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

Form 10-Q

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

For the quarterly period ended March 31, 2018

OR

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

For the transition period from _____ to _____

Commission file number: 001-37500

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

Delaware	**76-0722250**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

460 Totten Pond Road, Suite 530
Waltham, Massachusetts 02451
(Address of principal executive office) (Zip Code)

Registrant's telephone number, including area code:
(617) 928-5300

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, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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

As of May 7, 2018, there were 24,383,994 shares of the registrant's Common Stock, $0.01 par value per share, outstanding.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements. These statements include all matters that are not related to present facts or current conditions or that are not historical facts, including statements regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans, objectives of management and expected market growth. The words "anticipate," "believe," "could," "continue," "should," "predict," "estimate," "expect," "intend," "may," "plan," "potentially," "will," "would," or the negative of these terms or other similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. These forward-looking statements include, but are not limited to, statements about:

- the U.S. regulatory review process of our New Drug Application, or NDA, for octreotide capsules in acromegaly, and our efforts to conduct and complete a Phase 3 clinical trial of octreotide capsules in adult acromegaly patients per our agreement with the FDA under a Special Protocol Assessment, or SPA, to potentially enable us to resubmit our NDA to the U.S. Food and Drug Administration, or the FDA, in order to secure regulatory approval of octreotide capsules in acromegaly;
- our ability to preserve patients, sites and other resources necessary to enable us to simultaneously conduct two Phase 3 clinical trials in adult patients with acromegaly; and to produce data packages from each trial that could be suitable for submission in both the United States and the European Union;
- any regulatory approvals that may be issued or denied by the FDA, the European Medicines Agency, or EMA, or other regulatory agencies for octreotide capsules in acromegaly or other indications;
- the therapeutic benefits, effectiveness and safety of octreotide capsules;
- our estimates of the size and characteristics of the markets that may be addressed by octreotide capsules;
- the commercial success and market acceptance of octreotide capsules or any future product candidates that are approved for marketing in the United States or other countries;
- our ability to generate future revenue;
- the number, designs, results and timing of our clinical trials of octreotide capsules and the timing of the commencement and availability of data from these trials;
- the safety and efficacy of therapeutics marketed by our competitors that are targeted to indications which octreotide capsules have been developed to treat;
- our ability to leverage our Transient Permeability Enhancer, or TPE, platform to develop and commercialize novel oral product candidates incorporating peptides that are currently only available in injectable or other non-absorbable forms;
- the possibility that competing products or technologies may make octreotide capsules, other product candidates we may develop and commercialize or our TPE technology obsolete;
- our ability to manufacture sufficient amounts of octreotide capsules for clinical trials and commercialization activities;
- our ability to secure collaborators to license, manufacture, market and sell octreotide capsules or any products for which we receive regulatory approval in the future;
- our ability to protect our intellectual property and operate our business without infringing upon the intellectual property rights of others;
- our product development and operational plans generally; and
- our estimates and expectations regarding our capital requirements, cash and expense levels and liquidity sources.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. These forward-looking statements are subject to a number of risks, uncertainties and assumptions described in the section titled "Risk Factors" and elsewhere in this Quarterly Report on Form 10-Q and our prior filings with the SEC. Moreover, we operate in a very competitive and rapidly changing environment. New risk factors emerge from time to time, and it is not possible for our management to predict all risk factors nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in, or implied by, any forward-looking statements. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future.

Unless the context requires otherwise, references in this Quarterly Report on Form 10-Q to "we," "us", "our" and "Chiasma" refer to Chiasma, Inc. and our subsidiaries. We own various U.S. federal trademark registrations and applications, and unregistered trademarks and service marks, including "Chiasma," "TPE", "MYCAPSSA" and our corporate logo. Other trademarks or service marks that may appear in this Quarterly Report on Form 10-Q are the property of their respective holders. For convenience, we do not use the ® and ™ symbols in each instance in which one of our trademarks appears throughout this Quarterly Report on Form 10-Q, but this should not be construed as any indication that we will not assert, to the fullest extent under applicable law, our rights thereto. We do not intend to use or display other companies' trademarks and trade names to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

Chiasma, Inc.

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PART I — FINANCIAL INFORMATION

Item 1. Financial Statements

Chiasma, Inc.
Condensed Consolidated Balance Sheets

	March 31, 2018 (Unaudited)	December 31, 2017
	(in thousands except share data)	
Assets		
Current assets		
Cash and cash equivalents	$ 15,248	$ 14,603
Marketable securities	45,250	52,336
Prepaid expenses and other current assets	1,688	1,768
Total current assets	62,186	68,707
Property and equipment, net	175	193
Other assets	986	983
Total assets	$ 63,347	$ 69,883
Liabilities and Stockholders' Equity		
Current liabilities		
Accounts payable	$ 2,295	$ 1,017
Accrued expenses	4,409	4,033
Other current liabilities	—	1,695
Total current liabilities	6,704	6,745
Long-term liabilities	586	664
Total liabilities	7,290	7,409
Commitments and contingencies (Note 9)		
Stockholders' equity:		
Common stock, $0.01 par value; authorized 125,000,000 shares at March 31, 2018 and December 31, 2017; issued and outstanding 24,383,994 shares at March 31, 2018 and 24,381,605 shares at December 31, 2017	244	244
Preferred stock, $0.01 par value; authorized 5,000,000 shares; none outstanding	—	—
Additional paid-in capital	268,304	267,642
Accumulated other comprehensive loss	(95)	(59)
Accumulated deficit	(212,396)	(205,353)
Total stockholders' equity	56,057	62,474
Total liabilities and stockholders' equity	$ 63,347	$ 69,883

See accompanying notes to these unaudited condensed consolidated financial statements.

Chiasma, Inc.
Condensed Consolidated Statements of Operations
(Unaudited)

	For the Three Months Ended March 31,	
	2018	2017
	(in thousands except share and per share data)	
Operating expenses:		
General and administrative	$ 2,434	$ 2,460
Research and development	4,863	4,655
Total operating expenses	7,297	7,115
Loss from operations	(7,297)	(7,115)
Other income, net	(230)	(160)
Loss before income taxes	(7,067)	(6,955)
Provision (benefit) for income taxes	(24)	65
Net loss	(7,043)	(7,020)
Earnings per share attributable to common stockholders		
Basic	$ (0.29)	$ (0.29)
Diluted	$ (0.29)	$ (0.29)
Weighted-average shares outstanding:		
Basic	24,381,924	24,359,584
Diluted	24,381,924	24,359,584

See accompanying notes to these unaudited condensed consolidated financial statements.

Chiasma, Inc.
Condensed Consolidated Statements of Comprehensive Loss
(Unaudited)

	For the Three Months Ended March 31,	
	2018	2017
	(in thousands)	
Net loss	$ (7,043)	$ (7,020)
Other comprehensive loss:		
Unrealized losses on available for sale securities, net	(36)	(22)
Total other comprehensive loss	(36)	(22)
Comprehensive loss	$ (7,079)	$ (7,042)

See accompanying notes to these unaudited condensed consolidated financial statements.

Chiasma, Inc.
Condensed Consolidated Statements of Cash Flows
(Unaudited)

	Three Months Ended March 31,	
	2018	2017
	(in thousands)	
Operating Activities:		
Net loss	$ (7,043)	$ (7,020)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation	23	40
Stock-based compensation	637	719
Amortization of discount on marketable securities, net	(54)	(73)
Provision for deferred income taxes	—	5
Non-cash interest expense	5	36
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	80	341
Accounts payable and accrued expenses	1,654	(457)
Other assets	(3)	(7)
Other current and long-term liabilities	(53)	102
Net cash used in operating activities	(4,754)	(6,314)
Investing Activities:		
Purchase of marketable securities	(7,673)	(40,779)
Maturities of marketable securities	14,777	30,772
Purchases of property and equipment	(5)	(3)
Net cash provided by (used in) investing activities	7,099	(10,010)
Financing Activities:		
Payment under license termination agreement	(1,700)	(1,700)
Net cash used in financing activities	(1,700)	(1,700)
Net increase (decrease) in cash and cash equivalents	645	(18,024)
Cash and cash equivalents, beginning of period	14,603	37,013
Cash and cash equivalents, end of period	$ 15,248	$ 18,989

See accompanying notes to these unaudited condensed consolidated financial statements.

CHIASMA, INC.
Notes to Unaudited Condensed Consolidated Financial Statements
March 31, 2018

1. Description of Business and Summary of Significant Accounting Policies

Chiasma, Inc. is a clinical-stage biopharmaceutical company incorporated in 2001 under the laws of the State of Delaware. Chiasma, Inc. is headquartered in Massachusetts and has two wholly owned subsidiaries; Chiasma (Israel) Ltd., and Chiasma Securities Corp, collectively referred to as "the Company," "we," "us," "our" or "Chiasma". We are a clinical-stage biopharmaceutical company focused on improving the lives of patients who face challenges associated with their existing treatments for rare and serious chronic disease. Employing our proprietary Transient Permeability Enhancer ("TPE") technology platform, we seek to develop oral medications that are currently available only as injections. We are currently developing oral octreotide capsules, conditionally trade-named "MYCAPSSA", our sole TPE platform-based clinical product candidate, in two Phase 3 clinical trials in adult patients for the treatment of acromegaly to potentially support regulatory approval in the United States and European Union. Acromegaly is a rare and debilitating condition that results in the body's production of excess growth hormone. Octreotide is an analog of somatostatin, a natural inhibitor of growth hormone secretion. Octreotide capsules have been granted orphan designation in the United States and the European Union for the treatment of acromegaly. We retain worldwide rights to develop and commercialize octreotide capsules with no royalty obligations to third parties.

In September 2017, we initiated a third Phase 3 clinical trial for oral octreotide capsules for the maintenance therapy of adult patients with acromegaly following our agreement with the United States Food and Drug Administration ("FDA") on the design of the trial, reached through a Special Protocol Assessment in August 2017. The trial, referred to as CHIASMA OPTIMAL, is a randomized, double-blind, placebo-controlled, nine-month trial expected to enroll 50 adult acromegaly patients designed to support regulatory approval of octreotide capsules in the United States. We are also currently conducting an international Phase 3 clinical trial, referred to as MPOWERED, of oral octreotide capsules for the maintenance treatment of adult patients with acromegaly to support regulatory approval in the European Union. The MPOWERED trial is a global, randomized, open-label and active-controlled 15-month trial expected to enroll approximately 130 adult acromegaly patients, of which we expect to randomize at least 80 patients who are responders to octreotide capsules following a six-month run-in to either octreotide capsules or injectable somatostatin receptor ligands (octreotide or lanreotide), and then followed for an additional nine months.

Liquidity

We have incurred significant losses from operations since our inception and expect losses to continue for at least the next several years. We are heavily dependent on the regulatory approval and subsequent commercial success of our product candidate, octreotide capsules for the treatment of acromegaly in the United States and European Union, both of which may never occur.

We expect to continue with our ongoing international Phase 3 CHIASMA OPTIMAL clinical trial of octreotide capsules in acromegaly to support potential regulatory approval in the United States and ongoing international Phase 3 MPOWERED clinical trial of octreotide capsules in acromegaly to support potential regulatory approval in the European Union. In June and August 2016, we announced two separate corporate restructuring plans, which were completed in 2017, intended to focus our resources on the continued development of octreotide capsules for the maintenance treatment of adult acromegaly patients. We currently expect our existing cash, cash equivalents and marketable securities to fund our operations for at least one year after the date these condensed consolidated financial statements are issued. We expect to continue to incur significant operating losses for the foreseeable future.

Successful transition to attaining profitable operations is dependent upon achieving a level of revenues adequate to support our cost structure. We plan to continue to fund our losses from operations and capital funding needs from existing balances of cash, cash equivalents and marketable securities and potentially through the issuance of debt and/or equity or through collaborations or license agreements with other companies. Debt or equity financing may not be available on a timely basis on terms acceptable to us, or at all. If we are not able to secure adequate additional funding, we may be forced to make further reductions in spending, extend payment terms with suppliers, liquidate assets where possible, or suspend or curtail our planned development of octreotide capsules. Any of these actions could materially harm our business, results of operations and future prospects. Failure to obtain regulatory approval of octreotide capsules in acromegaly will prevent us from commercializing the product candidate, which could raise significant concerns about our continued viability as a business.

Basis of Presentation

We have prepared the accompanying unaudited condensed consolidated financial statements pursuant to the rules and regulations of the U.S. Securities and Exchange Commission ("SEC") regarding interim financial reporting. Accordingly, certain information and footnote disclosures required by accounting principles generally accepted in the United States ("U.S. GAAP") for annual financial statements have been condensed or omitted. The information included in this quarterly report on Form 10-Q should be read in conjunction with our Annual Report on Form 10-K for the year ended December 31, 2017. The year-end condensed consolidated balance sheet data presented for comparative purposes was derived from our audited financial statements, but does not include all disclosures required by U.S. GAAP. In the opinion of management, we have prepared the accompanying unaudited condensed consolidated financial statements on the same basis as our audited financial statements, and these financial statements include all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation of the results of the interim periods presented. The results of operations for the three months ended March 31, 2018 are not necessarily indicative of the operating results for the full year or for any other subsequent interim period.

Cash Equivalents

Cash equivalents consist of highly liquid instruments purchased with an original maturity of three months or less at the date of purchase.

Marketable Securities

Our investments primarily consist of commercial paper and corporate and government debt securities. These marketable securities are classified as available-for-sale, and as such, are reported at fair value on our condensed consolidated balance sheets. Unrealized holding gains and losses are reported within accumulated other comprehensive income as a separate component of stockholders' equity. The amortized cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization, together with interest on securities, are included in other income, net, on our condensed consolidated statements of operations.

If a decline in the fair value of a marketable security below our cost basis is determined to be other than temporary, such marketable security is written down to its estimated fair value as a new cost basis and the amount of the write-down is included in earnings as an impairment charge. The cost of securities sold is based on the specific identification method.

Concentrations of credit risk

Financial instruments that potentially subject us to significant concentration of credit risk consist primarily of cash, cash equivalents and marketable securities. We routinely maintain deposits in financial institutions in excess of government insured limits. Management believes that we are not exposed to significant credit risk as our deposits are held at financial institutions that management believes to be of high credit quality and we have not experienced any significant losses in these deposits. We regularly invest excess operating cash in deposits with major financial institutions and money market funds and in notes issued by the U.S. government, as well as in fixed income investments and U.S. bond funds, both of which can be readily purchased and sold using established markets. We believe that the market risk arising from our holdings of these financial instruments is mitigated based on the fact that many of these securities are either government backed or of high credit rating.

Use of Estimates

The preparation of condensed consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, and expenses, and the disclosure of contingent assets and liabilities as of and during the reporting period. We base these estimates and assumptions on historical experience when available, and on various factors that we believe to be reasonable under the specific circumstances. Significant estimates relied upon in preparing the accompanying condensed consolidated financial statements include, but are not limited to, accounting for stock-based compensation, present value of long-term purchase obligation, income taxes, and accounting for certain accruals. We assess the above estimates on an ongoing basis; however, actual results could materially differ from those estimates.

Recently Issued Accounting Pronouncements

In February 2016, the Financial Accounting Standards Board issued new guidance which establishes a right-of-use model that requires a lessee to record an asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. The new standard is effective for annual periods beginning after December 15, 2018, including interim periods within those annual reporting periods. A modified retrospective transition approach, which includes a number of optional practical expedients that we may elect to apply, is required for lessees for capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. We are currently evaluating the impact the standard may have on our consolidated condensed financial statements and we currently expect that most of our operating lease commitments will be subject to the new standard and recognized as operating lease liabilities and right-of-use assets upon adoption.

2. Investments

Our investments consisted of the following as of March 31, 2018 and December 31, 2017:

	As of March 31, 2018			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
	($ in thousands)			
Money market funds	$ 13,275	$ —	$ —	$ 13,275
Corporate notes	24,481	—	(60)	24,421
Commercial paper	20,864	—	(35)	20,829
Total	$ 58,620	$ —	$ (95)	$ 58,525

	As of December 31, 2017			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
	($ in thousands)			
Money market funds	$ 12,399	$ —	$ —	$ 12,399
Corporate notes	29,788	—	(35)	29,753
Commercial paper	22,607	1	(25)	22,583
Total	$ 64,794	$ 1	$ (60)	$ 64,735

As of March 31, 2018, we do not consider those securities that are in an unrealized loss position to be other-than-temporarily impaired, as we have the ability to hold such investments until recovery of the fair value. We utilize the specific identification method in computing realized gains and losses. We had no realized gains and losses on our available-for-sale securities for the three months ended March 31, 2018 or 2017.

The fair values of our investments by classification in our condensed consolidated balance sheets as of March 31, 2018 and December 31, 2017 were as follows:

	March 31, 2018	December 31, 2017
	($ in thousands)	
Cash and cash equivalents	$ 13,275	$ 12,399
Marketable securities	45,250	52,336
Total	$ 58,525	$ 64,735

Cash and cash equivalents in the table above exclude cash of $2.0 million and $2.2 million as of March 31, 2018 and December 31, 2017, respectively. The contractual maturity dates of all of our investments are less than one year.

3. Fair Value Measurements of Financial Instruments

Certain assets and liabilities are reported at fair value on a recurring basis. Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants at the measurement date. The fair value accounting guidance requires that assets and liabilities carried at fair value be classified and disclosed in one of the following three categories:

- *Level 1* — Quoted prices in active markets for identical assets or liabilities that we have the ability to access at the measurement date.
- *Level 2* — Inputs other than quoted prices in active markets that are observable for the asset or liability, either directly or indirectly.
- *Level 3* — Inputs that are unobservable for the asset or liability.

To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised by us in determining fair value is greatest for instruments categorized in Level 3. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

The fair value measurements of our financial instruments are summarized in the table below:

	Fair Value Measurements at March 31, 2018			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
	($ in thousands)			
Cash equivalents:				
Money market funds	$ 13,275	$ —	$ —	$13,275
Total cash equivalents	$ 13,275	$ —	$ —	$13,275
Marketable securities:				
Corporate notes	$ —	$ 24,421	$ —	$24,421
Commercial paper	—	20,829	—	20,829
Total marketable securities	—	45,250	—	45,250
Total	$ 13,275	$ 45,250	$ —	$58,525

	Fair Value Measurements at December 31, 2017			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
		($ in thousands)		
Cash equivalents:				
Money market funds	$ 12,399	$ —	$ —	$12,399
Total cash equivalents	$ 12,399	$ —	$ —	$12,399
Marketable securities:				
Corporate notes	$ —	$ 29,753	$ —	$29,753
Commercial paper	—	22,583	—	22,583
Total marketable securities	—	52,336	—	52,336
Total	$ 12,399	$ 52,336	$ —	$64,735

Our cash equivalents are classified as Level 1 assets under the fair value hierarchy as these assets have been valued using quoted market prices in active markets and do not have any restrictions on redemption. Our marketable securities are classified as Level 2 assets under the fair value hierarchy as these assets were primarily determined from independent pricing services, which normally derive security prices from recently reported trades for identical or similar securities, making adjustments based upon other significant observable market transactions. At the end of each reporting period, we perform quantitative and qualitative analysis of prices received from third parties to determine whether prices are reasonable estimates of fair value. After completing our analysis, we did not adjust or override any fair value measurements provided by our pricing services as of March 31, 2018 or December 31, 2017. We did not have any Level 3 assets being measured at fair value on a recurring basis as of March 31, 2018 and December 31, 2017.

4. Earnings per Share of Common Stock

All common stock warrants and stock options have been excluded from the computation of diluted weighted-average shares outstanding because such securities would have an anti-dilutive impact due to net losses reported during the three months ended March 31, 2018 and 2017.

5. Accrued Expenses

As of March 31, 2018 and December 31, 2017, accrued expenses consisted of the following:

	March 31, 2018	December 31, 2017
	($ in thousands)	
Accrued general and administrative expenses	$ 1,315	$ 752
Accrued research and development expenses	2,590	2,501
Accrued payroll and employee benefits	504	780
Total accrued expenses	$ 4,409	$ 4,033

6. License Agreement

In December 2012, we signed a license agreement with F. Hoffmann-La Roche Ltd. and Hoffmann-La Roche Inc. (collectively "Roche"), which was effective in January 2013, and granted Roche an exclusive, non-transferable license to our intellectual property related to octreotide capsules.

In July 2014, Roche terminated the license agreement. Upon termination, Roche returned all rights and documentation granted under the agreement to us. Following the termination of the license agreement, we are not entitled to further payments from Roche, Roche has no remaining rights to octreotide capsules and we retain all rights to octreotide capsules and all related intellectual property. Subsequent to the termination, we purchased from Roche active pharmaceutical ingredient ("API") supplies to continue the development and manufacturing of octreotide capsules as well as Roche's

proposed trade name for octreotide capsules for an aggregate amount of $5.1 million payable in three equal annual installments of $1.7 million beginning in 2016. We made the $1.7 million annual payments in March of 2018, 2017, and 2016. The difference between the aggregate purchase price and the present value of the installment payments represented the interest component of the financing arrangement and was recorded as interest expense over the payment term. We have no further financial or operational obligations to Roche.

7. Warrants

As of December 31, 2017, there were 3,567,015 common stock warrants outstanding with exercise prices ranging from $0.09 per share to $9.13 per share. The warrants were issued at various points between October 2012 and February 2015 with expiration dates ranging from October 2022 through February 2025. There were no warrants exercised during the three months ended March 31, 2018. There were 3,567,015 outstanding warrants as of March 31, 2018.

8. Stock Incentive Plans

In 2008, our board of directors adopted the 2008 Stock Incentive Plan (the "2008 Plan"), which provided for the grant of incentive stock options, nonqualified stock options, and restricted stock to employees, directors, and nonemployees of the Company up to 3,547,741 shares of common stock. Option awards expire 10 years from the grant date and generally vest over four years, but vesting conditions can vary at the discretion of our board of directors.

In July 2015, the Company approved the 2015 Stock Option and Incentive Plan (the "2015 Plan"), which became effective upon our initial public offering ("IPO"). The 2015 Plan allows the grant of incentive stock options, nonqualified stock options, and restricted stock to employees, directors, and nonemployees of the Company up to 3,566,296 shares of common stock. In connection with the adoption of the 2015 Plan, no further option grants are permitted under the 2008 Plan and any expirations, cancellations, or terminations under the previous plan are available for issuance under the 2015 Plan. On January 1, 2016, the number of shares reserved and available for issuance under the 2015 Stock Plan increased by 960,504 shares of common stock pursuant to a provision in the 2015 Stock Plan that provides that the number of shares reserved and available for issuance will automatically increase each January 1, beginning on January 1, 2016, by 4% of the number of shares of common stock issued and outstanding on the immediately preceding December 31 or such lesser number as determined by the compensation committee of the board of directors. The compensation committee of the Board of Directors determined there would be no increase to the shares reserved and available under the 2015 Stock Plan on January 1, 2018 and 2017. As of March 31, 2018, the total number of shares authorized for stock award plans is 7,114,037 of which 2,448,616 remain available for grant. There are 4,348,776 stock options outstanding as of March 31, 2018.

Stock-based compensation for the three months ended March 31, 2018 and 2017 consisted of the following:

	Three Months Ended March 31,	
	2018	2017
	($ in thousands)	
General and administrative	$ 323	$ 355
Research and development	314	364
Total	$ 637	$ 719

We issued approximately 2,000 shares of common stock following the exercise of underlying stock options in the three months ended March 31, 2018. There were no exercises of stock options in the three months ended March 31, 2017.

The fair value of each stock option issued was estimated at the date of grant using the Black-Scholes option model with the following weighted-average assumptions:

	Three Months Ended March 31, 2018
Expected volatility	76.5%
Expected term (years)	6.28
Risk-free interest rate	2.71%
Expected dividend yield	0%

We issued approximately 749,000 stock option grants in the three months ended March 31, 2018. The weighted-average grant date fair value per share of stock options granted during the three months ended March 31, 2018 was $1.05. We did not issue stock option grants in the three months ended March 31, 2017.

9. Commitments and Contingencies

We conduct certain of our operations in leased facilities, which are accounted for as operating leases. Certain leases include renewal options. In addition, we lease automobiles and equipment under operating leases. There were no assets held under capital leases at March 31, 2018 and December 31, 2017. At March 31, 2018, the minimum rental commitments under all non-cancelable operating leases with initial or remaining terms of more than one year was approximately $0.3 million through 2020.

Legal Proceedings

On June 9, 2016, Chiasma, Inc. and certain of our current and former officers were named as defendants in a federal securities class action lawsuit filed in the United States District Court for the District of Massachusetts, styled *Gerneth v. Chiasma, Inc., et al*. This lawsuit challenges our public statements regarding our Phase 3 clinical trial methodology for octreotide capsules and our ability to obtain FDA approval for the marketing and sale of octreotide capsules. In December 2016, a lead plaintiff was appointed in the case. An amended complaint was filed by the lead plaintiff on February 10, 2017 similarly challenging our statements regarding the Phase 3 clinical trial methodology and results, and our ability to obtain FDA approval for octreotide capsules, purportedly in violation of Sections 11 and 15 of the Securities Act of 1933. The amended complaint adds as defendants current and former members of our board of directors, as well as the investment banks that underwrote our initial public offering ("IPO") on July 15, 2015. The lead plaintiff seeks to represent a class of all purchasers of our stock in our IPO. The plaintiff is seeking an unspecified amount of compensatory damages on behalf of himself and members of a putative shareholder class, including interest and reasonable costs and expenses incurred in litigating the action, and any other relief the court determines is appropriate. The defendants filed a motion to dismiss the amended complaint on March 27, 2017 and on February 15, 2018, the court denied defendants' motion to dismiss. The defendants filed an answer to the amended complaint on March 30, 2018. We believe this lawsuit is meritless and intend to vigorously defend against it. At this time, no assessment can be made as to the likely outcome of this lawsuit or whether the outcome will be material to us.

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our unaudited condensed consolidated financial statements and the accompanying notes thereto included elsewhere in this Quarterly Report on Form 10-Q and the audited financial information and the notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2017. Some of the information contained in this discussion and analysis or set forth elsewhere in this Quarterly Report on Form 10-Q, including information with respect to our plans and strategy for our business and related financing, includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including those factors set forth in the "Risk Factors" section of this Quarterly Report on Form 10-Q and our prior filings with the SEC, our actual results could differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

We are a clinical-stage biopharmaceutical company focused on improving the lives of patients who face challenges associated with their existing treatments for rare and serious chronic disease. Employing our proprietary Transient Permeability Enhancer, or TPE, technology platform, we seek to develop oral medications that are currently available only as injections. We are currently developing oral octreotide capsules, conditionally trade-named "MYCAPSSA", our sole TPE platform-based clinical product candidate, in two Phase 3 clinical trials in adult patients for the treatment of acromegaly to potentially support regulatory approval in the United States and European Union. Acromegaly is a rare and debilitating condition that results in the body's production of excess growth hormone. Octreotide is an analog of somatostatin, a natural inhibitor of growth hormone secretion. We believe that octreotide capsules, if approved by regulatory authorities, will be the first somatostatin analog available for oral administration. Octreotide capsules have been granted orphan designation in the United States and the European Union for the treatment of acromegaly. The worldwide market for injectable somatostatin analogs is approximately $2.5 billion annually, of which we estimate approximately $775 million represents annual sales for the treatment of acromegaly. We retain worldwide rights to develop and commercialize octreotide capsules with no royalty obligations to third parties.

In September 2017, we initiated a third Phase 3 clinical trial for oral octreotide capsules for the maintenance therapy of adult patients with acromegaly following our agreement with the United States Food and Drug Administration, or the FDA, on the design of the trial, reached through a Special Protocol Assessment, or SPA, in August 2017. The trial, referred to as CHIASMA OPTIMAL, is a randomized, double-blind, placebo-controlled, nine-month trial expected to enroll 50 adult acromegaly patients designed to support regulatory approval of octreotide capsules in the United States. We expect to release top-line data from this trial by the end of 2019. We are also currently conducting an international Phase 3 clinical trial, referred to as MPOWERED, of oral octreotide capsules for the maintenance treatment of adult patients with acromegaly to support regulatory approval in the European Union. The MPOWERED trial is a global, randomized, open-label and active-controlled 15-month trial expected to enroll approximately 130 adult acromegaly patients, of which we expect to randomize at least 80 patients who are responders to octreotide capsules following a six-month run-in to either octreotide capsules or injectable somatostatin receptor ligands (octreotide or lanreotide), and then followed for an additional nine months. We currently expect to release top-line data from the MPOWERED trial in 2020.

We were incorporated in 2001 and commenced active operations in the same year. Our operations to date have been limited to organizing and staffing our company, business planning, raising capital, developing our TPE technology, identifying potential drug candidates, undertaking nonclinical studies and, beginning in 2010, conducting clinical trials and preparing for regulatory submissions. To date, we have financed our operations primarily through private placements, funding received from a licensing agreement, a loan agreement and our initial public offering. We have no products approved for sale and all of our historical revenue has been related to one license agreement, which was terminated in 2014. Since our inception and through March 31, 2018, we have raised an aggregate of $366.2 million to fund our operations, of which $86.3 million was through our license agreement with F. Hoffmann-La Roche Ltd. and Hoffmann-La Roche Inc., collectively Roche, $106.5 million was from issuing shares of common stock in our initial public offering, or IPO, $161.4 million was from the issuance of private securities and $12.0 million was from borrowings under a loan agreement. In 2013, using proceeds from the Roche license agreement, we repaid all outstanding borrowings under our loan agreement and paid an aggregate of $55.0 million in cash as partial consideration for the redemption of certain shares of our redeemable preferred stock. As of March 31, 2018, our consolidated cash, cash equivalents and marketable securities were $60.5 million, of which $0.3 million was held by Chiasma (Israel) Ltd., our wholly owned Israeli subsidiary.

We have incurred significant operating losses since our inception. Our net loss was $7.0 million for the three months ended March 31, 2018 and $26.8 million for the year ended December 31, 2017. As of March 31, 2018, we had an accumulated deficit of $212.4 million. We expect to incur significant operating losses over the next several years. These losses, combined with prior losses, will continue to have an adverse effect on our cash resources, stockholders' equity and working capital. We expect to continue to conduct the international Phase 3 MPOWERED clinical trial of octreotide capsules in acromegaly that we initiated in March 2016 to support potential regulatory approval in the European Union and plan to continue our Phase 3 CHIASMA OPTIMAL clinical trial of octreotide capsules in acromegaly that we initiated in September 2017 to support potential regulatory approval in the United States. We expect the release of top-line CHIASMA OPTIMAL data by the end of 2019 and we expect the release of top-line MPOWERED data in 2020. Clinical development timelines, the probability of success and development costs can differ materially from expectations.

In June and August 2016, we announced two separate corporate restructuring plans intended to focus our resources on the continued development of octreotide capsules for the maintenance treatment of adult acromegaly patients. As a result of the August 2016 reduction in workforce, we eliminated our research and discovery functions and are currently not investing in those areas. Because of the numerous risks and uncertainties facing our company and associated with developing and commercializing pharmaceutical products generally, we are unable to predict the extent of any future losses or when we will become profitable, if at all.

Until such time, if ever, as we can generate substantial product revenues, we expect to finance our cash needs through a combination of equity offerings and debt financings, and we may also opportunistically consider license and collaboration agreements with potential partners. We may be unable to raise capital when needed or on attractive terms, or to enter into collaboration agreements, which could force us to delay, limit, reduce or terminate our product development or future commercialization efforts. We will need to generate significant revenues to achieve profitability, which we may not be able to achieve.

Roche License Agreement

In December 2012, we signed a license agreement with Roche, which went into effect on January 2013. Pursuant to the license agreement, we granted Roche an exclusive, non-transferable license to all intellectual property related to octreotide capsules. Under the terms of the license, Roche obtained worldwide rights to research, develop, make, import, export, sell, market or distribute the commercial product. We retained certain responsibilities for research and development activities under a joint development plan.

In July 2014, Roche terminated the license agreement. Pursuant to the termination of the license agreement, we are not entitled to further payments from Roche, Roche has no remaining rights to octreotide capsules and we retain all rights to octreotide capsules and all related intellectual property. Subsequent to the termination, we purchased from Roche active pharmaceutical ingredient, or API, supplies to continue the development and manufacturing of octreotide capsules, together with Roche's proposed trade name, "MYCAPSSA" for octreotide capsules, for an aggregate amount of $5.1 million, payable in three annual installments of $1.7 million beginning in 2016. We made the $1.7 million annual payments in March of 2018, 2017, and 2016. We have no further financial or operational obligations to Roche.

Financial Overview

Research and Development

Research and development expenses consist of expenses incurred in performing research and development activities, including compensation and benefits for full-time research and development employees, an allocation of facilities expenses, overhead expenses, nonclinical pharmacology studies, manufacturing process-development and scale-up activities, clinical trial and related clinical manufacturing expenses, fees paid to contract research organizations, or CROs, investigative sites, and other external expenses. In the early phases of development, our research and development costs included expanding our technology platform as well as early development of specific product candidates. The majority of our research and development expenses has been spent on the development of octreotide capsules, including the manufacturing of clinical trial material, manufacturing process development and validation, regulatory and clinical activities, and our TPE platform. We expense research and development costs as incurred.

As a result of the August 2016 reduction in workforce, we eliminated our research and discovery functions and are currently not investing in those areas. We continue to invest in the clinical development of octreotide capsules. Product candidates in late stages of development generally have higher development costs than those in earlier stages of development, primarily due to the increased size and duration of late-stage clinical trials. We plan to continue our international Phase 3 CHIASMA OPTIMAL clinical trial of octreotide capsules in acromegaly that we initiated in September 2017 to support potential regulatory approval in the United States. We also expect to continue to conduct our international Phase 3 MPOWERED clinical trial of octreotide capsules in acromegaly that we initiated in March 2016 to support potential regulatory approval in the European Union. The successful development of octreotide capsules is highly uncertain.

General and Administrative

General and administrative expenses consist primarily of salaries and related benefits, including stock-based compensation, related to our executive, finance, and support functions. Other general and administrative expenses include facility-related costs not otherwise allocated to research and development expenses, travel expenses for our general and administrative personnel and professional fees for auditing, tax, and corporate and intellectual property legal services.

Our marketing expenses in the three months ended March 31, 2018 and the year ended December 31, 2017 were immaterial and are expected to continue to be immaterial while our primary business activity involves the conduct of clinical trials.

Restructuring Charges

Restructuring charges consist of employee severance benefits and related costs, contract termination fees, asset write-offs resulting from restructuring plans, suspension fees associated with commercial manufacturing agreements, and other expenses associated with restructuring our operations.

Other Income, Net

Other income, net consists mainly of interest income earned on our investments, net of interest incurred on our obligation related to the acquisition of API and trade name MYCAPSSA from Roche.

Provision for Income Taxes

We are subject to federal and state income taxes for earnings generated in the United States, and foreign taxes on earnings of our wholly-owned Israeli subsidiary. Our consolidated tax expense is primarily affected by the mix of our foreign subsidiary permanent items, discrete items, and unrecognized tax benefits and to a lesser extent our taxable income (loss) in the United States.

Critical Accounting Policies and Use of Estimates

We have adopted various accounting policies to prepare our consolidated financial statements in accordance with accounting principles generally accepted in the United States, or U.S. GAAP. Our most significant accounting policies are described in Note 1 to our consolidated financial statements included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2017. There have been no material changes in our critical accounting policies during the three months ended March 31, 2018. The preparation of our consolidated financial statements in conformity with U.S. GAAP requires us to make estimates and assumptions that affect the amounts reported in our consolidated financial statements and accompanying notes. Our estimates and assumptions, include those related to the accounting for stock-based compensation, present value of long-term purchase obligation, income taxes, and accounting for certain accruals. We assess the above estimates on an ongoing basis; however, actual results could materially differ from those estimates.

Results of Operations for the Three Months ended March 31, 2018 and 2017

Research and Development

The following is a comparison of research and development expenses for the three months ended March 31, 2018 and 2017:

	Three Months Ended March 31,			
	2018	2017	$ Change	% Change
	($ in thousands)			
Research and development	$4,863	$4,655	$ 208	4%

For the three months ended March 31, 2018, our total research and development expenses increased by $0.2 million to $4.9 million, primarily due to costs related to the CHIASMA OPTIMAL clinical trial which initiated in September 2017 and was partially offset by reduced personnel costs associated with the transition of our former Chief Development Officer from a full-time employee to board of director member of both our company and our Israeli subsidiary.

General and Administrative

The following is a comparison of general and administrative expenses for the three months ended March 31, 2018 and 2017:

	Three Months Ended March 31,			
	2018	2017	$ Change	% Change
	($ in thousands)			
General and administrative	$2,434	$2,460	$ (26)	(1%)

For the three months ended March 31, 2018, our general and administrative expenses decreased by $26,000 to $2.4 million, primarily due to the reduction in costs following the November 2017 termination of our office facility lease in Waltham, MA and was partially offset by increased legal fees.

Other Income, net

Other income totaled $0.2 million for the three months ended March 31, 2018 compared to other income of $0.2 million for the same period in 2017, an increase of approximately $70,000. The increase was driven by interest income generated from increased yields on our cash equivalents and marketable securities and a decrease in the imputed interest expense associated with the obligation related to the acquisition of API and trade name MYCAPSSA from Roche.

Provision (Benefit) for Income Taxes

Our total tax benefit was approximately $24,000 for the three months ended March 31, 2018, representing an effective tax rate of 0.3%, as compared to a tax provision of $0.1 million for the three months ended March 31, 2017, representing an effective tax rate of (0.9%).

Our effective tax rate differs from the statutory rate each year mainly due to a full valuation allowance maintained against U.S. deferred tax assets and due to lower tax rates applied to income of our Israeli subsidiary.

Liquidity and Capital Resources

Since our inception and through March 31, 2018, we have raised an aggregate of $366.2 million to fund our operations, of which $86.3 million was through our license agreement with Roche, approximately $106.5 million was from selling shares of common stock in our IPO, $161.4 million was from the issuance of private securities, and $12.0 million was from borrowings under a loan agreement. In March 2013, using proceeds from the Roche license agreement, we repaid all outstanding borrowings under our loan agreement and paid an aggregate of $55.0 million in cash as partial consideration for the redemption of certain shares of our preferred stock.

As of March 31, 2018, our cash and cash equivalents were $15.2 million, of which $0.3 million was held by our Israeli subsidiary. In addition, as of March 31, 2018, we have $45.3 million invested in short-term marketable securities.

Plan of Operations and Future Funding Requirements

We expect that our primary uses of capital will be associated with seeking regulatory approval of octreotide capsules in the United States and European Union, including clinical trial costs (including our international Phase 3 CHIASMA OPTIMAL clinical trial that we initiated in September 2017 to support regulatory approval of octreotide capsules in the United States and our international Phase 3 MPOWERED clinical trial that we initiated in March 2016 to support regulatory approval of octreotide capsules in the European Union), manufacturing of octreotide capsules for market consumption, if approved, legal and regulatory expenses related to seeking regulatory approval of octreotide capsules in the United States and European Union, compensation and related expenses, third-party clinical development services, legal and other regulatory expenses, and other general operating costs.

We currently expect our existing cash, cash equivalents and marketable securities will be sufficient to fund our operations through the anticipated release of top-line data from our Phase 3 CHIASMA OPTIMAL trial by the end of 2019 while supporting our Phase 3 MPOWERED trial in parallel. We cannot estimate the actual amounts necessary to successfully complete the development and commercialization of octreotide capsules, if at all, or whether, or when, we may achieve profitability. Our future capital requirements will depend on many factors, including, but not limited to:

- the costs, timing and outcome of the development and regulatory review of octreotide capsules;
- the progress and results of our ongoing clinical trials of octreotide capsules or any future clinical trials or studies we may conduct;
- the costs and timing of future commercialization activities, including product manufacturing, marketing, sales and distribution, for octreotide capsules and any other future product candidates for which we receive marketing approval;
- proceeds, if any, received from commercial sales of octreotide capsules and any future product candidates for which we receive marketing approval;
- the costs and timing of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending any intellectual property-related claims; and
- the extent to which we develop, acquire or in-license other product candidates and technologies or explore or consummate other strategic transactions.

Until such time, if ever, as we can generate substantial product sales, we expect to finance our cash needs through a combination of equity offerings and debt financings and we may opportunistically consider license and collaboration arrangements. We believe that shelf registration statements can contribute, when used, to greater financial flexibility. To that end, we filed a shelf registration statement on Form S-3 with the Securities and Exchange Commission in March 2018. To the extent that we raise additional capital through future issuance of equity or debt, the ownership interest of our stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our existing common stockholders. If we raise additional funds through collaboration arrangements, we may have to relinquish valuable rights to our current or future product candidates, exploratory programs, technologies or future revenue streams on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts of octreotide capsules or grant rights to develop and market future potential product candidates that we would otherwise prefer to develop and market ourselves.

Cash Flows

The following is a summary of cash flows for the three months ended March 31, 2018 and 2017:

	Three Months Ended March 31,	
	2018	2017
	($ in thousands)	
Cash flows provided by (used in):		
Operating activities	$(4,754)	$ (6,314)
Investing activities	7,099	(10,010)
Financing activities	(1,700)	(1,700)

Operating Activities

Net cash used in operating activities was $4.8 million for the three months ended March 31, 2018, and primarily consisted of $7.0 million in net loss, adjusted for non-cash items of $0.6 million (primarily stock-based compensation) and working capital increases of $1.7 million (primarily due to the increase in accounts payable and accrued expenses). Net cash used in operating activities was $6.3 million for the three months ended March 31, 2017, and primarily consisted of $7.0 million in net loss, adjusted for non-cash items of $0.7 million (primarily stock-based compensation). The primary driver for the decrease in our operating spending during the three months ended March 31, 2018 compared to the three months ended March 31, 2017 was the timing of clinical trial related payments driving our net working capital increases in 2018 and employee severance payments made in the three months ended March 31, 2017.

Investing Activities

Net cash provided by investing activities was $7.1 million for the three months ended March 31, 2018, primarily related to the net maturities of marketable securities, compared to $10.0 million in cash used in investing activities for the three months ended March 31, 2017, primarily related to the net purchases of marketable securities.

Financing Activities

Net cash used in financing activities was $1.7 million during the three months ended March 31, 2018, primarily related to the final $1.7 million installment payment related to the termination of the Roche license agreement. For the three months ended March 31, 2017, net cash used in financing activities was $1.7 million, related to the second $1.7 million installment payment related to the termination of the Roche license agreement.

Contractual Obligations

We conduct our operations in leased facilities, which are accounted for as operating leases. Certain leases include renewal options. In addition, we lease automobiles and equipment under operating leases. There were no assets held under capital leases at March 31, 2018 or December 31, 2017. At March 31, 2018, the minimum rental commitments under all non-cancelable operating leases with initial or remaining terms of more than one year was approximately $0.3 million through 2020.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined in the rules and regulations of the SEC.

JOBS Act

In April 2012, the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, was enacted. Section 107 of the JOBS Act provides that an “emerging growth company” can take advantage of an extended transition period for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this extended transition period, and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for public companies.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

The market risk inherent in our financial instruments and in our financial position represents the potential loss arising from adverse changes in interest rates. As of March 31, 2018, we had $15.2 million in cash and cash equivalents, consisting of cash in checking accounts at U.S. and Israeli banking institutions as well as money market funds. In addition, as of March 31, 2018, we had $45.3 million of marketable securities consisting of short-term corporate notes and commercial paper. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates. An immediate 100 basis point change in interest rates would cause a decrease in the value of our short-term investments of $0.2 million. As of March 31, 2018, we did not have any outstanding borrowings, and as a result we are not exposed to interest rate risk associated with credit facilities.

In addition, we are subject to currency risk for balances held, or denominated, in currencies other than U.S. dollars. We seek to maintain all balances in U.S. dollars until payment in other currencies is required to minimize this currency risk. Fluctuations in the exchange rate between the U.S. dollar and each of the Euro, GBP and NIS over the past 24 months have been approximately 9%, (1%) and 9%, respectively. As of March 31, 2018, we held $0.3 million in Israeli banks and petty cash funds to support our Israeli operations, approximately half of which is denominated in U.S. dollars. We contract with CROs internationally, primarily for the execution of clinical trials and manufacturing activities. Transactions with these providers are settled in U.S. dollars, Euros or GBP and, therefore, we believe that we have only minimal exposure to foreign currency exchange risks. We do not hedge against foreign currency risks.

We do not believe that inflation and changing prices had a significant impact on our results of operations for any periods presented herein.

Item 4. Controls and Procedures

Management's Evaluation of our Disclosure Controls and Procedures

We maintain disclosure controls and procedures (as defined in Rules 13a-15(e) or 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act) that are designed to ensure that information required to be disclosed in the reports that we file or submit under the Exchange Act is (1) recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms and (2) accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Based on this evaluation, our management, with the participation of our principal executive officer and principal financial officer, evaluated the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report. In designing and evaluating our disclosure controls and procedures, our 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. Our principal executive officer and principal financial officer has concluded based upon the evaluation described above that, as of March 31, 2018, our disclosure controls and procedures were effective at the reasonable assurance level.

We continue to review and document our disclosure controls and procedures, including our internal controls and procedures for financial reporting, and may from time to time make changes aimed at enhancing their effectiveness and to ensure that our systems evolve with our business.

Changes in Internal Control Over Financial Reporting

During the three months ended March 31, 2018, there have been no changes in our internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15(d)-15(f) promulgated under the Exchange Act, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION

Item 1. Legal Proceedings

On June 9, 2016, Chiasma, Inc. and certain of our current and former officers were named as defendants in a federal securities class action lawsuit filed in the United States District Court for the District of Massachusetts, styled *Gerneth v. Chiasma, Inc., et al*. This lawsuit challenges our public statements regarding our Phase 3 clinical trial methodology for octreotide capsules and our ability to obtain FDA approval for the marketing and sale of octreotide capsules. In December 2016, a lead plaintiff was appointed in the case. An amended complaint was filed by the lead plaintiff on February 10, 2017 similarly challenging our statements regarding the Phase 3 clinical trial methodology and results, and our ability to obtain FDA approval for octreotide capsules, purportedly in violation of Sections 11 and 15 of the Securities Act of 1933. The amended complaint adds as defendants current and former members of our board of directors, as well as the investment banks that underwrote our initial public offering ("IPO") on July 15, 2015. The lead plaintiff seeks to represent a class of all purchasers of our stock in our IPO. The plaintiff is seeking an unspecified amount of compensatory damages on behalf of himself and members of a putative shareholder class, including interest and reasonable costs and expenses incurred in litigating the action, and any other relief the court determines is appropriate. The defendants filed a motion to dismiss the amended complaint on March 27, 2017 and on February 15, 2018, the court denied defendants' motion to dismiss. The defendants filed an answer to the amended complaint on March 30, 2018. We believe this lawsuit is meritless and intend to vigorously defend against it. At this time, no assessment can be made as to the likely outcome of this lawsuit or whether the outcome will be material to us.

Item 1A. Risk Factors

We operate in a rapidly changing environment that involves a number of risks that could materially affect our business, financial condition or future results, some of which are beyond our control. In addition to the other information set forth in this Quarterly Report on Form 10-Q, you should carefully consider the factors discussed in Part I, "Item 1A. Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2017, as filed with the Securities and Exchange Commission, which could materially affect our business, financial condition or future results. During the quarterly period covered by this Quarterly Report on Form 10-Q, there were no material changes to the risk factors described in our Annual Report on Form 10-K for the fiscal year ended December 31, 2017.

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

Recent Sales of Unregistered Securities

None.

Issuer Purchases of Equity Securities

In the quarter ended March 31, 2018, we did not repurchase any shares of our common stock.

Use of Proceeds from Initial Public Offering of Common Stock

On July 21, 2015, we completed the sale of 7,319,750 shares of our common stock (inclusive of 954,750 shares of common stock sold by us pursuant to the full exercise of an option granted to the underwriters) in our IPO at a price to the public of $16.00 per share. The offer and sale of the shares in our IPO was registered under the Securities Act pursuant to registration statements on Form S-1 (File No. 333-204949), which was filed with the SEC on June 15, 2015 and amended subsequently and declared effective by the SEC on July 15, 2015, and Form S-1MEF (File No. 333-205691), which was filed with the SEC on July 15, 2015 and automatically effective upon filing. Following the sale of the shares in connection with the closing of our IPO, the offering terminated. The offering did not terminate before all the securities registered in the registration statements were sold. Barclays Capital Inc. and Cowen and Company, LLC acted as joint book-running managers for the offering. William Blair & Company, L.L.C. and Oppenheimer & Co. Inc. acted as co-managers.

We raised approximately $106.5 million in net proceeds after deducting underwriting discounts and commissions and offering expenses payable by us. We invested the funds received in cash equivalents and other short-term investments in accordance with our investment policy.

In June 2016 and August 2016, we announced two separate corporate restructuring plans intended to focus our resources on the continued development of octreotide capsules for the maintenance treatment of adult acromegaly patients. As a result of the August 2016 reduction in workforce, we eliminated our research and discovery functions and are currently not investing in those areas.

We expect that our primary uses of capital will be associated with seeking regulatory approval of octreotide capsules in the United States and European Union, including clinical trial costs (including the international Phase 3 MPOWERED clinical trial that we initiated in March 2016 to support anticipated European Union regulatory approval of octreotide capsules and our international Phase 3 CHIASMA OPTIMAL clinical trial that we initiated in September 2017 to support United States regulatory approval of octreotide capsules), manufacturing of octreotide capsules for market consumption, if approved, legal and regulatory expenses related to seeking regulatory approval of octreotide capsules in the United States and European Union, compensation and related expenses, third-party clinical development services, legal and other regulatory expenses, and other general operating costs.

Item 6. Exhibits

The following exhibits are filed as part of this Quarterly Report on Form 10-Q:

Exhibit No.	Description
10.1†*	Amended and Restated Employment Agreement dated as of February 23, 2018 by and between the Company and William Ludlam, M.D., Ph.D.
10.2†	Amended and Restated Employment Agreement dated as of February 23, 2018 by and between the Company and Drew Enamait (incorporated by reference to Exhibit 10.1 of the Company's Form 8-K filed on February 28, 2018).
31.1*	Certification of Principal Executive Officer and Principal Financial Officer pursuant to Exchange Act rules 13a-14 or 15d-14, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1+	Certification of Principal Executive Officer and Principal Financial Officer pursuant 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS*	XBRL Instance Document.
101.SCH*	XBRL Taxonomy Extension Schema Document.
101.CAL*	XBRL Taxonomy Extension Calculation Document.
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB*	XBRL Taxonomy Extension Labels Linkbase Document.
101.PRE*	XBRL Taxonomy Extension Presentation Link Document.

* Filed herewith.
† Indicates a management contract or compensation plan, contract or arrangement.
\+ The certification furnished in Exhibit 32.1 hereto is deemed to be furnished with this Quarterly Report on Form 10-Q and will not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, except to the extent that the Registrant specifically incorporates it by reference.

SIGNATURES

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

CHIASMA, INC.

May 10, 2018

By: */s/ Mark J. Fitzpatrick*
Mark J. Fitzpatrick
President, Chief Executive Officer and Director
(Principal Executive Officer and Principal Financial Officer)

Exhibit 10.1

Chiasma, Inc.
460 Totten Pond Road
Suite 530
Waltham, MA 02451

February 23, 2018

William Ludlam, M.D, Ph.D.

Re: Amended and Restated Executive Employment Letter

Dear William**:**

This amended and restated letter agreement (the "Agreement") confirms the terms and conditions of your employment with Chiasma, Inc. (the "Company") effective February 23, 2018 (the "Effective Date"). It amends, restates and supersedes in all respects your employment agreement with the Company dated August 7, 2015 (the "Prior Agreement") as of the Effective Date, *provided* that your Non-Competition, Non-Solicitation, Confidentiality and Assignment Agreement with the Company dated May 8, 2015 (the "Restrictive Covenant Agreement") shall remain in full effect as modified by this Agreement.

1. **Position.** You will continue to serve as the Company's Senior Vice President, Clinical and Medical Affairs and report to the Company's Chief Executive Officer (the "CEO"). This is a full-time exempt position. Unless otherwise agreed to by the Company's Chief Executive Officer (the "CEO"), it is understood that you may work remotely from your home office in New Jersey, except that you are expected to work from the Company's headquarters in Massachusetts on an as-needed basis (as determined by the CEO) and engage in Company travel on an as-needed basis (the "Remote Work Arrangement"). It is understood and agreed that, while you render services to the Company, you will not engage in any other employment, consulting or other business activities (whether full-time or part-time), unless you first obtain the Company's approval. It is understood and agreed that you may serve on one other board but only if such outside board service does not present a conflict or potential conflict of interest as determined in good faith by the CEO or the Company's Board of Directors (the "Board"). You also may engage in religious, charitable and other community activities, including your current position as a bishop in your church in New Jersey (the "Church Position"), so long as such activities do not interfere or conflict with your obligations to the Company. Upon the ending of your employment, you shall immediately resign from any other position(s) to which you were elected or appointed in connection with your employment.

2. **Salary.** Effective January 1, 2018, the Company will pay you a base salary at a rate equivalent to $380,000 per year, payable in accordance with the Company's standard payroll schedule and subject to applicable deductions and withholdings. Your base salary will be subject to periodic review and adjustment at the Company's discretion.

3. **Annual Bonus.** You will be eligible to receive an annual performance bonus. The Company will target the bonus at up to 30% of your annual salary rate (the "Bonus Target'). The actual bonus percentage is discretionary and will be subject to the Company's assessment of your performance, as well as business conditions at the Company. The bonus also will be subject to your employment for the full period covered by the bonus, approval by and adjustment at the discretion of the Board and the terms of any applicable bonus plan. The Company expects to review your job performance on an annual basis and to discuss with you the criteria which the Company will use to assess your performance for bonus purposes. The Board may also make adjustments in the targeted amount of your annual performance bonus. The Company will pay any bonus no later than 75 days after the end of the period covered by the bonus.

4. **Business Travel/Expenses.** The Company will reimburse you for travel and other business expenses consistent with the terms and conditions of the Company's expense reimbursement policies.

5. **Benefits/Vacation.** You will continue to be eligible to participate in the employee benefits and insurance programs generally made available to the Company's full-time employees. You will be eligible for up to 18 days of vacation per year, which shall accrue on a prorated basis. Other provisions of the Company's vacation policy are set forth in the policy itself.

6. **Stock Options.** The Board has granted you an option for the purchase of 52,011 shares of common stock of the Company, with an exercise price equal to the closing trading price on the date of the grant (the "Time-Based Option"). The Time-Based Option shall vest in equal quarterly installments over the 4-year period following the date of the grant, as described in more detail in the applicable stock option agreement to be provided by the Company, *provided* that you remain employed by the Company on each such vesting date. The Board also has granted you an option for the purchase of 18,189 shares of common stock of the Company, with an exercise price equal to the closing trading price on the date of the grant (the "Performance Option"). The vesting of the Performance Option shall be subject to performance-based parameters described in the applicable stock option agreement to be provided by the Company. Your eligibility for these stock options will be governed by the Company's 2015 Stock Incentive Plan and the associated stock option agreements required to be entered into by you and the Company (the "Equity Documents"). Your stock options granted prior to the date of this letter shall also remain subject to the applicable Equity Documents.

7. **At-Will Employment**. Your employment is "at will," meaning you or the Company may terminate it at any time for any or no reason.

8. **Termination Benefits**.

a. In the event of the termination of your employment for any reason, the Company shall pay you your base salary through your last day of employment (the "Date of Termination"), for any accrued but unused vacation and the amount of any documented expenses properly incurred by you on behalf of the Company prior to any such termination and not yet reimbursed (the "Accrued Obligations").

b. "Cause" means: (i) conduct by you in connection with your service to the Company that is fraudulent, unlawful or grossly negligent; (ii) your material breach of your material responsibilities to the Company, including your failure to adhere to the Remote Work Arrangement, or your willful failure to comply with the lawful directives of the Board or written policies of the Company; (iii) breach by you of your representations, warranties, covenants and/or obligations under this Agreement (including the Restrictive Covenant Agreement); (iv) material misconduct by you which seriously discredits or damages the Company or any of its affiliates, and/or (v) nonperformance or unsatisfactory performance of your duties or responsibilities to the Company as determined in good faith by the Company after (in the case of subsection (v) only) written notice to you and a reasonable opportunity to cure that shall not exceed thirty (30) days.

c. A "Change in Control" means the sale of all or substantially all of the outstanding shares of capital stock, assets or business of the Company, by merger, consolidation, sale of assets or otherwise (other than a merger or consolidation in which all or substantially all of the individuals and entities who were beneficial owners of the Company's voting securities immediately prior to such transaction beneficial own, directly or indirectly, more than 50% (determined on an as-converted basis) of the outstanding securities entitled to vote generally in the election of directors of the resulting, surviving or acquiring corporation in such transaction). Notwithstanding the foregoing, where required to avoid extra taxation under Section 409A of the Internal Revenue Code, a Change in Control must also satisfy the requirements of Treas. Reg. Section l. 409A-3(a)(5).

d. "Good Reason" means that you have complied with the "Good Reason Process" (hereinafter defined) following the occurrence of any of the following events: (i) a material diminution in your responsibilities, authority or duties; (ii) a material diminution in your Base Salary except for across-the-board salary reductions based on the Company's financial performance similarly affecting all or substantially all senior management employees of the Company; or (iii) a change of more than 60 miles

in the Company location to which you report (which is currently the Company's headquarters in Massachusetts) (each a "Good Reason Condition"). Notwithstanding the foregoing, a suspension of your responsibilities, authority and/or duties for the Company during any portion of a bona fide internal investigation or an investigation by regulatory or law enforcement authorities shall not be a Good Reason Condition. Good Reason Process shall mean that (i) you reasonably determine in good faith that a Good Reason Condition has occurred; (ii) you notify the Company in writing of the occurrence of the Good Reason Condition within 30 days of the occurrence of such condition; (iii) you cooperate in good faith with the Company's efforts, for a period not less than 30 days following such notice (the "Cure Period"), to remedy the Good Reason Condition; (iv) notwithstanding such efforts, the Good Reason condition continues to exist; and (v) you terminate employment within 30 days after the end of the Cure Period. If the Company cures the Good Reason Condition during the Cure Period, Good Reason shall be deemed not to have occurred.

e. In the event the Company terminates your employment without Cause or you terminate your employment for Good Reason, in either case within 12 months after the occurrence of the first event constituting a Change in Control (a "Change in Control Termination") and provided you (i) enter into, do not revoke and comply with the terms of a separation agreement in a form provided by the Company which shall include a general release of claims against the Company and related persons and entities (the "Release"), within the time period required by the Release but in no event later than 60 days after the Date of Termination; (ii) resign from any and all positions, including, without implication of limitation, as a director, trustee or officer, that you then hold with the Company or any affiliate of the Company; and (iii) return all Company property and comply with any instructions related to deleting and purging duplicates of such Company property, the Company will provide you with the following "Termination Benefits": (a) continuation of your base salary for the six (6) month period that immediately follows the Date of Termination; (b) payment of one-half (1/2) of your Bonus Target for the year in which the Change in Control occurs ((a) and (b), the "Severance Payments"); (c) all of the unvested shares subject to time based vesting (which, to avoid doubt, includes shares underlying the Performance Option to the extent the applicable performance milestones are satisfied by the effective date of a Change in Control Termination and excludes shares underlying the Performance Option that are subject to satisfaction of performance milestones to the extent that any defined performance milestone has not been satisfied as of the effective date of the Change in Control Termination) pursuant to the stock options granted to you by the Company shall immediately vest and become exercisable as of the Date of Termination; and (d) if elected, continuation of group health plan benefits to the extent authorized by and consistent with 29 U.S.C. *§* 1161 et seq. (commonly known as "COBRA"), with the cost of the regular premium for such benefits shared in the same relative proportion by the Company and you as in effect on the Date of Termination until the earlier of (i) the date that is six (6) months after the Date of Termination; and (ii) the date you become eligible for health benefits through another employer or otherwise become ineligible for COBRA. This Section 8(e) shall terminate and be of no further force or effect beginning 12 months after the occurrence of a Change in Control.

a. In the event the Company terminates your employment without Cause or you terminate your employment for Good Reason, in either case other than a Change in Control Termination, and in either case provided you (i) enter into, do not revoke and comply with the terms of the Release within 60 days after the Date of Termination; (ii) resign from any and all positions, including, without implication of limitation, as a director, trustee or officer, that you then hold with the Company and any affiliate of the Company; and (iii) return all Company property and comply with any instructions related to deleting and purging duplicates of such Company property, the Company will provide you with the following "Termination Benefits": (a) continuation of your then current base salary for the six (6) month period that immediately follows the Date of Termination (the "Severance Payments"); and (b) if elected, continuation of group health plan benefits to the extent authorized by and consistent with 29 U.S.C. § 1161 et seq. (commonly known as "COBRA"), with the cost of the regular premium for such benefits shared in the same relative proportion by the Company and you as in effect on the Date of Termination until the earlier of (i) the date that is six (6) months after the Date of Termination; and (ii) the date you become eligible for health benefits through another employer or otherwise become ineligible for COBRA.

b. The Severance Payments shall commence within 60 days after the Date of Termination and shall be made on the Company's regular payroll dates; provided, however, that if the 60-day period begins in one calendar year and ends in a second calendar year, the Severance Payments shall begin to be paid in the second calendar year. In the event you miss a regular payroll period between the Date of Termination and

first Severance Payment date, the first Severance Payment shall include a "catch up" payment. Solely for purposes of Section 409A of the Internal Revenue Code of 1986, as amended, each Severance Payment is considered a separate payment.

9. **Termination of Employment as a Result of Death, Disability, Termination by the Company for Cause or Resignation without Good Reason.** In the event your employment is terminated as a result of your (i) death, (ii) Disability, (iii) termination for Cause by the Company; or (iv) resignation without Good Reason, you will be entitled to the Accrued Obligations but you will not be entitled to Termination Benefits. "Disability" means that, as a result of your mental or physical illness, you are unable to perform (with or without reasonable accommodation in accordance with the Americans with Disabilities Act) the duties of your position pursuant to this Agreement for a period of a minimum of ninety (90) consecutive days.

10. **Confidential Information and Restricted Activities.** The Restrictive Covenant Agreement remains in full effect, is incorporated by reference herein, and is hereby revised by adding the following two Sections:

20. Protected Disclosures. I understand that nothing contained in this Agreement limits my ability to communicate with any federal, state or local governmental agency or commission, including to provide documents or other information, without notice to the Company. I also understand that nothing in this Agreement limits my ability to share compensation information concerning myself or others, except that this does not permit me to disclose compensation information concerning others that I obtain because my job responsibilities require or allow access to such information.

21. Defend Trade Secrets Act of 2016. I understand that pursuant to the federal Defend Trade Secrets Act of 2016, I shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that (a) is made (i) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney; and (ii) solely for the purpose of reporting or investigating a suspected violation of law; or (b) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal.

You agree without reservation that the restraints in the Restrictive Covenant Agreement are necessary for the reasonable and proper protection of the Company and its affiliates, and that each and every one of the restraints is reasonable in respect to subject matter, length of time and geographic area. You further agree that, were you to breach any of the covenants contained in this Agreement or the Restrictive Covenant Agreement, in addition to the Company's other legal and equitable remedies, the Company may suspend or cease any Termination Benefits to which you might otherwise be entitled. Any such suspension or termination of the Termination Benefits by the Company in the event of a breach by you shall not affect your ongoing obligations to the Company.

11. **Taxes; Section 409A; Section 280G; Section 4099.**

a. All forms of compensation referred to in this Agreement are subject to reduction to reflect applicable withholding and payroll taxes and other deductions required by law. You hereby acknowledge that the Company does not have a duty to design its compensation policies in a manner that minimizes your tax liabilities, and you will not make any claim against the Company or its board of directors related to tax liabilities arising from your compensation.

b. Anything in this Agreement to the contrary notwithstanding, if at the time of your separation from service within the meaning of Section 409A of the Code, the Company determines that you are a "specified employee" within the meaning of Section 409A(a)(2)(B)(i) of the Code, then to the extent any payment or benefit that you become entitled to under this Agreement on account of your separation from service would be considered deferred compensation subject to the 20 percent additional tax imposed pursuant to Section 409A(a) of the Code as a result of the application of Section 409A(a)(2)(B)(i) of the Code, such payment shall not be payable and such benefit shall not be provided until the date that is the earlier of (A) six months and one day after your separation from service, or (B) your death. If any such delayed cash payment is otherwise payable on an installment basis, the first

payment shall include a catch-up payment covering amounts that would otherwise have been paid during the six-month period but for the application of this provision, and the balance of the installments shall be payable in accordance with their original schedule. All in-kind benefits provided and expenses eligible for reimbursement under this Agreement shall be provided by the Company or incurred by you during the time periods set forth in this Agreement. All reimbursements shall be paid as soon as administratively practicable, but in no event shall any reimbursement be paid after the last day of the taxable year following the taxable year in which the expense was incurred. The amount of in-kind benefits provided or reimbursable expenses incurred in one taxable year shall not affect the in-kind benefits to be provided or the expenses eligible for reimbursement in any other taxable year. Such right to reimbursement or in-kind benefits is not subject to liquidation or exchange for another benefit. To the extent that any payment or benefit described in this Agreement constitutes "non-qualified deferred compensation" under Section 409A of the Code, and to the extent that such payment or benefit is payable upon your termination of employment, then such payments or benefits shall be payable only upon your "separation from service." The determination of whether and when a separation from service has occurred shall be made in accordance with the presumptions set forth in Treasury Regulation Section l. 409A- l (h). The Company and you intend that this Agreement will be administered in accordance with Section 409A of the Code. To the extent that any provision of this Agreement is ambiguous as to its compliance with Section 409A of the Code, the provision shall be read in such a manner so that all payments hereunder comply with Section 409A of the Code. The Company makes no representation or warranty and shall have no liability to you or any other person if any provisions of this Agreement are determined to constitute deferred compensation subject to Section 409A of the Code but do not satisfy an exemption from, or the conditions of, such Section.

c. Anything in this Agreement to the contrary notwithstanding, in the event that the amount of any compensation, payment or distribution by the Company to or for your benefit, whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise, calculated in a manner consistent with Section 280G of the Code and the applicable regulations thereunder (the "Aggregate Payments"), would be subject to the excise tax imposed by Section 4999 of the Code, then the Aggregate Payments shall be reduced (but not below zero) so that the sum of all of the Aggregate Payments shall be $1.00 less than the amount at which you become subject to the excise tax imposed by Section 4999 of the Code; provided that such reduction shall only occur if it would result in you receiving a higher After Tax Amount (as defined below) than you would receive if the Aggregate Payments were not subject to such reduction. In such event, the Aggregate Payments shall be reduced in the following order, in each case, in reverse chronological order beginning with the Aggregate Payments that are to be paid the furthest in time from consummation of the transaction that is subject to Section 280G of the Code: (1) cash payments not subject to Section 409A of the Code; (2) cash payments subject to Section 409A of the Code; (3) equity-based payments and acceleration; and (4) non-cash forms of benefits; provided that in the case of all the foregoing Aggregate Payments all amounts or payments that are not subject to calculation under Treas. Reg. §1.2800-1, Q&A-24(b) or (c) shall be reduced before any amounts that are subject to calculation under Treas. Reg. §1.280G-l, Q&A-24(b) or (c).

(i) For purposes of this subsection(c), the "After Tax Amount" means the amount of the Aggregate Payments less all federal, state, and local income, excise and employment taxes imposed on you as a result of your receipt of the Aggregate Payments. For purposes of determining the After Tax Amount, you shall be deemed to pay federal income taxes at the highest marginal rate of federal income taxation applicable to individuals for the calendar year in which the determination is to be made, and state and local income taxes at the highest marginal rates of individual taxation in each applicable state and locality, net of the maximum reduction in federal income taxes which could be obtained from deduction of such state and local taxes.

(ii) The determination as to whether a reduction in the Aggregate Payments shall be made pursuant to subsection(c) shall be made by a nationally recognized accounting firm selected by the Company (the "Accounting Firm"), which shall provide detailed supporting calculations both to the Company and you within 15 business days of the Date of Termination, if applicable, or at such earlier time as is reasonably requested by the Company or you. Any determination by the Accounting Firm shall be binding upon the Company and you.

12. **Interpretation, Amendment and Enforcement.** This Agreement, including the Restrictive Covenant Agreement and the Equity Documents, constitutes the complete agreement between you and the Company, contains all of the terms of your employment with the Company and supersedes any prior agreements, representations or understandings (whether written, oral or implied) between you and the Company, including without limitation the Prior Agreement. The terms of this Agreement and the resolution of any disputes as to the meaning, effect, performance or validity of this Agreement or arising out of, related to, or in any way connected with this Agreement, your employment with the Company or any other relationship between you and the Company (the "Disputes") will be governed by Massachusetts law, excluding laws relating to conflicts or choice of law. You and the Company submit to the exclusive personal jurisdiction of the federal and state courts located in the Commonwealth of Massachusetts in connection with any Dispute or any claim related to any Dispute.

13. **Assignment.** Neither you nor the Company may make any assignment of this Agreement or any interest in it, by operation of law or otherwise, without the prior written consent of the other; *provided, however,* that the Company may assign its rights and obligations under this Agreement (including the Restrictive Covenant Agreement) without your consent to any affiliate at any time, or to any person or entity with whom the Company shall hereafter effect a reorganization, consolidate with, or merge into or to whom it transfers all or substantially all of its properties or assets. This Agreement shall inure to the benefit of and be binding upon you and the Company, and each of your and its respective successors, executors, administrators, heirs and permitted assigns.

14. **Miscellaneous.** This Agreement may not be modified or amended, and no breach shall be deemed to be waived, unless agreed to in writing by you and the CEO of the Company. The headings and captions in this Agreement are for convenience only and in no way define or describe the scope or content of any provision of this Agreement. The words "include," "includes" and "including" when used herein shall be deemed in each case to be followed by the words "without limitation." This Agreement may be executed in two or more counterparts, each of which shall be an original and all of which together shall constitute one and the same instrument.

15. **Other Terms.** By signing this Agreement, you represent to the Company that you have no contractual commitments or other legal obligations that would or may prohibit you from performing your duties for the Company.

Please acknowledge, by signing below, that you have accepted this Agreement.

Very Truly Yours,

/s/ Mark J. Fitzpatrick
Mark J. Fitzpatrick
President and Chief Executive Officer
Chiasma, Inc.

I have read and accept this amended and restated employment offer:

/s/ William H. Ludlam	2/26/18
William Ludlam	Date

Exhibit 31.1

Certification

I, Mark J. Fitzpatrick, certify that:

1. I have reviewed this quarterly report on Form 10-Q for the period ended March 31, 2018 of Chiasma, Inc.;

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

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

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

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

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

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

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

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

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

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

Date: May 10, 2018

/s/ Mark J. Fitzpatrick
Mark J. Fitzpatrick
President, Chief Executive Officer and Director
(Principal Executive Officer and Principal Financial Officer)

Exhibit 32.1

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

In connection with the quarterly report on Form 10-Q of Chiasma, Inc. (the "Company") for the period ended March 31, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Mark J. Fitzpatrick, President, Chief Executive Officer and Director (Principal Executive Officer and Principal Financial Officer) of the Company, hereby certifies, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that to his knowledge:

1) the Report which this statement accompanies fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company at the dates and for the periods indicated in the Report.

Date: May 10, 2018

/s/ Mark J. Fitzpatrick
Mark J. Fitzpatrick
President, Chief Executive Officer and Director
(Principal Executive Officer and Principal Financial Officer)