PAIN THERAPEUTICS INC
Form 10-Q
July 26, 2018
UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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Form 10-Q

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

For the Quarterly Period Ended June 30, 2018

or

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

Commission File Number: 000-29959

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Pain Therapeutics, Inc.

(Exact name of registrant as specified in its charter)

Delaware	91-1911336
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

7801 N. Capital of Texas Highway, Suite 260, Austin, TX 78731

(512) 501-2444

(Address, including zip code, of registrant's principal executive offices and

telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes 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, small reporting company, or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company,” and “emerging growth company” in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	Accelerated filer
Non-accelerated filer	Smaller reporting company
	Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act .

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

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Common Stock, $0.001 par value	6,981,207
	Shares Outstanding as of July 24, 2018

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PAIN THERAPEUTICS, INC.

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

PAIN THERAPEUTICS, INC.

CONDENSED BALANCE SHEETS
(Unaudited, in thousands, except share and per share data)

	June 30, 2018	December 31, 2017
ASSETS		
Current assets:		
Cash and cash equivalents	$ 9,608	$ 10,479
Other current assets	91	184
Total current assets	9,699	10,663
Property and equipment, net	122	156
Other assets	12	12
Total assets	$ 9,833	$ 10,831
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 962	$ 424
Accrued development expense	—	399
Accrued compensation and benefits	313	309
Other current liabilities	12	—
Total current liabilities	1,287	1,132
Noncurrent liabilities	—	—
Total liabilities	1,287	1,132
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, $.001 par value; 10,000,000 shares authorized, none issued and outstanding	—	—
Common stock, $.001 par value; 120,000,000 shares authorized; 6,895,509 and 6,595,509 shares issued and outstanding at June 30, 2018 and December 31, 2017, respectively	7	7
Additional paid-in capital	170,551	167,091
Accumulated deficit	(162,012)	(157,399)
Total stockholders' equity	8,546	9,699
Total liabilities and stockholders' equity	$ 9,833	$ 10,831

See accompanying notes to condensed financial statements.

PAIN THERAPEUTICS, INC.

CONDENSED STATEMENTS OF OPERATIONS
(Unaudited, in thousands, except per share data)

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
Operating expenses:				
Research and development	$ 1,463	$ 3,063	$ 2,532	$ 4,452
General and administrative	998	1,103	2,097	2,478
Total operating expenses	2,461	4,166	4,629	6,930
Operating loss	(2,461)	(4,166)	(4,629)	(6,930)
Interest income	9	6	16	27
Net loss	$ (2,452)	$ (4,160)	$ (4,613)	$ (6,903)
Net loss per share, basic and diluted	$ (0.36)	$ (0.64)	$ (0.68)	$ (1.06)
Shares used in computing net loss per share, basic and diluted	6,838	6,537	6,739	6,536

See accompanying notes to condensed financial statements.

PAIN THERAPEUTICS, INC.

CONDENSED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(Unaudited, in thousands)

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
Net loss	$ (2,452)	$ (4,160)	$ (4,613)	$ (6,903)
Other comprehensive income (loss):				
Net unrealized gains (losses) on marketable securities	—	—	—	—
Comprehensive loss	$ (2,452)	$ (4,160)	$ (4,613)	$ (6,903)

See accompanying notes to condensed financial statements.

PAIN THERAPEUTICS, INC.

CONDENSED STATEMENTS OF CASH FLOWS
(Unaudited, in thousands)

	Six months ended June 30,	
	2018	2017
Cash flows from operating activities:		
Net loss	$ (4,613)	$ (6,903)
Adjustments to reconcile net loss to net cash used in operating activities:		
Non-cash stock-based compensation	1,501	1,536
Depreciation and amortization	34	34
Non-cash net interest income	—	(2)
Changes in operating assets and liabilities:		
Other current assets	154	344
Accounts payable	538	363
Accrued development expense	(399)	5
Accrued compensation and benefits	4	(26)
Other current liabilities	12	—
Net cash used in operating activities	(2,769)	(4,649)
Cash flows from investing activities:		
Purchases of marketable securities	—	(399)
Sales of marketable securities	—	400
Maturities of marketable securities	—	2,100
Net cash provided by investing activities	—	2,101
Cash flows from financing activities:		
Proceeds from issuance of common stock, net of issuance costs	1,898	—
Net cash provided by financing activities	1,898	—
Net decrease in cash and cash equivalents	(871)	(2,548)
Cash and cash equivalents at beginning of period	10,479	16,615
Cash and cash equivalents at end of period	$ 9,608	$ 14,067

See accompanying notes to condensed financial statements.

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PAIN THERAPEUTICS, INC.

Notes to Condensed Financial Statements

(Unaudited)

Note 1. General and Liquidity

Pain Therapeutics, Inc. (the “Company”, “Pain Therapeutics” or “we”) develops proprietary drugs that offer significant improvements to patients and healthcare professionals. We generally focus our drug development efforts on disorders of the nervous system.

In the course of our development activities, we have sustained cumulative operating losses. There are no assurances that additional financing will be available on favorable terms, or at all.

We have prepared the accompanying unaudited condensed financial statements of Pain Therapeutics in accordance with generally accepted accounting principles (“GAAP”) for interim financial information and pursuant to the instructions to the Quarterly Report on Form 10-Q and Article 10 of Regulation S-X. Accordingly, the financial statements do not include all of the information and footnotes required by GAAP for complete financial statements. In our opinion, all adjustments, consisting of normal recurring adjustments, considered necessary for a fair presentation have been included. Operating results for the three and six months ended June 30, 2018 are not necessarily indicative of the results that may be expected for any other interim period or for the year 2018. For further information, refer to the consolidated financial statements and footnotes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2017.

Liquidity

The Company has incurred significant net losses and negative cash flows since inception, and as a result has an accumulated deficit of $162 million at June 30, 2018. We expect our cash requirements to be significant in the future. As of June 30, 2018, the Company had $9.6 million in cash and cash equivalents, which is available to fund future operations. The amount and timing of our future cash requirements will depend on regulatory and market acceptance of our drug candidates, the resources we devote to researching and developing, formulating, manufacturing, commercializing and supporting our products. We may seek additional future funding through public or private financing within this timeframe, if such funding is available and on terms acceptable to us.

Note 2. Significant Accounting Policies

Use of Estimates

We make estimates and assumptions in preparing our financial statements in conformity with U.S. GAAP. These estimates and assumptions affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenue earned and expenses incurred during the reporting period. We evaluate our estimates on an ongoing basis, including those estimates related to agreements, research collaborations and investments. Actual results could differ from these estimates and assumptions.

Cash Equivalents, Marketable Securities and Concentration of Credit Risk

We invest in cash equivalents and marketable securities. We consider highly-liquid financial instruments with original maturities of three months or less to be cash equivalents. Our marketable securities include interest-bearing financial instruments, generally consisting of corporate or government securities.

Our investment policy allows for investments in marketable securities with active secondary or resale markets, establishes diversification and credit quality requirements and limits investments by maturity and issuer. We maintain our investments at one financial institution.

A change in prevailing interest rates may cause the fair value of the investment to fluctuate. We do not recognize an impairment charge related to this type of fluctuation because the fluctuation is temporary and eliminated by the

time an investment matures. We would recognize an impairment charge if and when we determine that a decline in the fair value below the amortized cost of an investment is other-than-temporary. We consider various factors in determining whether to recognize an impairment charge, including any adverse changes in the investees' financial condition, how long the fair value has been below the amortized cost and whether it is more likely than not that we would elect to or be required to sell the marketable security before its anticipated recovery.

We may elect to sell marketable securities before they mature. We hold these investments as "available for sale" and include these investments in our balance sheets as current assets, even though the contractual maturity of a particular investment may be beyond one year.

Fair Value Measurements

We report our cash equivalents and marketable securities at fair value as Level 1, Level 2 or Level 3 using the following inputs:

- Level 1 includes quoted prices in active markets. We base the fair value of money market funds and U.S. treasury securities on Level 1 inputs.
- Level 2 includes significant observable inputs, such as quoted prices for identical or similar investments, or other inputs that are observable and can be corroborated by observable market data for similar securities. We use market pricing and other observable market inputs obtained from third-party providers. We use the bid price to establish fair value where a bid price is available. We base the fair value of our marketable securities on Level 2 inputs. We do not have any investments where the fair value is based on Level 2 inputs.
- Level 3 includes unobservable inputs that are supported by little or no market activity. We do not have any investments where the fair value is based on Level 3 inputs.

We include unrealized gains or losses on our investments as accumulated other comprehensive loss in the stockholders' equity section of our balance sheets. We include changes in net unrealized gains or losses in our statements of comprehensive income. We would recognize significant realized gains and losses on a specific identification basis as other income in our statements of operations.

Proceeds from Grants

During the first six months of 2018 and 2017, we received $0.8 million and $0.1 million pursuant to a previously disclosed research grant from the National Institutes of Health ("NIH") and National Institute on Drug Abuse

("NIDA") that we recorded as a reduction to our research and development expenses.

Non-cash Stock-based Compensation

We recognize non-cash expense for the fair value of all stock options and other share-based awards. We use the Black-Scholes option valuation model to calculate the fair value of stock options, using the single-option award approach and straight-line attribution method. For options granted to employees and directors, we recognize the resulting fair value as expense on a straight-line basis over the vesting period of each respective stock option, generally four years. For options granted to non-employees, we remeasure the fair value expense using Black-Scholes each reporting period.

We have granted share-based awards that vest upon achievement of certain performance criteria ("Performance Awards"). We multiply the number of Performance Awards by the fair market value of our common stock on the date of grant to calculate the fair value of each award. We estimate an implicit service period for achieving performance criteria for each award. We recognize the resulting fair value as expense over the implicit service period when we conclude that achieving the performance criteria is probable. We periodically review and update as appropriate our estimates of implicit service periods and conclusions on achieving the performance criteria. Performance Awards vest and common stock is issued upon achievement of the performance criteria.

Net Loss per Share

We compute basic net loss per share on the basis of the weighted-average number of common shares outstanding for the reporting period. We compute diluted net loss per share on the basis of the weighted-average number of

common shares outstanding plus potential dilutive common shares outstanding using the treasury-stock method. Potential dilutive common shares consist of outstanding stock options.

We include the following in the calculation of basic and diluted net loss per share (in thousands, except per share data):

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
Numerator:				
Net loss	$ (2,452)	$ (4,160)	$ (4,613)	$ (6,903)
Denominator:				
Shares used in computing net loss per share, basic and diluted	6,838	6,537	6,739	6,536
Net loss per share, basic and diluted	$ (0.36)	$ (0.64)	$ (0.68)	$ (1.06)
Dilutive common shares excluded from net loss per share, diluted	2,220	2,369	2,190	2,402

We excluded options outstanding from the calculation of net loss per share, diluted because the effect of including options outstanding would have been anti-dilutive.

Income Taxes

We make estimates and judgments in determining the need for a provision for income taxes, including the estimation of our taxable income or loss for each full fiscal year.

We have accumulated significant deferred tax assets that reflect the tax effects of net operating loss and tax credit carryovers and temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Realization of certain deferred tax assets is dependent upon future earnings. We are uncertain about the timing and amount of any future earnings. Accordingly, we offset these deferred tax assets with a valuation allowance.

We may in the future determine that certain deferred tax assets will likely be realized, in which case we will reduce our valuation allowance in the period in which such determination is made. If the valuation allowance is reduced, we may recognize a benefit from income taxes in our Statement of Operations in that period.

We classify interest recognized pursuant to our deferred tax assets as interest expense, when appropriate.

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Note 3. Cash, Cash Equivalents and Marketable Securities and Assets Measured at Fair Value

Our cash, cash equivalents and marketable securities consisted of the following (in thousands):

	Cash, Cash Equivalents and Marketable Securities				
	Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value	Accrued Interest	Total Value
June 30, 2018						
Cash	$ 71	$ —	$ —	$ 71	$ —	$ 71
Cash equivalents	9,537	—	—	9,537	—	9,537
Total cash and cash equivalents	$ 9,608	$ —	$ —	$ 9,608	$ —	$ 9,608
Reported as:						
Cash and cash equivalents	$ 9,608	$ —	$ —	$ 9,608	$ —	$ 9,608
Marketable securities	—	—	—	—	—	—
	$ 9,608	$ —	$ —	$ 9,608	$ —	$ 9,608
Maturities:						
Matures in one year or less	$ 9,608	$ —	$ —	$ 9,608	$ —	$ 9,608
Matures one to three years	—	—	—	—	—	—
	$ 9,608	$ —	$ —	$ 9,608	$ —	$ 9,608
December 31, 2017						
Cash	$ 158	$ —	$ —	$ 158	$ —	$ 158
Cash equivalents	10,321	—	—	10,321	—	10,321
Total cash and cash equivalents	$ 10,479	$ —	$ —	$ 10,479	$ —	$ 10,479
Reported as:						
Cash and cash equivalents	$ 10,479	$ —	$ —	$ 10,479	$ —	$ 10,479
Marketable securities	—	—	—	—	—	—
	$ 10,479	$ —	$ —	$ 10,479	$ —	$ 10,479
Maturities:						
Matures in one year or less	$ 10,479	$ —	$ —	$ 10,479	$ —	$ 10,479
Matures one to three years	—	—	—	—	—	—
	$ 10,479	$ —	$ —	$ 10,479	$ —	$ 10,479

We did not realize any material gains or losses on our investments in marketable securities during the six months ended June 30, 2018 and December 31, 2017. To date we have not recorded any impairment charges on marketable securities related to other-than-temporary declines in market value.

Our assets measured at fair value on a recurring basis are as follows (in thousands):

	Level 1	Level 2	Level 3	Total
June 30, 2018				
Cash and cash equivalents	$ 9,608	$ —	$ —	$ 9,608
Commercial paper	—	—	—	—
	$ 9,608	$ —	$ —	$ 9,608
December 31, 2017				
Cash and cash equivalents	$ 10,479	$ —	$ —	$ 10,479
Commercial paper	—	—	—	—
	$ 10,479	$ —	$ —	$ 10,479

During the six months ended June 30, 2018, there were no transfers between Level 1, Level 2 or Level 3.

Note 4. Stockholders' Equity and Stock-Based Compensation Expense

Stockholders' equity activity in 2018

During the six months ended June 30, 2018, our common stock outstanding and stockholders' equity

(in thousands) changed as follows:

	Common Stock	Stockholders' equity (in thousands)
Balance at December 31, 2017	6,595,509	$ 9,699
Non-cash stock-related compensation for:		
Stock options for employees	—	1,469
Stock options for non-employees	—	32
Issuance of common stock, net of issuance costs	300,000	1,959
Net loss	—	(4,613)
Balance at June 30, 2018	6,895,509	$ 8,546

At the Market Common Stock Issuance

At the Market Issuance Sales Agreement — On February 8, 2018, we entered into a Capital on Demand™ Sales Agreement, or the ATM Agreement, with JonesTrading. In accordance with the terms of the sales agreement, we are able to offer and sell up to $16.9 million of shares of our common stock, from time to time in one or more public offerings of our common stock, with JonesTrading acting as agent, in transactions pursuant to a shelf registration statement that was declared effective by the SEC on July 31, 2017.

During the six months ended June 30, 2018, we sold a total of 300,000 shares of our common stock under the ATM Agreement, in the open market at an average gross selling price of $6.70 per share for net proceeds of $1.9 million. We expensed approximately $0.1 million of cost for the offering, excluding JonesTrading commissions. During the six months ended June 30, 2018, we charged $0.01 million of these costs against addition paid-in capital. As of July 24, 2018, we had up to $14.7 million of shares of our common stock available for sale under the ATM Agreement.

Stock option and Performance Award activity in 2018

During the six months ended June 30, 2018, stock options and unvested Performance Awards outstanding under our Equity Incentive Plan changed as follows:

	Stock Options	Performance Awards
Outstanding as of December 31, 2017	2,982,155	152,340
Options granted	15,000	—
Options exercised	—	—
Options forfeited/canceled	(243,257)	—
Outstanding as of June 30, 2018	2,753,898	152,340

The weighted average exercise price of options outstanding at June 30, 2018 was $15.44. As outstanding options vest over the current remaining vesting period of three years, we expect to recognize non-cash expense of $3.6 million. If and when outstanding Performance Awards vest, we would recognize non-cash expense of $2.5 million over the implicit service period.

Stock-based Compensation Expense in 2018

During the three and six months ended June 30, 2018 and 2017, our non-cash stock-related compensation expenses were as follows (in thousands):

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
Research and development				
Vesting of stock options	$ 316	$ 289	$ 668	$ 601
	316	289	668	601
General and administrative				
Vesting of stock options	382	420	833	935
	382	420	833	935
Total non-cash stock-based compensation expenses				
Vesting of stock options	698	709	1,501	1,536
	$ 698	$ 709	$ 1,501	$ 1,536

Note 5. Income Taxes

On December 22, 2017, legislation commonly known as the Tax Cuts and Jobs Act, or the Tax Act, was signed into law. The Tax Act, among other changes, reduces the U.S. federal corporate tax rate from 35% to 21%, requires taxpayers to pay a one-time transition tax on earnings of certain foreign subsidiaries that were previously tax deferred and creates new taxes on certain foreign sourced earnings. On December 31, 2017, the Company did not have any foreign subsidiaries and the international aspects of the Tax Act are not applicable.

In connection with the initial analysis of the impact of the Tax Act, the Company remeasured certain deferred tax assets and liabilities based on the rates at which they are expected to reverse in the future, which is generally 21%. The remeasurement of the Company's deferred tax balance was primarily offset by application of its valuation allowance. The Company is still in the process of analyzing the impact to the Company of the Tax Act. Where the Company has been able to make reasonable estimates of the effects for which its analysis is not yet complete, the Company has recorded provisional amounts. Where the Company has not yet been able to make reasonable estimates of the impact of certain elements, the Company has not recorded any amounts related to those elements and has continued accounting for them in accordance with ASC 740 on the basis of the tax laws in effect immediately prior to the enactment of the Tax Act. For the six months ended June 30, 2018 no adjustments to the remeasurement of the Company’s deferred tax accounts were recognized.

We did not provide for income taxes during the six months ended June 30, 2018, because we have projected a net loss for the full year 2018.

Note 6. Commitments

We conduct our product research and development programs through a combination of internal and collaborative programs that include, among others, arrangements with universities, contract research organizations and clinical research sites. We have contractual arrangements with these organizations that are cancelable. Our obligations under these contracts are largely based on services performed.

We have a non-cancelable operating lease for approximately 6,000 square feet of office space in Austin, Texas that expires in December 2020. Minimum lease payments are as follows (in thousands):

	2018	2019	2020	Total
Minimum lease payments	$ 91	$ 95	$ 99	$ 285

Note 7. Recently Issued Accounting Pronouncements

We reviewed recently issued accounting pronouncements and have adopted or plan to adopt those that are applicable to us. We do not expect the adoption of these pronouncements to have a material impact on our financial position, results of operations or cash flows.

In August 2016, the FASB issued ASU No. 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments. This ASU provides guidance on statement of cash flows presentation for eight specific cash flow issues where diversity in practice exists. The Company adopted ASU 2016-15 effective January 1, 2018, and this guidance did not have any impact on the Company's financial statements.

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842). The core principle of Topic 842 is that a lessee should recognize the assets and liabilities that arise from leases. For operating leases, a lessee is required to recognize a right-of-use asset and a lease liability, initially measured at the present value of the lease payments, in the statement of financial position. This ASU is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. The Company is evaluating the effect that the adoption of this ASU will have on its financial statements. The Company currently expects that its operating lease commitment will be subject to the new standard and recognized as right-of-use asset and operating lease liability upon adoption of ASU 2016-02, which will increase the total assets and total liabilities that it reports relative to such amounts prior to adoption.

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

This discussion and analysis should be read in conjunction with our financial statements and accompanying notes included elsewhere in this Quarterly Report on Form 10-Q. Operating results are not necessarily indicative of results that may occur in future periods.

This Quarterly Report on Form 10-Q contains certain statements that are considered forward-looking statements within the meaning of the Private Securities Reform Act of 1995. We intend that such statements be protected by the safe harbor created thereby. Forward-looking statements relate to expectations, beliefs, projections, future plans and strategies, anticipated events or trends and similar expressions concerning matters that are not historical facts. In some cases, you can identify forward-looking statements by terms such as "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "plan," "potential," "should," "will" and "would" or the negatives of these terms or other comparable termino

The forward-looking statements are based on our beliefs, assumptions and expectations of our future performance, taking into account all information currently available to us. Forward-looking statements involve risks and

uncertainties and our actual results and the timing of events may differ significantly from the results discussed in the forward-looking statements. Examples of such forward-looking statements include, but are not limited to statements about:

- the timing and topics of our discussions with the U.S. Food and Drug Administration (the "FDA") regarding the status of the New Drug Application (the "NDA") for REMOXY® ER (oxycodone capsules CII), or REMOXY;
- additional development activities to potentially support obtaining approval of REMOXY by the FDA;
- the ability of REMOXY to capture a share of the market for extended release opioid drugs;
- the status of products and potential products that are competitive with REMOXY and the implications of the FDA requirements for approval of such competitive products;
- our plans to rely on third parties, including Durect Corporation ("Durect"), and Noramco, Inc. ("Noramco") to supply us with excipients and active pharmaceutical ingredients and to manufacture REMOXY;
- discussions with potential strategic partners for the development and commercialization of REMOXY;
- the outcome of research and development activities, including, without limitation, development activities for FENROCK™ and potential formulation of additional dosage forms of our drug candidates;

- the potential benefits of our product candidates such as REMOXY, FENROCK, PTI-125 or PTI-125DX including the potential ability of PTI-125 to prevent or reverse amyloid-related Alzheimer's damage or PTI-125DX to diagnose Alzheimer's disease;
- the utility of protection of our intellectual property;
- expected future sources of revenue and capital and increasing cash needs;
- potential competitors or competitive products;
- market acceptance of our drug candidates and potential drug candidates;
- expectations regarding trade secrets, technological innovations, licensing agreements and outsourcing of certain business functions;
- expenses increasing, interest income decreasing or fluctuations in our operating results;
- operating losses and anticipated operating and capital expenditures;
- expected uses of capital resources;
- expectations regarding the issuance of shares of common stock to employees pursuant to equity compensation awards net of employment taxes;
- anticipated hiring and development of our internal systems and infrastructure;
- the sufficiency of our current resources to fund our operations over the next 12 months; and
- assumptions and estimates used for our disclosures regarding stock-based compensation.

Such forward-looking statements involve risks and uncertainties, including, but not limited to, those risks and uncertainties relating to:

- difficulties or delays in potentially obtaining regulatory approval of the NDA for REMOXY, including the potential for requests by the FDA for additional data which may require an extended period of time to obtain and submit;
- unexpected adverse side effects or inadequate therapeutic efficacy or manufacturing or stability issue of our drug candidates that could slow or prevent product approval (including the risk that current and past results of clinical trials are not indicative of future results of clinical trials) or potential post-approval market acceptance;
- having or obtaining sufficient resources for the successful development, manufacture and commercialization of REMOXY;
- the quantity, quality or sufficiency of the data, materials and information transferred to us by Pfizer, Inc. ("Pfizer") regarding the REMOXY development program;
- discussions with potential strategic partners for the development and commercialization of REMOXY;
- the successful development of other drug candidates, independently as well as pursuant to our other collaboration agreements, and the continuation of such agreements;
- difficulties or delays in development, testing, clinical trials (including patient enrollment), regulatory authorization or approval, production and commercialization of our drug candidates;
- the uncertainty of protection of our intellectual property rights or trade secrets;
- potential infringement of the intellectual property rights of third parties;
- pursuing in-license and acquisition opportunities;
- maintenance or third party funding of our collaboration and license agreements;
- legislation or regulatory actions affecting product pricing, reimbursement or access;
- significant breakdown or interruption of our information technology and infrastructure;

- significant issues that may arise related to outsourcing certain preclinical studies, clinical trials and formation and manufacturing activities;
- hiring and retaining personnel; and
- our financial position and our ability to obtain additional financing if necessary.

In addition, such statements are subject to the risks and uncertainties discussed in the "Risk Factors" section and elsewhere in this document.

Overview

Pain Therapeutics develops proprietary drugs that offer significant improvements to patients and healthcare professionals. We generally focus our drug development efforts on disorders of the nervous system.

Our expertise consists of developing new drug candidates and guiding these drug candidates through various regulatory and development pathways in preparation for their potential commercialization. By necessity, the conduct of drug development is complex, lengthy, expensive and risky. The FDA has not yet established the safety or efficacy of our drug candidates.

The following is a summary of our pipeline of drug assets:

REMOXY ER (extended-release oxycodone capsules CII) – REMOXY, our lead drug candidate, is a proprietary abuse-deterrent, twice-daily, oral oxycodone to treat severe chronic pain. The REMOXY NDA was submitted to the FDA, with priority (six-month) review, in the first quarter of 2018 and was assigned a Prescription Drug User Fee Act ("PDUFA") date of August 7, 2018. The REMOXY NDA is requesting label claims against the injection, inhalation and nasal routes of abuse. The FDA held an Advisory Committee meeting ("Meeting") on June 26, 2018, to discuss the REMOXY NDA. At the conclusion of the Meeting, members of the Advisory Committee voted 14-to-3 against regulatory approval of REMOXY ER. In addition, during the Meeting, the FDA expressed an opinion that current data for REMOXY ER may not support label claims against the injection and inhalation routes of abuse. At its sole discretion, the FDA may or may not follow the Advisory Committee's recommendation. We own exclusive rights to develop and commercialize REMOXY worldwide, with a sales royalty obligation to one of our technology partners.

FENROCK™ (transdermal fentanyl patch CII) – FENROCK is a proprietary, abuse-deterrent fentanyl skin patch to treat severe pain. This is an early-stage program that is substantially funded by a competitive research grant award from the NIDA, the primary agency of the U.S. government for research on drug abuse. We own exclusive, worldwide rights to FENROCK, with no royalty obligations to any third party.

PTI-125 – PTI-125 is a proprietary small molecule drug for the treatment of AD. In 2018, we completed a first-in-human Phase I study with PTI-125. This is an early-stage program that is substantially funded by competitive research grant awards from the NIH, the primary agency of the U.S. government for biomedical research. We own exclusive, worldwide rights to PTI-125, with no royalty obligations to any third party.

PTI-125DX – PTI-125 is a proprietary, blood-based diagnostic/biomarker to detect AD. This is an early-stage program that is substantially funded by competitive research grant awards from the NIH. We own exclusive, worldwide rights to PTI-125DX, with no royalty obligations to any third party.

REMOXY ER - a drug candidate for severe chronic pain

Our lead drug candidate is called REMOXY ER (extended-release). REMOXY is a proprietary, abuse-deterrent, twice-daily, capsule formulation of oral oxycodone, a strong opioid drug. REMOXY is intended to meet the needs of healthcare professionals who appropriately prescribe extended-release oxycodone and who seek to minimize the risks of drug diversion, abuse or accidental patient misuse. In particular, REMOXY's thick, sticky, high viscosity gel formulation may deter unapproved routes of drug administration, such as injection, snorting or smoking.

The proposed indication for REMOXY is for “the management of pain severe enough to require daily, around-the-clock, long-term opioid treatment and for which alternative treatment options are inadequate.”

We resubmitted the REMOXY NDA in the first quarter of 2018 with priority (six-month) review. The REMOXY NDA was subsequently accepted by the FDA and was assigned a PDUFA date of August 7, 2018.

The REMOXY NDA is requesting label claims for abuse deterrence against three routes of abuse: injection, inhalation and nasal. The FDA held an Advisory Committee meeting (“Meeting”) on June 26, 2018, to discuss the REMOXY NDA. At the conclusion of the Meeting, members of the Advisory Committee voted 14-to-3 against regulatory approval of REMOXY ER. In addition, during the Meeting, the FDA expressed an opinion that current data for REMOXY ER may not support label claims against the injection and inhalation routes of abuse. At its sole discretion, the FDA may or may not follow the Advisory Committee’s recommendation.

We own exclusive, worldwide rights to REMOXY.

Opioid drugs, such as oxycodone, are an important treatment option for patients with severe chronic pain. However, misuse, abuse and diversion of these prescription drugs remains a serious, persistent problem. For over a decade, we have pioneered technology, tools and techniques that enable the development of Abuse-Deterrent Formulations (ADFs). ADFs are intended to make opioid drugs difficult to abuse yet provide steady pain relief when used appropriately by patients. ADFs are intended to help in the fight against prescription drug abuse.

In March 2016, we resubmitted to the FDA an NDA for REMOXY. In September 2016, we received a Complete Response Letter (‘CRL”) from the FDA for the REMOXY NDA. The CRL informed us that REMOXY could not be approved in its present form and specified additional actions and data needed for drug approval. The CRL substantially focused on the need to conduct a clinical abuse-deterrent study via the nasal route of administration, and additional in vitro (non-clinical) studies to further characterize the abuse-deterrent properties of REMOXY. The 2016 CRL made no mention of clinical safety, drug efficacy, manufacturing, stability, bioequivalence or any other issues from a prior CRL.

In February 2017, we met with the FDA regarding REMOXY. During this meeting, we reached a written agreement with the FDA on a roadmap to resubmit the NDA for REMOXY. Final minutes of our FDA meeting confirmed two key requirements needed for the resubmission of the REMOXY NDA:

- To support a potential drug label claim against abuse by injection: Repeat an injectability/syringeability study using thin films of drug, smaller volumes of solvents, additional mixed solvents and alternative extraction methods and syringe filter.
- To support a potential drug label claim against abuse by snorting: Conduct an intranasal abuse potential study in human volunteers.

During 2017, we conducted these mandated studies with REMOXY. We believe positive results from these studies support label claims against abuse by injection and abuse by snorting. In November 2017, we concluded a pre-NDA meeting with the FDA. The purpose of this pre-NDA meeting was to agree on submission requirements for the REMOXY NDA under Section 505(b)(2) of the Federal Food, Drug, and Cosmetic Act. During the pre-NDA meeting, we received comments and clarification from the FDA on the acceptability of the data to be included in the REMOXY NDA resubmission, including a recent intranasal study. All questions were addressed and summarized in official minutes of the meeting issued by the FDA. There are no discrepancies or requests for clarifications following receipt of final meeting minutes. As a result, we resubmitted the REMOXY NDA in the first quarter of 2018 with Priority (six-month) review. The REMOXY NDA was subsequently accepted by the FDA and was assigned a PDUFA date of August 7, 2018.

We have yet to generate any revenues from product sales. We have an accumulated deficit of $162 million at June 30, 2018. These losses have resulted principally from costs incurred in connection with research and development activities, salaries and other personnel-related costs and general corporate expenses. Research and development activities include costs of preclinical and clinical trials as well as clinical supplies associated with our drug candidates. Salaries and other personnel-related costs include non-cash stock-based compensation associated with options and other equity awards granted to employees and non-employees. Our operating results may fluctuate substantially from

period to period as a result of the timing of preclinical activities, enrollment rates of clinical trials for our drug candidates and our need for clinical supplies.

We expect to continue to use significant cash resources in our operations for the next several years. Our cash requirements for operating activities and capital expenditures may increase substantially in the future as we:

- conduct preclinical and clinical trials for our drug candidates;
- seek regulatory approvals for our drug candidates;
- develop, formulate, manufacture and commercialize our drug candidates;
- implement additional internal systems and develop new infrastructure;
- acquire or in-license additional products or technologies, or expand the use of our technology;
- maintain, defend and expand the scope of our intellectual property; and
- hire additional personnel.

Product revenue will depend on our ability to receive regulatory approvals for, and successfully market, our drug candidates. If our development efforts result in regulatory approval and successful commercialization of our drug candidates, we will generate revenue from direct sales of our drugs and/or, if we license our drugs to future collaborators, from the receipt of license fees and royalties from sales of licensed products. We conduct our research and development programs through a combination of internal and collaborative programs. We rely on arrangements with universities, our collaborators, contract research organizations and clinical research sites for a significant portion of our product development efforts.

We focus substantially all of our research and development efforts in the area of neurology. The following table summarizes expenses by category for research and development efforts (in thousands):

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
Compensation	$ 753	$ 714	$ 1,591	$ 1,441
Contractor fees and supplies	548	2,166	620	2,622
Other common costs	162	183	321	389
	$ 1,463	$ 3,063	$ 2,532	$ 4,452

Contractor fees and supplies generally include expenses for preclinical studies and clinical trials and costs for formulation and manufacturing activities. Other common costs include the allocation of common costs such as facilities. During the three and six months ended June 30, 2018, we received $0.4 million and $0.8 million pursuant to a previously disclosed research grant from the National Institutes of Health (“NIH”) and National Institute on Drug Abuse (“NIDA”) that we recorded as a reduction to our research and development expenses.

Our technology has been applied across certain of our drug candidates. Data, know-how, personnel, clinical results, research results and other matters related to the research and development of any one of our drug candidates also relate to, and further the development of, our other drug candidates. As a result, costs allocated to a specific drug candidate may not necessarily reflect the actual costs surrounding research and development of that drug candidate due to cross application of the foregoing.

Estimating the dates of completion of clinical development, and the costs to complete development, of our drug candidates would be highly speculative, subjective and potentially misleading. Pharmaceutical products take a significant amount of time to research, develop and commercialize. The clinical trial portion of the development of a new drug alone usually spans several years. We expect to reassess our future research and development plans based on our review of data we receive from our current research and development activities. The cost and pace of our future research and development activities are linked and subject to change.

Critical Accounting Policies

The preparation of our financial statements in accordance with U.S. GAAP requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, expenses and interest income in our financial statements and accompanying notes. We evaluate our estimates on an ongoing basis, including those estimates related to agreements, research collaborations and investments. We base our estimates on historical experience and various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. The following items in our financial statements require significant estimates and judgments:

- Stock-based compensation. We recognize non-cash expense for the fair value of all stock options and other share-based awards. We use the Black-Scholes option valuation model to calculate the fair value of stock options, using the single-option award approach and straight-line attribution method. For options granted to employees and directors, we recognize the resulting fair value as expense on a straight-line basis over the vesting period of each respective stock option, generally four years. For options granted to non-employees, we remeasure the fair value expense using Black-Scholes each reporting period.

We have granted share-based awards that vest upon achievement of certain performance criteria, or Performance Awards. We multiply the number of Performance Awards by the fair market value of our common stock on the date of grant to calculate the fair value of each award. We estimate an implicit service period for achieving performance criteria for each award. We recognize the resulting fair value as expense over the implicit service period when we conclude that achieving the performance criteria is probable. We periodically review and update as appropriate our estimates of implicit service periods and conclusions on achieving the performance criteria. Performance Awards vest and common stock is issued upon achievement of the performance criteria.

- Income Taxes. We make estimates and judgments in determining the need for a provision for income taxes, including the estimation of our taxable income or loss for each full fiscal year. We have accumulated significant deferred tax assets that reflect the tax effects of net operating loss and tax credit carryovers and temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Realization of deferred tax assets is dependent upon future earnings, if any. We are uncertain as to the timing and amount of any future earnings. Accordingly, we offset these deferred tax assets with a valuation allowance. We may in the future determine that our deferred tax assets will likely be realized, in which case we will reduce our valuation allowance in the quarter in which such determination is made. If the valuation allowance is reduced, we may recognize a benefit from income taxes in our statement of operations in that period. We classify interest recognized in connection with our tax positions as interest expense, when appropriate.

Results of Operations – Three and six months ended June 30, 2018 and 2017

Research and Development Expense

Research and development expense consists primarily of costs of drug development work associated with our drug candidates, including:

- preclinical testing,
- clinical trials,
- clinical supplies and related formulation and design costs, and
- compensation and other personnel-related expenses.

Research and development expenses were $1.4 million and $3.1 million during the three months ended June 30, 2018 and 2017, respectively. The decrease was due primarily to a decrease in REMOXY related expenses in 2018 and the receipt of grant funding from the NIH, recorded as a reduction in research and development expenses.

Research and development expenses were $2.5 million and $4.5 million during the six months ended June 30, 2018 and 2017, respectively. The decrease was due primarily to a decrease in REMOXY related expenses in 2018.

Research and development expenses included non-cash stock-related compensation expenses of $0.3 million in both three months ended June 30, 2018 and 2017, respectively. Non-cash-stock-related compensation expenses were $0.7 million and $0.6 million during the six months ended June 30, 2018 and 2017, respectively.

We expect research and development expenses to fluctuate over the next several years as we continue our development efforts. We believe our development efforts may result in our drug candidates progressing through various stages of clinical trials. Our research and development expenses may fluctuate from period to period due to the timing and scope of our development activities and the results of clinical trials and preclinical studies. We also expect non-cash equity-related expenses to increase in the future.

General and Administrative Expense

General and administrative expenses consist of personnel costs, allocated expenses and other expenses for outside professional services, including legal, human resources, audit and accounting services. Personnel costs consist of salaries, bonus, benefits and stock-based compensation. We incur expenses associated with operating as a public company, including expenses related to compliance with the rules and regulations of the SEC and Nasdaq Stock Market LLC (“Nasdaq”), additional insurance expenses, additional audit expenses, investor relations activities, Sarbanes-Oxley compliance expenses and other administrative expenses and professional services.

General and administrative expenses were $1.0 million and $1.1 million during the three months ended June 30, 2018 and 2017, respectively. The decrease was due primarily to a decrease non-cash compensation related expenses and reduction in outside professional fees.

General and administrative expenses were $2.1 million and $2.5 million during the six months ended June 30, 2018 and 2017, respectively. The decrease was due primarily to a decrease in cash and non-cash compensation related expenses and reduction in outside professional fees.

General and administrative expenses included non-cash stock-related compensation expenses of $0.4 million in both three months ended June 30, 2018 and 2017. Non-cash-stock-related compensation expenses were $0.8 million and $0.9 million during the six months ended June 30, 2018 and 2017, respectively.

We expect our general and administrative expenses during the remainder of 2018 to remain approximately the same as compared to 2017 activities.

Interest Income

Interest income was $9,000 and $6,000 during the three months ended June 30, 2018 and 2017, respectively. Interest income was $16,000 and $27,000 during the six months ended June 30, 2018 and 2017. The decrease was due primarily to a lower cash balance and lower prevailing interest rate on our investments.

Liquidity and Capital Resources

Since inception, we have financed our operations primarily through public and private stock offerings, payments received under collaboration agreements and interest earned on our investments. We intend to continue to use our capital resources to fund research and development activities, capital expenditures, working capital requirements and other general corporate purposes. As of June 30, 2018, cash and cash equivalents were $9.6 million.

On February 8, 2018, we entered into Capital on Demand™ Sales Agreement with JonesTrading. In accordance with the terms of the sales agreement, we are able to offer and sell up to $16.9 million of shares of our common stock, from time to time in one or more public offerings of our common stock, with JonesTrading acting as agent, in transactions pursuant to a shelf registration statement that was declared effective by the SEC on July 31, 2017. We sold 300,000 shares of our common stock in the open market for net proceeds of $1.9 million through June 30, 2018,

in the Capital on Demand™ program. As of July 24, 2018, we had up to $14.7 million of shares of our common stock available for sale under the Capital on Demand™ Sales Agreement.

Net cash used in operating activities was $2.8 million and $4.7 million for the six months ended June 30, 2018 and 2017, respectively. The decrease was primarily due to a reduction in R&D expenses and the timing changes in other balance sheet accounts.

Net cash provided by investing activities during the six months ended June 30, 2017 was $2.1 million. All marketable securities were sold in Q1 2017 and were not re-invested during Q2 2018 resulting in all amounts held in cash and cash equivalents.

Net cash provided by financing activities during the six months ended June 30, 2018 was $1.9 million. Cash provided in 2018 was primarily related to sale common stock, net of issuance costs in Capital on Demand™ transactions.

Realization of our other deferred tax assets is dependent on future earnings, if any. We are uncertain about the timing and amount of any future earnings. Accordingly, we offset these net deferred tax assets with a valuation allowance.

We have a non-cancelable operating lease for approximately 6,000 square feet of office space in Austin, Texas that expires in December 2020. Minimum lease payments are as follows (in thousands):

	2018	2019	2020	Total
Minimum lease payments	$ 91	$ 95	$ 99	$ 285

We have license agreements that require us to make milestone payments upon the successful achievement of milestones, including clinical milestones. Our license agreements also require us to pay certain royalties to our licensors if we succeed in fully commercializing products under these license agreements. All of these potential future payments are cancelable as of June 30, 2018. Our formulation agreement with Durect obligates us to make certain milestone payments upon achieving clinical milestones and regulatory milestones and pay royalties on related drug sales.

Our employees have Performance Awards that vest upon certain conditions. If these Performance Awards vest, we may issue the employees shares of our common stock net of statutory employment taxes. This net issuance would result in fewer shares of common stock issued and uses our cash to pay these taxes on behalf of employees. The use

of cash could be higher or lower, depending on the fair value of our common stock on the date the Performance Awards vest.

We have an accumulated deficit of $162 million at June 30, 2018. We expect our cash requirements to be significant in the future. The amount and timing of our future cash requirements will depend on regulatory and market acceptance of our drug candidates, the resources we devote to researching and developing, formulating, manufacturing, commercializing and supporting our products and other corporate needs. We believe that our current resources should be sufficient to fund our operations for at least the next 12 months. We may seek additional future funding through public or private financing within this timeframe, if such funding is available and on terms acceptable to us.

Off-balance Sheet Arrangements

As of June 30, 2018, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. In addition, we do not engage in trading activities involving non-exchange traded contracts. Therefore, we are not materially exposed to financing, liquidity, market or credit risk that could arise if we had engaged in these relationships. We do not have relationships or transactions with persons or entities that derive benefits from their non-independent relationship with us or our related parties.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

The primary objective of our cash investment activities is to preserve principal while at the same time maximizing the income we receive from our investments without significantly increasing risk. Some of the securities that we invest in may be subject to market risk. This means that a change in prevailing interest rates may cause the principal amount of the investment to fluctuate. For example, if we hold a security that was issued with a fixed interest rate at the then-prevailing rate and the interest rate later rises, we expect the fair value of our investment will decline. A hypothetical 50 basis point increase in interest rates would not affect the fair value of securities at June 30, 2018. To minimize risk, we intend to maintain our portfolio of cash equivalents and marketable securities in a variety of securities, including commercial paper, government and non-government debt securities and/or money market funds that invest in such securities. We are not aware of holdings of derivative financial or commodity instruments.

As of June 30, 2018, our investments consisted of money market accounts with variable market rates of interest. We believe our credit risk is immaterial. We measure our cash equivalents and marketable securities at fair value on a recurring basis and have significant observable inputs where there are identical or comparable assets in the market to use in establishing our fair value measurements. We use significant observable inputs that include but are not limited to benchmark yields, reported trades, broker/dealer quotes and issuer spreads. We consider these inputs to be Level 2 inputs. Generally, the types of instruments we invest in are not traded on a market such as the Nasdaq Global Market, which we would consider to be Level 1 inputs. We do not have any investments that would require inputs considered to be Level 3. We use the bid price to establish fair value where a bid price is available.

Item 4. Controls and Procedures

Evaluation of disclosure controls and procedures. Our management evaluated, with the participation of our Chief Executive Officer, the effectiveness of our disclosure controls and procedures as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on this evaluation, our Chief Executive Officer (as Principal Executive Officer and Principal Financial Officer) has concluded that our disclosure controls and procedures are effective to ensure that information we are required to disclose in reports that we file or submit under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission (the “SEC”) rules and forms and that such information is accumulated and communicated to management as appropriate to allow timely decisions regarding required disclosures.

Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of June 30, 2018, our Chief Executive Officer (as Principal Executive Officer and Principal Financial Officer) concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in internal control over financial reporting. There has been no change in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) identified during the six months ended June 30, 2018 that has material affected, or is reasonable likely to materially affect, our internal control over financial reporting.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings

None.

Item 1A. Risk Factors

Investing in our common stock involves a high degree of risk.

You should carefully consider the risks described below, as well as all other information, including our financial statements, the notes thereto and the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations." If any of the following risks occur, our business, financial condition, operating results, prospects and ability to accomplish our strategic objectives could be materially harmed. As a result, the trading price of our common stock could quickly decline by a material amount, and you could lose all or part of your investment.

Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations and the market price of our common stock.

Clinical and Regulatory Risks

Our success depends in large part on receiving FDA approval for our lead product, REMOXY.

To date, we have invested substantial resources in the development of our lead product, REMOXY. Despite these investments, the REMOXY NDA received CRLs from the FDA in 2008, 2011 and 2016 indicating our drug was not yet ready for approval. Collectively, these CRLs have resulted in long delays to product revenue; sudden, severe and prolonged drops in our stock price; loss of our initial competitive advantages in the market for abuse-deterrent opioid drugs; and dwindling cash balances. Accordingly, we cannot assure you that we will be able to receive FDA approval for REMOXY, or successfully commercialize this drug candidate. If we cannot do so, or are significantly delayed in doing so, our business will be materially harmed, and we may not be able to survive as a business.

A recent FDA Advisory Committee meeting voted substantially against the regulatory approval of REMOXY.

The FDA held an Advisory Committee meeting ("Meeting") on June 26, 2018, to discuss the REMOXY NDA. At the conclusion of the Meeting, members of the Committee voted 14-to-3 against regulatory approval of REMOXY. In addition, during the Meeting, the FDA expressed an opinion that current data for REMOXY may not support label claims against the injection and inhalation routes of abuse. At its sole discretion, the FDA may or may not follow the Advisory Committee's recommendation. Accordingly, we cannot assure you that REMOXY will receive FDA approval for REMOXY, or, if REMOXY is approved, that the product will receive a favorable label claims on abuse deterrence.

The FDA may not approve product labeling for REMOXY that would permit us to market and promote this drug in the United States by describing their abuse-deterrent features.

There can be no assurance that REMOXY will receive final FDA-approved product labeling that adequately describes its abuse deterrent features. We have invested substantial time and money conducting abuse deterrence studies to ensure that REMOXY complies with the FDA's guidance regarding opioid abuse deterrence. If the FDA does not approve product labeling containing abuse deterrence claims for REMOXY, we will not be able to promote REMOXY based on its abuse deterrent features and may not be able to differentiate our drug from other opioid products containing the same active pharmaceutical ingredients. This would make REMOXY less competitive, or even un-competitive, in the market. Furthermore, the FDA's April 2015 final guidance on abuse deterrent opioids expects sponsors to compare their formulations against approved abuse deterrent versions of the same opioid based on the relevant categories of testing. If the FDA decides that REMOXY is less resistant to manipulation than an approved product, our lead drug candidate may not be approved or may lack product labeling containing abuse deterrence claims

Even if REMOXY is approved for marketing with certain abuse-deterrence claims, the April 2015 final FDA guidance on abuse-deterrent opioids is not binding law and may be superseded or modified at any time. Also, if the FDA determines that our post-marketing data do not demonstrate that REMOXY's abuse-deterrent properties do in fact result in reduction of abuse, or demonstrate a shift to routes of abuse that present a greater risk, the FDA may find that product labeling revisions are needed, and potentially may require the removal of any abuse-deterrence claims.

If we fail to obtain the necessary regulatory approvals, or if such approvals are limited, we and our collaborators will not be allowed to commercialize our drug candidates, and we will not generate product revenues.

Satisfaction of all regulatory requirements for commercialization of a drug candidate typically takes many years, is dependent upon the type, complexity and novelty of the drug candidate, and requires the expenditure of substantial resources for research and development. In December 2008, we received from the FDA a CRL for the REMOXY NDA. In this CRL, the FDA indicated that additional non-clinical data was required to support the approval of REMOXY. However, the FDA did not request or recommend additional clinical efficacy studies prior to approval. In March 2009, King Pharmaceuticals ("King") assumed sole responsibility for the regulatory approval of REMOXY. In December 2010, King resubmitted the NDA for REMOXY. In June 2011, we and Pfizer announced that King received a CRL from the FDA in response to King's resubmission of the REMOXY NDA. The FDA's CRL raised concerns related to, among other matters, the Chemistry, Manufacturing, and Controls section of the NDA for REMOXY. Certain drug lots showed inconsistent release performance during in vitro testing. Pfizer completed work designed to address the June 2011 CRL. On April 21, 2015, we announced that we resumed responsibility for REMOXY under the terms of a letter agreement with Pfizer. The letter agreement was entered into within the scope of the previously disclosed provisions of the Collaboration Agreement between us and Pfizer relating to the return of REMOXY.

We believe Pfizer has now transferred to us its data, materials, capital equipment and other assets related to REMOXY. Pfizer and the FDA had discussed and agreed to a regulatory plan to refile the NDA for REMOXY. The FDA had agreed that we may follow this plan for the NDA for REMOXY.

In March 2016, we resubmitted to the FDA the NDA for REMOXY. In April 2016, the FDA determined that the NDA for REMOXY was sufficiently complete to permit a substantive review. On May 19, 2016, we announced that the FDA planned to hold an Advisory Committee meeting to review the NDA for REMOXY. On July 1, 2016, we announced that the FDA had determined that an Advisory Committee meeting for REMOXY was unnecessary and would not be held.

In September 2016, we received a CRL from the FDA on the resubmission of NDA for REMOXY. The CRL informed us that the NDA for REMOXY could not be approved in its present form and specifies additional actions and data that are needed for drug approval. The CRL focuses on the abuse-deterrent properties of REMOXY and proposed drug labeling.

On February 13, 2017, we met with the FDA regarding REMOXY. During this meeting, we reached agreement with the FDA on a roadmap to resubmit the NDA for REMOXY. Final minutes of our FDA meeting confirmed two key requirements needed for the resubmission of the REMOXY NDA: a) to conduct a clinical abuse potential study via the intranasal route of abuse; and b) to conduct a non-clinical abuse potential study using household solvents.

During 2017, we conducted these mandated studies with REMOXY. In November 2017, we concluded a regulatory meeting with the FDA. The purpose of this pre-NDA meeting was to agree on submission requirements for the REMOXY NDA under 505(b)(2) of the Federal Food, Drug, and Cosmetic Act. We received comments and clarification from the FDA on the acceptability of the data to be included in the REMOXY NDA resubmission, including a recent intranasal study. All questions were addressed and summarized in official minutes of the meeting issued by the FDA. There are no discrepancies or requests for clarifications following receipt of final meeting minutes. As a result, we resubmitted the REMOXY NDA in the first quarter of 2018 with Priority (six-month) review. The REMOXY NDA was subsequently accepted by the FDA and was assigned a PDUFA date of August 7, 2018.

There can be no assurance that the FDA will approve an NDA for REMOXY or that the FDA will not require submission of additional clinical or non-clinical data. Obtaining data from such studies (even if completed) that is insufficient to support approval of REMOXY or any adverse decisions by the FDA (including any decision by the FDA to require additional clinical or non-clinical data) may significantly delay or prevent the potential approval of REMOXY.

Our research and clinical approaches may not lead to drugs that the FDA considers safe for humans and effective for indicated uses we are studying. The FDA may require additional studies, in which case we or our collaborators would have to expend additional time and resources and would likely delay the date of potentially receiving regulatory approval. The approval process may also be delayed by changes in government regulation, future legislation or administrative action or changes in FDA policy that occur prior to or during our regulatory review. Delays in obtaining regulatory approvals would:

- delay commercialization of, and product revenues from, our drug candidates; and
- diminish the competitive advantages that we may have otherwise enjoyed, which would have an adverse effect on our operating results and financial condition.

Even if we or our collaborators comply with all FDA regulatory requirements, our drug candidates may never obtain regulatory approval. If we or our collaborators fail to obtain regulatory approval for any of our drug candidates we will have fewer commercial products, if any, and corresponding lower product revenues, if any. Even if our drug candidates receive regulatory approval, such approval may involve limitations on the indications and conditions of use or marketing claims for our products. Further, later discovery of previously unknown problems or adverse events could result in additional regulatory restrictions, including withdrawal of products. The FDA may also require us or our collaborators to commit to perform lengthy Phase IV post-approval clinical efficacy or safety studies. Our expending additional resources on such trials would have an adverse effect on our operating results and financial condition.

In jurisdictions outside the United States, we must receive marketing authorizations from the appropriate regulatory authorities before commercializing our drugs. Regulatory approval processes outside the United States generally include all of the aforementioned requirements and risks associated with FDA approval.

If we are unable to design, conduct and complete preclinical and clinical trials successfully, our drug candidates will not be able to receive regulatory approval.

In order to obtain FDA approval for any of our drug candidates, we must submit to the FDA an NDA that demonstrates with substantive evidence that the drug candidate is both safe and effective in humans for its intended use. This demonstration requires significant research and animal tests, which are referred to as preclinical studies, as well as human tests, which are referred to as clinical trials.

Preclinical studies may not provide results we believe are sufficient to support the filing of an IND. Success in early preclinical studies does not ensure success in later preclinical or clinical studies. The FDA may disagree with the design of our preclinical studies or our interpretations of data from preclinical studies. The FDA may not accept an IND for our product candidate and may require additional preclinical studies to support the filing of an IND.

Success in preclinical studies and early clinical trials does not ensure that later clinical trials will be successful. Results from Phase I clinical programs may not support moving a drug candidate to Phase II or Phase III clinical

trials. Phase III clinical trials may not demonstrate the safety or efficacy of our drug candidates. Results of later clinical trials may not replicate the results of prior clinical trials and preclinical studies. Even if the results of Phase III clinical trials are positive, we or our collaborators may have to commit substantial time and additional resources to conducting further preclinical studies and clinical trials before obtaining FDA approval for any of our drug candidates.

Clinical trials are very expensive and difficult to design and implement, in part because they are subject to rigorous requirements. The clinical trial process also consumes a significant amount of time. Furthermore, if patients in clinical trials suffer drug-related adverse reactions during the course of such clinical trials, or if we, our collaborators or the FDA believe that participating patients are being exposed to unacceptable health risks, such clinical trials will have to be suspended or terminated. Failure can occur at any stage of the clinical trials, and we or our collaborators could encounter problems that cause abandonment or repetition of clinical trials.

Clinical trials with REMOXY and our potential future clinical trials for other drug candidates for treatment of pain measure clinical symptoms, such as pain and physical dependence, that are not biologically measurable. The success in these clinical trials depends on reaching statistically significant changes in patients' symptoms based on clinician-rated scales. Due in part to a lack of consensus on standardized processes for assessing clinical outcomes, these scores may or may not be reliable, useful or acceptable to regulatory agencies.

In addition, completion of clinical trials can be delayed by numerous factors, including:

- delays in identifying and agreeing on acceptable terms with prospective clinical trial sites;
- slower than expected rates of patient recruitment and enrollment;
- unanticipated patient dropout rates;
- increases in time required to complete monitoring of patients during or after participation in a clinical trial; and
- unexpected need for additional patient-related data.

Any of these delays could significantly impact the timing, approval and commercialization of our drug candidates and could significantly increase our overall costs of drug development.

Even if clinical trials are completed as planned, their results may not support expectations or intended marketing claims. The clinical trials process may fail to demonstrate that our drug candidates are safe and effective for indicated uses. Such failure would cause us to abandon a drug candidate and could delay development of other drug candidates.

Clinical trial designs that were discussed with regulatory authorities prior to their commencement may subsequently be considered insufficient for approval at the time of application for regulatory approval.

We discuss with and obtain guidance from regulatory authorities on certain of our clinical development activities. With the exception of our Special Protocol Assessment (SPA), these discussions are not binding obligations on the part of regulatory authorities.

Regulatory authorities may revise previous guidance or decide to ignore previous guidance at any time during the course of our clinical activities or after the completion of our clinical trials. Even with successful clinical safety and efficacy data, including such data from a clinical trial conducted pursuant to a SPA, we or our collaborators may be required to conduct additional, expensive clinical trials to obtain regulatory approval.

Developments by competitors may establish standards of care that affect our ability to conduct our clinical trials as planned.

We have conducted clinical trials of our drug candidates comparing our drug candidates to both placebo and other approved drugs. Changes in standards related to clinical trial design could affect our ability to design and conduct clinical trials as planned. For example, regulatory authorities may not allow us to compare our drug candidates to placebo in a particular clinical indication where approved products are available. In that case, both the cost and the amount of time required to conduct a clinical trial could increase.

The U.S. Drug Enforcement Agency ("DEA") limits the availability of the active ingredients in certain of our current drug candidates and, as a result, quotas for these ingredients may not be sufficient to complete clinical trials, or to meet commercial demand, or may result in clinical delays.

The DEA regulates chemical compounds as Schedule I, II, III, IV or V substances, with Schedule I substances considered to present the highest risk of substance abuse and Schedule V substances the lowest risk. Certain active ingredients in our current drug candidates, such as oxycodone, are listed by the DEA as Schedule II under the Controlled Substances Act of 1970. Consequently, their manufacture, research, shipment, storage, sale and use are subject to a high degree of oversight and regulation. For example, all Schedule II drug prescriptions must be signed by a physician, physically presented to a pharmacist and may not be refilled without a new prescription. Furthermore, the amount of Schedule II substances that can be obtained for clinical trials and commercial distribution is limited by the DEA and quotas for these substances may not be sufficient to complete clinical trials or meet commercial demand. There is a risk that DEA regulations may interfere with the supply of the drugs used in clinical trials for our product candidates, and, in the future, the ability to produce and distribute our products in the volume needed to meet commercial demand.

Conducting clinical trials of our drug candidates or potential commercial sales of a drug candidate may expose us to expensive product liability claims, and we may not be able to maintain product liability insurance on reasonable terms or at all.

The risk of product liability is inherent in the testing of pharmaceutical products. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit or terminate testing of one or more of our drug candidates. Our inability to obtain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of our drug candidates. We currently carry clinical trial insurance but do not carry product liability insurance. If we successfully commercialize one or more of our drug candidates, we may face product liability claims, regardless of FDA approval for commercial manufacturing and sale. We may not be able to obtain such insurance at a reasonable cost, if at all. Even if our agreements with any current or future corporate collaborators entitle us to indemnification against product liability losses, such indemnification may not be available or adequate should any claim arise.

If our drug candidates receive regulatory approval, we and our collaborators will be subject to ongoing FDA obligations and continued regulatory review, such as continued safety reporting requirements, and we and our collaborators may also be subject to additional FDA post-marketing obligations or new regulations, all of which may result in significant expense and limit our and our collaborators' ability to commercialize our potential drugs.

Any regulatory approvals that our drug candidates receive may also be subject to limitations on the indicated uses for which the drug may be marketed or contain requirements for potentially costly post-marketing follow-up studies. In addition, if the FDA approves any of our drug candidates, the labeling, packaging, adverse event reporting, storage, advertising, promotion and record keeping for the drug will be subject to extensive regulatory requirements. The subsequent discovery of previously unknown problems with the drug, including but not limited to adverse events of unanticipated severity or frequency, or the discovery that adverse events previously observed in preclinical research or clinical trials that were believed to be minor actually constitute much more serious problems, may result in restrictions on the marketing of the drug, and could include withdrawal of the drug from the market.

The FDA's policies may change and additional government regulations may be enacted that could prevent or delay regulatory approval of our drug candidates. We cannot predict the likelihood, nature or extent of adverse government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are not able to maintain regulatory compliance, we may be subject to fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution. Any of these events could prevent us from marketing our drugs and our business could suffer.

We may not be able to successfully develop or commercialize FENROCK™, a proprietary abuse-deterrent transdermal pain patch (fentanyl), designed to prevent common methods of abuse of fentanyl.

We have no history of developing transdermal patches. We do not know whether any of our planned development activities for FENROCK will result in approval of such drug candidate by the FDA, or, if FENROCK is approved, it will be a commercially viable product.

We may not be able to successfully develop or commercialize PTI-125, a proprietary drug candidate to treat Alzheimer's disease.

We have no history of developing treatment for AD. The biopharmaceutical industry as a whole has a poor track record in developing drugs for AD. Drug candidates aimed at AD have almost universally failed in every attempt to show late-stage efficacy in clinical studies. We do not know whether any of our planned development activities for AD will result in approval of such drug candidate by the FDA, or, if PTI-125 is approved, it will be a commercially viable product.

We may not be able to successfully develop or commercialize PTI-125DX, a blood-based test to detect Alzheimer's disease.

We have no history of developing diagnostics. The biopharmaceutical industry as a whole has a poor track record in developing blood-based diagnostics for AD. Diagnostics aimed at detecting AD have almost universally failed in

large studies despite evidence of success in early testing. We do not know whether any of our planned development activities for AD will result in approval of a diagnostic by the FDA, or, if PTI-125DX is approved, it will be a commercially viable product.

Risks Relating to our Collaboration Agreements

If Pfizer did not transfer to us all data and documentation or the quality of the data and documentation transferred is insufficient, our ability to achieve approval of the NDA for REMOXY will be negatively impacted and our business will suffer.

In April 2015, we announced that we resumed responsibility for REMOXY under the terms of a letter agreement with Pfizer. The letter agreement was entered into within the scope of the previously disclosed provisions of the Collaboration Agreement between us and Pfizer relating to the return of REMOXY.

We believe Pfizer has transferred to us data, materials, capital equipment and other assets related to REMOXY. In preparing to resubmit the NDA for REMOXY, we may find that there are additional data, materials or agreements that Pfizer should have transferred to us. If Pfizer did not meet its obligations to transfer all such materials or if the quality of the data and documentation transferred is insufficient, we would be significantly delayed in our ability to achieve FDA approval of the NDA for REMOXY, and may need to conduct further development activities or clinical trials to prepare any potential resubmission. As a result, any further development, regulatory approval and product introduction for REMOXY would be delayed or prevented and our business would suffer.

If outside collaborators fail to devote sufficient time and resources to drug development programs related to our product candidates, or to the manufacture of our products, or if their performance is substandard, regulatory submissions and introductions for our products may be delayed.

We rely on Durect as the sole-source provider of certain components of REMOXY. Durect’s failure for any reason to provide these components could result in delays or failures in product testing or delivery, cost overruns or other problems that could materially harm our business.

We depend on independent investigators and collaborators, such as universities and medical institutions, to conduct our clinical trials under agreements with us. These investigators and collaborators are not our employees, and we cannot control the amount or timing of resources that they devote to our programs. They may not assign as great a priority to our programs or pursue them as diligently as we would if we were undertaking such activities ourselves. If these investigators or collaborators fail to devote sufficient time and resources to our drug development programs, or

if their performance is substandard, the approval of our regulatory submissions and our introductions of new drugs will be delayed or prevented.

Our collaborators may also have relationships with other commercial entities, some of which may compete with us. If outside collaborators assist our competitors to our detriment, the approval of our regulatory submissions will be delayed and the sales from our products, if any are commercialized, will be less than expected.

If we fail to enter into or maintain collaboration agreements and licenses for REMOXY and other drugs designed to reduce potential risks of unintended use, we may have to reduce or delay our drug candidate development.

Our plan for developing, manufacturing and commercializing REMOXY currently requires us to successfully maintain our license from Durect. If we are unable to meet the obligations necessary to maintain our license with Durect for one or more potential products we may lose the rights to utilize Durect's technology for such potential products, our potential future revenues may suffer and we may have to reduce or delay development of our other drug candidates. In addition, we expect to seek a new corporate collaborator with respect to REMOXY. If we do not enter into a new collaboration with respect to the continued development and potential commercialization of REMOXY, we will be required to undertake and fund such activities ourselves and may need to seek additional capital (which may not be available on acceptable terms, if at all), personnel or other resources. If we are not successful in such efforts, development and commercialization of REMOXY and our other drug candidates would be delayed or prevented, and our business would suffer.

We may not succeed at in-licensing drug candidates or technologies to expand our product pipeline.

We may not successfully in-license drug candidates or technologies to expand our product pipeline. The number of such candidates and technologies is limited. Competition among large pharmaceutical companies and biopharmaceutical companies for promising drug candidates and technologies is intense because such companies generally desire to expand their product pipelines through in-licensing. If we fail to carry out such in-licensing and expand our product pipeline, our potential future revenues may suffer.

Our collaborative agreements may not succeed or may give rise to disputes over intellectual property, disputes concerning the scope of collaboration activities or other issues.

Our collaborative agreements with third parties, such as our license agreement with Durect, are generally complex and contain provisions that could give rise to legal disputes, including potential disputes concerning ownership of intellectual property under collaborations or disputes concerning the scope of collaboration activities. Such disputes can delay or prevent the development of potential new drug products, or can lead to lengthy, expensive litigation or arbitration. Other factors relating to collaborative agreements may adversely affect our business, including:

- the development of parallel products by our collaborators or by a competitor;
- arrangements with collaborative partners that limit or preclude us from developing certain products or technologies;
- premature termination of a collaborative or license agreement; or
- failure by a collaborative partner to provide required funding, to devote sufficient resources to the development of or legal defense of our potential products or to provide data or other information to us as required by our collaborative agreements.

Risks Relating to Commercialization

We currently have no in-house capabilities to manufacture or commercialize our drug products. If we are unable to develop our own manufacturing, sales, marketing and distribution capabilities, or if we are not successful in contracting with third parties for these services on favorable terms, or at all, our product revenues could be disappointing.

We currently rely on Mallinckrodt as the sole manufacturer for REMOXY and commercialization of REMOXY is dependent on continuation of such relationship. Disputes in the past have arisen with Mallinckrodt with respect to us fulfilling our obligations under the Mallinckrodt Agreement. There can be no guarantee that such disputes will not arise again in the future, which may lead to Mallinckrodt terminating the Mallinckrodt Agreement. If the Mallinckrodt Agreement is terminated, we would not be able to commercialize REMOXY until another manufacturer is identified

and we have entered into a manufacturing agreement with such manufacturer. If we are required to replace Mallinckrodt as the manufacturer of REMOXY, it is likely to delay commercialization of REMOXY for an extended period of time.

We currently have no sales, marketing or distribution capabilities. We have not established commercial strategies regarding any of our product candidates, including REMOXY. In order to commercialize our products, if any are approved by the FDA, we will either have to develop such capabilities internally or collaborate with third parties who can perform these services for us.

If we decide to commercialize any of our drugs ourselves, we may not be able to

- hire and retain the necessary experienced personnel;
- build sales, marketing and distribution operations in a cost-effective manner which are capable of successfully launching new drugs;
  - obtain access to adequate numbers of physicians to prescribe our products; or
- generate sufficient product revenues.

In addition, establishing such operations on our own will take time and involve significant expense. If our commercial operations lack complementary products, we may not be able to compete in a cost-effective manner with competitors with more products to sell. If we engage third-party collaborators to perform any commercial operations, our future revenues may depend significantly upon the performance of those collaborators.

If we decide to enter into new co-promotion or other licensing arrangements with third parties, we may be unable to locate acceptable collaborators because the number of potential collaborators is limited and because of competition from others for similar alliances with potential collaborators. Even if we are able to identify one or more acceptable new collaborators, we may not be able to enter into any collaborative arrangements on favorable terms, or at all.

In addition, due to the nature of the market for our drug candidates, it may be necessary for us to license all or substantially all of our drug candidates to a single collaborator, thereby eliminating our opportunity to commercialize these other products independently. If we enter into any such new collaborative arrangements, our revenues are likely to be lower than if we marketed and sold our products ourselves.

In addition, any revenues we receive would depend upon our collaborators' efforts which may not be adequate due to lack of attention or resource commitments, management turnover, change of strategic focus, business combinations or other factors outside of our control. Depending upon the terms of our collaboration, the remedies we have against an under-performing collaborator may be limited. If we were to terminate the relationship, it may be difficult or impossible to find a replacement collaborator on acceptable terms, or at all.

If physicians and patients do not accept and use our drugs, we will not achieve sufficient product revenues and our business will suffer.

Even if the FDA approves our drugs, physicians and patients may not accept and use them. Acceptance and use of our drugs will depend on a number of factors including:

- when the drug is launched into the market and related competition;
- approved label claims;
- perceptions by members of the healthcare community, including physicians, about the safety and effectiveness of our drugs, and, in particular, the effectiveness of REMOXY in reducing potential risks of unintended use;
- perceptions by physicians regarding the cost benefit of REMOXY in reducing potential risks of unintended use;
- published studies demonstrating the cost-effectiveness of our drugs relative to competing products;
- availability of reimbursement for our products from government or healthcare payers;
- our or our collaborators' ability to implement a risk management plan prior to the distribution of any Schedule II drug; and
- effectiveness of marketing and distribution efforts by us and other licensees and distributors.

Because we expect to rely on sales generated by our current lead drug candidates for substantially all of our revenues for the foreseeable future, the failure of any of these drugs to find market acceptance would harm our business and could require us to seek additional financing.

The science of abuse-deterrence is relatively new.

The analytical, clinical, and statistical methods for evaluating abuse-deterrent technologies and study results are new and rapidly evolving. Although we believe the FDA will take a flexible, adaptive approach to the evaluation and labeling of potentially abuse-deterrent products, such as REMOXY, we cannot be certain that our interpretation of abuse-deterrent data for REMOXY is consistent with the views of the FDA. In our opinion, the FDA has limited data correlating the potentially abuse-deterrent properties of certain opioid drug products, such as REMOXY, with actual reduction in abuse or adverse events associated with abuse. In addition, the FDA has stated it is not able to provide

specific guidance on the magnitude of effect that would be sufficient to support any particular type of label claim for abuse-deterrence.

Our ability to market and promote REMOXY and its abuse-deterrent features will be determined by FDA-approved labeling.

The commercial success of REMOXY and certain of our other product candidates will depend upon our ability to obtain FDA-approved labeling describing their abuse-deterrent features. Our failure to achieve FDA approval of product labeling containing such information will prevent us from advertising and promoting the abuse-deterrent features of our product candidates in order to differentiate them from other similar products. This would make our products less competitive in the market. The FDA held an Advisory Committee meeting ("Meeting") on June 26, 2018, to discuss the REMOXY NDA. During the Meeting, the FDA expressed an opinion that current data for REMOXY may not support label claims against the injection and inhalation routes of abuse.

Abuse-deterrent label claims for REMOXY may not be broad enough to demonstrate a substantial benefit to health care providers and patients.

FDA approval is required in order to make claims that a product has an abuse-deterrent effect. In April 2015, the FDA published final guidance with regard to the evaluation and labeling of abuse-deterrent opioids. The guidance provides direction as to the studies and data required for obtaining abuse-deterrent claims in a product label. FDA guidance describes three categories of pre-market studies that may lead to an abuse-deterrent claim:

Category 1 – laboratory manipulation and extraction studies;

Category 2 – pharmacokinetic studies; and

Category 3 – human abuse potential studies.

According to the FDA guidance, label claims for abuse-deterrence should describe the product's specific abuse-deterrent properties as well as the specific routes of abuse that the product has been developed to deter. When data predict or show that a product's potentially abuse-deterrent properties can be expected to, or actually do, result in a significant reduction in that product's abuse potential, these data, together with an accurate characterization of what the data mean, may be included in product labeling.

If a product is approved by the FDA to include such claims in its label, the applicant may use the approved labeling information about the abuse-deterrent features of the product in its marketing efforts to physicians.

Although we intend to provide data to the FDA to support approval of abuse-deterrence label claims for REMOXY, there can be no assurance that REMOXY or any of our other product candidates will receive FDA-approved labeling that describes the abuse-deterrent features of such products. The FDA may find that our studies and data do not support abuse-deterrent labeling or that our product candidates do not provide substantial abuse-deterrence because, for example, their deterrence mechanisms do not address the way they are most likely to be abused. Further, the FDA is not required to follow its guidance and could change this guidance, which could require us to conduct additional studies or generate additional data. If the FDA does not approve abuse-deterrent labeling, we will not be able to promote such products based on their abuse-deterrent features and our business may suffer.

Even if we do receive FDA approval for abuse-deterrent claims, the claims may not be broad enough to demonstrate a substantial benefit to health care providers and patients. For instance, the claims may not encompass the more common forms of abuse for products like our product candidates. Moreover, continued investigation in Phase IV studies following product approval, if required, is expensive and may not support the continued use of abuse-deterrent claims.

If we cannot compete successfully for market share against other drug companies, we may not achieve sufficient product revenues and our business will suffer.

The market for our drug candidates is characterized by intense competition and rapid technological advances. If our drug candidates receive FDA approval, they will compete with a number of existing and future drugs and therapies developed, manufactured and marketed by others. Existing or future competing products may provide greater therapeutic convenience or clinical or other benefits for a specific indication than our products, or may offer

comparable performance at a lower cost. If our products are unable to capture and maintain market share, we may not achieve sufficient product revenues and our business will suffer.

We and our collaborators will compete for market share against fully integrated pharmaceutical companies or other companies that are collaborating with larger pharmaceutical companies, academic institutions, government agencies and other public and private research organizations. Many of these competitors have drugs already approved or drug candidates in development that will or may compete against our approved drug candidates. In addition, many of these competitors, either alone or together with their collaborative partners, operate larger research and development programs and have substantially greater financial resources than we do, as well as significantly greater experience in:

- developing drugs;
- conducting preclinical testing and human clinical trials;
- obtaining FDA and other regulatory approvals of drugs;
- formulating and manufacturing drugs; and
- launching, marketing, distributing and selling drugs.

If we fail to obtain acceptable prices or an adequate level of reimbursement for our products from healthcare payers, our ability to generate product revenues will be diminished.

Our ability to commercialize drugs we (alone or with other collaborators) may develop will depend in part on the extent to which reimbursement can be obtained for such drugs from:

- government and health administration authorities;
- private health maintenance organizations and health insurers; and
- other healthcare payers.

Significant uncertainty exists as to the reimbursement status of newly approved healthcare products. Healthcare payers, including Medicare, health maintenance organizations and managed care organizations, are challenging the prices charged for medical products and services and/or are seeking pharmacoeconomic data to justify formulary acceptance and reimbursement practices. We currently have not generated pharmacoeconomic data on any of our drug candidates. Government and other healthcare payers increasingly are attempting to contain healthcare costs by limiting both coverage and the level of reimbursement for drugs, and by refusing, in some cases, to provide coverage for uses of approved products for disease indications for which the FDA has or has not granted labeling approval. Adequate third-party insurance coverage may not be available to patients for any products we discover and develop, alone or with collaborators. If government and other healthcare payers do not provide adequate coverage and reimbursement levels for our products, market acceptance of our drug candidates could be limited.

Enacted and future legislation may increase the difficulty and cost for us to commercialize our product candidates and may reduce the prices we are able to obtain for our product candidates.

Legislative and regulatory changes and future changes regarding the healthcare system could prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities or affect our ability to profitably sell any product candidates for which we obtain marketing approval.

In the United States, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (the "Medicare Modernization Act") established the Medicare Part D program and provided authority for limiting the number of drugs that will be covered in any therapeutic class thereunder. The Medicare Modernization Act, including its cost reduction initiatives, could limit the coverage and reimbursement rate that we receive for any of our approved products. Private payors may follow Medicare coverage policies and payment limitations in setting their own reimbursement rates resulting in similar limits in payments from private payors.

The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or collectively, the Affordable Care Act, among other things, imposes a significant annual fee on companies that manufacture or import branded prescription drug products. It also contains substantial provisions intended to, among other things, broaden access to health insurance, reduce or constrain the growth of health care spending, enhance

remedies against healthcare fraud and abuse, add new transparency requirements for the healthcare and health insurance industries, and impose additional health policy reforms, any of which could have a material adverse effect on our business. A significant number of provisions are not yet, or have only recently become, effective, but the Affordable Care Act may result in downward pressure on pharmaceutical pricing, especially under the Medicare program, and may also increase our regulatory burdens and operating costs.

The Affordable Care Act, as well as other healthcare reform measures that have been and may be adopted in the future, may result in more rigorous coverage criteria and in additional downward pressure on the price that we receive for any approved product, and could seriously harm our future revenues. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may compromise our ability to generate revenue, attain profitability or commercialize our products.

The Affordable Care Act is a highly complex piece of legislation that continues to evolve. We do not and cannot understand or anticipate the full impact and potential implications of the Affordable Care Act on our business or on our drugs.

Even if we are able to commercialize any of our product candidates, our products may become subject to unfavorable pricing regulations or third-party coverage and reimbursement policies, which could have a material adverse effect on our business.

Our ability to commercialize any products successfully will depend in part on the extent to which coverage and adequate reimbursement for these products and related treatments will be available from government health administration authorities, private health insurers and other organizations. Government authorities and third-party payors, such as private health insurers and health maintenance organizations, determine which medications they will cover and establish reimbursement levels. A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and other third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. We cannot be sure that coverage and reimbursement will be available for any product that we commercialize and, if reimbursement is available, what the level of reimbursement will be and whether it will be satisfactory. Coverage and reimbursement may impact the demand for, or the price of, any product candidate for which we obtain marketing approval. If coverage and reimbursement are not available or reimbursement is available only to limited levels, we may not be able to successfully commercialize any product candidate for which we obtain marketing approval.

There may be significant delays in obtaining coverage and reimbursement for newly approved drugs, and coverage may be more limited than the purposes for which the drug is approved by the FDA or foreign regulatory authorities. Moreover, eligibility for coverage and reimbursement does not imply that any drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. Interim reimbursement levels for new drugs, if applicable, may also be insufficient to cover our costs and may only be temporary.

Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost drugs and may be incorporated into existing payments for other services. Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement policies. Our inability to promptly obtain coverage and profitable reimbursement rates from both government-funded and private payors for any approved products that we develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize products and our overall financial condition.

Public concern over the abuse of opioids, including law enforcement concerns over diversion of opioid and regulatory efforts to combat abuse, could decrease the potential market for our product candidates.

Media stories regarding prescription drug abuse and the diversion of opioids and other controlled substances are commonplace. Law enforcement and regulatory agencies may apply policies that seek to limit the availability of opioids. Such efforts may inhibit our ability to commercialize our product candidates. Aggressive enforcement and

unfavorable publicity regarding, for example, the use or misuse of oxycodone or other opioid drugs; the limitations of ADFs; the ability of drug abusers to discover previously unknown ways to abuse our products; public inquiries and investigations into prescription drug abuse; litigation; or regulatory activity regarding sales, marketing, distribution or storage of opioid drugs could have a material adverse effect on our reputation. Such negative publicity could reduce the potential size of the market for our product candidates and decrease the revenues we are able to generate from their sale. To the extent opioid abuse becomes less prevalent or less urgent of a public health issue, regulators and third party payers may not be willing to pay a premium for ADFs of opioids.

Efforts by the FDA and other regulatory bodies to combat abuse of opioids may negatively impact the market for our product candidates. For example, on September 10, 2013, the FDA announced its intention to effect labeling changes to all approved long-acting opioid formulations. In particular, the FDA announced its intention to update the indication for long-acting opioid formulations so that long-acting opioid formulations will be indicated only for the management of pain severe enough to require daily, around-the-clock, long-term opioid treatment and for which alternative treatment options are inadequate. On April 16, 2014, the FDA updated these indications. It is possible that such changes could reduce the number of prescriptions for opioids written by physicians and negatively impact the potential market for our product candidates.

If the FDA or other applicable regulatory authorities approve generic products with abuse-deterrent claims that compete with any of our product candidates, it could reduce our sales of those product candidates.

Once an NDA, including a Section 505(b)(2) application, is approved, the product covered thereby becomes a "listed drug" which can, in turn, be cited by potential competitors in support of approval of an abbreviated NDA, or ANDA. Potential competitors may create modified, non-infringing versions of a drug to facilitate the approval of an ANDA or other application for generic substitutes. These competitors might only be required to conduct a relatively inexpensive study to show that their product has the same active ingredients, dosage form, strength, route of administration, and conditions of use, or labeling, as our products and that the generic product is absorbed in the body at the same rate and to the same extent as, or is bioequivalent to, our products. These generic equivalents would be significantly less costly than ours 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 products would substantially limit our ability to generate revenues and therefore to obtain a return on the investments we have made in our product candidates.

Our relationships with customers and payors will be subject to applicable anti-kickback, fraud and abuse, transparency, and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, exclusion from government healthcare programs, contractual damages, reputational harm, administrative burdens, and diminished profits and future earnings.

Healthcare providers, physicians and payors play a primary role in the recommendation and prescription of any product candidates for which we may obtain marketing approval. Our future arrangements with payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the

business or financial arrangements and relationships through which we market, sell and distribute any product candidates for which we may obtain marketing approval. Even though we do not and will not control referrals of healthcare services or bill directly to Medicare, Medicaid or other third-party payors, federal and state healthcare laws and regulations pertaining to fraud and abuse and patients' rights are and will be applicable to our business. Restrictions under applicable federal, state and foreign healthcare laws and regulations may affect our ability to operate and expose us to areas of risk, including:

- the federal Anti-Kickback Statute, which prohibits, among other things, knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under federal and state healthcare programs such as Medicare and Medicaid. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;
- the federal False Claims Act, which imposes criminal and civil penalties, including through civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false

statement to avoid, decrease or conceal an obligation to pay money to the federal government. In addition, the government may assert that a claim including items and services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act;

- the federal Health Insurance Portability and Accountability Act of 1996 ("HIPAA") which imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters. Similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute to defraud any healthcare benefit program or specific intent to violate it in order to have committed a violation;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 and its implementing regulations, which also imposes obligations on certain covered entity healthcare providers, health plans, and healthcare clearinghouses as well as their business associates that perform certain services involving the use or disclosure of individually identifiable health information, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;
- federal laws requiring drug manufacturers to report information related to payments and other transfers of value made to physicians and other healthcare providers, as well as ownership or investment interests held by physicians and their immediate family members, including under the federal Open Payments program, commonly known as the Sunshine Act, as well as other state and foreign laws regulating marketing activities; and
- state and foreign equivalents of each of the above laws, including state anti-kickback and false claims laws, which may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental payors, including private insurers; state laws which require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government or otherwise restricting payments that may be made to healthcare providers; and state and foreign laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. Nonetheless, it is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, imprisonment, exclusion from participation in government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations.

Government agencies may establish and promulgate usage guidelines that could limit the use of our drug candidates.

Government agencies, professional and medical societies, and other groups may establish usage guidelines that apply to our drug candidates. These guidelines could address such matters as usage and dose, among other factors. Application of such guidelines could limit the clinical use or commercial appeal of our drug candidates.

Risks Relating to our Intellectual Property

Our ability to commercialize our drug candidates will depend on our ability to sell such products without infringing the patent or proprietary rights of third parties. If we are sued for infringing the intellectual property rights of third parties, such litigation will be costly and time consuming and an unfavorable outcome would have a significant adverse effect on our business.

Our ability to commercialize our drug candidates will depend on our ability to sell such products without infringing the patents or other proprietary rights of third parties. Intellectual property rights in the areas of controlled-release technology and pharmaceutical ingredients are complicated and are continuously evolving. Holders of patent rights in these areas may allege that the commercialization of REMOXY or our other drug candidates infringes such

patent rights. While we believe that we would have valid defenses to any claim of infringement, there can be no assurance that these or other third-party patents will not limit our ability to commercialize REMOXY or our other drug candidates.

In addition, because patent applications are published sometime after filing, and because applications can take several years to issue, there may be currently pending third party patent applications that are unknown to us, which may later result in issued patents. If a third party claims that we infringe on its patents or other proprietary rights, we could face a number of issues that could seriously harm our competitive position, including:

- infringement claims that, with or without merit, can be costly and time consuming to litigate, can delay the regulatory approval process and can divert management's attention from our core business strategy;
- substantial damages for past infringement which we may have to pay if a court determines that our products or technologies infringe upon a competitor's patent or other proprietary rights;
- a court order prohibiting us from commercializing our products or technologies unless the holder licenses the patent or other proprietary rights to us, which such holder is not required to do;
- if a license is available from a holder, we may have to pay substantial royalties or grant cross licenses to our patents or other proprietary rights; and
- redesigning our process so that it does not infringe third party intellectual property rights, which may not be possible, or which may require substantial time and expense including delays in bringing our own products to market. Such actions could harm our competitive position and our ability to generate revenue and could result in increased costs.

If we are unable to protect our intellectual property, our competitors could develop and market products with similar features that may reduce demand for our drug candidates.

Our success, competitive position and potential future revenues will depend in part on our ability to protect our intellectual property. If we or our collaborators fail to file, prosecute, obtain or maintain certain patents, our competitors could market products that contain features and clinical benefits similar to those of our products, and demand for our products could decline as a result.

We and our collaborators have filed patent applications in the United States and select international jurisdictions to protect our intellectual property. The coverage sought in a patent application can be denied or significantly reduced before or after the patent is issued. Consequently, we do not know whether any of our pending applications will result in the issuance of patents, or if any existing or future patents will provide significant protection or commercial advantage or will be circumvented by others. There can be no assurance that patents will issue from our pending or future patent applications or, if issued, that such patents will be of commercial benefit to us, afford us adequate protection from competing products, or not be challenged or declared invalid. Thus, if these patent applications do not result in issued patents or result in a patent that is challenged by others, the duration or scope of our patent rights may be limited and our future revenues could be lower as a result.

We may be involved in challenges to our intellectual property. If our competitors are able to successfully challenge the validity or scope of our patent rights, based on the existence of prior art or otherwise, they might be able to market

products that contain features and clinical benefits similar to those of our drug candidates, and demand for our drug candidates could decline as a result. An adverse outcome of a challenge to our intellectual property could result in loss of claims of patents or other intellectual property rights that pertain to certain drugs we currently have under development and could have a material adverse impact on our future revenues.

We intend to file additional patent applications relating to our technology, products and processes. We may direct our collaborators to file additional patent applications relating to the licensed technology or we may do so ourselves. However, our competitors may challenge, invalidate or circumvent any of our current or future patents. These patents may also fail to provide us with meaningful competitive advantages.

We may become involved in expensive litigation or other legal proceedings related to our existing intellectual property rights, including patents.

We expect that we will rely upon patents, trade secrets, know-how, continuing technological innovations and licensing opportunities to develop and maintain our competitive position. While we use confidentiality agreements with our employees, consultants and certain of our contractors, if trade secrets or other confidential information is made public, our business may be harmed and our legal remedies may be limited or insufficient. Others may independently develop substantially equivalent proprietary information or be issued patents that may prevent the sale of our products or know-how or require us to license such information and pay significant fees or royalties in order to produce our products.

Our technology could infringe upon claims of patents owned by others. If we were found to be infringing on a patent held by another, we might have to seek a license to use the patented technology. In that case, we might not be able to obtain such a license on terms acceptable to us, or at all. If a legal action were to be brought against us or our licensors, we could incur substantial defense costs, and any such action might not be resolved in our favor. If such a dispute were to be resolved against us, we could have to pay the other party large sums of money and our use of our technology and the testing, manufacture, marketing or sale of one or more of our proposed products could be restricted or prohibited.

If we are unable to protect the confidentiality of our intellectual property, the value of our intellectual property could be materially adversely affected and our business would be harmed.

We seek to protect our intellectual property, in part, by confidentiality agreements with our employees, consultants, scientific advisors, contractors and collaborators. However, there can be no assurance that our intellectual property will not be disclosed or that competitors will not otherwise gain access to our intellectual property or independently develop substantially equivalent intellectual property. For example, if our confidential information were disclosed in violation of our confidentiality agreements, we may not be able to obtain adequate remedies for such breaches. We also seek to protect our intellectual property by maintaining physical security of our premises and physical and electronic security of our information technology systems, but it is possible that these security measures could be breached. If any of our intellectual property were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent such competitor from using that intellectual property to compete with us, which could harm our business.

Risks Relating to our Business and Strategy

If we are not successful in attracting and retaining qualified personnel, we could experience delays in completing necessary clinical trials, in the regulatory approval process or in formulating, manufacturing, marketing and selling

our potential products.

We depend on the services of our key personnel, including Remi Barbier, our Chairman, President and Chief Executive Officer. On February 14, 2017, Peter S. Roddy resigned as Vice President, Chief Financial Officer and Secretary, effective March 9, 2017. Remi Barbier has assumed the role of Principal Financial Officer until such time as a new Chief Financial Officer is appointed.

The loss of key personnel, including members of executive management as well as key bioengineering, product development, and technical personnel, could disrupt our operations and have an adverse effect on our business. We will need to hire additional qualified personnel with expertise in clinical research, preclinical testing, government regulation, formulation and manufacturing and sales and marketing. We compete for qualified individuals with numerous biopharmaceutical companies, universities and other research institutions. Competition for such individuals is intense, and our search for such personnel may not be successful. Attracting and retaining qualified personnel is critical to our success.

We have employees whose equity ownership in the Company could result in a substantial increase in personal wealth if the fair value of our common stock increases. Over time, this increase in personal wealth may make it more challenging to retain these employees.

If third-party manufacturers of our drug candidates fail to devote sufficient time and resources to our concerns, or if their performance is substandard, our clinical trials and product introductions may be delayed and our costs may be higher than expected.

We have no manufacturing facilities and have limited experience in drug product development and commercial manufacturing. We lack the resources and expertise to formulate, manufacture or test the technical performance of our drug candidates. We rely on and expect to continue to rely on a limited number of experienced personnel and a small number of contract manufacturers and other vendors to formulate, test, supply, store and distribute drug supplies for our preclinical studies and clinical trials. Our reliance on a limited number of vendors exposes us to the following risks, any of which could delay our clinical trials, and, consequently, FDA approval of our drug candidates and commercialization of our products, result in higher costs, or deprive us of potential product revenues:

- Contract commercial manufacturers, their sub-contractors or other third parties we rely on and expect to rely on, may encounter difficulties in achieving the volume of production needed to satisfy preclinical and clinical needs or commercial demand, may experience technical issues that impact quality or compliance with applicable and strictly enforced regulations governing the manufacture of pharmaceutical products, and may experience shortages of qualified personnel to adequately staff production operations.
- Our contract manufacturers could default on their agreements with us to provide supplies or meet our requirements for commercialization of our products.
- For certain of our drug candidates, the use of alternate manufacturers may be difficult because the number of potential manufacturers that have the necessary governmental licenses to produce narcotic products is limited. Additionally, the FDA and the DEA must approve any alternative manufacturer of our products before we may use the alternative manufacturer to produce our supplies.
- It may be difficult or impossible for us to find a replacement manufacturer on acceptable terms quickly, or at all. Our contract manufacturers and vendors may not perform as agreed or may not remain in the contract manufacturing business for the time required to successfully produce, store and distribute our products.
- If any contract manufacturer makes improvements in the manufacturing process for our products, we may not own, or may have to share, the intellectual property rights to such innovation.

We may not be able to successfully develop or commercialize potential drug candidates for indications other than pain.

Our research and development activities include development of potential drug candidates for indications other than pain. We have no history of developing such drug candidates. We do not know whether any of our planned development activities will result in marketable products. We do not anticipate that our drug candidates in these areas will reach the market for at least several years, if at all.

Our employees and consultants are generally subject to confidentiality or other agreements with their former employers and they may inadvertently or otherwise violate those agreements.

Many of our employees and consultants were previously employed at universities or biotechnology or pharmaceutical companies. While we require our employees and consultants to honor any agreements they may have entered into

prior to working with us, we may be subject to claims that we inadvertently or otherwise used or disclosed trade secrets or other confidential information belonging to former employers. Failure to defend such claims could result in loss of valuable rights or personnel, which in turn could harm or prevent commercialization of our drug candidates. Successful defense against such claims can be expensive and might distract us from executing our strategies.

Law enforcement concerns over diversion of opioids and social issues around abuse of opioids may make the regulatory approval process and commercialization of our drug candidates very difficult.

Law enforcement agencies or regulatory agencies may apply policies that seek to limit the availability of opioids. Such efforts may adversely affect the regulatory approval and commercialization of our drug candidates.

Developments by competitors may render our products or technologies obsolete or non-competitive.

Alternative technologies and products are being developed to improve or replace the use of opioids for pain management, several of which are in clinical trials or are awaiting approval from the FDA. In addition, the active ingredients in nearly all opioid drugs are available in generic form. Drug companies that sell generic opioid drugs represent substantial competition. Many of these organizations competing with us have substantially greater capital resources, larger research and development staffs and facilities, greater experience in drug development and in obtaining regulatory approvals and greater manufacturing and marketing capabilities than we do. Our competitors may market less expensive or more effective drugs that would compete with our drug candidates or reach market with competing drugs before we are able to reach market with our drug candidates. These organizations also compete with us to attract qualified personnel and partners for acquisitions, joint ventures or other collaborations.

Business interruptions could limit our ability to operate our business.

Our operations, as well as those of our collaborators on which we depend, are vulnerable to damage or interruption from computer viruses, human error, natural disasters, electrical and telecommunication failures, international acts of terror and similar events. We have not established a formal disaster recovery plan and our back-up operations and business interruption insurance may not be adequate to compensate us for losses we may suffer. A significant business interruption could result in losses or damages incurred by us and require us to cease or curtail our operations.

Cyber-attacks or other failures in telecommunications or information technology systems could result in information theft, data corruption and significant disruption of our business operations.

We use information technology, computer systems and networks to process, transmit and store electronic information in connection with our business activities. Cyber incidents, including deliberate attacks and attempts to gain unauthorized access to computer systems and networks, have increased in frequency, scope and sophistication in every industry. These threats pose a risk to the security of our systems and networks and the confidentiality, availability and integrity of our data, and may cause a disruption in our operations, harm our reputation and increase our stock trading risk. There can be no assurance that we will be successful in preventing cyber-attacks or successfully mitigating their effects. Similarly, there can be no assurance that our third-party collaborators, distributors and other contractors and consultants will be successful in protecting our data that is stored on their systems. A cyberattack or destruction or loss of data could have a material adverse effect on our business and prospects. In addition, we may suffer reputational harm or face litigation or adverse regulatory action as a result of cyber-attacks or other data security breaches and may incur significant additional expense to implement further data protection measures.

Unfavorable media coverage of opioid pharmaceuticals could negatively affect our business.

Opioid drug abuse receives a high degree of media coverage. Unfavorable publicity regarding, for example, the use or misuse of oxycodone or other opioid drugs, the limitations of ADFs, public inquiries and investigations into prescription drug abuse, litigation or regulatory activity could adversely affect our reputation. Such negative publicity could have an adverse effect on the potential size of the market for our drug candidates and decrease revenues and royalties, which would adversely affect our business and financial results.

Risks Relating to Manufacturing

We do not own any manufacturing facilities and we rely on third-party commercial drug manufacturers for drug supply.

We do not own any manufacturing facilities. We plan to continue to outsource formulation, manufacturing and related activities.

We rely on a limited number of third-party suppliers to formulate, manufacture, fill, label, ship or store all of our drug candidates. These suppliers must comply with current good manufacturing practices ("GMP") regulations enforced by the FDA and other government agencies and DEA regulations, and are subject to ongoing periodic unannounced inspection, including preapproval inspections by the FDA and DEA and corresponding state and foreign government agencies to ensure strict compliance with GMP and other government regulations and corresponding

foreign standards. These manufacturers may subsequently be stopped from producing, storing, shipping or testing our drug products due to their non-compliance with federal, state or local regulations. We do not have control over our suppliers' compliance with these regulations and standards.

If REMOXY is approved, our commercial suppliers may encounter difficulties in achieving high volumes of production to satisfy commercial demands.

We cannot control decisions by our suppliers that affect their ability or willingness to continue to supply us on acceptable terms, or at all.

We may not be able to replace a commercial supplier on commercially reasonable terms, or at all. Replacing any of our commercial suppliers would be expensive and time consuming.

Failure by any of our suppliers to perform as expected could delay or prevent commercialization of REMOXY or result in shortages, cost overruns, or other problems and would materially harm our business.

We will rely on Durect as the sole source of certain excipients in REMOXY. Durect has limited experience manufacturing pharmaceutical products and maintaining GMP-compliant operations. We currently do not have a long-term commercial supply agreement in place with Durect. We expect that we and Durect will negotiate a supply agreement for these excipients. We may not be able to establish a commercial supply agreement on acceptable terms, or at all.

If we receive marketing approval for and commercially launch REMOXY, Durect may need to materially expand its manufacturing capacity. Durect may not be able to increase its manufacturing capacity for REMOXY in a timely or economic manner, or at all. Moreover, significant scale up of manufacturing will require additional validation studies, which are subject to FDA review and approval. If Durect is unable to successfully increase the manufacturing capacity, at an acceptable cost or otherwise, and we are unable to establish alternative manufacturing capabilities, there may be a shortage in supply, which would harm our future revenues and cause our business to suffer.

If Durect fails to supply excipients to us, they may be in breach of their supply obligations. With or without a commercial supply agreement, Durect's failure for any reason to supply these excipients, including failure resulting from Durect relying on sole source providers, could delay or prevent commercialization of REMOXY or result in shortages, delays, unexpected costs or other problems and would materially harm our business.

We expect to rely on Noramco as the sole source of the oxycodone in REMOXY. We currently do not have a long-term commercial supply agreement in place with Noramco. Effective July 1, 2016, Noramco is owned by SK Capital Partners, a private investment firm. We expect to negotiate with Noramco a commercial supply agreement to supply us with oxycodone. We may not be able to establish a commercial supply agreement on acceptable terms, or at all. Until we have a commercial supply agreement in place with Noramco, we expect to obtain oxycodone from Noramco via purchase orders. There can be no assurance that Noramco will accept our purchase orders on acceptable terms, or at all. With or without a commercial supply agreement, Noramco's failure for any reason to supply us with oxycodone could delay or prevent commercialization of REMOXY or result in shortages, cost overruns or other problems that would materially harm our business.

We will need to identify a third-party to manufacture commercial supplies of REMOXY. Without a commercial manufacturer, we may not be able commercialize REMOXY. To date, we have not identified such third-party manufacturer and we may never find a viable source of commercial supplies of REMOXY. We expect to rely on such third party as the sole-source drug product manufacturer of REMOXY pursuant to a supply agreement. In addition to drug product manufacturing, this third-part manufacturer will need to be responsible for sourcing excipients in REMOXY other than those provided by the Durect Agreement. Failure for any reason to manufacture and supply REMOXY could delay or prevent commercialization of REMOXY or result in shortages, product recalls or withdrawals, delays or failures in product testing or delivery, cost overruns or other problems that would materially harm our business.

If we cannot formulate and scale-up additional dosage forms of REMOXY, the commercial opportunity for REMOXY might be diminished.

We plan to formulate and scale-up additional dosage forms of REMOXY. We may not be able to successfully complete our formulation or scale-up activities, or we may determine that the commercial opportunity for REMOXY in certain dosage forms is too limited to warrant further investment. If we are unsuccessful in our formulation or scale-up activities with REMOXY, our future revenue may be less than expected and our operations may suffer.

We rely solely on Durect to provide us with certain components of drug candidates and will continue to rely on Durect as the sole-source provider of these components.

We rely on Durect as the sole-source provider of certain components of REMOXY and other drug candidates designed to reduce the potential risks of unintended use and will rely solely on Durect to produce commercial supplies of these components. Durect's failure for any reason to provide these components or to achieve and maintain satisfactory manufacturing standards could result in product recalls or withdrawals, delays or failures in product testing or delivery, cost overruns or other problems that could materially harm our business.

Durect may encounter manufacturing difficulties involving production yields, quality control and quality assurance. Durect is subject to ongoing periodic unannounced inspection by the FDA and corresponding state and foreign agencies to ensure strict compliance with government regulations and corresponding foreign standards. We cannot control Durect's compliance with these regulations and standards.

If we receive marketing approval for and commercially launch REMOXY, Durect may need to materially expand its manufacturing capacity. Durect may not be able to increase its manufacturing capacity for REMOXY in a timely or economic manner, or at all. Moreover, significant scale up of manufacturing will require additional validation studies, which are subject to FDA review and approval. If Durect is unable to successfully increase the manufacturing capacity for such components of REMOXY, at an acceptable cost or otherwise, and we are unable to establish alternative manufacturing capabilities, commercialization of REMOXY may be delayed, prevented or impaired or there may be a shortage in supply, which would harm our future revenues and cause our business to suffer.

We expect to rely on Noramco as the sole source of the oxycodone in REMOXY.

We expect to rely on Noramco as the sole source of the oxycodone in REMOXY. We expect we and Noramco will negotiate a supply agreement to supply us with the oxycodone in REMOXY. Noramco's operation is subject to regulation by the DEA and the Controlled Substances Act. Noramco's failure for any reason to manufacture and supply us with the oxycodone in REMOXY could result in shortages, cost overruns or other problems that could materially harm our business.

Risks Relating to our Financial Position and Need for Financing

Our operating history may make it difficult for you to evaluate our business to date and to assess its future viability.

Our operations from our inception to date have been limited to organizing and staffing our company, acquiring, developing and securing our technology, undertaking preclinical studies and clinical trials of our drug candidates and forming collaborations. We have not yet demonstrated our ability to obtain regulatory approval, formulate and manufacture our drug candidates on a commercial scale or conduct sales and marketing activities. Consequently, any predictions you make about our future success or viability may not be as accurate as they could be if we had a longer operating history.

We have a history of losses and expect to incur substantial losses and negative operating cash flows for the foreseeable future.

Although we were profitable in some years in the past based on payments received pursuant to collaboration agreements and interest income, we have yet to generate any revenues from product sales. We have an accumulated deficit of $162 million at June 30, 2018. Even if we succeed in developing and commercializing one or more of our drug candidates, we expect to continue to use significant cash resources in our operations for the foreseeable future.

We anticipate that our expenses will increase substantially in the foreseeable future as we:

- continue to conduct preclinical studies and clinical trials for our drug candidates;
- seek regulatory approvals for our drug candidates;
- develop, formulate, manufacture and commercialize our drug candidates;
- implement additional internal systems and develop new infrastructure;
- acquire or in-license additional products or technologies, or expand the use of our technology;
- maintain, defend and expand the scope of our intellectual property; and
- hire additional personnel.

We will need to generate significant revenues to achieve and maintain profitability. If we or our collaborators cannot successfully develop, obtain regulatory approval for and commercialize our drug candidates, we will not be able to generate such revenues or achieve profitability in the future. Our failure to achieve or maintain profitability would have a material adverse impact on the market price of our common stock.

If we cannot raise additional capital on acceptable terms, we may be unable to complete planned clinical trials of any or some of our drug candidates or to pursue attractive business opportunities.

We have funded all of our operations and capital expenditures with the proceeds from our public and private stock offerings, payments received under collaboration agreements and interest earned on our investments. We expect that our current cash, cash equivalents and marketable securities will be sufficient to meet our working capital and capital expenditure needs for at least the next twelve months. However, we may elect to raise additional funds within such twelve-month period or need to raise additional funds thereafter and additional financing may not be available on favorable terms, if at all. Even if we succeed in selling additional securities to raise funds, our existing stockholders' ownership percentage would be reduced and new investors may demand rights, preferences or privileges senior to those of existing stockholders. If we raise additional capital through debt financing, if available, such financings may involve covenants that restrict our business activities. If we raise additional capital through strategic alliance and license arrangements, we may have to trade our rights to our technology, intellectual property or drug candidates to others in such arrangements on terms that may not be favorable to us.

If we determine that we need to raise additional funds and we are not successful in doing so, we may be unable to complete the clinical development of some or all of our drug candidates or to seek or obtain FDA approval of our drug candidates. We then could be forced to discontinue product development, enter into a relationship with an additional strategic partner earlier than currently intended, relinquish or license on unfavorable terms our rights to technologies or drug candidates that we would seek to develop ourselves or significantly delay, scale-back or curtail our operations.

Our forecast of the period of time through which our financial resources will be adequate to support our operations is a forward-looking statement and involves risks and uncertainties, and actual results could vary as a result of a number of factors, including the factors discussed elsewhere in this "Risk Factors" section. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently

expect.

Risks Relating to an Investment in our Common Stock

Our stock price has been volatile and could experience a sudden decline in value.

Our common stock has experienced significant price and volume fluctuations and may continue to experience volatility in the future. You may not be able to sell your shares quickly or at the latest market price if trading in our stock is not active or the volume is low.

The following factors, in addition to other risk factors described in this section, may have a significant impact on the market price of our common stock:

- results of or delays in efforts to seek regulatory approval for REMOXY, and in preclinical studies and clinical trials for our other drug candidates;
- publicity regarding products under development by us or others, including with respect to actual or potential medical results relating to such matters;
- announcements of technological innovations or new commercial products by us or others;
- developments in patent or other proprietary rights by us or others;
- comments or opinions by securities analysts or major stockholders;
- adverse media coverage related to opioid pharmaceuticals;
- future sales of our common stock by existing stockholders;
- developments with respect to potential merger and acquisition activity of companies with whom we have strategic alliances or other agreements;
- regulatory developments or changes in regulatory guidance enacted by applicable governmental or other authorities;
- litigation or threats of litigation;
- economic and other external factors or other disaster or crises;
- the departure of any of our officers, directors or key employees;
- period-to-period fluctuations in financial results;
- announcement or expectations of additional financing efforts;
- changes in accounting practices;
- changes in the structure of the healthcare payment system;
- market conditions in the biopharmaceutical industry;
- publication of research reports about us, our competitor or our industry, or positive or negative recommendations or withdrawal of research coverage by securities analysts; and
- limited daily trading volume.

We are a smaller reporting company and we cannot be certain if the reduced disclosure requirements applicable to smaller reporting companies will make our common stock less attractive to investors.

We are currently a “smaller reporting company” as defined in the Securities Exchange Act of 1934, and are thus allowed to provide simplified executive compensation disclosures in our filings, are exempt from the provisions of Section 404(b) of the Sarbanes-Oxley Act requiring that an independent registered public accounting firm provide an attestation report on the effectiveness of internal control over financial reporting and have certain other reduced disclosure obligations with respect to our SEC filings. We will remain a “smaller reporting company” until the aggregate market value of our outstanding common stock held by non-affiliates as of the last business day our recently completed second fiscal quarter is $75 million or more. We cannot predict whether investors will find our common stock less attractive because of our reliance on any of these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

We have in the past and may in the future fail to meet all applicable listing requirements and, our common stock may be delisted from The Nasdaq Global Market, which could have an adverse impact on the liquidity and market price of our common stock.

Our common stock is currently listed on The Nasdaq Global Market, which has qualitative and quantitative listing criteria that we must meet in order to remain listed on Nasdaq.

We have in the past temporarily fallen out of compliance with Nasdaq listing standards and there can be no assurance that we will continue to meet Nasdaq listing requirements in the future.

On March 13, 2018, we received a notice from the staff of The Nasdaq Stock Market LLC (the "Staff") that we were not in compliance with Nasdaq Listing Rule 5450, setting forth the requirements for continued listing on Nasdaq. Nasdaq Listing Rule 5450 requires, among other things, that we meet one of the three standards under Nasdaq Listing Rule 5450(b); the Equity Standard; the Market Value Standard; or the Total Asset/Total Revenue Standard. The Staff notice stated that we were not in compliance with Nasdaq Listing Rule 5450(b)(2)(A) (under the Market Value Standard), as the minimum market value of our common stock had been below $50 million for 30 consecutive business days. In addition, the Staff notice stated that we also do not meet the requirements under Nasdaq Listing Rule 5450(b)(3)(A) (under the Total Asset/Total Revenue Standard).

On April 26, 2018, following ten consecutive business days during which the market value of our common stock was $50 million or greater, we regained compliance with Nasdaq Listing Rule 5450(b)(2)(A).

If future events cause our common stock to be delisted, the liquidity of our common stock would be adversely affected and the market price of our common stock could decrease.

Anti-takeover provisions in our charter documents and Delaware law may prevent or delay removal of incumbent management or a change of control.

Anti-takeover provisions of our amended and restated certificate of incorporation and amended and restated bylaws and Delaware law may have the effect of deterring or delaying attempts by our stockholders to remove or replace management, engage in proxy contests and effect changes in control. The provisions of our charter documents include:

- a classified board so that only one of the three classes of directors on the Board of Directors is elected each year;
- elimination of cumulative voting in the election of directors;
- procedures for advance notification of stockholder nominations and proposals;

- the ability of the Board of Directors to amend our bylaws without stockholder approval; and
- the ability of the Board of Directors to issue up to 10,000,000 shares of preferred stock without stockholder approval upon the terms and conditions and with the rights, privileges and preferences as the Board of Directors may determine.

In addition, as a Delaware corporation, we are subject to Delaware law, including Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years following the date that the stockholder became an interested stockholder unless certain specific requirements are met as set forth in Section 203.

These provisions, alone or together, could have the effect of deterring or delaying changes in incumbent management, proxy contests or changes in control.

Our share ownership is concentrated, and our officers, directors and principal stockholders can exert significant control over matters requiring stockholder approval.

Due to their combined stock holdings, our officers, directors and principal stockholders (stockholders holding greater than 5% of our common stock) acting collectively may have the ability to exercise significant influence over

matters requiring stockholder approval including the election of directors and approval of significant corporate transactions. In particular, Remi Barbier, our founder, Chairman of the Board of Directors, President and Chief Executive Officer, owns or controls a significant amount of the voting power of our outstanding capital stock. This concentration of ownership may delay or prevent a change in control of the Company and may make some transactions, including but not limited to any merger, consolidation, or sale of substantially all of our assets, more difficult or impossible to complete without the support of key stockholders.

Publicly available information regarding stockholders' ownership may not be comprehensive because the SEC does not require certain large stockholders to publicly disclose their stock ownership positions.

If the fair value of our stock increases and outstanding Performance Awards vest, we expect to use substantial amounts of cash to fund employee tax liabilities.

We have Performance Awards outstanding. If these Performance Awards vest, we expect to issue our employees shares of our common stock net of statutory employment taxes. This net issuance results in fewer shares issued and uses our cash to fund these taxes. The use of cash could be substantially higher, depending on the fair value of our common stock on the date the Performance Awards vest. If our use of cash to fund these taxes is substantial, our cash balance could substantially decline and our stock price could also decline.

We may in the future seek to fund the cash used for Performance Awards through the sale of our common stock. However, we may not be successful in selling shares of our common stock to fund the cash used for Performance Awards. If the number of shares we sell to fund the cash used for Performance awards is significant, our stock price could decline.

Volatility in the stock prices of other companies may contribute to volatility in our stock price.

The stock market in general, Nasdaq and the market for technology companies in particular, have experienced significant price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. Further, there has been particular volatility in the market prices of securities of early stage life sciences companies. These broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance. In the past, following periods of volatility in the market price of a company's securities, securities class action litigation has often been instituted. A securities class action suit against us could result in substantial costs, potential liabilities and the diversion of management's attention and resources.

Our operating results may fluctuate from quarter to quarter and this fluctuation may cause our stock price to decline.

Our quarterly operating results have fluctuated in the past and are likely to fluctuate in the future. Factors contributing to these fluctuations include, among other items, the timing and enrollment rates of clinical trials for our drug candidates, our need for clinical supplies and the valuation of stock-based compensation. Thus, quarter-to-quarter comparisons of our operating results may not be not indicative of what we might expect in the future. As a result, in some future quarters our clinical, financial or operating results may not meet the expectations of securities analysts and investors and could result in a decline in the price of our stock.

If securities or industry analysts publish inaccurate or unfavorable research about our business or product candidates, our stock price could decline.

Securities or industry analysts publish research and reports about our business or product candidates. An analyst's conclusions regarding prospects for product candidates in the biopharmaceutical industry can include judgments based on the limited publicly-available data. If one or more analysts issues unfavorable research about our business or our product candidates, including a downgrade of our common stock, the price of our stock may decline.

We may sell additional equity or debt securities to fund our operations, which may result in dilution to our stockholders and impose restrictions on our business.

In order to raise additional capital to support our operations, we may sell additional shares of our common stock or other securities convertible into or exchangeable for our common stock including under our ATM Agreement (as defined below), which could result in dilution our stockholders. On February 8, 2018, we entered into Capital on Demand™ Sales Agreement, or the ATM Agreement, with JonesTrading. In accordance with the terms of the ATM agreement, we are able to offer and sell up to $16.9 million of shares of our common stock, from time to time in one or more public offerings of our common stock, with JonesTrading acting as agent, in transactions pursuant to a shelf registration statement that was declared effective by the SEC on July 31, 2017. We cannot assure you that we will be able to sell shares or other securities in any other offering at a price per share that is equal to or greater than the price per share paid by investors in prior offerings, and investors purchasing our shares or other securities in the future could have rights superior to existing shareholders. The price per share at which we sell additional shares of our common stock or securities convertible into or exchangeable for our common stock in future transactions may be higher or lower than the price per share in prior offerings.

There may not be an active, liquid trading market for our common stock.

There is no guarantee that an active trading market for our common stock will be maintained on Nasdaq. Investors may not be able to sell their shares quickly or at the latest market price if trading in our stock is not active.

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

None.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

The following exhibits have been filed with this report:

Exhibit No.	Description	Incorporated by Reference			Filed Herewith
		Form	Filing Date	Exhibit No.	
3.1	Amended and Restated Certificate of Incorporation.	10-Q	7/29/2005	3.1	
3.2	Amended and Restated Bylaws.	10-Q	4/24/2013	3.2	
3.3	Amendment to Amended and Restated Certificate of Incorporation	8-K	5/8/2017	3.1	
4.1	Specimen Common Stock Certificate.	10-Q	7/29/2005	4.1	
31.1	Certification of Principal Executive Officer and Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
32.1	Certification of the Chief Executive Officer (as Principal Executive Officer and Principal Financial Officer) pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				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.DEF	XBRL Taxonomy Extension Definition Linkbase Document.				X
101.LAB	XBRL Taxonomy Extension Labels Linkbase Document.				X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.				X

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.

Pain Therapeutics, Inc.
(Registrant)

/s/ REMI BARBIER
Remi Barbier,
Chairman of the Board of
Directors,
President and Chief
Executive Officer

Date: July 26, 2018