted to be, harmful to patients. Also, because of our dependence upon consumer perceptions, any adverse publicity associated with illness or other adverse effects resulting from patients' use or misuse of our products or any similar products distributed by other companies could have a material adverse impact on our results of operations.

We do not currently hold product liability insurance coverage. Prior to commercialization of our product candidates, we will need to purchase insurance coverage. As a result, we may be unable to maintain or obtain sufficient insurance at a reasonable cost to protect us against losses that could have a material adverse effect on our business. These liabilities could prevent or interfere with our product development and commercialization efforts. A successful product liability claim or series of claims brought against us, particularly if judgments exceed our insurance coverage, could decrease our cash resources and adversely affect our business, financial condition and results of operations.

Our employees, contractors and partners may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements and insider trading.

We are exposed to the risk of fraud or other misconduct by our employees, contractors or partners. Misconduct by these parties could include failures to comply with FDA regulations, to provide accurate information to the FDA, to comply with federal and state healthcare fraud and abuse laws and regulations, to report financial information or data timely, completely or accurately, or to disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion,

sales commission, customer incentive programs and other business arrangements. Third-party misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. It is not always possible to identify and deter misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. If any such actions are instituted against us resulting from this misconduct and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant fines or other sanctions.

We enter into various contracts in the normal course of our business in which we indemnify the other party to the contract. In the event we have to perform under these indemnification provisions, it could have a material adverse effect on our business, financial condition and results of operations.

In the normal course of business, we periodically enter into academic, commercial, service, collaboration, licensing, consulting and other agreements that contain indemnification provisions. With respect to our academic and other research agreements, we typically indemnify the institution and related parties from losses arising from claims relating to the products, processes or services made, used, sold or performed pursuant to the agreements for which we have secured licenses, and from claims arising from our or our potential sublicensees' exercise of rights under the agreement. With respect to our commercial agreements, we indemnify our vendors from any third-party product liability claims that could result from the production, use or consumption of the product, as well as for alleged infringements of any patent or other intellectual property right by a third party.

Should our obligation under an indemnification provision exceed applicable insurance coverage or if we are denied insurance coverage, our business, financial condition and results of operations could be adversely affected. Similarly, if we are relying on a collaborator to indemnify us and the collaborator is denied insurance coverage or the indemnification obligation exceeds the applicable insurance coverage, and if the collaborator does not have other assets available to indemnify us, our business, financial condition and results of operations could be adversely affected.

If we fail to develop and commercialize other product candidates, we may be unable to grow our business.

Although the development and commercialization of MGL-3196 is our primary focus, as part of our longer-term growth strategy, we plan to evaluate the development and commercialization of other therapies related to thyroid hormone, orphan and other diseases. We will evaluate internal opportunities from our compound libraries, and also may choose to in-license or acquire other product candidates as well as commercial products to treat patients suffering from thyroid hormone, orphan or other disorders with high unmet medical needs and limited treatment options. These other product candidates may require additional, time-consuming development efforts prior to commercial sale, including preclinical studies, clinical trials and approval by the FDA and/or applicable foreign regulatory authorities. All product candidates are prone to the risks of failure that are inherent in pharmaceutical product development, including the possibility that the product candidate will not be shown to be sufficiently safe and effective for approval by regulatory authorities. In addition, we cannot assure you that any such products that are approved will be manufactured or produced economically, be successfully commercialized, be widely accepted in the marketplace, or be more effective than other commercially available alternatives.

If we lose key management personnel, or if we fail to recruit additional highly skilled personnel, our ability to identify, develop and commercialize products will be impaired.

We are highly dependent on principal members of our management team, including our Chief Executive Officer, Paul A. Friedman, M.D., and our Chief Medical Officer, Rebecca Taub, M.D. These executives each have significant pharmaceutical industry experience. The loss of any member of our management team or scientific staff, including Drs. Friedman and Taub, would impair our ability to identify, develop and market new products. Our management and other employees may voluntarily terminate their employment with us at any time. The loss of the services of these or other key personnel, or the inability to attract and retain additional qualified personnel, could result in delays to development or approval, loss of sales and diversion of management resources. In addition, we depend on our ability to attract and retain other highly skilled personnel. Competition for qualified personnel is intense, and the process of hiring and integrating such qualified personnel is often lengthy. We may be unable to recruit such personnel on a timely basis, if at all, which would negatively impact our development and commercialization programs.

Additionally, we do not currently maintain "key person" life insurance on the lives of our executives or any of our employees. This lack of insurance means that we may not receive adequate compensation for the loss of the services of these individuals.

We currently have no marketing, sales or distribution infrastructure with respect to our product candidates. If we are unable to develop are sales, marketing and distribution capability on our own or through collaborations with marketing partners, we will not be successful in commercializing our product candidates.

We currently have no marketing, sales or distribution capabilities and have limited sales or marketing experience within our organization. If our product candidate, MGL-3196, is approved, we intend either to establish a sales and marketing organization with technical expertise and supporting distribution capabilities to commercialize MGL-3196, or to outsource this function to a third party. Either of these options would be expensive and time consuming. Some or all of these costs may be incurred in advance of any approval of MGL-3196. In addition, we may not be able to hire a sales force in the United States that is sufficient in size or has adequate expertise in the medical markets that we intend to target. Any failure or delay in the development of our internal sales, marketing and distribution capabilities would adversely affect the commercialization of MGL-3196 and other future product candidates.

With respect to our existing and future product candidates, we may choose to collaborate with third parties that have direct sales forces and established distribution systems, either to augment our own sales force and distribution systems or as an alternative to our own sales force and distribution systems. To the extent that we enter into co-promotion or other licensing arrangements, our product revenue may be lower than if we directly marketed or sold any approved products. In addition, any revenue we receive will depend in whole or in part upon the efforts of these third parties, which may not be successful and are generally not within our control. If we are unable to enter into these arrangements on acceptable terms or at all, we may not be able to successfully commercialize any approved products. If we are not successful in commercializing any approved products, either on our own or through collaborations with one or more third parties, our future product revenue will suffer and we may incur significant additional losses.

Even if we obtain FDA approval of MGL-3196 or any other future product candidate, we or our partners may never obtain approval or commercialize our products outside of the United States, which would limit our ability to realize their full market potential.

In order to market any products outside of the United States, we must establish and comply with numerous and varying regulatory requirements of other countries regarding clinical trial design, safety and efficacy. Clinical trials conducted in one country may not be accepted by regulatory authorities in other countries, and regulatory approval in one country does not mean that regulatory approval will be obtained in any other country. Approval procedures vary among countries and can involve additional product testing and validation and additional administrative review periods. Seeking foreign regulatory approvals could result in significant delays, difficulties and costs for us and may require additional preclinical studies or clinical trials which would be costly and time consuming. Regulatory requirements can vary widely from country to country and could delay or prevent the introduction of our products in those countries. Satisfying these and other regulatory requirements is costly, time consuming, uncertain and subject to unanticipated delays. In addition, our failure to obtain regulatory approval in any country may delay or have negative effects on the process for regulatory approval in other countries. We and our partners do not have any product candidates approved for sale in any jurisdiction, including international markets, and we do not have experience in obtaining regulatory approval in international markets. If we or our partners fail to comply with regulatory requirements in international markets or to obtain and maintain required approvals, our target market will be reduced and our ability to realize the full market potential of our products will be harmed.

If we do not obtain protection under the Hatch-Waxman Amendments and similar foreign legislation by extending the term of patents covering each of our product candidates, our business may be materially harmed.

Depending upon the timing, duration and conditions of FDA marketing approval of our product candidates, one or more of our United States patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent term extension of up to five years for a patent covering an approved product as compensation for effective patent term lost during product development and the FDA regulatory review process. However, we may not receive an extension if we fail to apply within applicable deadlines, fail to apply prior to expiration of relevant patents or otherwise fail to satisfy applicable requirements. Moreover, the length of the extension could be less than we request. If we are unable to obtain patent term extension or the term of any such extension is less than we request, the period during which we can enforce our patent rights for that product may not extend beyond the current patent expiration dates and our competitors may obtain approval to market competing products sooner. As a result, our revenue could be potentially materially reduced.

If we or our partners market products in a manner that violates fraud and abuse and other healthcare laws, or if we or our partners violate government price reporting laws, we or our partners may be subject to administrative civil and/or criminal penalties.

In addition to FDA restrictions on marketing of pharmaceutical products, several other types of state and federal healthcare laws, including those commonly referred to as "fraud and abuse" laws, have been applied in recent years to restrict certain marketing practices in the pharmaceutical industry. These laws include, among others, false claims and anti-kickback statutes. At such time, if ever, as we or any of our partners market any of our future approved products, it is possible that some of our business activities and/or our partners could be subject to challenge under one or more of these laws.

Federal false claims, false statements and civil monetary penalties laws prohibit, among others, any person from knowingly presenting, or causing to be presented, a false claim for payment to the federal government or knowingly making, or causing to be made, a false statement to get a false claim paid. The federal healthcare program anti-kickback statute prohibits, among other things, knowingly and willfully offering, paying, soliciting or receiving remuneration to induce, or in return for, purchasing, leasing, ordering or arranging for the purchase, lease or order of any healthcare item or service reimbursable under Medicare, Medicaid or other federally financed healthcare programs. This statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand and prescribers, purchasers and formulary managers on the other. Although there are several statutory exceptions and regulatory safe harbors protecting certain common activities from prosecution, the exceptions and safe harbors are drawn narrowly, and practices that involve remuneration intended to induce prescribing, purchasing or recommending may be subject to scrutiny if they do not qualify for an exception or safe harbor.

In addition, we and/or our partners may be subject to data privacy and security regulation, including the Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act, and their respective implementing regulations, which impose specified requirements relating to the privacy, security and transmission of individually identifiable health information.

Most states also have statutes or regulations similar to these federal laws, which may apply to items such as pharmaceutical products and services reimbursed by private insurers. We and/or our partners may be subject to administrative, civil and criminal sanctions for violations of any of these federal and state laws. Pharmaceutical and other healthcare companies have been prosecuted under these laws for a variety of promotional and marketing activities, such as: providing free trips, free goods, sham consulting fees and grants and other monetary benefits to prescribers; reporting to pricing services inflated average wholesale prices that were then used by federal programs to set reimbursement rates; engaging in off-label promotion; and submitting inflated best price information to the Medicaid Rebate Program to reduce liability for Medicaid rebates.

If the third parties on which we rely for the conduct of our clinical trials and results do not perform our clinical trial activities in accordance with good clinical practices and related regulatory requirements, we may be unable to obtain regulatory approval for or commercialize our product candidates.

We use third-party service providers to conduct and/or oversee the clinical trials of our product candidates and expect to continue to do so for the foreseeable future. We rely heavily on these parties for successful execution of our clinical trials. Nonetheless, we are responsible for confirming that each of our clinical trials is conducted in accordance with FDA requirements and our general investigational plan and protocol.

The FDA requires us and our third-party service providers to comply with regulations and standards, commonly referred to as good clinical practices, or GCP, for conducting, recording and reporting the results of clinical trials to assure that data and reported results are credible and accurate, and that the trial participants are adequately protected. Our reliance on third parties that we do not control does not relieve us of these responsibilities and requirements. Third parties may not complete activities on schedule or may not conduct our clinical trials in accordance with regulatory or GCP requirements or the respective trial plans and protocols. In addition, third parties may not be able to repeat their past successes in clinical trials. The failure of these third parties to carry out their obligations could delay or prevent the development, approval and commercialization of our product candidates or result in enforcement action against us.

We have relied on, and expect to continue to rely on, third-party manufacturers to produce our product candidates.

We do not own or operate manufacturing facilities for the production of clinical or commercial quantities of our product candidates, and we lack the resources and the capabilities to do so. As a result, we currently rely, and expect to rely for the foreseeable future, on third-party manufacturers to supply its product candidates. Reliance on third-party manufacturers entail risks to which we would not be subject if we manufactured our product candidates or products ourselves, including:

- reliance on third-parties for manufacturing process development, regulatory compliance and quality assurance;
- limitations on supply availability resulting from capacity and scheduling constraints of third-parties;
- the possible breach of manufacturing agreements by third-parties because of factors beyond our control; and
- the possible termination or non-renewal of manufacturing agreements by third-parties, at a time that is costly or inconvenient to us.

If we do not maintain our key manufacturing relationships, we may fail to find replacement manufacturer or develop our own manufacturing capabilities, which could delay or impair our ability to obtain regulatory approval for our products and substantially increase our costs or deplete profit margins, if any. If we do find replacement manufacturer, we may not be able to enter into agreements with them on terms and conditions favorable to us and there could be a substantial delay before new facilities could be qualified and registered with the FDA and other foreign regulatory authorities.

The FDA and other foreign regulatory authorities require manufacturers to register manufacturing facilities. The FDA and corresponding foreign regulators also inspect these facilities to confirm compliance with current good manufacturing practices, or cGMPs. Contract manufacturers may face manufacturing or quality control problems causing drug substance production and shipment delays or a situation where the contractor may not be able to maintain compliance with the applicable cGMP requirements. Any failure to comply with cGMP requirements or other FDA, European Medicines Agency, or EMA, and comparable foreign regulatory requirements could adversely affect our clinical research activities and our ability to develop our product candidates and market our products following approval.

Our current and anticipated future dependence upon others for the manufacture of our product candidates may adversely affect our future profit margins and our ability to develop our product candidates and commercialize any products that receive regulatory approval on a timely basis.

Our reliance on third parties requires us to share our trade secrets, which increases the possibility that a competitor will discover them or that our trade secrets will be misappropriated or disclosed.

Because we rely on third parties to conduct our clinical trials and to produce our product candidates, we must, at times, share trade secrets with them. We seek to protect our proprietary technology in part by entering into confidentiality agreements and, if applicable, material transfer agreements, consulting agreements or other similar agreements with our third party contractors and consultants prior to disclosing proprietary information. These agreements typically limit the rights of the third parties to use or disclose our confidential information, including our trade secrets. Despite the contractual provisions employed when working with third parties, the need to share trade secrets and other confidential information increases the risk that such trade secrets become known by our competitors, are inadvertently incorporated into the technology of others, or are disclosed or used in violation of these agreements. Given that our proprietary position is based, in part, on our know-how and trade secrets, a competitor's discovery of our trade secrets or other unauthorized use or disclosure would impair our competitive position and may have a material adverse effect on our business.

Risks Related to our Intellectual Property

Our rights to develop and commercialize our product candidates are subject in part to the terms and conditions of a license to MGL-3196 granted to us by Roche.

We entered into a research, development and commercialization agreement, or the Roche Agreement, with Hoffmann-La Roche Pharmaceutical Company Limited, or Roche, on December 18, 2008. Pursuant to the terms of the Roche Agreement, We assumed control of all development and commercialization of MGL-3196 and will own exclusive worldwide rights for all potential indications. Roche assigned all patent rights relating to MGL-3196 to us and granted us an exclusive license to use certain know-how relating to MGL-3196 in exchange for consideration consisting of an upfront payment, milestone payments tied to the achievement of product development and regulatory milestones, and royalty payments based on net sales of products containing MGL-3196, subject to certain reductions. We must use commercially reasonable efforts to conduct clinical and commercial development programs for products containing MGL-3196. If we determine that it is not reasonable to continue clinical trials or other development of MGL-3196, we may elect to cease further development and Roche may terminate the license. If we determine not to pursue the development or commercialization of MGL-3196 in certain jurisdictions, including the United States, Roche may terminate the license for such territories. The Roche Agreement will expire, unless earlier terminated pursuant to other provisions of the agreement, on the last to occur of (i) the expiration of the last valid claim of a licensed patent covering the manufacture, use or sale of products containing MGL-3196, or (ii) ten years after the first sale of a product containing MGL-3196.

We do not have, nor have we had, any material disputes with Roche regarding the Roche Agreement. However, if there is any future dispute between us and Roche regarding the parties' rights under the Roche Agreement, our ability to develop and commercialize MGL-3196 may be materially harmed. Any uncured, material breach under the Roche Agreement could result in our loss of exclusive rights to MGL-3196 and may lead to a complete termination of the Roche Agreement and force us to cease product development efforts for MGL-3196.

We may fail to comply with any of our obligations under agreements pursuant to which we license rights or technology, which could result in the loss of rights or technology that are material to our business.

We may enter into license agreements from time to time. Licensing of intellectual property is important to our business and involves complex legal, business and scientific issues. Disputes may arise regarding intellectual property subject to a licensing agreement, including but not limited to:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- the sublicensing of patent and other rights;
- our diligence obligations under the license agreement and what activities satisfy those diligence obligations;
- the ownership of inventions and know-how resulting from the joint creation or use of intellectual property by us and our licensors and collaborators; and
- the priority of invention of patented technology.

If disputes over intellectual property and other rights that we have licensed or acquired from third parties prevent or impair our ability to maintain our current licensing arrangements on acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates.

Our success depends on our ability to protect our intellectual property and our proprietary technologies.

Our success depends on our ability to protect our intellectual property and our proprietary technologies. Our commercial success depends in part on our ability to obtain and maintain patent protection and trade secret protection for our product candidates, proprietary technologies, and their uses, as well as our ability to operate without infringing upon the proprietary rights of others.

We can provide no assurance that our patent applications or those of our licensors will result in additional patents being issued or that issued patents will afford sufficient protection against competitors with similar technologies, nor can we provide any assurance that the patents issued will not be infringed, designed around or invalidated by third parties. Even issued patents may later be found unenforceable or may be modified or revoked in proceedings instituted by third parties before various patent offices or in courts. The degree of future protection for our proprietary rights is uncertain. Only limited protection may be available and may not adequately protect our rights or permit us to gain or keep any competitive advantage. This failure to properly protect the intellectual property rights relating to our product candidates could have a material adverse effect on our financial condition and results of operations. Composition-of-matter patents on the biological or chemical active pharmaceutical ingredients are generally considered to offer the strongest protection of intellectual property and provide the broadest scope of patent protection for pharmaceutical products, as such patents provide protection without regard to any method of use or any method of manufacturing. While we own and have licensed rights to issue composition-of-matter patents in the United States and other jurisdictions for MGL-3196, we cannot be certain that the claims in issued composition-of-matter patents will not be found invalid or unenforceable if challenged. We cannot be certain that the claims in owned and licensed patent applications covering our product candidates will be considered patentable by the United States Patent and Trademark Office, or USPTO, and valid by courts in the United States or by the patent offices and courts in foreign jurisdictions. Even if we owned and licensed patent applications covering our product candidates, the patents may not be enforced against competitors. For example, a formulation patent will not be enforced against those making and marketing a product that has the same active pharmaceutical ingredient in a different formulation that is not claimed in the formulation patent. Method-of-use patents protect the use of a product for the specified method or for treatment of a particular indication. This type of patent may not be enforced against competitors making and marketing a product that has the same active pharmaceutical ingredient but is used for a method not claimed in the patent. Moreover, even if competitors do not actively promote their product for our targeted indications, physicians may prescribe these products "off-label." Although off-label prescriptions may infringe or contribute to the infringement of method-of-use patents, the practice is common and such infringement is difficult to prevent or prosecute.

Our licensed composition-of-matter patent from Roche for MGL-3196 is expected to expire in the United States in 2026. Our owned patents and pending patent applications that cover solid form, method of manufacturing, and use of MGL-3196 to treat various indications are expected to expire in 2033. While patent term adjustments or patent term extensions could result in later expiration dates for each of these patents, there can be no assurances that we will receive any patent adjustments or patent term extensions. The patent application process and patent maintenance and enforcement are subject to numerous risks and uncertainties, and there can be no assurance that we or any of our future development partners will be successful in protecting our product candidates by obtaining and defending patents. These risks and uncertainties include the following:

- the USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other provisions during the patent process and after a patent has issued. There are situations in which noncompliance can result in abandonment or lapse of a patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, competitors might be able to enter the market earlier than would otherwise have been the case;
- patent applications may not result in any patents being issued;
- patents may be challenged, invalidated, modified, revoked, circumvented, found to be unenforceable or otherwise may not provide any competitive advantage;
- us and our licensor(s) may not have been the first to make the inventions covered by pending patent applications or issued patents;
- us and our licensor(s) may not have been the first to file patent applications for its product candidates or the compositions our developed, or for their uses;
- others may independently develop identical, similar or alternative products or compositions and uses thereof;
- us and our licensor(s)' disclosures in patent applications may not be sufficient to meet the statutory requirements for patentability;
- others may design around our owned and licensed patent claims to produce competitive products which fall outside of the scope of the patents;
- others may identify prior art or other bases which could invalidate our or licensor(s)' patents;
- our competitors might conduct research and development activities in the United States and other countries that provide a safe harbor from patent infringement claims for certain research and development activities, as well as in countries where us and our licensor(s) do not have patent rights, and then use the information learned from such activities to develop competitive products for sale in major commercial markets;
- there may be significant pressure on the United States government and international governmental bodies to limit the scope of patent protection both inside and outside the United States for disease treatments that prove successful, as a matter of public policy regarding worldwide health concerns; and
- countries other than the United States may have patent laws less favorable to patentees than those upheld by United States courts, allowing foreign competitors a better opportunity to create, develop and market competing product candidates.

In addition, we rely on the protection of our trade secrets and proprietary know-how. Although we have taken steps to protect our trade secrets and unpatented know-how, including entering into confidentiality agreements with third parties, and confidential information and inventions agreements with employees, consultants and advisors, we cannot provide any assurances that any of these parties would not breach the agreements to disclose any proprietary information, including trade secrets, and we may not be able to obtain adequate remedies for such breaches. Further, third parties may still obtain this information by other means, such as breaches of our physical or computer security systems. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. Moreover, third parties may come upon this or similar information lawfully and independently. We would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us. Further, intellectual property rights have limitations and do not necessarily address all potential threats to our competitive position. If any of these events occurs or if we otherwise lose protection for our trade secrets or proprietary know-how, our business may be harmed.

We may not be able to protect our intellectual property rights throughout the world.

While we have licensed from Roche issued composition-of-matter patents directed at MGL-3196 in the United States and other countries, filing, prosecuting and defending patents on MGL-3196 in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries may not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, we may not be able to prevent third parties from practicing its inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where we have patent protection but enforcement is not as strong as that in the United States. These products may compete with MGL-3196, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biopharmaceuticals, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing, and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate, and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce its intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

Risks Related to Our Financial Position and Need for Capital

If we fail to obtain the capital necessary to fund our operations, we will be unable to successfully develop and commercialize MGL-3196 and other future product candidates.

We will require substantial additional future working capital in order to complete the remaining clinical development for MGL-3196 and our other product candidates through potential regulatory approval and through potential commercialization of these product candidates. In particular, in order to initiate our Phase 3 clinical program for MGL-3196 in NASH, we will need to collaborate with a strategic partner or raise significant financing. We expect our spending levels to increase in connection with our clinical trials of MGL-3196 as well as other corporate activities. The amount and timing of any expenditure needed to implement our development and commercialization programs will depend on numerous factors, including:

- the type, number, scope, progress, expansion costs, results of and timing of our ongoing or future clinical trials or the need for additional clinical trials of MGL-3196 for NASH and FH or any other product candidates which we are pursuing or may choose to pursue in the future;
- the costs of obtaining, maintaining and enforcing our patents and other intellectual property rights;
- the costs and timing of obtaining or maintaining manufacturing for MGL-3196 for NASH and FH and any other product candidates, including commercial manufacturing if any product candidate is approved;
- the costs and timing of establishing sales, marketing and reimbursement capabilities and enhanced internal controls over financial reporting;
- the terms and timing of establishing and maintaining collaborations, license agreements and other partnerships;
- costs associated with any new product candidates that we may develop, in-license or acquire;
- the effect of competing technological and market developments;
- the costs associated with being a public company; and
- the costs of obtaining regulatory approval.

Some of these factors are outside of our control. We expect that we will need to raise substantial additional funds in the future.

We have not sold any products, and we do not expect to sell or derive revenue from any product sales for the foreseeable future. We may seek additional funding through future debt financings and potentially dilutive equity financings, as well as potential additional collaborations or strategic partnerships with other companies or through non-dilutive financings. Additional funding may not be available to us on acceptable terms or at all. In addition, the terms of any financing may adversely affect the holdings or the rights of our stockholders. In addition, the issuance of additional shares by us, or the possibility of such issuance, may cause the market price of our shares to decline.

If we are unable to obtain additional funding on a timely basis, we may be unable to complete planned clinical trials for MGL-3196 for NASH and FH and any of our other product candidates, and we may be required to significantly curtail some or all of our activities. We also could be required to seek funds through arrangements with collaborative partners or otherwise that may require us to relinquish rights to our product candidates or otherwise agree to terms unfavorable to us.

Our ability to use net operating loss and tax credit carryforwards and certain built-in losses to reduce future tax payments may be limited by provisions of the Internal Revenue Code.

Our net operating losses have been fully offset by a valuation allowance due to uncertainties surrounding our ability to realize these tax benefits. Under Section 382 of the Internal Revenue Code of 1986, as amended, if a corporation undergoes an "ownership change" (generally defined as a greater than 50% change (by value) in its equity ownership over a three year period), the corporation's ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes to offset its post-change income may be limited. Similar rules may apply under state tax laws. We have not performed a detailed analysis to determine whether an ownership change under Section 382 of the Code, or similar state provisions, has previously occurred. As a result, if we earn net taxable income, our ability to use our pre-change net operating loss carryforwards to offset U.S. federal taxable income may become subject to limitations, which could potentially result in increased future tax liability to us and may be substantial.

Risks Relating to Ownership of Our Common Stock

The price of our common stock has been, and may continue to be, volatile.

Historically, the market price of our common stock has fluctuated over a wide range, and it is likely that the price of our common stock will continue to be volatile in the future. The market price of our common stock could be impacted due to a variety of factors, including, in addition to global and industry-wide events:

- the losses we may incur;
- developments in patent or other proprietary rights owned or licensed by us, our collaborative partners or our competitors;
- public concern as to the safety and efficacy of products developed by us or others; and
- litigation.

In addition, due to one or more of the foregoing factors in one or more future quarters, our results of operations may fall below the expectations of securities analysts and investors. In that event, the market price of our common stock could materially decline.

A small number of our stockholders beneficially own a substantial amount of our common stock and have substantial control over us; therefore, your ability to influence corporate matters may be limited.

Certain stockholders affiliated with our officers and directors collectively beneficially own or control approximately 55.2% of our outstanding common stock as of September 30, 2016 and acting together, may have the ability to affect matters submitted to our stockholders for approval. This concentration of ownership may have the effect of delaying, deferring or preventing a strategic transaction, even if such a transaction would benefit other stockholders.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of our company, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our charter and bylaws may delay or prevent a merger, acquisition or other change of control that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. These provisions include a classified board of directors. In addition, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which prohibits, with some exceptions, stockholders owning in excess of 15% of our outstanding voting stock from merging or combining with us. Although we believe these provisions together provide for an opportunity to receive higher bids by requiring potential acquirers to negotiate with our board of directors, they would apply even if the offer may be considered beneficial by some stockholders.

Future sales and issuances of our common stock or rights to purchase common stock could result in additional dilution of the percentage ownership of our stockholders and could cause our share price to fall.

We expect that significant additional capital will be needed in the future to continue our planned operations. To the extent we raise additional capital by issuing equity securities, our stockholders may experience substantial dilution. We may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time. If we sell common stock, convertible securities or other equity securities in more than one transaction, investors may be materially diluted by subsequent sales. Such sales may also result in material dilution to our existing stockholders, and new investors could gain rights superior to our existing stockholders.

Sales of a substantial number of shares of our common stock by our existing stockholders in the public market could cause our stock price to fall.

Sales of a substantial number of shares of our common stock in the public market or the perception that these sales might occur, could significantly reduce the market price of our common stock and impair our ability to raise adequate capital through the sale of additional equity securities.

We do not anticipate paying cash dividends on our common stock, and accordingly, stockholders must rely on stock appreciation for any return on their investment.

We have never declared or paid any cash dividend on our common stock and do not anticipate paying cash dividends on our common stock in the future. As a result, the only return to stockholders will be appreciation in the price of our common stock, which may never occur. Investors seeking cash dividends should not invest in our common stock.

Risks Relating to the Merger

The integration of Madrigal and Synta will require significant resources and may not be successful.

There is no history of Madrigal and Synta as a combined company. As a result, there can be no guarantee that the two companies will operate together successfully as a combined company. Integration of the companies and consolidation of their operations will require considerable management time, which could result in the diversion of management resources from other important matters.

The failure to integrate successfully the merged businesses in the expected timeframe could adversely affect the combined company's future results.

The failure to integrate successfully and to manage successfully the challenges presented by the integration process may result in the combined company's failure to achieve some or all of the anticipated benefits of the Merger.

Potential difficulties that may be encountered in the integration process include the following:

- using the combined company's cash and other assets efficiently to develop the business of the combined company;
- appropriately managing the liabilities of the combined company;
- potential unknown or currently unquantifiable liabilities associated with the Merger and the operations of the combined company; and
- performance shortfalls at one or both of the companies as a result of the diversion of management's attention caused by integrating the companies' operations.

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

On July 22, 2016, Synta issued an aggregate of 7,253,665 shares of its common stock to the former stockholders of Private Madrigal in accordance with the terms of an Agreement and Plan of Merger and Reorganization, dated as of April 13, 2016, or the Merger Agreement. Such issuances were exempt from registration under Section 4(a)(2) under the Securities Act and the rules and regulations promulgated thereunder. Additionally, Synta issued 79,101 shares of its common stock to MTS Securities, LLC as a result of MTS Health Partners, L.P.'s advisory role in the merger transaction. Such issuances were exempt from registration under Section 4(a)(2) under the Securities Act and the rules and regulations promulgated thereunder.

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 PHARMACEUTICAL, INC.

Date: November 14, 2016

By: /s/ Paul A. Friedman
Paul A. Friedman, M.D.
Chief Executive Officer
(Principal Executive Officer)

Date: November 14, 2016

By: /s/ Marc Schneebaum
Marc Schneebaum
Chief Financial Officer
(Principal Financial and Accounting Officer)

EXHIBIT INDEX

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
3.1	Restated Certificate of Incorporation of the Registrant, as amended.					X
3.2	Bylaws of the Registrant, as amended April 13, 2016.	8-K	001-33277	3.1	04/14/16	
10.1#	Amended 2015 Stock Plan.	8-K	001-33277	10.1	07/22/16	
10.2#	Form of Indemnification Agreement, by and between the Registrant and each of its directors and officers	8-K	001-33277	10.2	07/22/16	
10.3#	Letter Agreement, dated April 13, 2016, by and between the Registrant and Paul A. Friedman, M.D.	8-K	001-33277	10.3	07/22/16	
10.4#	Letter Agreement, dated April 13, 2016, by and between the Registrant and Rebecca Taub, M.D.	8-K	001-33277	10.4	07/22/16	
10.5†	Research, Development and Commercialization Agreement, dated December 18, 2008, by and between Hoffman-La Roche, Inc., F. Hoffman-La Roche Ltd and the Registrant					X
31.1	Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
31.2	Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
32.1*	Certifications of Principal Executive Officer and Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
101.INS	XBRL Instance Document.					X
101.SCH	XBRL Taxonomy Extension Schema Document.					X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.					X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.					X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.					X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.					X

# Indicates a management contract or compensatory plan or arrangement

† Confidential portions of these documents have been filed separately with the Securities and Exchange Commission pursuant to a request for confidential treatment.

* The certifications attached as Exhibit 32.1 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, and 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.

Exhibit 3.1

Delaware
The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED ARE TRUE AND CORRECT COPIES OF ALL DOCUMENTS FILED FROM AND INCLUDING THE RESTATED CERTIFICATE OR A MERGER WITH A RESTATED CERTIFICATE ATTACHED OF "MADRIGAL PHARMACEUTICALS, INC" AS RECEIVED AND FILED IN THIS OFFICE.

THE FOLLOWING DOCUMENTS HAVE BEEN CERTIFIED:

RESTATED CERTIFICATE, FILED THE FIRST DAY OF SEPTEMBER, A.D. 2011, AT 3:13 O'CLOCK P.M.

CERTIFICATE OF AMENDMENT, FILED THE SIXTH DAY OF JUNE, A.D. 2013, AT 1:31 O'CLOCK P.M.

CERTIFICATE OF AMENDMENT, FILED THE THIRTEENTH DAY OF APRIL, A.D. 2016, AT 8:51 O'CLOCK P.M.

/s/ Jeffrey W. Bullock
Jeffrey W. Bullock, Secretary of State

5027346 8100X
SR# 20164965642

Authentication: 202679220
Date: 07-19-16

You may verify this certificate online at corp.delaware.gov/authver.shtml

State of Delaware
Secretary of State
Division of Corporations
Delivered 03:18 PM 09/01/2011
FILED 03:13 PM 09/01/2011
SRV 110973787 - 5027346 FILE

AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
MADRIGAL PHARMACEUTICALS, INC.

(Pursuant to Sections 242 and 245 of the
General Corporation Law of the State of Delaware)

MADRIGAL PHARMACEUTICALS, INC., a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the **"General Corporation Law"),** hereby certifies as follows:

1. That the name of this corporation is Madrigal Pharmaceuticals, Inc. and that the original Certificate of Incorporation of this corporation was filed with the Secretary of State of the State of Delaware on August 19, 2011.

2. That the Board of Directors duly adopted resolutions proposing to amend and restate the Certificate of Incorporation of this corporation, declaring said amendment and restatement to be advisable and in the best interests of this corporation and its stockholders, and authorizing the appropriate officers of this corporation to solicit the consent of the stockholders therefor, which resolution setting forth the proposed amendment and restatement is as follows:

RESOLVED, that the Certificate of Incorporation of this corporation be amended and restated in its entirety to read as follows:

ARTICLE I

The name of this corporation is Madrigal Pharmaceuticals, Inc. **(**the **"Corporation").**

ARTICLE II

The address of the registered office of the Corporation in the State of Delaware is 2711 Centerville Road, Suite 400, City of Wilmington, County of New Castle, DE 19808. The name of its registered agent at such address is Corporation Service Company.

ARTICLE III

The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law.

ARTICLE IV

The total number of shares of all classes of stock which the Corporation shall have authority to issue is (i) 35,000,000 shares of Common Stock, $0.0001 par value per share **("Common Stock"),** and (ii) 30,000,000 shares of Preferred Stock, $0.0001 par value per share **("Preferred Stock").**

The following is a statement of the designations and the powers, privileges and rights, and the qualifications, limitations or restrictions thereof in respect of each class of capital stock of the Corporation.

A. COMMON STOCK

1. General. The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights, powers and preferences of the holders of the Preferred Stock set forth herein.

2. Voting. The holders of the Common Stock are entitled to one vote for each share of Common Stock held at all meetings of stockholders (and written actions in lieu of meetings); provided, however, that, except as otherwise required by law, holders of Common Stock, as such, shall not be entitled to vote on any amendment to the Certificate of Incorporation that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to the Certificate of Incorporation or pursuant to the General Corporation Law. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by (in addition to any vote of the holders of one or more series of Preferred Stock that may be required by the terms of the Certificate of Incorporation) the affirmative vote of the holders of shares of capital stock of the Corporation representing a majority of the votes represented by all outstanding shares of capital stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(6)(2) of the General Corporation Law.

B. PREFERRED STOCK

Thirty Million (30,000,000) shares of the authorized and unissued Preferred Stock of the Corporation are hereby designated **"Series A Preferred Stock"** with the following rights, preferences, powers, privileges and restrictions, qualifications and limitations. Unless otherwise indicated, references to "Sections" or "Subsections" in this Part B of this Article IV refer to sections and Subsections of Part **B** of this Article IV.

1. Dividends.

From and after the date of the issuance of any shares of Series A Preferred Stock, dividends at the rate of eight percent (8%) per annum of the Series A Original Issue Price (as defined below) shall accrue on such shares of Series A Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A Preferred Stock) (the **"Accruing Dividends").** Accruing Dividends shall accrue from day to day, whether or not declared, and shall be cumulative; provided, however, that except as set forth in the following sentence of this Section 1 or in Subsections 2.1 and 6, such Accruing Dividends shall be payable only when, as, and if declared by the Board of Directors and the Corporation shall be under no obligation to pay such Accruing Dividends. The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than dividends on shares of Common Stock payable in shares of Common Stock) unless (in addition to the obtaining of any consents required elsewhere in the Certificate of Incorporation) the holders of the Series A Preferred Stock then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of Series A Preferred Stock in an amount at least equal to the greater of (i) the amount of the aggregate Accruing Dividends then accrued on such share of

Series A Preferred Stock and not previously paid and (ii) (A) in the case of a dividend on Common Stock or any class or series that is convertible into Common Stock, that dividend per share of Series A Preferred Stock as would equal the product of (1) the dividend payable on each share of such class or series determined, if applicable, as if all shares of such class or series had been converted into Common Stock and (2) the number of shares of Common Stock issuable upon conversion of a share of Series A Preferred Stock, in each case calculated on the record date for determination of holders entitled to receive such dividend or (B) in the case of a dividend on any class or series that is not convertible into Common Stock, at a rate per share of Series A Preferred Stock determined by (1) dividing the amount of the dividend payable on each share of such class or series of capital stock by the original issuance price of such class or series of capital stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series) and (2) multiplying such fraction by an amount equal to the Series A Original Issue Price (as defined below); provided that, if the Corporation declares, pays or sets aside, on the same date, a dividend on shares of more than one class or series of capital stock of the Corporation, the dividend payable to the holders of Series A Preferred Stock pursuant to this Section 1 shall be calculated based upon the dividend on the class or series of capital stock that would result in the highest Series A Preferred Stock dividend. The "Series A Original Issue Price" shall mean $1.00 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A Preferred Stock.

2. Liquidation Dissolution or Winding UP; Certain Mergers, Consolidations and Asset Sales.

2.1 Preferential Payments to Holders of Series A Preferred Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, the holders of shares of Series A Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders before any payment shall be made to the holders of Common Stock by reason of their ownership thereof, an amount per share equal to the Series A Original Issue Price, plus any Accruing Dividends accrued but unpaid thereon, whether or not declared, together with any other dividends declared but unpaid thereon. If upon any such liquidation, dissolution or winding up of the Corporation, the assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series A Preferred Stock the full amount to which they shall be entitled under this Subsection 2.1, the holders of shares of Series A Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

2.2 Distribution of Remaining Assets. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, after the payment of all preferential amounts required to be paid to the holders of shares of Series A Preferred Stock the remaining assets of the Corporation available for distribution to its stockholders shall be distributed among the holders of the shares of Series A Preferred Stock and Common Stock, pro rata based on the number of shares held by each such holder, treating for this purpose all such securities as if they had been converted to Common Stock pursuant to the terms of the Certificate of Incorporation immediately prior to such dissolution, liquidation or winding up of the Corporation. The aggregate amount which a holder of a share of Series A Preferred Stock is entitled to receive under Subsections 2.1 and 22 is hereinafter referred to as the **"Series A Liquidation Amount."**

2.3 Deemed Liquidation Events.

2.3.1 Definition. Each of the following events shall be considered a **"Deemed Liquidation Event"** unless the holders of at least a majority of the outstanding shares of Series A Preferred Stock elect otherwise by written notice sent to the Corporation at least ten (10) days prior to the effective date of any such event:

(a) a merger or consolidation in which

(i) the Corporation is a constituent party; or

(ii) a subsidiary of the Corporation is a constituent party and the Corporation issues shares of its capital stock pursuant to such merger or consolidation,

except any such merger or consolidation involving the Corporation or a subsidiary in which the shares of capital stock of the Corporation outstanding immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation, at least a majority, by voting power, of the capital stock of (1) the surviving or resulting corporation or (2) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation (provided that, for the purpose of this Subsection 2.3.1, all shares of Common Stock issuable upon exercise of Options (as defined below) outstanding immediately prior to such merger or consolidation or upon conversion of Convertible Securities (as defined below) outstanding immediately prior to such merger or consolidation shall be deemed to be outstanding immediately prior to such merger or consolidation and, if applicable, converted or exchanged in such merger or consolidation on the same terms as the actual outstanding shares of Common Stock are converted or exchanged); or

(b) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Corporation or any subsidiary of the Corporation of all or substantially all the assets of the Corporation and its subsidiaries taken as a whole, or the sale or disposition (whether by merger or otherwise) of one or more subsidiaries of the Corporation if substantially all of the assets of the Corporation and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, except where such sale, lease, transfer, exclusive license or other disposition is to a wholly owned subsidiary of the Corporation.

2.3.2 Effecting a Deemed Liquidation Event.

(a) The Corporation shall not have the power to effect a Deemed Liquidation Event referred to in Subsection 2.3.1(a)(i) unless the agreement or plan of merger or consolidation for such transaction (the **"Merger Agreement")** provides that the consideration payable to the stockholders of the Corporation shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2.

(b) In the event of a Deemed Liquidation Event referred to in Subsection 2.3.1(a)(ii) or 2.3.1(b), if the Corporation does not effect a dissolution of the Corporation under the General Corporation Law within ninety (90) days after such Deemed Liquidation Event,

then (i) the Corporation shall send a written notice to each holder of Series A Preferred Stock no later than the 90th day after the Deemed Liquidation Event advising such holders of their right (and the requirements to be met to secure such right) pursuant to the terms of the following clause (ii) to require the redemption of such shares of Series A Preferred Stock, and (ii) if the holders of at least a majority of the then outstanding shares of Series A Preferred Stock so request in a written instrument delivered to the Corporation not later than 120 days after such Deemed Liquidation Event, the Corporation shall use the consideration received by the Corporation for such Deemed Liquidation Event (net of any retained liabilities associated with the assets sold or technology licensed, as determined in good faith by the Board of Directors of the Corporation), together with any other assets of the Corporation available for distribution to its stockholders (the **"Available Proceeds"),** to the extent legally available therefor, on the 150th day after such Deemed Liquidation Event, to redeem all outstanding shares of Series A Preferred Stock at a price per share equal to the Series A Liquidation Amount. Notwithstanding the foregoing, in the event of a redemption pursuant to the preceding sentence, if the Available Proceeds are not sufficient to redeem all outstanding shares of Series A Preferred Stock, the Corporation shall redeem a pro rata portion of each holder's shares of Series A Preferred Stock to the fullest extent of such Available Proceeds, based on the respective amounts which would otherwise be payable in respect of the shares to be redeemed if the Available Proceeds were sufficient to redeem all such shares, and shall redeem the remaining shares to have been redeemed as soon as practicable after the Corporation has funds legally available therefor. The provisions of Subsections 6.2 through 64 shall apply, with such necessary changes in the details thereof as are necessitated by the context, to the redemption of the Series A Preferred Stock pursuant to this Subsection 2.3.2(b). Prior to the distribution or redemption provided for in this Subsection 2.3.2(b), the Corporation shall not expend or dissipate the consideration received for such Deemed Liquidation Event, except to discharge expenses incurred in connection with such Deemed Liquidation Event or in the ordinary course of business.

2.3.3 Amount Deemed Paid or Distributed. The amount deemed paid or distributed to the holders of capital stock of the Corporation upon any such merger, consolidation, sale, transfer, exclusive license, other disposition or redemption shall be the cash or the value of the property, rights or securities paid or distributed to such holders by the Corporation or the acquiring person, firm or other entity. The value of such property, rights or securities shall be determined in good faith by the Board of Directors of the Corporation.

2.3.4 Allocation of Escrow. In the event of a Deemed Liquidation Event pursuant to Subsection 2.3.1(a)(i), if any portion of the consideration payable to the stockholders of the Corporation is placed into escrow and/or is payable to the stockholders of the Corporation subject to contingencies, the Merger Agreement shall provide that (a) the portion of such consideration that is not placed in escrow and not subject to any contingencies (the **"Initial Consideration")** shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2 as if the Initial Consideration were the only consideration payable in connection with such Deemed Liquidation Event and (b) any additional consideration which becomes payable to the stockholders of the Corporation upon release from escrow or satisfaction of contingencies shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2 after taking into account the previous payment of the Initial Consideration as part of the same transaction.

3. Voting. On any matter presented to the stockholders of the Corporation for their action or consideration at any meeting of stockholders of the Corporation (or by written consent of stockholders in lieu of meeting), each holder of outstanding shares of Series A Preferred Stock shall

be entitled to cast the number of votes equal to the number of whole shares of Common Stock into which the shares of Series A Preferred Stock held by such holder are convertible as of the record date for determining stockholders entitled to vote on such matter. Except as provided by law or by the other provisions of the Certificate of Incorporation, holders of Series A Preferred Stock shall vote together with the holders of Common Stock as a single class.

4. Optional Conversion.

The holders of the Series A Preferred Stock shall have conversion rights as follows (the **"Conversion Rights"):**

4.1 Right to Convert.

4.1.1 Conversion Ratio. Each share of Series A Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing the Series A Original Issue Price by the Series A Conversion Price (as defined below) in effect at the time of conversion. The **"Series A Conversion Price"** shall initially be equal to $1.00. Such initial Series A Conversion Price, and the rate at which shares of Series A Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below.

4.1.2 Termination of Conversion Rights. In the event of a notice of redemption of any shares of Series A Preferred Stock pursuant to Section 6, the Conversion Rights of the shares designated for redemption shall terminate at the close of business on the last full day preceding the date fixed for redemption, unless the redemption price is not fully paid on such redemption date, in which case the Conversion Rights for such shares shall continue until such price is paid in full. In the event of a liquidation, dissolution or winding up of the Corporation or a Deemed Liquidation Event, the Conversion Rights shall terminate at the close of business on the last full day preceding the date fixed for the payment of any such amounts distributable on such event to the holders of Series A Preferred Stock.

4.2 Fractional Shares. No fractional shares of Common Stock shall be issued upon conversion of the Series A Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock as determined in good faith by the Board of Directors of the Corporation. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Series A Preferred Stock the holder is at the time converting into Common Stock and the aggregate number of shares of Common Stock issuable upon such conversion.

4.3 Mechanics of Conversion.

4.3.1 Notice of Conversion. In order for a holder of Series A Preferred Stock to voluntarily convert shares of Series A Preferred Stock into shares of Common Stock, such holder shall surrender the certificate or certificates for such shares of Series A Preferred Stock (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or

destruction of such certificate), at the office of the transfer agent for the Series A Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent), together with written notice that such holder elects to convert all or any number of the shares of the Series A Preferred Stock represented by such certificate or certificates and, if applicable, any event on which such conversion is contingent. Such notice shall state such holder's name or the names of the nominees in which such holder wishes the certificate or certificates for shares of Common Stock to be issued. If required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by a written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or his, her or its attorney duly authorized in writing. The close of business on the date of receipt by the transfer agent (or by the Corporation if the Corporation serves as its own transfer agent) of such certificates (or lost certificate affidavit and agreement) and notice shall be the time of conversion (the **"Conversion Time"**), and the shares of Common Stock issuable upon conversion of the shares represented by such certificate shall be deemed to be outstanding of record as of such date. The Corporation shall, as soon as practicable after the Conversion Time, (i) issue and deliver to such holder of Series A Preferred Stock, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable upon such conversion in accordance with the provisions hereof and a certificate for the number (if any) of the shares of Series A Preferred Stock represented by the surrendered certificate that were not converted into Common Stock, (ii) pay in cash such amount as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and (iii) pay all declared but unpaid dividends on the shares of Series A Preferred Stock converted.

4.3.2 Reservation of Shares. The Corporation shall at all times when the Series A Preferred Stock shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, for the purpose of effecting the conversion of the Series A Preferred Stock, such number of its duly authorized shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding Series A Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series A Preferred Stock, the Corporation shall take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to the Certificate of Incorporation. Before taking any action which would cause an adjustment reducing the Series A Conversion Price below the then par value of the shares of Common Stock issuable upon conversion of the Series A Preferred Stock, the Corporation will take any corporate action which may, in the opinion of its counsel, be necessary in order that the Corporation may validly and legally issue fully paid and nonassessable shares of Common Stock at such adjusted Series A Conversion Price.

4.3.3 Effect of Conversion. All shares of Series A Preferred Stock which shall have been surrendered for conversion as herein provided shall no longer be deemed to be outstanding and all rights with respect to such shares shall immediately cease and terminate at the Conversion Time, except only the right of the holders thereof to receive shares of Common Stock in exchange therefor, to receive payment in lieu of any fraction of a share otherwise issuable upon such conversion as provided in Subsection 4.2 and to receive payment of any dividends declared but unpaid thereon. Any shares of Series A Preferred Stock so converted shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such

appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Series A Preferred Stock accordingly.

4.3.4 No Further Adjustment. Upon any such conversion, no adjustment to the Series A Conversion Price shall be made for any declared but unpaid dividends on the Series A Preferred Stock surrendered for conversion or on the Common Stock delivered upon conversion.

4.3.5 Taxes. The Corporation shall pay any and all issue and other similar taxes that may be payable in respect of any issuance or delivery of shares of Common Stock upon conversion of shares of Series A Preferred Stock pursuant to this Section 4. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of shares of Common Stock in a name other than that in which the shares of Series A Preferred Stock so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

4.4 Adjustments to Series A Conversion Price for Diluting Issues.

4.4.1 Special Definitions. For purposes of this Article IV, the following definitions shall apply:

(a) **"Option"** shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.

(b) **"Series A Original Issue Date"** shall mean the date on which the first share of Series A Preferred Stock was issued.

(c) **"Convertible Securities"** shall mean any evidences of indebtedness, shares or other securities directly or indirectly convertible into or exchangeable for Common Stock, but excluding Options.

(d) **"Additional Shares of Common Stock"** shall mean all shares of Common Stock issued (or, pursuant to Subsection 4.4.3 below, deemed to be issued) by the Corporation after the Series A Original Issue Date, other than (1) the following shares of Common Stock and (2) shares of Common Stock deemed issued pursuant to the following Options and Convertible Securities (clauses (1) and (2), collectively, **"Exempted Securities"**):

(i) shares of Common Stock, Options or Convertible Securities issued as a dividend or distribution on Series A Preferred Stock;

(ii) shares of Common Stock, Options or Convertible Securities issued by reason of a dividend, stock split, split-up or other distribution on shares of Common Stock that is covered by Subsection 4.5, 4.6, 4.7 or 4.8;

(iii) shares of Common Stock or Options issued to employees or directors of, or consultants or advisors

to, the Corporation or any of its subsidiaries pursuant to a plan, agreement or arrangement approved by the Board of Directors of the Corporation;

(iv) shares of Common Stock or Convertible Securities actually issued upon the exercise of Options or shares of Common Stock actually issued upon the conversion or exchange of Convertible Securities, in each case provided such issuance is pursuant to the terms of such Option or Convertible Security;

(v) shares of Common Stock, Options or Convertible Securities issued to banks, equipment lessors or other financial institutions, or to real property lessors, pursuant to a debt financing, equipment leasing or real property leasing transaction approved by the Board of Directors of the Corporation;

(vi) shares of Common Stock, Options or Convertible Securities issued pursuant to the acquisition of another corporation by the Corporation by merger, purchase of substantially all of the assets or other reorganization or to a joint venture agreement, provided, that such issuances are approved by the Board of Directors of the Corporation;

(vii) shares of Common Stock, Options or Convertible Securities issued in connection with sponsored research, collaboration, technology license, development or other similar agreements or strategic partnerships approved by the Board of Directors of the Corporation; or

(viii) any other shares of Common Stock, Options or Convertible Securities which shall be deemed Exempted Securities as approved by the Board of Directors of the Corporation, which approval shall expressly refer to this Subsection 4.4.1(d)(viii).

4.4.2 No Adjustment of Series A Conversion Price. No adjustment in the Series A Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of at least a majority of the then outstanding shares of Series A Preferred Stock agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock.

4.4.3 Deemed Issue of Additional Shares of Common Stock.

(a) If the Corporation at any time or from time to time after the Series A Original Issue Date shall issue any Options or Convertible Securities (excluding Options or Convertible Securities which are themselves Exempted Securities) or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares of Common Stock (as set forth in the instrument relating thereto, assuming the satisfaction of any conditions to exercisability, convertibility or exchangeability but without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Common Stock issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date.

(b) If the terms of any Option or Convertible Security, the issuance of which resulted in an adjustment to the Series A Conversion Price pursuant to the terms of Subsection 4.4.4, are revised as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase or decrease in the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any such Option or Convertible Security or (2) any increase or decrease in the consideration payable to the Corporation upon such exercise, conversion and/or exchange, then, effective upon such increase or decrease becoming effective, the Series A Conversion Price computed upon the original issue of such Option or Convertible Security (or upon the occurrence of a record date with respect thereto) shall be readjusted to such Series A Conversion Price as would have obtained had such revised terms been in effect upon the original date of issuance of such Option or Convertible Security. Notwithstanding the foregoing, no readjustment pursuant to this clause (b) shall have the effect of increasing the Series A Conversion Price to an amount which exceeds the lower of (i) the Series A Conversion Price in effect immediately prior to the original adjustment made as a result of the issuance of such Option or Convertible Security, or (ii) the Series A Conversion Price that would have resulted from any issuances of Additional Shares of Common Stock (other than deemed issuances of Additional Shares of Common Stock as a result of the issuance of such Option or Convertible Security) between the original adjustment date and such readjustment date.

(c) If the terms of any Option or Convertible Security (excluding Options or Convertible Securities which are themselves Exempted Securities), the issuance of which did not result in an adjustment to the Series A Conversion Price pursuant to the terms of Subsection 4.4.4 (either because the consideration per share (determined pursuant to Subsection 4.4.5) of the Additional Shares of Common Stock subject thereto was equal to or greater than the Series A Conversion Price then in effect, or because such Option or Convertible Security was issued before the Series A Original Issue Date), are revised after the Series A Original Issue Date as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase in the number of shares of Common Stock issuable upon the exercise, conversion or exchange of any such Option or Convertible Security or (2) any decrease in the consideration payable to the Corporation upon such exercise, conversion or exchange, then such Option or Convertible Security, as so amended or adjusted, and the Additional Shares of Common Stock subject thereto

(determined in the manner provided in Subsection 4.4.3(a)) shall be deemed to have been issued effective upon such increase or decrease becoming effective.

(d) Upon the expiration or termination of any unexercised Option or unconverted or unexchanged Convertible Security (or portion thereof) which resulted (either upon its original issuance or upon a revision of its terms) in an adjustment to the Series A Conversion Price pursuant to the terms of Subsection 4.4.4, the Series A Conversion Price shall be readjusted to such Series A Conversion Price as would have obtained had such Option or Convertible Security (or portion thereof) never been issued.

(e) If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, is calculable at the time such Option or Convertible Security is issued or amended but is subject to adjustment based upon subsequent events, any adjustment to the Series A Conversion Price provided for in this Subsection 4.4.3 shall be effected at the time of such issuance or amendment based on such number of shares or amount of consideration without regard to any provisions for subsequent adjustments (and any subsequent adjustments shall be treated as provided in clauses (b) and (c) of this Subsection 4.4.3). If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, cannot be calculated at all at the time such Option or Convertible Security is issued or amended, any adjustment to the Series A Conversion Price that would result under the terms of this Subsection 4.4.3 at the time of such issuance or amendment shall instead be effected at the time such number of shares and/or amount of consideration is first calculable (even if subject to subsequent adjustments), assuming for purposes of calculating such adjustment to the Series A Conversion Price that such issuance or amendment took place at the time such calculation can first be made.

4.4.4 Adjustment of Series A Conversion Price Upon Issuance of Additional Shares of Common Stock. In the event the Corporation shall at any time after the Series A Original Issue Date issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to Subsection 4.4.3) without consideration or for a consideration per share less than the Series A Conversion Price in effect immediately prior to such issue, then the Series A Conversion Price shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

$$CP_2 = CP_1 * (A + B) \div (A + C).$$

For purposes of the foregoing formula, the following definitions shall apply:

(a) "CP_2" shall mean the Series A Conversion Price in effect immediately after such issue of Additional Shares of Common Stock;

(b) "CP_1" shall mean the Series A Conversion Price in effect immediately prior to such issue of Additional Shares of Common Stock;

(c) "A" shall mean the number of shares of Common Stock outstanding immediately prior to such issue of Additional Shares of Common Stock (treating for this

purpose as outstanding all shares of Common Stock issuable upon exercise of Options outstanding immediately prior to such issue or upon conversion or exchange of Convertible Securities (including the Series A Preferred Stock) outstanding (assuming exercise of any outstanding Options therefor) immediately prior to such issue);

(d) "B" shall mean the number of shares of Common Stock that would have been issued if such Additional Shares of Common Stock had been issued at a price per share equal to CP_1 (determined by dividing the aggregate consideration received by the Corporation in respect of such issue by CP_1); and

(e) "C" shall mean the number of such Additional Shares of Common Stock issued in such transaction.

4.4.5 Determination of Consideration. For purposes of this Subsection 4.4, the consideration received by the Corporation for the issue of any Additional Shares of Common Stock shall be computed as follows:

(a) Cash and Property: Such consideration shall:

(i) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation, excluding amounts paid or payable for accrued interest;

(ii) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board of Directors of the Corporation; and

(iii) in the event Additional Shares of Common Stock are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (i) and (ii) above, as determined in good faith by the Board of Directors of the Corporation.

(b) Options and Convertible Securities. The consideration per share received by the Corporation for Additional Shares of Common Stock deemed to have been issued pursuant to Subsection 4.4.3, relating to Options and Convertible Securities, shall be determined by dividing:

(i) the total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable

to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities, by

(ii) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities.

4.4.6 Multiple Closing Dates. In the event the Corporation shall issue on more than one date Additional Shares of Common Stock that are a part of one transaction or a series of related transactions and that would result in an adjustment to the Series A Conversion Price pursuant to the terms of Subsection 4.4.4, then, upon the final such issuance, the Series A Conversion Price shall be readjusted to give effect to all such issuances as if they occurred on the date of the first such issuance (and without giving effect to any additional adjustments as a result of any such subsequent issuances within such period).

4.5 Adjustment for Stock Splits and Combinations. If the Corporation shall at any time or from time to time after the Series A Original Issue Date effect a subdivision of the outstanding Common Stock, the Series A Conversion Price in effect immediately before that subdivision shall be proportionately decreased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be increased in proportion to such increase in the aggregate number of shares of Common Stock outstanding. If the Corporation shall at any time or from time to time after the Series A Original Issue Date combine the outstanding shares of Common Stock, the Series A Conversion Price in effect immediately before the combination shall be proportionately increased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be decreased in proportion to such decrease in the aggregate number of shares of Common Stock outstanding. Any adjustment under this Subsection shall become effective at the close of business on the date the subdivision or combination becomes effective.

4.6 Adjustment for Certain Dividends and Distributions. In the event the Corporation at any time or from time to time after the Series A Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable on the Common Stock in additional shares of Common Stock, then and in each such event the Series A Conversion Price in effect immediately before such event shall be decreased as of the time of such issuance or, in the event such a record date shall have been fixed, as of the close of business on such record date, by multiplying the Series A Conversion Price then in effect by a fraction:

(1) the numerator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and

(2) the denominator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution.

Notwithstanding the foregoing, (a) if such record date shall have been fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, the Series A Conversion Price shall be recomputed accordingly as of the close of business on such record date and thereafter the Series A Conversion Price shall be adjusted pursuant to this Subsection as of the time of actual payment of such dividends or distributions; and (b) that no such adjustment shall be made if the holders of Series A Preferred Stock simultaneously receive a dividend or other distribution of shares of Common Stock in a number equal to the number of shares of Common Stock as they would have received if all outstanding shares of Series A Preferred Stock had been converted into Common Stock on the date of such event.

4.7 Adjustments for Other Dividends and Distributions. In the event the Corporation at any time or from time to time after the Series A Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities of the Corporation (other than a distribution of shares of Common Stock in respect of outstanding shares of Common Stock) or in other property and the provisions of Section 1 do not apply to such dividend or distribution, then and in each such event the holders of Series A Preferred Stock shall receive, simultaneously with the distribution to the holders of Common Stock, a dividend or other distribution of such securities or other property in an amount equal to the amount of such securities or other property as they would have received if all outstanding shares of Series A Preferred Stock had been converted into Common Stock on the date of such event.

4.8 Adjustment for Merger or Reorganization, etc. Subject to the provisions of Subsection 2.3, if there shall occur any reorganization, recapitalization, reclassification, consolidation or merger involving the Corporation in which the Common Stock (but not the Series A Preferred Stock) is converted into or exchanged for securities, cash or other property (other than a transaction covered by Subsections 4.4, 4.6 or 4.7), then, following any such reorganization, recapitalization, reclassification, consolidation or merger, each share of Series A Preferred Stock shall thereafter be convertible in lieu of the Common Stock into which it was convertible prior to such event into the kind and amount of securities, cash or other property which a holder of the number of shares of Common Stock of the Corporation issuable upon conversion of one share of Series A Preferred Stock immediately prior to such reorganization, recapitalization, reclassification, consolidation or merger would have been entitled to receive pursuant to such transaction; and, in such case, appropriate adjustment (as determined in good faith by the Board of Directors of the Corporation) shall be made in the application of the provisions in this Section 4 with respect to the rights and interests thereafter of the holders of the Series A Preferred Stock, to the end that the provisions set forth in this Section 4 (including provisions with respect to changes in and other adjustments of the Series A Conversion Price) shall thereafter be applicable, as nearly as reasonably may be, in relation to any securities or other property thereafter deliverable upon the conversion of the Series A Preferred Stock.

4.9 Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Series A Conversion Price pursuant to this Section 4, the Corporation at its expense shall, as promptly as reasonably practicable but in any event not later than ten (10) days thereafter, compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Series A Preferred Stock a certificate setting forth such adjustment or readjustment (including the kind and amount of securities, cash or other property into which the Series A Preferred Stock is convertible) and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, as promptly as reasonably practicable after the written request at any time of any holder of Series A Preferred Stock (but in any event not later than ten (10) days thereafter), furnish or cause to be furnished to such holder a certificate setting forth (i) the Series A Conversion Price then in effect, and (ii) the number of shares of Common Stock and the amount, if any, of other securities, cash or property which then would be received upon the conversion of Series A Preferred Stock.

4.10 Notice of Record Date. In the event:

(a) the Corporation shall take a record of the holders of its Common Stock (or other capital stock or securities at the time issuable upon conversion of the Series A Preferred Stock) for the purpose of entitling or enabling them to receive any dividend or other distribution, or to receive any right to subscribe for or purchase any shares of capital stock of any class or any other securities, or to receive any other security; or

(b) of any capital reorganization of the Corporation, any reclassification of the Common Stock of the Corporation, or any Deemed Liquidation Event; or

(c) of the voluntary or involuntary dissolution, liquidation or winding-up of the Corporation,

then, and in each such case, the Corporation will send or cause to be sent to the holders of the Series A Preferred Stock a notice specifying, as the case may be, (i) the record date for such dividend, distribution or right, and the amount and character of such dividend, distribution or right, or (ii) the effective date on which such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up is proposed to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock (or such other capital stock or securities at the time issuable upon the conversion of the Series A Preferred Stock) shall be entitled to exchange their shares of Common Stock (or such other capital stock or securities) for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up, and the amount per share and character of such exchange applicable to the Series A Preferred Stock and the Common Stock. Such notice shall be sent at least ten (10) days prior to the record date or effective date for the event specified in such notice.

5. Mandatory Conversion.

5.1 Trigger Events. Upon either (a) the closing of the sale of shares of Common Stock to the public at a price of at least $3.00 per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Common Stock), in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, resulting in at least $30,000,000 of gross proceeds to the Corporation or (b) the date and time, or the occurrence of an event, specified

by vote or written consent of the holders of at least a majority of the then outstanding shares of Series A Preferred Stock (the time of such closing or the date and time specified or the time of the event specified in such vote or written consent is referred to herein as the **"Mandatory Conversion Time"), (i)** all outstanding shares of Series A Preferred Stock shall automatically be converted into shares of Common Stock, at the then effective conversion rate and (ii) such shares may not be reissued by the Corporation.

5.2 Procedural Requirements. All holders of record of shares of Series A Preferred Stock shall be sent written notice of the Mandatory Conversion Time and the place designated for mandatory conversion of all such shares of Series A Preferred Stock pursuant to this Section 5. Such notice need not be sent in advance of the occurrence of the Mandatory Conversion Time. Upon receipt of such notice, each holder of shares of Series A Preferred Stock shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the Series A Preferred Stock converted pursuant to Section 5.1, including the rights, if any, to receive notices and vote (other than as a holder of Common Stock), will terminate at the Mandatory Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender the certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of their certificate or certificates (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Subsection 5.2. As soon as practicable after the Mandatory Conversion Time and the surrender of the certificate or certificates (or lost certificate affidavit and agreement) for Series A Preferred Stock, the Corporation shall issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable on such conversion in accordance with the provisions hereof, together with cash as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and the payment of any declared but unpaid dividends on the shares of Series A Preferred Stock converted. Such converted Series A Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Series A Preferred Stock accordingly.

6. Redeemed or Otherwise Acquired Shares. Any shares of Series A Preferred Stock that are redeemed or otherwise acquired by the Corporation or any of its subsidiaries shall be automatically and immediately cancelled and retired and shall not be reissued, sold or transferred. Neither the Corporation nor any of its subsidiaries may exercise any voting or other rights granted to the holders of Series A Preferred Stock following redemption.

7. Waiver. Any of the rights, powers, preferences and other terms of the Series A Preferred Stock set forth herein may be waived on behalf of all holders of Series A Preferred Stock by the affirmative written consent or vote of the holders of at least a majority of the shares of Series A Preferred Stock then outstanding.

8. Notices. Any notice required or permitted by the provisions of this Article IV to be given to a holder of shares of Series A Preferred Stock shall be mailed, postage prepaid, to the post office address last shown on the records of the Corporation, or given by electronic communication in compliance with the provisions of the General Corporation Law, and shall be deemed sent upon such mailing or electronic transmission.

ARTICLE V

Subject to any additional vote required by the Certificate of Incorporation or Bylaws, in furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, repeal, alter, amend and rescind any or all of the Bylaws of the Corporation.

ARTICLE VI

Subject to any additional vote required by the Certificate of Incorporation, the number of directors of the Corporation shall be determined in the manner set forth in the Bylaws of the Corporation.

ARTICLE VII

Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

ARTICLE VIII

Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws of the Corporation may provide. The books of the Corporation may be kept outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation.

ARTICLE IX

To the fullest extent permitted by law, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the General Corporation Law or any other law of the State of Delaware is amended after approval by the stockholders of this Article Ninth to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law as so amended.

Any repeal or modification of the foregoing provisions of this Article Ninth by the stockholders of the Corporation shall not adversely affect any right or protection of a director of the Corporation existing at the time of, or increase the liability of any director of the Corporation with respect to any acts or omissions of such director occurring prior to, such repeal or modification.

ARTICLE X

To the fullest extent permitted by applicable law, the Corporation is authorized to provide indemnification of (and advancement of expenses to) directors, officers and agents of the

Corporation (and any other persons to which General Corporation Law permits the Corporation to provide indemnification) through Bylaw provisions, agreements with such agents or other persons, vote of stockholders or disinterested directors or otherwise, in excess of the indemnification and advancement otherwise permitted by Section 145 of the General Corporation Law.

Any amendment, repeal or modification of the foregoing provisions of this Article Tenth shall not adversely affect any right or protection of any director, officer or other agent of the Corporation existing at the time of such amendment, repeal or modification

ARTICLE XI

The Corporation renounces any interest or expectancy of the Corporation in, or in being offered an opportunity to participate in, any Excluded Opportunity. An **"Excluded Opportunity"** is any matter, transaction or interest that is presented to, or acquired, created or developed by, or which otherwise comes into the possession of, (i) any director of the Corporation who is not an employee of the Corporation or any of its subsidiaries, or (ii) any holder of Series A Preferred Stock or any partner, member, stockholder, manager, director, employee or agent of any such holder, other than someone who is an employee of the Corporation or any of its subsidiaries (collectively, **"Covered Persons"**), unless such matter, transaction or interest is presented to, or acquired, created or developed by, or otherwise comes into the possession of, a Covered Person expressly and solely in such Covered Person's capacity as a director of the Corporation.

ARTICLE XII

In connection with repurchases by the Corporation of its Common Stock from employees, officers, directors, advisors, consultants or other persons performing services for the Corporation or any subsidiary pursuant to agreements under which the Corporation has the option to repurchase such shares at cost upon the occurrence of certain events, such as the termination of employment, Sections 502 and 503 of the California Corporations Code shall not apply in all or in part with respect to such repurchases.

* * *

3. That the foregoing amendment and restatement was approved by the holders of the requisite number of shares of this corporation in accordance with Section 228 of the General Corporation Law.

4. That this Amended and Restated Certificate of Incorporation, which restates and integrates and further amends the provisions of this corporation's Amended and Restated Certificate of Incorporation, has been duly adopted in accordance with Sections 242 and 245 of the General Corporation Law.

IN WITNESS WHEREOF, this Amended and Restated Certificate of Incorporation has been executed by a duly authorized officer of this corporation on this 1st day of September, 2011.

By: /s/ Rebecca Taub
Name: Rebecca Taub
Title: Chief Executive Officer

State of Delaware
Secretary of State
Division of Corporations
Delivered 01:46 PM 06/06/2013
FILED 01:31 PM 06/06/2013
SRV 130744894 - 5027346 FILE

CERTIFICATE OF AMENDMENT
TO
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
MADRIGAL PHARMACEUTICALS, INC.

The undersigned does hereby certify on behalf of Madrigal Pharmaceuticals, Inc., a corporation organized and existing under the laws of the State of Delaware (the **"Corporation"**), as follows:

1. The undersigned is the duly elected, qualified and acting Senior Vice President, Finance, of the Corporation.

2. The Amended and Restated Certificate of Incorporation of the Corporation was originally filed with the Secretary of State of the State of Delaware on September 1, 2011.

3. This Certificate of Amendment to Amended and Restated Certificate of Incorporation was duly adopted by the board of directors of the Corporation in accordance with Sections 141 and 242 of the General Corporation Law of the State of Delaware and amends the provisions of the Amended and Restated Certificate of Incorporation of the Incorporation, as currently in effect.

4. Subsection 2.1 of ARTICLE IV of the Amended and Restated Certificate of Incorporation of the Corporation is hereby amended and restated to read in its entirety as follows:

"2.1 Preferential Payments to Holders of Series A Preferred Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, the holders of shares of Series A Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders before any payment shall be made to the holders of Common Stock by reason of their ownership thereof, an amount per share equal to 14.29759 times the Series A Original Issue Price, plus any Accruing Dividends accrued but unpaid thereon, whether or not declared, together with any other dividends declared but unpaid thereon. If upon any such liquidation, dissolution or winding up of the Corporation, the assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series A Preferred Stock the full amount to which they shall be entitled under this Subsection 2.1, the holders of shares of Series A Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full."

5. The holders of the necessary number of shares of capital stock of the Corporation gave their written consent in favor of the foregoing amendments in accordance with the provisions of Sections 228 and 242 of the General Corporation Law of the State of Delaware.

* * * * *

IN WITNESS WHEREOF, Madrigal Pharmaceuticals, Inc. has caused this Certificate of Amendment to Amended and Restated Certificate of Incorporation to be signed by the undersigned, a duly authorized officer of the Corporation, on June 6, 2013.

/s/ Brian N. Cunningham, M.D.
Brian N. Cunningham, M.D.
Senior Vice President, Finance

CERTIFICATE OF AMENDMENT
TO
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
MADRIGAL PHARMACEUTICALS, INC.

The undersigned does hereby certify on behalf of Madrigal Pharmaceuticals, Inc., a corporation organized and existing under the laws of the State of Delaware (the **"Corporation"**), as follows:

1. The undersigned is the duly elected, qualified and acting Chief Executive Officer of the Corporation.

2. The Amended and Restated Certificate of Incorporation of the Corporation was originally filed with the Secretary of State of the State of Delaware on September 1, 2011.

3. This Certificate of Amendment to Amended and Restated Certificate of Incorporation was duly adopted by the board of directors of the Corporation in accordance with Sections 141 and 242 of the General Corporation Law of the State of Delaware and amends the provisions of the Amended and Restated Certificate of Incorporation of the Corporation, as currently in effect.

4. The first paragraph of ARTICLE IV of the Amended and Restated Certificate of Incorporation of the Corporation is hereby amended and restated to read in its entirety as follows:

"The total number of shares of all classes of stock which the Corporation shall have authority to issue is (i) 50,000,000 shares of Common Stock, $0.0001 par value per share (**"Common Stock"**), and (ii) 45,000,000 shares of Preferred Stock, $0.0001 par value per share (**"Preferred Stock"**)."

5. Part B of ARTICLE IV of the Amended and Restated Certificate of Incorporation of the Corporation is hereby amended and restated to read in its entirety as follows:

"Preferred Stock. Forty Five Million (45,000,000) shares of the authorized and unissued Preferred Stock of Corporation are hereby designated **"Series A Preferred Stock"** with the following rights, preferences, powers, privileges and restrictions, qualifications and limitations. Unless otherwise indicated, references to "Sections" or "Subsections" in this Part B of this Article IV refer to Sections and Subsections of Part B of this Article IV."

6. The holders of the necessary number of shares of capital stock of the Corporation gave their written consent in favor of the foregoing amendments in accordance with the provisions of Sections 228 and 242 of the General Corporation Law of the State of Delaware.

* * * * *

State of Delaware
Secretary of State
Division of Corporations
Delivered 08:51 PM 04/13/2016
FILED 08:51 PM 04/13/2016
SR 20162281066 - File Number 5027346

IN WITNESS WHEREOF, Madrigal Pharmaceuticals, Inc. has caused this Certificate of Amendment to Amended and Restated Certificate of Incorporation to be signed by the undersigned, a duly authorized officer of the Corporation, on April 13, 2016.

/s/ Rebecca Taub, M.D.
Rebecca Taub, M.D.
Acting Chief Executive Officer

Exhibit 10.5

RESEARCH, DEVELOPMENT
AND COMMERCIALIZATION AGREEMENT

This Research, Development and Commercialization Agreement ("Agreement") is entered into as of this 18th day of December, 2008, by and between:

on the one hand,

Hoffmann-La Roche Inc., with its principal place of business at 340 Kingsland Street, Nutley, New Jersey 07110 USA ("Roche Nutley"), and F. Hoffmann-La Roche Ltd, a Swiss corporation, with its principal office at Grenzacherstrasse 124, CH-4070 Basel, Switzerland ("Roche Basel"; Roche Nutley and Roche Basel are collectively referenced as "Roche"),

and on the other hand,

VIA Pharmaceuticals, Inc., with its principal place of business at 750 Battery Street, Suite 330, San Francisco California 94111 USA ("VIA"). VIA and Roche each may be referred to herein as a "Party," and collectively as "Parties."

WHEREAS, Roche owns certain patent rights, know-how and regulatory filings with respect to the Compound (as defined below);

WHEREAS, Roche believes that the Compound has the potential to be incorporated into a drug with significant worldwide annual sales, and that VIA has the ability to realize the potential of this compound;

WHEREAS, VIA desires to develop the Compound and ensure that it is diligently developed and commercialized worldwide so as to realize promptly its therapeutic and commercial potential;

WHEREAS, VIA desires to obtain an exclusive license under Roche's patent rights, know-how and regulatory filings to begin development and commercialization of products containing the Compound; and

WHEREAS, Roche is willing to grant an exclusive license to VIA under such patent rights and know-how.

NOW THEREFORE, in consideration of the foregoing and of the mutual covenants hereinafter set forth and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties mutually agree as follows:

ARTICLE 1

DEFINITIONS

As used in this Agreement, the following terms shall have the following meanings, and singular forms, plural forms and derivative forms, (i.e. other parts of speech) shall be interpreted accordingly:

1.1 "Additional Licensed Compound" means any compound other than the Compound or a Derivative, the composition or use of which is claimed in the Roche Patent Rights, including any salt, ester, non-covalent complex, chelate, hydrate, and stereoisomer thereof, and other forms of any such compound.

1.2 "Affiliate" means any corporation or non-corporate business entity that directly or indirectly controls, is controlled by, or is under common control with a Party to this Agreement. As used in this definition, the term "control" (with correlative meanings for the terms "controlled by" and "under common control with") means that an entity owns greater than fifty percent (>50%) of the voting stock of the subject entity with the ability to elect a majority of the board (or managing members) of such entity, or otherwise has the power to govern and control the financial and the operating policies and management of the subject entity, whether through the ownership or control of voting securities, by contract or otherwise. With respect to Roche, the term "Affiliate" shall not include Genentech, Inc. or Chugai Pharmaceutical Co., Ltd, unless Roche opts for such inclusion by giving written notice to VIA. With respect to VIA, the term "Affiliate" shall not include any corporation or non-corporate business entity that VIA does not directly or indirectly control.

1.3 "Commencement" means, with respect to a clinical trial, the date upon which the first patient receives the first dose of an item that is the subject of such clinical trial.

1.4 "Commercialize" means to make, have made, develop, use, sell, have sold, offer for sale, and import.

1.5 "Compound" means the compound ***, also known as RO***.

1.6 "Derivative" means any salt, ester, non-covalent complex, chelate, hydrate, and stereoisomer of the Compound, and any compound generated by modifying the structure of the Compound so as to optimize its activity.

1.7 "Development Plan" means the plan for guiding development of Licensed Products.

1.8 "Dollars" or "$" means US dollars.

1.9 "Effective Date" means January 5, 2009.

1.10 "FDA" means the United States Food and Drug Administration and any successor entity thereto.

1.11 "FD&C Act" means the US Federal Food, Drug, and Cosmetic Act, as amended, and the equivalent laws and regulations in any foreign countries or jurisdictions.

1.12 "Field" means all therapeutic, prophylactic, and other pharmaceutical uses and applications.

1.13 "First Commercial Sale" means the first invoiced sale by the VIA Group of a Licensed Product in a particular country to a Third Party in such country.

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1.14 "Global Liaison" means an employee of Roche who is selected by Roche to be the point person with primary responsibility for communications and interactions with VIA.

1.15 "IND" means an Investigational New Drug Application filed with the FDA and covering administration of a Compound, Derivative or Additional Licensed Compound.

1.16 "Inventions" means any and all useful ideas, concepts, methods, procedures, processes, improvements, inventions, discoveries, and reductions to practice, whether or not patentable, which arise from or are first made, conceived or first reduced to practice in the course of the activities conducted pursuant to or in exercise of a right granted under this Agreement.

1.17 "Know-How" means all non-patented data, information, methods, procedures, processes, materials and other know-how.

1.18 "Licensed Product" means any product containing a Compound, a Derivative or an Additional Licensed Compound, including all formulations, dosages, and dosage forms thereof.

1.19 "Major Market" means any of the US, Japan, the United Kingdom, Germany, France, Spain or Italy.

1.20 "NDA" means a new drug application, including all necessary documents, data, and other information concerning a Licensed Product, required for Regulatory Approval of the Licensed Product as a pharmaceutical product by the FDA or an equivalent application to the equivalent agency in any other country or group of countries (e.g. the marketing authorization application (MAA) in the European Union).

1.21 "Net Sales" means, with respect to VIA, the amount of gross sales of all Licensed Products in the Territory invoiced by the VIA Group to Third Parties, as reduced by the following deductions to the extent actually allowed or incurred with respect to such sales: (a) transportation charges, and other shipping charges, such as insurance, (b) sales, value-added and excise taxes, customs, duties, and any other governmental charges, to the extent imposed upon the sale of the Licensed Product and paid by the selling party, *provided* that no income taxes shall be deducted from gross sales of Licensed Product to calculate Net Sales, (c) distributor fees, rebates or allowances actually granted, allowed or incurred, including government and managed care rebates, (d) quantity discounts, cash discounts or chargebacks actually granted, allowed or incurred, and (e) allowances or credits to customers or write offs of invoiced amounts, not in excess of the selling price of Licensed Product, on account of governmental requirements, rejections, recalls, or returns.

If Licensed Product is sold as part of a Combination Product (as defined below), then the parties shall meet approximately one (1) year prior to anticipated First Commercial Sale to negotiate, on a country-by-country basis, in good faith and agree to an appropriate adjustment to Net Sales, on a country-by-country basis, to reflect the relative significance of the Compound, Derivative or Additional Licensed Compound and other pharmaceutically active ingredients contained in the Combination Product. If the parties cannot reach agreement, then the Net Sales of the Combination Product, for the purposes of determining royalty payments, shall be determined by multiplying the Net Sales of the Combination Product (as defined in the portion of the Net Sales definition preceding this paragraph) on a country-by-country basis, during the applicable royalty reporting period, by the fraction, A/(A+B), where A is the average sale price of the Licensed Product when sold separately in finished form and B is the average sale price of the other pharmaceutical product(s) included in the

Combination Product when sold separately in finished form, in each case during the applicable royalty reporting period or, if sales of both the Licensed Product and the other product(s) did not occur in such period, then in the most recent royalty reporting period in which sales of both occurred.

In the event that such average sale price cannot be determined for both the Licensed Product and all other pharmaceutical products(s) included in the Combination Product, Net Sales for the purposes of determining royalty payments shall be calculated by multiplying the Net Sales of the Combination Product by the fraction of C/(C+D) where C is the fair market value of the Licensed Product and D is the fair market value of all other pharmaceutical product(s) included in the Combination Product.

"Combination Product" shall mean any product that contains, in addition to a Compound, a Derivative or an Additional Licensed Compound, one or more other pharmaceutically active ingredients.

1.22 "Patent" means (a) any patent, including re-examinations, reissues, renewals, extensions and term restorations thereof, and any foreign counterpart of any of the foregoing, and (b) any pending application for patent, including, without limitation, provisional applications, continuations, continuations-in-part, divisional and substitute applications, inventors' certificates, and extensions, and any foreign counterpart of any of the foregoing.

1.23 "Phase I" means, with respect to the United States, the first phase of human clinical trials using a limited number of human subjects to gain evidence of the safety and tolerability of a Licensed Product and information regarding pharmacokinetics and potentially pharmacological activity for such Licensed Product, Compound, Derivative or Additional Licensed Compound, which human clinical trials are completed prior to the initiation of Phase II, as described in 21 C.F.R. § 312.21(a), as may be amended, or, with respect to any other country or jurisdiction, the equivalent of such a clinical trial in such other country or jurisdiction.

1.24 "Phase II" means, with respect to the United States, the second phase of human clinical trials of a Licensed Product in human subjects to gain evidence of the efficacy in one or more indications and expanded evidence of the safety of such Licensed Product, Compound, Derivative or Additional Licensed Compound, as well as an indication of the dosage regimen required, as described in 21 C.F.R.§ 312.21(b), as may be amended, or, with respect to any other country or jurisdiction, the equivalent of such a clinical trial in such other country or jurisdiction.

1.25 "Phase III" means, with respect to the United States, the third phase of human clinical trials of a Licensed Product, which are large-scale trials to gain evidence of the efficacy and safety in a number of human subjects sufficient to support Registration for such Licensed Product, Compound, Derivative or Additional Licensed Compound with the FDA, as described in 21 C.F.R. § 312.21(c), as may be amended, or, with respect to any other country or jurisdiction, the equivalent of such a clinical trial in such other country or jurisdiction.

1.26 "Registration" in relation to any Licensed Product means such approvals by the applicable Regulatory Agency in a country (or community or association of countries) included in the Territory (including, where applicable, price approvals) that are required to be obtained prior to marketing and selling such Licensed Product in such country or jurisdiction.

1.27 "Regulatory Agency" means, with respect to any particular country or jurisdiction, the governmental authorities, bodies, commissions, agencies and/or other instrumentalities of such

country or jurisdiction (the EMEA with respect to the EU), with the primary responsibility for the evaluation or approval of pharmaceutical products before such product can be tested, marketed, promoted, distributed or sold in such country, including such governmental bodies that have jurisdiction over the conduct of clinical trials and/or the pricing of such pharmaceutical product. The term "Regulatory Agency" includes the FDA.

1.28 "Regulatory Filing" means any filing with a Regulatory Agency relating to or to permit or request, as applicable, the clinical evaluation or Registration of a Licensed Product. Regulatory Filings include without limitation INDs and NDAs.

1.29 "Roche Know-How" means all Know-How which on the Effective Date is owned or controlled by, or licensed to, Roche and in which Roche has a cost-free transferable interest.

1.30 "Roche Patent Rights" means all Patents in the Territory listed on Appendix A, and any future Patents that claim priority from or the benefit of the filing date of any of the Patents listed in Appendix A, and including any and all extensions, supplementary protection certificates and the like with respect to any of the foregoing.

1.31 "Signing Date" means December 18, 2008.

1.32 "Territory" means the entire world, subject to Section 12.7(a).

1.33 "Third Party" means any party other than Roche, Roche's Affiliates, or a member of the VIA Group.

1.34 "Transfer Know-How" means the Roche Know-How identified on Appendix B.

1.35 "VIA Group" means VIA, its Affiliates and sublicensees under this Agreement.

1.36 "VIA Know-How" means all Know-How that is related to the Compound, a Derivative, an Additional Licensed Compound or a Licensed Product, and is owned or controlled by VIA Group and in which VIA has a transferable interest.

1.37 "VIA Patent Rights" means all Patents in the Territory that (a) claim a Compound, Derivative, Additional Licensed Compound or Licensed Product, or the manufacture or use thereof, and (b) are owned or controlled by VIA during the term of this Agreement.

1.38 "US" means the United States of America, its territories and possessions.

1.39 "Valid Claim" means a claim contained in (i) an issued and unexpired patent included within the Roche Patent Rights or VIA Patent Rights that has not been held unenforceable, unpatentable or invalid by a decision of a court or other governmental agency of competent jurisdiction, which decision is not subject to any further appeal, and that has not been admitted to be invalid or unenforceable through abandonment, reissue, disclaimer or otherwise or (ii) a patent application which is included within the Roche Patent Rights or VIA Patent Rights and has been pending for less than *** (***) years from the priority date. If a claim of a patent application that ceased to be a Valid Claim under item (ii) because of the passage of time later issues as a part of a

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patent within item (i), then it shall again be considered to be a Valid Claim effective as of the issuance of such patent.

ARTICLE 2

GRANT OF LICENSE

2.1 Grants.

(a) Subject to the terms and conditions of this Agreement, Roche hereby grants to VIA and its Affiliates, and VIA hereby accepts on its and their behalf, a sole and exclusive license, with full rights to sublicense as provided in Section 2.2, under the Roche Patent Rights and Roche Know-How, to (a) develop, use, sell, offer for sale, and import Licensed Products containing the Compound, Derivative or Additional Licensed Compound in the Field, in the Territory, and (b) make and have made Licensed Products in the Territory for such development, use, sale, offering for sale, and importation.

(b) Roche shall retain all rights under the Roche Patent Rights and Roche Know-How for any other purpose.

2.2 Right to Sublicense. After the Commencement of a Phase I clinical trial with a Licensed Product containing the Compound ("Lead Product") or replacement of the Lead Product by another Licensed Product, VIA and its Affiliates shall have the right to sublicense the rights granted under Section 2.1 to Third Parties, subject to Section 2.5. If VIA grants such sublicenses, then all such sublicenses shall conform to and be in accordance with the terms of this Agreement. VIA assumes full responsibility for the performance of all obligations under this Agreement and will remain obligated to Roche for all royalties due under this Agreement by reason of the operations of any such sublicense. VIA shall have the right to use Third Party contract research and development organizations at any time during the term of this Agreement. If, prior to expiration or termination of this Agreement, VIA has or would like to sublicense a Third Party under Roche Know-How and Roche Patent Rights and would prefer that Roche grant a direct license to such Third Party under Roche Know-How and Roche Patent Rights, then Roche will not unreasonably deny granting such a direct license under Roche Know-How and Roche Patent Rights, provided that such Third Party agrees to the applicable terms and conditions of this Agreement and covenants to make the applicable financial payments under this Agreement to Roche.

2.3 Covenant Not to Sue. If the making, having made, using, offering for sale, selling, or importing in any country in the Territory in the Field by the VIA Group of any composition described in the Patent Rights which contains Compound manufactured using a process set forth in the Patent Rights would, during the term of the Agreement in such country, infringe a claim of an issued patent owned or controlled by Roche (other than the Roche Patent Rights), Roche hereby grants to the VIA Group, to the extent Roche is legally able to do so, a covenant not to sue under such patent, as may be necessary to enable the VIA Group to make, have made, use, offer for sale, sell and import such composition in such country. Roche shall cause such covenant to be binding on any assignee of any such patent and VIA shall have the right to grant or assign its rights under such covenant to any of its permitted sublicensees or assignees.

2.4 Covenant Regarding License Scope. VIA hereby covenants and agrees that it and its Affiliates shall not, during the term of this Agreement, in the absence of any other valid right or

license granted to VIA or its Affiliates, knowingly practice any Roche Patent Rights or Roche Know-How outside the scope of the licenses granted by Roche in Section 2.1.

2.5 Minimal Diligence. If VIA has not completed a Phase I clinical trial within three (3) years after the Effective Date with respect to the Lead Product, then either (i) VIA shall commit to developing an Additional Licensed Compound or a Derivative or (ii) Roche may terminate this Agreement. VIA shall have the burden of proving it has complied with its diligence obligations under Section 6.1. If VIA did not comply with such obligations, then Roche may terminate all licenses granted herein. Following such termination by Roche under this Section 2.5 and if requested by Roche within thirty (30) days after such termination, VIA shall negotiate in good faith with Roche, for a period of sixty (60) days from the date of Roche's request, regarding granting a license to Roche on commercially reasonable terms for the VIA Patent Rights and VIA Know-How related solely to the Licensed Products.

2.6 Roche Right of First Negotiation. If VIA seeks to out-license any Licensed Product to a Third Party ("Out-License"), then, before approaching any such Third Party, VIA shall inform Roche and afford Roche the opportunity to negotiate an Out-License under which Roche would obtain a sole and exclusive license to such Licensed Product. If Roche is interested in such negotiation, then Roche shall inform VIA of its interest within forty-five (45) days ("Review Period"). If Roche indicates that it is not interested in negotiation or if Review Period expires, then VIA shall have the right to grant an Out-License to a Third Party. If Roche indicates that it is interested in negotiation within the Review Period, then Roche and VIA shall negotiate in good faith for a period of time not to exceed sixty (60) days for an Out-License ("Negotiation Period"). If Roche indicates that it is not interested in continuing negotiation or if the Negotiation Period expires, then VIA shall have the right to grant a license to a Third Party.

2.7 Section 365(n) of the Bankruptcy Code. The licenses granted under this Article 2 shall be treated as licenses of rights to "intellectual property" (as defined in Section 101(56) of Title 11 of the United States Code, as amended (the "Bankruptcy Code")) for purposes of Section 365(n) of the Bankruptcy Code. The Parties agree that VIA may elect to retain and may fully exercise all of its rights and elections under the Bankruptcy Code; provided that VIA complies with the terms of this Agreement.

ARTICLE 3

RESEARCH AND DEVELOPMENT REIMBURSEMENT AND MILESTONE PAYMENTS

3.1 Fees. VIA shall pay to Roche in consideration for the rights granted herein a fee of *** Dollars ($***) which shall be non-refundable, and non-creditable, and payable by VIA within thirty (30) days after receipt of an invoice from Roche after the Signing Date.

3.2 Milestone Payments. VIA shall pay to Roche non-refundable, non-creditable milestone payments in the amounts specified in tabular form below (each a "Milestone Payment") no later than thirty (30) days after the first occurrence of each of the following events, as they occur:

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Milestones	Payments (Dollars)	
Commencement of Phase I	$	***
Commencement of Phase II	$	***
Commencement Phase III	$	***
NDA Approval in the USA	$	***
NDA Approval in a Major Market country in Europe	$	***

Each milestone payment set forth under this Section 3.2 shall be paid to Roche no more than once, and once paid shall be non-refundable. For clarity, once any milestone payment is paid to Roche under this Section 3.2, such payment shall not be owed with respect to any other Licensed Product even if such milestone is subsequently achieved again by any Licensed Product.

ARTICLE 4

ROYALTIES

4.1 Royalties in General. For each Licensed Product, the obligation of VIA to pay Roche royalties based on sales of the Licensed Product in a given country shall commence on the date of the First Commercial Sale of such Licensed Product by the VIA Group in such country and shall continue until the later of (a) the date upon which there no longer exists in such country Roche Patent Rights having a Valid Claim that claims the manufacture, use or sale of such Licensed Product in such country, or (b) the date which is ten (10) years after the date of First Commercial Sale of such Licensed Product in such country. VIA shall pay or cause to be paid to Roche a royalty based on Net Sales made by the VIA Group in the Territory, on a country-by-country basis, at the applicable incremental royalty rate as provided for in the table below in this Section 4.1, subject to reduction as provided in Sections 4.3, 4.4, 4.5 and 4.6.

Total, Territory-wide Annual Net Sales in a single calendar year	Royalty Rate
Amount of Net Sales up to and including $***	***%
Amount of Net Sales over $*** and up to and including $***	***%
Amount of Net Sales over $*** and up to and including $***	***%
Amount of Net Sales over $***	***%

4.2 Accrual of Royalties. No royalty shall be due or owing from the use or distribution of a Licensed Product in transactions where no consideration is received by the VIA Group, such as when a Licensed Product is made or used for tests or development purposes or is distributed as samples. No royalties shall be payable on sales among entities within the VIA Group, but royalties shall be payable on the first subsequent sale by entities within the VIA Group to a Third Party. No multiple royalties shall be payable under this Agreement because a commercialized Licensed Product is covered by more than one Valid Claim or is covered by both a claim with respect to Know-How and a Valid Claim.

4.3 Reduction for No Patent. If, but for this Agreement, no Valid Claim of Roche Patent Rights would be infringed by the making, using or selling of a Licensed Product in a country in the

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Territory, then the Net Sales of such Licensed Product in such country shall be reduced by *** percent (***%) for the purpose of determining the royalties payable under Section 4.1.

4.4 Reduction for Third Party License Fees. VIA shall be entitled to deduct from its payment obligations under Section 4.1 hereunder *** percent (***%) of any license fees, milestone payments and royalties that VIA pays to a Third Party in respect of any license to Third Party Patents that VIA reasonably concludes is required for the manufacture, use, offer for sale, sale or importation of the Compound, any Derivative or any Additional Licensed Compound; provided that no such deduction shall reduce the amount of any quarterly royalty payment under Section 4.1 by more than *** percent (***%) of the amount otherwise payable. If VIA is prevented from deducting any amount by the proviso in the immediately preceding sentence, then VIA shall be entitled to carry forward such amount for deduction from subsequent payments to Roche under Section 4.1.

4.5 Reduction for Generic Competition. If a Third Party sells a product that contains the same Compound, Derivative or Additional Licensed Compound as found in the Licensed Product sold in a country in the Territory, then VIA's royalty obligations to Roche under Sections 4.1 and 4.3 with respect to sales in such country shall be reduced as follows: ***.

4.6 Cap on Royalty Reductions. In no case shall the royalties otherwise payable under Section 4.1 be reduced by more than *** percent (***%) regardless of the number of reductions otherwise available under Sections 4.3-4.5.

ARTICLE 5

ROYALTY REPORTS AND ACCOUNTING

5.1 Royalty Payments; Royalty Reports. After the First Commercial Sale and for the remaining term of this Agreement, VIA shall submit with each payment of royalties to Roche a written royalty report ("Royalty Report") covering sales of Licensed Product for each VIA fiscal quarter (currently ending on or about the last day of March, June, September, and December) with the following information provided on a country-by-country basis for the Major Market countries and for the rest of the world as a whole:

(a) gross sales;

(b) Net Sales;

(c) the royalties, payable in Dollars, which shall have accrued hereunder in respect to such Net Sales;

(d) withholding taxes, if any, required by law to be deducted in respect of such sales;

(e) the exchange rates used in determining the amount of Dollars; and

(f) the royalty rates applied to calculate royalties due hereunder.

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Royalty Reports shall be due for the entire Territory no later than sixty (60) days after the end of the fiscal quarter to which they pertain. The Parties will cooperate with each other with regard to the handling of withholding taxes.

5.2 Exchange Rate; Manner of Payment. All payments due under this Agreement shall be made in Dollars via wire transfer of immediately available funds, or by such other commercially reasonable means as may be designated by Roche. Royalty payments due on Net Sales in countries in the Territory outside the US shall be made in Dollars, after being converted by VIA using the average rate of exchange for such currencies during the applicable calendar quarter, as retrieved from Reuters' system for the applicable period. If by law, regulations or fiscal policies, remittance of royalties in Dollars, or removal of currency from the country, is prohibited or restricted, VIA will notify Roche and payment of the royalty obligation shall be made by deposit thereof in local currency to the credit of Roche in a recognized banking institution in such country designated by Roche. If in any country or jurisdiction, the law, regulations or fiscal policies prohibit both the transmittal and deposit of royalties on sales in such country, royalty payments calculated as a percentage of Net Sales in that country shall be suspended for as long as such prohibition is in effect, and as soon as such prohibition ceases, all royalties that Roche would have otherwise been entitled to shall be transmitted or deposited to the extent allowable.

5.3 Payment Due Dates. Royalties shown to have accrued by each Royalty Report provided for under Article 5 of this Agreement shall be due and payable sixty (60) days after the end of the fiscal quarter to which they pertain. Payment of royalties in whole or in part may be made in advance of such due date. All royalty and other payments due to Roche hereunder, shall be made in Dollars and delivered to the account specified below or to any other account specified by Roche:

Bank Name:	Citibank, n.a. New York, NY
ABA Routing No.:	xxxxxxxxx
Account Name:	Hoffmann-La Roche Inc.
Account No.:	xxxxxxxx

VIA shall provide Roche with an annual non-binding forecast of anticipated Net Sales for each calendar year by September 30 of the preceding calendar year.

5.4 Right to Audit. During the Term and for a period of *** (***) years thereafter, VIA shall keep (and shall cause its Affiliates, licensees and sublicensees to keep) complete and accurate records pertaining to the purchase, storage, sale, or other disposition of Licensed Products in sufficient detail to permit Roche to confirm the accuracy of all royalty and other payments due hereunder. Records will include, at a minimum, master files, product numbers, description, quantities purchased, shipped, sold and on-hand at period end, customer or supplier name, address, customer agreements, date of purchase or sale, cost of purchase or sale price, and delivery address. Roche shall have the right to cause an independent, certified public accountant to audit such royalty payments, and milestone payments related to Net Sales for a period covering not more than the preceding *** (***) years. Such audits may be exercised no more than once per calendar year during normal business hours upon reasonable prior written notice to VIA. Prompt adjustments shall be made by the parties to reflect the results of such audit. Roche shall bear the full cost of such audit

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unless such audit discloses an underpayment by VIA of more than five percent (5%) of the amount of royalty or other payments due under this Agreement, in which case, VIA shall bear the full cost of such audit and shall promptly remit to the auditing party the amount of any underpayment, plus interest calculated at the three month US Dollar LIBOR rate plus *** percent (***%). If requested by Roche, VIA shall provide to Roche within thirty (30) days after such request any and all financial information relating to VIA that is controlled by VIA and necessary for Roche to prepare its financial statements and to make governmental filings, including full monthly reporting of data to Roche by the third work day of each month and maintaining a set of accounting records, based on Roche Financial Group Accounting and Reporting Requirements ("FGAR") and International Financial Reporting Standards ("IFRS").

5.5 Late Payments. In the event that any payment due under this Agreement is not made when due, the payment shall accrue interest from the date due at the rate of the one-month LIBOR plus *** percent (***%); provided, however, that in no event shall such rate exceed the maximum legal annual interest rate. The payment of such interest shall not limit Licensor from exercising any other rights it may have as a consequence of the lateness of any payment.

5.6 Confidentiality of Records. Roche agrees that all information subject to review under this Article 5 or under any sublicense agreement (other than the reported results of such review) is confidential and that Roche and the auditor shall retain all such information in confidence, although this condition is not intended to restrict Roche from enforcing any term or provision of this Agreement in arbitration or court.

ARTICLE 6

RESEARCH, DEVELOPMENT AND MARKETING

6.1 Development. Prior to the Effective Date, Roche has conducted research and development of the Compound. VIA shall use commercially reasonable efforts to develop and commercialize Licensed Products, including obtaining the necessary approvals from Regulatory Agencies. In no case shall commercially reasonable efforts be less than those efforts that would be exerted by a comparable biotech company with a drug of similar commercial potential.

(a) At the Effective Date of this Agreement, Roche shall assign a Global Liaison to be the liaison with VIA. The Global Liaison will be the Roche point person with primary responsibility for communications and interactions with VIA related to:

i) General Inter-Company Communication

ii) VIA Group due diligence

iii) Technology and Data Transfer.

(b) Similarly and for reasons including those set out in Section 6.2(a). VIA shall assign a liaison with Roche.

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6.2 Development Program.

(a) VIA shall, at its expense, conduct a clinical and commercial development program relating to the use of a Licensed Product using commercially reasonable efforts ("Development Program") consistent with a Development Plan that is to be provided to Roche as soon as practicable after creation by VIA. VIA shall provide on a once yearly basis written reports to the Global Liaison on the progress of the Development Program, and annually shall provide to the Global Liaison a written overview of material Development Program activities.

(b) VIA shall maintain a clinical trials database in accordance with the standards of Regulatory Agencies.

(c) The Development Plan may be reasonably modified and updated at any time as is deemed necessary at the discretion of VIA.

(d) Upon completion of a Phase I clinical trial for each Licensed Product, VIA shall present to Roche (i) a summary presentation of the data generated by such Phase I clinical trial, and (ii) a Development Plan for Phase II.

(e) Notwithstanding anything to the contrary hereunder (including without limitation under Section 6.1 and this Section 6.2), VIA's sole and exclusive liability and Roche's sole and exclusive remedy for any failure by VIA to exercise any required level of efforts to research, develop, obtain Registrations or commercialize the Licensed Products shall be for Roche to exercise any termination right that Roche might have pursuant to Section 12.3 on account of such failure.

6.3 Reversion to Roche. Notwithstanding anything in this Agreement to the contrary, if at any time and for any reason, whether scientific, technical, medical, economic, commercial or otherwise, VIA shall determine that it is not reasonable to continue clinical trials or other development of Licensed Products (whether directly or through one or more Affiliates or sublicensees), it may deliver a written notice of such determination to Roche, and its election to cease further development, in which event, Roche may terminate the Agreement and all licenses granted herein pursuant to Section 12.3(b). Likewise, if VIA determines not to pursue the development or commercialization of a Licensed Product (whether directly or through one or more Affiliates or sublicensees) in any of the following sub-territories: (i) the US, (ii) Japan, (iii) the European Union (in such case at least three (3) of the Major Markets in the European Union), then VIA shall provide Roche with written notice of its decision and shall terminate this Agreement with respect to such sub-territory, within thirty (30) days following Roche's receipt of such notice, in which event, Roche may terminate all licenses granted herein solely for such sub-territory pursuant to Section 12.3(b).

ARTICLE 7

PATENT RIGHTS

7.1 Patent Prosecution and Maintenance.

(a) Roche shall, at its sole expense, prosecute any and all patent applications within the Roche Patent Rights to obtain patents thereon and to maintain all patents included in the Roche Patent Rights. Interferences, nullification proceedings and oppositions shall be considered a part of the prosecution and maintenance of the Roche Patent Rights.

(b) VIA shall, at its sole expense, prosecute any and all patent applications within the VIA Patent Rights, to obtain patents thereon and to maintain all patents included in the VIA Patent Rights using patent counsel of its choice. Interferences, nullification proceedings and oppositions shall be considered a part of the prosecution and maintenance of the VIA Patent Rights.

(c) Roche shall keep VIA reasonably informed of its prosecution of the Roche Patent Rights. Roche agrees to provide VIA with a written report no less frequently than once each year updating VIA with respect to the status of its prosecution of the Roche Patent Rights. Prior to making any submissions, such as patent applications and responses to office actions, to a patent office wherein Roche Patent Rights are being prosecuted, Roche shall allow VIA to comment on such submissions.

7.2 Discontinuance/Abandonment. Notwithstanding Section 7.1, Roche shall have the right to discontinue the prosecution of any patent application, or to abandon any patent, encompassed within the Roche Patent Rights. If Roche decides to abandon or allow to lapse any patent application or patent within the Roche Patent Rights, then Roche shall inform VIA at least thirty (30) days prior to such abandonment or lapse and VIA shall be given the opportunity to have such Patent assigned to it from Roche. If a Roche patent application or patent is assigned to VIA, then such Patent shall cease to be considered Roche Patent Rights for purposes of royalty payments under Article 4.

7.3 Status of Patent Rights. Within thirty (30) days after each anniversary of the Effective Date, Roche shall advise VIA as to the then-current status of any patent applications or patents within the Roche Patent Rights.

7.4 Ownership of Future Inventions and Know-How.

(a) Patentable and unpatentable Inventions or Know-How made, developed or conceived by VIA personnel alone (or jointly with one another) shall be the sole property of VIA ("VIA Inventions"). VIA shall have sole discretion and responsibility to prepare file, prosecute and maintain patent applications for VIA Inventions, and shall be responsible for related interference proceedings.

(b) Patentable and unpatentable Inventions or Know-How made, developed or conceived by Roche personnel alone (or jointly with one another) shall be the sole property of Roche ("Roche Inventions"). Roche shall have sole discretion and responsibility to prepare file, prosecute and maintain patent applications for Roche Inventions, and shall be responsible for related interference proceedings.

(c) Patentable or unpatentable Inventions or Know-How jointly made, developed or conceived by VIA and Roche personnel shall be jointly owned, unless the Parties agree otherwise. Patent applications for joint inventions shall be prepared and prosecuted jointly. Subject to any exclusivity obligations set forth in this Agreement, each Party shall be free to use and exploit jointly owned Inventions, Patents and Know-How without the consent of, or any duty to account to, the other Party.

(d) In no event shall any disclosure of compounds, inventions or other information in accordance with this Section 7.4 be construed as an offer to sell those compounds, inventions or other information. Any disclosure under this Section 7.4 shall be subject to the confidentiality provisions of this Agreement.

ARTICLE 8

INFRINGEMENT

8.1 Applicability. The provisions of this Article 8 shall govern the Parties' rights and obligations, as between themselves, with respect to actions against Third Parties for infringement of the Patents or misappropriation of the Know-How licensed under this Agreement.

8.2 Third Party Infringement.

(a) If either VIA or Roche becomes aware of any product made, used, sold or imported in the Territory which it believes to (i) infringe a Valid Claim within the Roche Patent Rights ("Roche Patent Infringement") or the VIA Patent Rights, (ii) or constitute a misappropriation of Know-How owned by either Party covering or relating to a Licensed Product or its manufacture or use, then such Party (the "Notifying Party") shall promptly (and, in the event of receiving a Paragraph IV Certification described in 21 C.F.R. § 314.50(i)(A)(4), within ten (10) days) advise the other Party of all the relevant facts and circumstances known by the Notifying Party in connection with the infringement or misappropriation.

(b) Roche shall have the right, at its own expense, but not the obligation, to enforce Roche Patent Rights against Roche Patent Infringement and VIA shall have the right, at its own expense, but not the obligation, to enforce VIA Patent Rights against infringement. VIA and its Affiliates shall, at Roche's sole expense, fully cooperate with Roche with respect to the investigation and prosecution of such alleged Roche Patent Infringement or misappropriation including (without limitation) the joining of VIA and its Affiliates as a party to such action, as may be required by the law of the particular forum where enforcement is being sought. Roche and its Affiliates shall, at VIA's sole expense, fully cooperate with VIA with respect to the investigation and prosecution of such alleged infringement of the VIA Patent Rights or misappropriation including (without limitation) the joining of Roche and its Affiliates as a party to such action, as may be required by the law of the particular forum where enforcement is being sought.

(c) If Roche elects to proceed with an enforcement action pursuant to Section 8.2(b) with respect to infringement of the Roche Patent Rights that is or can reasonably be expected to be competitive with a Licensed Product ("Competitive Infringement"), then VIA shall have the right to intervene and pursue its own damages claim against any alleged Competitive Infringement, and Roche shall, at VIA's sole expense, take all such actions and execute all such documents as may be necessary to enable VIA to pursue such claim, including by taking actions and executing documents at VIA's direction on VIA's behalf. Any such intervention by VIA under this Section 8.2(c) shall be controlled by VIA with respect to such damages claim; however, Roche shall remain in control of the defense against any claim, counterclaim or defense of patent invalidity or unenforceability related to any such Roche Patent Infringement. Notwithstanding the foregoing provisions of this Section 8.2(c), if VIA is unable to intervene and pursue its own damages claim because VIA lacks standing (e.g., because VIA does not own the Roche Patent Rights) or for any other reason, Roche shall pursue such damages claim directly for VIA's benefit as VIA may reasonably request.

(d) Roche grants to VIA the right to enforce the Roche Patent Rights against Competitive Infringement, if:

(i) Roche fails, within sixty (60) days (twenty (20) days in the event of the filing of a Paragraph IV Certification) after receiving notice from VIA of the Roche Patent Infringement to (1) notify VIA that Roche elects to proceed with an enforcement action pursuant to Section 8.2(b), (2) take reasonable action to investigate such alleged infringement, and (3) promptly thereafter, institute an action to abate such alleged infringement and to prosecute such action diligently, or

(ii) Roche earlier notifies VIA that Roche does not plan to terminate the infringement or institute such action solely pursuant to Section 8.2(b).

If VIA notifies Roche that there are circumstances that require the enforcement of the Roche Patent Rights against a Competitive Infringement within a shorter period than contemplated by Section 8.2(d)(i) above in order to avoid any loss of rights or compromising any potential claims, then Roche shall in good faith discuss with VIA avenues for instituting an action (or allowing VIA to institute an action) more rapidly than contemplated by Section 8.2(d)(i) above.

Roche and its Affiliates shall fully cooperate with VIA, at VIA's expense, with respect to the investigation and prosecution of such alleged infringement including (but not limited to) the joining of Roche and its Affiliates as a party to such action, as may be required by the law of the particular forum where enforcement is being sought. Any such enforcement action by VIA under Roche Patent Rights shall be limited to enforcement against Competitive Infringement.

(e) If Roche is prosecuting an infringement action under Section 8.2(b), then Roche shall have the right to control such litigation and shall bear all legal expenses (including court costs and legal fees and expenses), including settlement thereof. If a claim for damages is brought by VIA or VIA requests that Roche pursue such a claim for VIA's benefit pursuant to Section 8.2(c), then VIA shall have such right to control (or direct, if VIA is not able to intervene and pursue its own damages claim and requests that Roche pursue such claim for VIA's benefit) such claim for damages and shall bear all its and Roche's legal expenses (except as provided otherwise in the event that Roche should join as a party to such action). No settlement or consent judgment or other voluntary final disposition of any infringement action brought by a Party pursuant to this Section 8.2 may be entered into without the prior written consent of the other Party if such settlement would require the other Party to be subject to an injunction or to make a monetary payment or would restrict the claims in or admit any invalidity of any of the Roche Patent Rights or VIA Patent Rights or significantly adversely affect the rights of the other Party to this Agreement.

Roche shall be entitled to keep, out of all damages or costs recovered by Roche in connection with any action filed by Roche under Section 8.2(b), and after first reimbursing both parties for any out-of-pocket costs and expenses incurred in bringing the action ("Roche Net Recovery"), an amount equal to (i) one hundred percent (100%) of such Roche Net Recovery for actions against Roche Patent Infringement that are not Competitive Infringement, and (ii) twenty-five percent (25%) of the Roche Net Recovery from any action to the extent involving Competitive Infringement, and the rest of such Roche Net Recovery shall be provided to VIA. VIA shall be entitled to keep seventy-five percent (75%) of all damages or costs recovered by VIA in connection with any claim for damages brought by VIA under Section 8.2(c) or 8.2(d), after first reimbursing both parties for any out-of-pocket costs and expenses incurred in bringing the action ("VIA Net Recovery"), and the rest of such

VIA Net Recovery (25%) shall be provided to Roche. If the Parties agree to jointly prosecute such infringement action and jointly share expenses, then the Parties will split 50:50 all damages or costs recovered, after first reimbursing each Party for any out-of-pocket expenses in such action. If the recovery of a Party or Parties prosecuting an action solely under this Section 8.2 does not exceed the Parties' costs in such action, then each Party shall be reimbursed *pari passu* for any out-of-pocket expenses incurred in such action.

(f) Sections 8.2(b)-(e) shall apply *mutatis mutandis* to trade secret misappropriation actions relating to competitive Third Party activities involving Roche Know-How as it does to enforcement of Roche Patent Rights against Competitive Infringement.

(g) Neither Party shall be entitled to grant covenants not to sue or other similar rights under Patents owned by the other Party, provided, however, VIA may grant licenses and sublicenses in accordance with Section 2.2.

ARTICLE 9

REPRESENTATIONS AND WARRANTIES

9.1 Representations of Roche. Roche hereby represents to VIA as of the Effective Date that:

(a) Roche is duly formed and/or incorporated, validly existing and in good standing, with the corporate power and authority to enter into this Agreement and to perform its obligations hereunder. The execution and delivery of this Agreement and the consummation of the transactions contemplated hereby have been duly authorized by all requisite corporate action on the part of Roche. This Agreement has been duly executed and delivered by Roche and constitutes the valid, binding and enforceable obligation of Roche, subject to applicable bankruptcy, reorganization, insolvency, moratorium and other laws affecting creditors' rights generally from time to time in effect and to general principles of equity.

(b) Roche owns the Roche Patent Rights and owns, controls, or licenses the Roche Know-How and owns all of the Transfer Know-How (as defined in Section 11.1);

(c) Except for the Roche Patent Rights, Roche and its Affiliates do not own or control any Patents claiming the Compound;

(d) Roche has the right to grant VIA the rights and licenses granted under this Agreement; and

(e) Roche is not subject to, or bound by, any provision of:

(i) any articles or certificates of incorporation or by-laws;

(ii) any mortgage, deed of trust, lease, note, shareholders' agreement, bond, indenture, license, permit, trust, custodianship, or other instrument, agreement or restriction; or

(iii) any judgment, order, writ, injunction or decree or any court, governmental body, administrative agency or arbitrator;

that would prevent, or be violated by, or under which there would be a default as a result of, nor is the consent of any Third Party required for, the execution, delivery and performance by Roche of this Agreement and the obligations contained herein, including without limitation, the grant to VIA of the license described in Section 2.1 hereof.

9.2 Representations of VIA. VIA hereby represents to Roche as of the Effective Date that:

(a) VIA is a corporation duly incorporated, validly existing and in good standing under the laws of the jurisdiction of its organization, with the corporate power and authority to enter into this Agreement and to perform its obligations hereunder. The execution and delivery of this Agreement and the consummation of the transactions contemplated hereby have been duly authorized by all requisite corporate action on the part of VIA. This Agreement has been duly executed and delivered by VIA and constitutes the valid, binding and enforceable obligation of VIA, subject to applicable bankruptcy, reorganization, insolvency, moratorium and other laws affecting creditors' rights generally from time to time in effect and to general principles of equity.

(b) VIA is not subject to, or bound by, any provision of:

(i) any articles or certificates of incorporation or by-laws;

(ii) any mortgage, deed of trust, lease, note, shareholders' agreement, bond, indenture, license, permit, trust, custodianship, or other instrument, agreement or restriction, or

(iii) any judgment, order, writ, injunction or decree or any court, governmental body, administrative agency or arbitrator,

that would prevent, or be violated by, or under which there would be a default as a result of, nor is the consent of any Third Party required for, the execution, delivery and performance by VIA of this Agreement and the obligations contained herein.

9.3 Disclaimer of Warranties. EXCEPT AS SET FORTH EXPRESSLY IN THIS AGREEMENT, EACH PARTY HEREBY EXPRESSLY DISCLAIMS ANY AND ALL WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION THE WARRANTIES OF DESIGN, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OF THE INTELLECTUAL RIGHTS OF THIRD PARTIES. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, BOTH PARTIES ACKNOWLEDGE AND DISCLAIM ANY WARRANTY AS TO: (I) THE SUCCESS OF ANY DEVELOPMENT OR CLINICAL TRIAL, STUDY OR TEST COMMENCED BY UNDER THIS AGREEMENT; OR (II) REGULATORY APPROVAL, PRODUCT INTRODUCTION, SAFETY, USEFULNESS OR COMMERCIAL SUCCESS OF ANY LICENSED PRODUCT.

ARTICLE 10

CONFIDENTIALITY

10.1 Treatment of Confidential Information. Except as otherwise provided in this Article 10, during the term of this Agreement and for a period of five (5) years thereafter, VIA and its

Affiliates will retain in confidence and use only for purposes of this Agreement any information, data, and materials supplied by Roche or on behalf of Roche to VIA and its Affiliates under this Agreement, and Roche will retain in confidence and use only for purposes of this Agreement any information, data, and materials supplied by VIA or on behalf of VIA to Roche under this Agreement. For purposes of this Agreement, all such information and data which a Party is obligated to retain in confidence shall be called "Confidential Information" of the disclosing Party.

10.2 Right to Disclose. To the extent it is reasonably necessary or appropriate to fulfill its obligations or exercise its rights under this Agreement or any rights which survive termination or expiration hereof, VIA and Roche each may disclose the Confidential Information of the other Party to their respective Affiliates, sublicensees, consultants, outside contractors, clinical investigators or other Third Parties *provided* that such entities or persons agree in writing (a) to keep the Confidential Information confidential for the same time periods and to the same extent as VIA and Roche are required to keep the Confidential Information confidential and (b) to use the Confidential Information only for such purposes as VIA and Roche (as applicable) are entitled to use the Confidential Information. Each Party or its Affiliates or sublicensees may disclose such Confidential Information of the other Party to government or other regulatory authorities to the extent that such disclosure (i) is reasonably necessary to obtain Patents or authorizations to conduct clinical trials with or to market commercially the Licensed Products, provided such Party is otherwise entitled to engage in such activities under this Agreement; (ii) is otherwise legally required; (iii) is in facilitation of a Party's relationship with its existing or prospective investors; or (iv) is permitted pursuant to Section 14.7; *provided* that if a Party is legally required to make such a disclosure under (ii), it shall, if practicable under the circumstances, first have given prompt notice to the other Party hereto to enable it to seek any available exemptions from or limitations on such a disclosure, or to apply for confidential treatment or a protective order.

10.3 Release From Restrictions. The foregoing obligations in respect of disclosure and use of Confidential Information shall not apply to any part of such Confidential Information that the receiving Party, or its Affiliates (all collectively referred to as the "Receiving Party") can demonstrate by competent evidence:

(a) is or becomes publicly available other than by acts of the Receiving Party in breach of this Agreement;

(b) is disclosed to the Receiving Party or its Affiliates or sublicensees by a Third Party who had the right to disclose such Confidential Information to the Receiving Party;

(c) prior to disclosure under this Agreement, was already in the possession of the Receiving Party or its Affiliates or sublicensees, provided such Confidential Information was not obtained, directly or indirectly, from the other Party under this Agreement; or

(d) was independently discovered or developed by the Receiving Party without resort to or use of any Confidential Information of the disclosing Party.

10.4 Confidentiality of Agreement. Except as otherwise required by law or the terms of this Agreement or mutually agreed upon by the Parties hereto, each Party shall treat as confidential the terms, and conditions of this Agreement, except that Roche and VIA may each disclose such terms and conditions and the achievement of milestone and other significant events under this Agreement to its Affiliates and sublicensees, and to current, and potential investors, merger partners

or acquirors. Furthermore, either Party in connection with its current or future status as a public company (or in connection with its initial public offering registration activities) may disclose the terms of this Agreement to the extent required by the federal securities laws or regulations or the rules or regulations of any stock exchange or NASDAQ, and provided, that the disclosing Party shall seek confidential treatment of key business terms contained in this Agreement, including but not limited to the royalty rates; *provided further*, that the disclosing Party shall duly consider reasonable and timely suggestions, advice and input from the non-disclosing Party with respect to seeking confidential treatment of key business terms contained in the Agreement. After execution of this Agreement, the Parties shall release the joint press release, the text of such shall be mutually agreeable to each Party, announcing the execution of the Agreement. In addition, the Parties have agreed to the publicity-related provisions that are set forth in Section 14.7.

10.5 Return of Confidential Information. Upon termination of this Agreement by either Party for any reason, the rights of each Party to retain and use the Confidential Information of the other shall be as provided in Article 12, *provided*, *however*, that each Party may retain a single archival copy of the other Party's Confidential Information solely for the purpose of determining the extent of disclosure of Confidential Information hereunder and assuring compliance with the surviving provisions of this Agreement.

ARTICLE 11

TRANSFERS AND ACCESS; REGULATORY

11.1 Transfer of Know-How. Immediately after the Effective Date, but not later than sixty (60) days after the Effective Date, Roche shall transfer (originals or copies) to VIA all of the Roche Know-How listed in Appendix B (the "Transfer Know-How"). If Roche identifies any Roche Know-How in the future that should have been included in the Transfer Know-How, then Roche shall provide such Roche Know-How to VIA in a timely manner. Roche agrees to provide to VIA upon VIA's reasonable request and at VIA's sole expense copies of the prosecution files and histories of the Roche Patent Rights that are not publicly available. At VIA's request, Roche shall participate in up to two (2) telephone conferences designed to answer questions related to the Roche Know-How, provided that Roche shall not be obligated to provide more that one (1) person day of effort related to these telephone conferences.

11.2 Tissue Samples. Roche has certain tissue samples related to the subject matter of this Agreement ("Samples"). Upon the request of VIA, Roche shall provide VIA with access to these Samples or transfer such Samples to VIA. Once Roche's right of first negotiation under Section 2.6 is exhausted, Roche shall have the right to transfer such Samples to VIA.

11.3 Regulatory Affairs.

(a) During the Term, VIA shall (i) control and be solely responsible for making all needed Regulatory Filings relating to the development of Licensed Products and for seeking and maintaining Registrations of Licensed Products developed by VIA throughout the Territory, in such countries as it selects; and (ii) own and be responsible for preparing and submitting all Regulatory Rulings, including preparing all applications and reports necessary as part of an IND, NDA, DMF ("Drug Master File"), or other necessary filing required for Registration. Roche shall assign to VIA all rights, title and interest in and to all Regulatory Filings that Roche has made with respect to any Compound or Derivative and all licenses, authorizations and permits that Roche has obtained with

respect to clinical trials of any Compound or Derivative. Roche shall permit VIA to access, and shall provide VIA with sufficient rights to reference and use in association with exercising its rights and performing its obligations under this Agreement, all records pertaining to Compounds, Derivatives or Licensed Products as are in the possession of Roche and are reasonably necessary for obtaining Registrations for Licensed Products.

(b) In conducting any research or development activities under this Agreement, VIA shall (i) ensure that its employees, agents, clinical institutions and clinical investigators comply with all Regulatory Agency statutory and regulatory requirements with respect to Licensed Products, including but not limited to the Federal Food, Drug and Cosmetic Act, as amended, the Public Health Service Act, Institutional Review Boards, GCP, GLP, IND regulations, and any conditions imposed by a reviewing IRB or Regulatory Agency; and (ii) not utilize, in conducting studies on Licensed Products, any person or entities that at such time are debarred by a Regulatory Agency, or that, at such time, are under investigation by the FDA for debarment action pursuant to the provisions of 21 U.S.C. § 335.

ARTICLE 12

TERM AND TERMINATION

12.1 Term. This Agreement shall become binding upon the Effective Date. This Agreement shall continue thereafter in full force and effect, unless terminated sooner pursuant to Sections 12.2 or 12.3 below, until it expires upon the expiration of VIA's obligation to pay royalties to Roche hereunder (such expiration of the term of this Agreement without termination, "Expiration").

12.2 VIA's Right to Terminate.

(a) For Material Breach at any Time. VIA may terminate this Agreement, as a whole, at any time if (i) Roche materially breaches the Agreement and (ii) such material breach is not cured by Roche within ninety (90) days after VIA provides Roche with written notice of such breach, or, if such breach cannot be cured through commercially reasonably efforts within such ninety (90) days, and Roche has (within such time period) submitted a plan for cure as promptly as is reasonably practicable through the application of commercially reasonable efforts with a cure date reasonably acceptable to VIA, after the earlier of the cure date agreed to by VIA or the date Roche ceases commercially reasonable efforts to cure such breach.

(b) For Convenience. VIA may terminate this Agreement for convenience, upon sixty (60) days prior written notice to Roche, provided that such notice of termination may not occur until after the one year anniversary of the Effective Date. VIA may commence to wind down all of its activities under this Agreement immediately upon such notice.

12.3 Roche's Right to Terminate.

(a) For Material Breach at any Time. Roche may terminate this Agreement, as a whole, at any time if (i) VIA materially breaches the Agreement and (ii) such material breach is not cured by VIA within ninety (90) days after Roche provides VIA with written notice of such breach, or, if such breach cannot be cured through commercially reasonably efforts within such ninety (90) days, and VIA has (within such time period) submitted a plan for cure as promptly as is reasonably

practicable through the application of commercially reasonable efforts with a cure date reasonably acceptable to Roche, after the earlier of the cure date agreed to by Roche or the date VIA ceases commercially reasonable efforts to cure such breach. If VIA files a petition for bankruptcy, dissolution, liquidation or winding up of affairs, then such petition shall not relieve VIA of its obligation for continued performance under this Agreement pending a decision on such petition.

(b) For VIA's Discontinuance of the Development Plan. Notwithstanding anything in this Agreement to the contrary, Roche may terminate the Agreement and all licenses granted herein following receipt of written notice from VIA of VIA's decision to discontinue all of VIA's activities under the Development Plan pursuant to Section 6.3 in either the Territory or a sub-territory (as defined in Section 6.3), as applicable; provided that any such termination for a sub-territory shall only be effective for such sub-territory (i.e., this Agreement shall remain in force for all remaining sub-territories that are not subject to such termination). Following such termination and at Roche's request within thirty (30) days after such termination, VIA shall negotiate in good faith with Roche, for a period of sixty (60) days from the date of Roche's request, to license on commercially reasonable terms to Roche the VIA Patent Rights and VIA Know-How related solely to the Licensed Products in the Territory or terminated sub-territory, as applicable.

12.4 General Effect of Expiration or Termination. Upon Expiration or termination of this Agreement for any reason, all rights and obligations of the Parties hereunder shall cease, except as explicitly provided for below in this Article 12 or elsewhere in this Agreement. Expiration or termination of this Agreement shall not relieve the Parties of any obligation to make payments or otherwise to the extent related to events or other facts in existence prior to such Expiration or termination.

12.5 Rights Upon Expiration or Any Termination.

(a) Upon Expiration of this Agreement in any country, VIA shall continue to have a royalty-free, perpetual right to Commercialize Licensed Products in the Territory, as the license granted VIA in Section 2.1 shall automatically become royalty-free, non-exclusive and perpetual in the country of Expiration.

(b) Upon Expiration or termination of this Agreement for any reason, the following Sections and Articles shall survive such expiration or termination, subject to any later termination dates provided for therein: Sections 5.1 and 5.2 (with respect to payments having accrued during the term of this Agreement); Sections 5.4; 5.5; and 9.3, and Articles 1, 8 (as relates to infringement occurring during the term of this Agreement), 10, 12, 13 and 14.

12.6 Rights Upon Certain VIA Terminations.

(a) Upon termination by VIA for Roche's uncured material breach of this Agreement pursuant to Section 12.2(a), the following Sections shall survive such termination in addition to the Sections and Articles set forth to survive in Section 12.5(b): Sections 2.1; and 3.1, 3.2 and 3.3 (with continued milestone payments reduced by *** percent (***%)); Article 4 (with continued royalty payments reduced by *** percent (***%)) and all other Sections and Articles governing the

*** Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

mechanics of milestone and royalty payments hereunder. The licenses granted by Roche to VIA shall become perpetual and irrevocable if VIA terminates under Section 12.2 (a).

(b) If VIA terminates this Agreement for any reason other than Roche's uncured material breach of this Agreement pursuant to Section 12.2(a), then VIA's obligations pursuant to Section 3.1 shall survive such termination.

(c) Termination of this Agreement by VIA shall not limit VIA's ability to seek any remedies that may be available for any breaches of the terms hereof by Roche prior to such termination.

12.7 Rights Upon Roche Termination for Cause and Other VIA Terminations. If Roche terminates this Agreement pursuant to Section 12.3, or VIA terminates this Agreement for convenience pursuant to Section 12.2(b), then:

(a) Reverted Territory; Reverted Products. The Territory, in the case of a termination in whole, and the terminated country or countries (together with their territories and possessions) in the case of a partial termination, shall be deemed to be the "Reverted Territory" effective as of the effective date of such termination. In the case of a partial termination, the Reverted Territory shall thereafter be excluded from the Territory for all purposes under this Agreement, but this Agreement will remain in effect in the remaining Territory. All Licensed Products in the Reverted Territory shall, effective upon the effective date of such termination, be deemed "Reverted Products."

(b) No Further Representations. The VIA Group shall discontinue making any representation regarding its status as a licensee of or distributor for Roche in the Reverted Territory, for all Reverted Products. The VIA Group shall cease conducting any activities with respect to the marketing, promotion, sale or distribution of the Reverted Products in the Reverted Territory.

(c) Technology License. VIA hereby grants to Roche, if Roche notifies VIA within thirty (30) days after such termination that Roche desires to negotiate such a license, the right to negotiate for a period of sixty (60) days thereafter a license on commercially reasonable terms under (i) any patent or patent application owned by VIA (or any VIA Affiliate) covering the Reverted Products having been developed or commercialized by the VIA Group during the term of this Agreement, and (ii) all Know-How owned or controlled by VIA and its Affiliates relevant to Reverted Products, solely for Roche to commercialize Reverted Products in the Reverted Territory, and to manufacture Reverted Products anywhere in the world for such Commercialization, and (iii) any Regulatory Filings of VIA in the Reverted Territory.

(d) No Further Sales. VIA covenants that promptly upon such termination it and its Affiliates and former sublicensees hereunder shall cease to sell, and thereafter shall not sell, any Reverted Product in the Reverted Territory prior to three (3) years after the effective date of termination.

ARTICLE 13

INDEMNIFICATION

13.1 Indemnification by VIA. Subject to Sections 13.3 and 14.14 hereof, VIA hereby agrees to defend, indemnify and hold harmless Roche and its Affiliates and licensors, and their directors, officers, employees and agents ("Roche Indemnitees") from and against any liabilities, losses, fines, penalties, damages, expenses (including reasonable attorney's fees and expenses and expenses incurred in connection with the enforcement of this provision), resulting from any Third Party suits, actions, or claims brought or threatened after the Effective Date of this Agreement and which arise out of claims against Roche Indemnitees brought by Third Parties after the Effective Date of this Agreement, including but not limited to, any actions in contract (including breach of warranty) tort (including negligence, strict liability or commercial torts) which arise, result from, or relate to:

(i) any breach of any of the representations of VIA contained in Section 9.2 hereof,

(ii) the gross negligence, recklessness or willful misconduct of the VIA and its Affiliates; and

(iii) any development or commercialization (including without limitation, any manufacture, storage, use or possession) of Compound, Derivatives, Additional Licensed Compounds or Licensed Product by VIA, its Affiliates, sublicensees and distributors.

Items (i) through (iii) are hereinafter collectively referred to as a "Roche Loss." VIA shall have no obligation to indemnify Roche, to the extent that any Roche Loss arises out of the gross negligence or willful misconduct of any Roche Indemnitee or Roche's breach of this Agreement.

13.2 Indemnification by Roche. Subject to Sections 13.3 and 14.14 hereof, Roche hereby agrees to defend, indemnify and hold harmless VIA, its Affiliates and sublicensees, and their directors, officers, employees and agents ("VIA Indemnitees") from and against any liabilities, losses, fines, penalties, damages, expenses (including reasonable attorney's fees and expenses and expenses incurred in connection with the enforcement of this provision), resulting from any Third Party suits, actions, or claims which arise out of claims against VIA Indemnitees brought by Third Parties after the Effective Date of this Agreement, including but not limited to, any actions in contract (including breach of warranty), tort (including negligence, strict liability or commercial torts) which arise, result from, or relate to:

(i) any breach of any of the representations of Roche contained in Section 9.1 hereof,

(ii) the gross negligence, recklessness or willful misconduct of Roche, its Affiliates or agents, and

(iii) any development or commercialization (including without limitation, any manufacture, storage, use or possession) of Compound, Derivatives, Additional Licensed Compounds or Licensed Product by Roche or its Affiliates.

Items (i) through (iii) are hereinafter collectively referred to as an "VIA Loss." Roche shall have no obligation to indemnify VIA, to the extent that any VIA Loss arises out of the gross negligence or willful misconduct of any VIA Indemnitee or VIA' breach of this Agreement.

13.3 Indemnification Procedures With Respect to Third Party Claims.

(a) To be eligible to seek indemnification under this Article 13 in respect to a liability, loss, fine, penalty, damage, expense, action, or claim brought against such Indemnitee by a Third Party (such claim hereinafter referred to as a "Third Party Claim"), a VIA Indemnitee or Roche Indemnitee (each, an "Indemnitee") shall promptly give written notice thereof to the Party from whom indemnification is sought (such Party hereinafter referred to as the "Indemnitor") within a reasonable period of time after the assertion of such Third Party Claim by such Third Party; *provided*, *however*, that the failure to provide written notice of such Third Party Claim within a reasonable period of time shall not relieve the Indemnitor of any of its obligations hereunder, except to the extent that the Indemnitor is prejudiced by such failure. The Indemnitor shall have the right to assume the complete control of the defense, compromise or settlement of any Third Party Claim (provided that no settlement of any Third Party Claim shall include any admission of wrongdoing on the part of an Indemnitee, without the prior written consent of such Indemnitee, which consent shall not be unreasonably withheld), including, at its own expense, employment of legal counsel. At any time thereafter the Indemnitor shall be entitled to exercise, on behalf of the Indemnitee, any rights which may mitigate the extent or amount of such Third Party Claim; *provided*, *however*, that if the Indemnitor shall have exercised its right to assume control of such Third Party Claim, the Indemnitee (i) may, in its sole discretion and at its own expense (which expense shall not be subject to indemnification hereunder), employ legal counsel to represent it (in addition to the legal counsel employed by the Indemnitor) in any such matter, and in such event legal counsel selected by the Indemnitee shall be required to confer and cooperate with such counsel of the Indemnitor in such defense, compromise or settlement for the purpose of informing and sharing information with the Indemnitor; (ii) shall, at its own expense, make available to Indemnitor those employees, officers and directors or Indemnitee whose assistance, testimony or presence is necessary or appropriate to assist the Indemnitor in evaluating and in defending any such Third Party Claim (*provided*, *however*, that any such access shall be conducted in such a manner as not to interfere unreasonably with the operations of the businesses of Indemnitee); and (iii) shall otherwise fully cooperate with the Indemnitor and its legal counsel in the investigation and defense of such Third Party Claim.

(b) If the Parties acting in good faith cannot agree as to the applicability of Section 13.1 and/or 13.2 to a particular Third Party Claim, then each Party (and its respective Indemnitees) reserves the right to conduct its own defense of such Third Party Claim and seek indemnification from the applicable Party upon its resolution.

ARTICLE 14

GENERAL PROVISIONS

14.1 Force Majeure. Neither Party shall be held liable or responsible to the other Party nor be deemed to have defaulted under or breached this Agreement for failure or delay in fulfilling or performing any term of this Agreement, other than an obligation to make payments hereunder, when such failure or delay is caused by or results from fire; flood; earthquake; tornado; embargo; government regulation; prohibition or intervention; war; act of war (whether war be declared or not); insurrection; act of terrorism; riot; civil commotion; strike; lockout; act of God or any other cause

beyond the reasonable control of the affected Party to anticipate, prevent, avoid or mitigate (a "Force Majeure Event") so long as the affected Party uses commercially reasonable efforts to overcome the effects of the Force Majeure Event; *provided*, *however*, that any failure or delay in fulfilling a term of this Agreement shall not be considered a result of a Force Majeure Event if it arises from a knowing failure of VIA or Roche to comply with applicable laws and regulations.

14.2 Further Assurances. Each Party hereto agrees to perform such acts, execute such further instruments, documents or certificates, and provide such cooperation in proceedings and actions as may be reasonably requested by the other Party in order to carry out the intent and purpose of this Agreement, including without limitation the registration or recordation of the rights granted hereunder.

14.3 Severability. Both Parties hereby expressly acknowledge and agree that it is the intention of neither Party to violate any public policy, statutory or common law, rules, regulations, treaty or decision of any government agency or executive body thereof of any country or community or association of countries and specifically agree that if any word, sentence, paragraph, clause or combination thereof in this Agreement is found by a court or executive body with judicial powers having jurisdiction over this Agreement or any of the Parties hereto in a final unappealed order, to be in violation of any such provisions in any country or community or association of countries, then in such event such words, sentences, paragraphs, clauses or combination shall be inoperative in such country or community or association of countries (or reformed, for example but without limitation, to apply for a shorter period of time, such that their effect is in compliance with law) and the remainder of this Agreement shall remain binding upon the Parties hereto.

14.4 Notices. Any notice required or permitted to be given hereunder shall be in writing and shall be deemed to have been properly given if delivered in person, or if mailed by registered or certified mail (return receipt requested) postage prepaid, or by a nationally recognized overnight courier, or by facsimile (and promptly confirmed by registered, certified mail, overnight courier or fax receipt), to the addresses given below or such other addresses as may be designated in writing by the Parties from time to time during the term of this Agreement. Any notice sent by overnight courier or facsimile shall be deemed received on the first business day after posted with the courier or transmittal. Any notice sent by registered, certified mail shall be deemed received on the fourth (4th) business day following the date of posting.

In the case of VIA:	VIA Pharmaceuticals, Inc. 750 Battery Street, Suite 330 San Francisco California 94111 USA Attention: President
In the case of Roche:	Hoffmann-La Roche Inc. 340 Kingsland Street Nutley, New Jersey 07110 Attention: Corporate Secretary
and:	F. Hoffmann-La Roche Ltd Grenzacherstrasse 124 CH-4070 Basel Switzerland Attention: Corporate Law

14.5 Assignment. All of the terms and provisions of this Agreement shall be binding upon and inure to the benefit of and be enforceable by the respective successors and permitted assigns of the Parties hereto, but neither this Agreement nor any of the rights, interests or obligations hereunder of any Party hereto shall be assigned without the prior written consent of the other Party (which may be withheld for any reason), *provided*, *however*, that either Party may, without such consent, assign this Agreement in whole or in part (i) to a successor corporation in connection with the transfer or sale of all or substantially all of its business or assets to which this Agreement pertains or in the event of the merger or consolidation with another corporation; and (ii) to an Affiliate. Any purported assignment in violation of the preceding sentence shall be void. Any permitted assignee shall assume all obligations of its assignor under this Agreement.

14.6 Performance by Affiliates. Each of Roche and VIA acknowledge that their obligations and rights under this Agreement may be performed and exercised by Affiliates of Roche and VIA, respectively. Obligations of the Party for which one of its Affiliates is performing hereunder shall be deemed to extend to such performing Affiliate. Each of Roche and VIA guarantee performance of this Agreement by its Affiliates. Wherever in this Agreement the Parties delegate responsibility to Affiliates or local operating entities, the Parties agree that such entities shall not make decisions inconsistent with this Agreement, amend the terms of this Agreement or act inconsistently with the foregoing sentence, then the other Party shall be entitled to proceed against the Party whose Affiliate so breached, and shall not first be required to proceed against the Affiliate that so breached.

14.7 Publicity. Except for the details in the press release to be agreed upon by the Parties, and as required by the rules or regulations of any stock exchange or regulatory authority or otherwise required by law or regulation, neither Party, nor any of its Affiliates, shall originate any publicity, news release or other public announcement that identifies the other Party, written or oral, relating to the confidential terms or conditions contained in this Agreement without the prior written approval of such other Party. In addition, VIA shall have the right to originate publicity, news releases and other public announcements relating to Licensed Products if such publicity, news releases and other public announcements do not identify Roche; provided that VIA shall provide Roche with an opportunity to review a draft of any such publicity, news release or other public announcement at least five (5) business days prior to releasing such publicity, news release or other public announcement (unless a quicker release is mandated by law).

14.8 Roche Publications. The Parties recognize the importance of allowing Roche scientists to have the ability to publish their results but recognize that such publications have the potential for disclosing intellectual property. Accordingly, Roche shall have the right to publish all documents that (i) have been approved for publication in compliance with Roche's internal procedures and (ii) submitted for publication prior to the Effective Date (drafts of which were disclosed to VIA). After the Effective Date, Roche shall not submit for publication any document without the written consent of VIA, which consent shall be at VIA's sole discretion.

14.9 Amendment. The Parties hereto may amend, modify or alter any of the provisions of this Agreement, but only by a written instrument that explicitly refers to this Agreement and is duly executed by both Parties hereto.

14.10 Entire Agreement. This Agreement contains the entire understanding of the Parties with respect to the subject matter hereof. All express or implied agreements and understandings,

either oral or written, heretofore made with respect to such subject matter are expressly superseded by this Agreement.

14.11 Waiver. The failure of a Party to enforce at any time for any period any of the provisions hereof shall not be construed as a waiver of such provisions or of the rights of such Party thereafter to enforce each such provisions.

14.12 No Implied Licenses. Except as expressly and specifically provided under this Agreement, the Parties agree that neither Party is granted any implied rights to or under any of the other Party's current or future Patents, trade secrets, copyrights, moral rights, trade or service marks, trade dress, or any other intellectual property rights.

14.13 No Joint Venture. The Parties agree that the relationship of Roche and VIA established by this Agreement is that of independent licensee and licensor.

Furthermore, the Parties agree that this Agreement does not, is not intended to, and shall not be construed to, establish a partnership or joint venture, and nor shall this Agreement create or establish an employment, agency or any other relationship. Except as may be specifically provided herein, neither Party shall have any right, power or authority, nor shall they represent themselves as having any authority to assume, create or incur any expense, liability or obligation, express or implied, on behalf of the other Party, or otherwise act as an agent for the other Party for any purpose.

14.14 No Third Party Beneficiaries. Except as otherwise set forth in Article 13, all rights, benefits and remedies under this Agreement are solely intended for the benefit of Roche and VIA, and no Third Party shall have any rights whatsoever to (i) enforce any obligation contained in this Agreement; (ii) seek a benefit or remedy for any breach of this Agreement; or (iii) take any other action relating to this Agreement under any legal theory, including but not limited to, actions in contract, tort (including but not limited to negligence, gross negligence and strict liability), or as a defense, setoff or counterclaim to any action or claim brought or made by the Parties.

14.15 Limitation of Liability. IN NO EVENT SHALL EITHER PARTY BE LIABLE TO THE OTHER PARTY FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES OF ANY KIND, EVEN If SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH LOSS OR DAMAGES. IN NO CASE SHALL EITHER PARTY BE LIABLE FOR ANY REPRESENTATION OF WARRANTY MADE BY THE OTHER PARTY TO ANY THIRD PARTY.

14.16 Governing Law. This Agreement is to be construed in accordance with, and governed by, the laws of the state of Delaware, except in relation to the principles governing conflict of laws. This Agreement shall not be governed by the United Nations Convention of International Contracts on the Sale of Goods. Notwithstanding the foregoing, questions affecting the construction and effect of any Patent shall be determined by the laws of the country in which such Patent has been granted.

14.17 Headings. The article, section and paragraph headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement.

14.18 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same document.

14.19 Dispute Resolution. The Parties recognize that disputes, controversies or claims arising out of or relating to this Agreement, or the breach, termination, or invalidity thereof (each, a "Dispute") which relate to either Party's rights and/or obligations hereunder may from time to time arise during the term of this Agreement. The Parties shall seek to amicably resolve such a Dispute in an expedient manner by mutual cooperation. To reach amicable resolution, the Parties agree to first refer the Dispute to their respective senior-level management, or their designees, for attempted resolution through good faith negotiations.

If the Dispute cannot be resolved within sixty (60) days after the referral to the senior-level management referred to above, all such disputes shall be finally resolved and settled in accordance with the provisions of this section:

(a) Arbitration Request. If a party intends to begin arbitration it must provide written notice (the "Arbitration Request") to the other party that the Dispute arising under this Agreement is to be referred to arbitration administered by the American Arbitration Association (the "AAA"). From the date of the Arbitration Request and until such time as any matter has been finally settled, the running of the time periods as to which party must cure a breach of this Agreement shall be suspended as to the subject matter of the Dispute.

(b) No Arbitration of Patent Issues. Unless otherwise agreed by the parties, a Dispute relating to the validity, infringement or enforceability of Patents shall not be subject to arbitration, and shall be submitted to a court of competent jurisdiction.

(c) Arbitration Procedure. The Arbitration shall be held in New York, New York in accordance with the Commercial Arbitration Rules of the AAA. The Parties shall each be responsible for one-half of any fees or other amounts payable to the AAA or the arbitrator, and each Party shall bear its own attorneys' fees and other expenses in connection with the arbitration.

The Parties agree that the procedures set forth in this paragraph shall be the sole and exclusive means of resolving any and all Disputes. Judgment on any award rendered by the arbitrator may be entered in any court having competent jurisdiction thereof.

Remainder of this page intentionally left blank.

In Witness Hereof, the Parties have executed this Agreement effective as of the Effective Date.

Hoffmann-La Roche Inc.

By: /s/ Frederick C Kentz III
Name: Frederick C Kentz III
Title: VP SECY & GE

F. Hoffmann-La Roche Ltd

By: /s/ Nigel Shedil
Name: Nigel Shedil
Title: Vice President
Global Head Licensing

F. Hoffmann-La Roche Ltd

By: /s/ Stefan Arnold
Name: Stefan Arnold
Title: Legal Counsel

VIA Pharmaceuticals, Inc.

By: /s/ Lawrence Cohen
Name: Lawrence Cohen, PHD
Title: Chief Executive Officer

Appendix A

List of Roche Patent Rights

Case 22191	Application Date	Application No.	Grant Date	Patent No.	Expiry Date	Holder
AR	19.07.2006	P060103084			19.07.2026	Roche Basel
AU	11.07.2006	2006271721			11.07.2026	Roche Basel
BR	11.07.2006	PI0613754-7			11.07.2026	Roche Basel
CA	11.07.2006	2614529			11.07.2026	Roche Basel
CL	18.07.2006	1863-2006				Roche Basel
CN	11.07.2006	200680026731.7			11.07.2026	Roche Basel
CO	11.07.2006	08-002.797				Roche Basel
CR	11.07.2006	9644				Roche Basel
EC	11.07.2006	08-8120				Roche Basel
EG	21.01.2008	PCT108/2008			11.07.2026	Roche Basel
EP	11.07.2006	06792493.6			11.07.2026	Roche Basel
GC	19.07.2006	6611				Roche Basel
IN	11.07.2006	658/DELNP/2008			11.07.2026	Roche Basel
ID	11.07.2006	W-00200800220			11.07.2026	Roche Basel
IL	11.07.2006	188476			11.07.2026	Roche Basel
JP	11.07.2006	2008-521935				Roche Basel
MY	19.07.2006	PI20063456				Roche Basel
MX	11.07.2006	MX/A/2008/000818				Roche Basel
MA	11.07.2006	30618			11.07.2026	Roche Basel
NZ	11.07.2006	565190			11.07.2026	Roche Basel
NO	11.07.2006	20080058			11.07.2026	Roche Basel
PH	11.07.2006	1-2008-500147				Roche Basel
RU	11.07.2006	2008106058			11.07.2026	Roche Base!
SG	11.07.2006	200800416-0				Roche Basel
ZA	11.07.2006	2008/00405				Roche Basel
KR	11.07.2006	2008-7001480			11.07.2026	Roche Basel
TW	18.07.2006	095126242				Roche Basel
TH	19.07.2006	0601003388				Roche Basel
US	21.07.2005	60/701215 Priority			21.07.2006	Roche Nutley
US1	18.07.2006	11/488870				Roche Nutley
US2	20.08.2008	12/194643				Roche Nutley
UA	11.07.2006	A200801933				Roche Basel
VE	20.07.2006	1684-06				Roche Basel
VN	11.07.2006	1-2008-00403			11.07.2026	Roche Basel
WO	11.07.2006	PCT/EP2006/064093				Roche Basel

Case 24361	Application Date	Application No.	Grant Date	Patent No.	Expiry Date	Holder
US	20.09.2007	60/973846 Priority			20.09.2008	Roche Nutley
US1	02.09.2008	12/202552				Roche Nutley
wo	11.09.2008	PCT/EP2008/062017				Roche Basel

*** Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

Appendix B

Transfer of Know How

Document No	Title	Author(s)	Document Date	Pages	Document Class	Center	Division	Language
1015946	Results of the in vitro micronucleus test (MNT) with RO*** using a microscale screening protocol with L5178Y tk mouse lymphoma cells (Study Plan No. 2057M04, NON-GLP)	Kirchner S	7/21/2004	16	research	Basel	Pharma	English
1004034	Results of the Ames microsuspension assay with RO*** (Study No. 2060M04, non-GLP screening test for genotoxic activity)	Muster W	1/5/2005	10	research	Basel	Pharma	English
1024256	RO*** THRA: A Two-Week Oral (Intubation) Toxicity and Toxicokinetic Range-Finding Study in Dogs (Study No. 09925)	Visalli T, Lamb M, Pamidimukkala A, Herrott C, Braen A	11/20/2007	280	regular	Nutley	Pharma	English
1023567	RO*** [THR]: A Two-Week Oral (Intubation) Range-Finding Toxicity and Toxicokinetic Study in Rats (Study No.09924)	Rusin G, Lamb M, Pamidimukkala A, Herrott C, Braen A	12/18/2007	337	regular	Nutley	Pharma	English

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Document No	Title	Author(s)	Document Date	Pages	Document Class	Center	Division	Language
1028177	RO*** [THR Agonist]: Evaluation of the Covalent Protein Binding in Rat, Dog, Monkey and Human Liver Microsomal Incubations Using [14C]RO*** (Study No. 09757)	Nangia A, Olejnik N, Yang T J	1/14/2008	16	regular	Nutley	Pharma	English
1024674	RO***: In Vitro Plasma Protein Binding, Blood to Plasma Ratios and Partitioning to Red Blood Cells in Human and Various Animal Species (Study No. 10018).	Costanza S, Cotler S	1/24/2008	19	regular	Nutley	Pharma	English
1028100	RO*** [THR Agonist]: Evaluation of the Cytochrome P450 Inhibition (Study No. 10315) and Time Dependent Inactivation by RO*** Using Human Liver Microsomal Incubations (Study No. 10315)	Chang M, Olejnik N, Yang T J	1/28/2008	30	regular	Nutley	Pharma	English
1025882	RO***: Evaluation of Thyroid Hormone Agonist for In Vitro Induction Potential in Primary Human Hepatocyte Cultures (Study No 10182)	Frank K B, Ryan A L	2/14/2008	24	regular	Nutley	Pharma	English

*** Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

Document No	Title	Author(s)	Document Date	Pages	Document Class	Center	Division	Language
1027865	RO***: Respiratory Assessment of Orally Administered RO*** to Plethysmograph Restrained Male Wistar Rats (WIL Study No. WIL-30039, Roche Study Reference No. 10349)	Staudner H A	3/3/2008	164	regular	Nutley	Pharma	English
1028777	RO*** (THRA): In Vitro Effect on hERG Current (IKr) Expressed in Human Embryonic Kidney (HEK) Cells (Roche Study No. 08757)	Staudner H A	3/4/2008	13	regular	Nutley	Pharma	English
1027864	RO***: The Acute Central Nervous System Pharmacological Study of RO*** Following Oral Administration in Rats Using a Modified Functional Observational Battery (Roche Study No. 10348, WIL Research Study No. WIL-30040)	Staudner H A	3/5/2008	217	regular	Nutley	Pharma	English
1027916	RO***: Bacterial reverse mutation test (Ames test) - Study No. 2363M07; RCC Analytic phase No. B69096	Gocke E, Flade D	5/5/2008	56	regular	Basel	Pharma	English

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Document No	Title	Author(s)	Document Date	Pages	Document Class	Center	Division	Language
1026150	RO*** (THRA): Cardiovascular Assessment in Conscious Radiotelemetry-Implanted Beagle Dogs Following Oral Gavage Administration (Study No. 09979)	Staudner H A, Hirkaler G, Pamidimukkala A, Braen A	6/4/2008	251	regular	Nutley	Pharma	English
1026453	RO*** (THRA): A Two-Week Oral (Intubation) Exploratory Metabolic and Pharmacokinetic Study of RO*** with a 2-Week Recovery Period (Study No. 10135)	Visalli T, Pamidimukkala A, Herrott C, Braen A P J M	7/8/2008	310	regular	Nutley	Pharma	English
1025069	RO*** (THR): Evaluation of the Interaction between Drug Efflux Transporters and RO*** (Study No. 09989)	Veerasammy S, Guo A	7/30/2008	27	regular	Nutley	Pharma	English
1026833	Induction of chromosome aberrations in cultured human peripheral blood lymphocytes	Lloyd M, Flade D, Chételat A A	8/7/2008	65	regular	Basel	Pharma	English
1025400	Method for determination of RO*** in Dog Plasma by LC/MS/MS (BA Method MS-121)	Egan T, Kolis S	6/4/2007	18	method	Nutley	Pharma	English
1026961	Synthesis of RO***, A Thyroid Hormone Receptor Agonist	Shu L, Wang P	11/27/2007	18	method	Nutley	Pharma	English
1028106	Method for determination of RO*** in Dog and Rat Plasma by LC/MS/MS (BA Method MS-121)	Vidal N, Egan T, Liang Z, Kolis S	12/11/2007	22	method	Nutley	Pharma	English
1027730	(Case 24361) PRODRUGS OF THYROID HORMONE ANALOGS (RO***)	Haynes N E, Scott N R, Tilley J W	9/20/2007	55	patent	Nutley	Pharma	English

*** Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO SECURITIES 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 Friedman, 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.

Date: November 14, 2016

/s/ Paul Friedman
Paul Friedman
Chairman and Chief Executive Officer
(principal executive officer)

Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO SECURITIES 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 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.

Date: November 14, 2016

/s/ Marc Schneebaum
Marc Schneebaum
Senior Vice President and Chief Financial Officer
(principal accounting and financial officer)

Exhibit 32.1

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 period ended September 30, 2016 (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: November 14, 2016

/s/ Paul Friedman
Paul Friedman
Chairman and Chief Executive Officer
(principal executive officer)

Dated: November 14, 2016

/s/ Marc Schneebaum
Marc Schneebaum
Senior Vice President and Chief Financial Officer
(principal accounting and financial officer)

A signed original of this written statement required by Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. Section 1350), has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request. 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.