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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-Q

(Mark One)

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

For the quarterly period ended June 30, 2018

OR

o **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: 001-36812

FLEX PHARMA, INC.
(Exact name of Registrant as specified in its charter)

Delaware	**46-5087339**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification Number)

800 Boylston Street, 24th Floor, Boston, MA 02199
(Address of principal executive offices)(Zip Code)

Registrant's Telephone Number, Including Area Code: (617) 874-1821

Former Name, Former Address and Former Fiscal Year, If Changed Since Last Report: Not Applicable

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 the filing requirements for the past 90 days. Yes ☒ No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, 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 o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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 o	Accelerated Filer o	Non-accelerated Filer o	Smaller Reporting Company ☒	Emerging Growth Company ☒

(Do not check if a smaller reporting company)

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 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 o No ☒

As of July 27, 2018, there were 18,069,476 shares of common stock outstanding.

FLEX PHARMA, INC.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements related to present facts or current conditions or historical facts, contained in this Quarterly Report on Form 10-Q, including statements regarding our strategy, future operations, future financial position, projected costs, expectations regarding the timing and outcome of the strategic review process, development of our drug product candidates, including the timing of our planned and ongoing clinical trials, and expectations regarding the commercial prospects of our consumer product, the expected timing for the reporting of data from our ongoing and future studies, prospects, plans and objectives of management, are forward looking statements. These factors also include, but are not limited to, those factors set forth in the sections entitled "Risk Factors," "Legal Proceedings," "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Quantitative and Qualitative Disclosures about Market Risk," and "Controls and Procedures" in this Quarterly Report on Form 10-Q, all of which you should review carefully. The words "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "predict," "project," "target," "potential," "will," "would," "could," "should," "continue" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

Forward-looking statements are not guarantees of future performance and our actual results could differ materially from the results discussed in the forward-looking statements. Factors that could cause actual results to differ materially from those in the forward-looking statements include, but are not limited to, the outcome of the evaluation of our strategic alternatives, including any perceived benefits of our restructuring plan; the costs associated with our pending litigation; our ability to raise funds for our operations, our ability to continue to sell our consumer product; availability of funding sufficient for our foreseeable and unforeseeable operating expenses and capital expenditure requirements; ability to attract, retain and motivate qualified personnel; the status, timing, costs, results and interpretation of our clinical trials; the uncertainties inherent in conducting clinical trials; results from our ongoing and planned clinical development; expectations of our ability to make regulatory filings and obtain and maintain regulatory approvals; results of early clinical studies as indicative of the results of future trials; other matters that could affect the availability or commercial potential of our drug product candidates; the inherent uncertainties associated with intellectual property; and other factors discussed in this Quarterly Report on Form 10-Q, our Annual Report on Form 10-K for the year ended December 31, 2017 and other filings with the Securities and Exchange Commission, or SEC.

As a result of these and other factors, 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 do not assume any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

PART I - FINANCIAL INFORMATION

Item 1. Financial Statements

FLEX PHARMA, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS (Unaudited)

	June 30, 2018	December 31, 2017
Assets		
Current assets:		
Cash and cash equivalents	$ 15,756,971	$ 19,186,036
Marketable securities	—	14,129,723
Accounts receivable	17,329	10,385
Inventory	275,693	431,891
Prepaid expenses and other current assets	856,118	777,102
Total current assets	16,906,111	34,535,137
Property and equipment, net	180,044	331,040
Restricted cash	126,595	126,595
Total assets	$ 17,212,750	$ 34,992,772
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 1,145,333	$ 2,004,440
Accrued expenses and other current liabilities	2,588,596	3,712,221
Deferred revenue	—	72,188
Deferred rent, current portion	58,821	58,821
Total current liabilities	3,792,750	5,847,670
Deferred rent, net of current portion	9,804	39,214
Total liabilities	3,802,554	5,886,884
Stockholders' equity:		
Preferred stock, $0.0001 par value; 10,000,000 shares authorized at June 30, 2018 and December 31, 2017; none issued or outstanding at June 30, 2018 and December 31, 2017	—	—
Common stock, $0.0001 par value; 100,000,000 shares authorized at June 30, 2018 and December 31, 2017; 18,069,476 and 17,972,166 shares issued at June 30, 2018 and December 31, 2017, and 18,066,142 and 17,797,178 shares outstanding at June 30, 2018 and December 31, 2017, respectively	1,807	1,780
Additional paid-in capital	141,722,546	140,184,630
Accumulated other comprehensive loss	—	(1,247)
Accumulated deficit	(128,314,157)	(111,079,275)
Total stockholders' equity	13,410,196	29,105,888
Total liabilities and stockholders' equity	$ 17,212,750	$ 34,992,772

See accompanying notes to condensed consolidated financial statements.

FLEX PHARMA, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (Unaudited)

	Three Months Ended June 30, 2018	Three Months Ended June 30, 2017	Six Months Ended June 30, 2018	Six Months Ended June 30, 2017
Net product revenue	$ 241,416	$ 330,688	$ 417,671	$ 570,980
Other revenue	4,086	4,835	6,413	7,090
Total revenue	245,502	335,523	424,084	578,070
Costs and expenses:				
Cost of product revenue	179,945	145,325	263,879	224,431
Research and development	6,174,589	4,076,220	10,854,770	7,991,194
Selling, general and administrative	2,994,649	4,990,943	6,691,936	9,585,659
Total costs and expenses	9,349,183	9,212,488	17,810,585	17,801,284
Loss from operations	(9,103,681)	(8,876,965)	(17,386,501)	(17,223,214)
Interest income, net	51,809	72,342	111,402	150,196
Net loss	$ (9,051,872)	$ (8,804,623)	$ (17,275,099)	$ (17,073,018)
Net loss attributable to common stockholders	$ (9,051,872)	$ (8,804,623)	$ (17,275,099)	$ (17,073,018)
Net loss per share attributable to common stockholders — basic and diluted	$ (0.50)	$ (0.51)	$ (0.96)	$ (1.00)
Weighted-average number of common shares outstanding — basic and diluted	18,037,274	17,130,264	17,965,989	17,002,597

See accompanying notes to condensed consolidated financial statements.

FLEX PHARMA, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS (Unaudited)

	Three Months Ended June 30, 2018	Three Months Ended June 30, 2017	Six Months Ended June 30, 2018	Six Months Ended June 30, 2017
Net loss	$ (9,051,872)	$ (8,804,623)	$ (17,275,099)	$ (17,073,018)
Other comprehensive gain (loss):				
Unrealized gain (loss) on available-for-sale securities	(93)	6,737	1,247	(4,002)
Comprehensive loss	$ (9,051,965)	$ (8,797,886)	$ (17,273,852)	$ (17,077,020)

See accompanying notes to condensed consolidated financial statements.

FLEX PHARMA, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)

	Six Months Ended June 30, 2018	Six Months Ended June 30, 2017
Operating activities		
Net loss	$ (17,275,099)	$ (17,073,018)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation expense	124,000	171,109
Stock-based compensation expense	1,419,933	2,262,098
Amortization and accretion on investments	11,537	(15,895)
Other non-cash items	22,274	—
Changes in operating assets and liabilities:		
Accounts receivable	(184)	(22,554)
Inventory	139,206	207,063
Prepaid expenses and other current assets	(93,909)	(283,209)
Other assets	—	64,800
Accounts payable	(859,107)	601,646
Accrued expenses and other current liabilities	(1,127,164)	101,705
Deferred revenue	—	8,323
Deferred rent	(29,410)	62,385
Net cash used in operating activities	(17,667,923)	(13,915,547)
Investing activities		
Purchases of marketable securities	(1,997,751)	(9,607,390)
Proceeds from maturities and sales of marketable securities	16,117,184	40,282,017
Purchases of property and equipment	—	(53,741)
Proceeds from sales of property and equipment	1,415	3,375
Net cash provided by investing activities	14,120,848	30,624,261
Financing activities		
Proceeds from exercise of common stock	118,010	2,047
Net cash provided by financing activities	118,010	2,047
Net increase (decrease) in cash, cash equivalents and restricted cash	(3,429,065)	16,710,761
Cash, cash equivalents and restricted cash at beginning of period	19,312,631	22,542,635
Cash, cash equivalents and restricted cash at end of period	$ 15,883,566	$ 39,253,396
Supplemental cash flow information		
Inventory purchases included in accounts payable and accrued expense at June 30, 2017	$ —	$ 441,116
Property and equipment purchases included in accounts payable at June 30, 2017	$ —	$ 19,630
Property and equipment purchases included in accounts payable and accrued expenses at December 31, 2016	$ —	$ 7,100

See accompanying notes to condensed consolidated financial statements.

FLEX PHARMA, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)

1. Organization and operations

The Company

Flex Pharma, Inc. (the "Company") is a biotechnology company that was focused on developing innovative and proprietary treatments for muscle cramps, spasms and spasticity associated with severe neurological conditions. In June 2018, the Company announced that it was ending its ongoing Phase 2 clinical trials of FLX-787 in patients with motor neuron disease ("MND"), primarily with amyotrophic lateral sclerosis ("ALS"), and in patients with Charcot-Marie-Tooth disease ("CMT"), due to oral tolerability concerns observed in both studies.

Additionally, in June 2018, the Company initiated a process to explore a range of strategic alternatives for enhancing stockholder value, including the potential sale or merger of the Company. Wedbush PacGrow has been engaged to act as the Company's strategic financial advisor. The Company also announced the restructuring of the organization to reduce its cost structure in order to preserve liquidity. In connection with the restructuring plan, the Company reduced its workforce by approximately 60%, with the majority of reduction completed as of June 30, 2018. While the strategic assessment is ongoing, the Company will continue to operate with a reduced internal team that will focus their efforts on assessing the potential of FLX-787 in dysphagia (difficulty swallowing) and operating its consumer business, which sells HOTSHOT®, the Company's consumer product launched in 2016 to prevent and treat exercise-associated muscle cramps.

The Company's evaluation of strategic alternatives and its restructuring plans entails significant risks and uncertainties, including the risks and uncertainties set forth in Item 1A under the heading "Risk Factors" and Item 2 under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations" of this Quarterly Report on Form 10-Q and in the Company's Annual Report on Form 10-K. There can be no assurance that the Company's evaluation of potential strategic alternatives will result in any transaction.

The Company operates as two reportable segments, Consumer Operations and Drug Development. See Note 12 for additional discussion and information on the reportable segments.

Liquidity

The Company incurred a loss of $9,051,872 for the three months ended June 30, 2018, a loss of $17,275,099 for the six months ended June 30, 2018 and had an accumulated deficit of $128,314,157 as of June 30, 2018. The Company had unrestricted cash and cash equivalents of $15,756,971 at June 30, 2018. The Company's operating plan assumes limited research and development activities and that the Consumer Operations segment will continue to sell HOTSHOT.

In the event that the Company does not complete a sale or merger, the Company may (i) elect to continue to sell HOTSHOT and operate its consumer business or (ii) elect to pursue a dissolution and liquidation of the Company. If the Company dissolves and liquidates, the Company's common stockholders may lose their entire investment. The amount of assets available for distribution to the Company's stockholders will depend heavily on the timing of such liquidation as well as the amount of cash that will be needed for commitments and contingent liabilities.

Based on the Company's operating plan, the Company believes that its existing cash and cash equivalents will be sufficient to allow the Company to fund its current operating plan for at least 12 months from the date the financial statements are issued.

The Company cannot predict the outcome of its strategic assessment or whether and to what extent it will resume drug development activities for FLX-787 or other drug product candidates beyond its current efforts to assess the potential of FLX-787 in dysphagia and to what extent it will promote and sell HOTSHOT or other consumer products in the future. Accordingly, it is difficult to predict future cash needs. Management does expect the Company to incur losses for the foreseeable future. The Company's ability to achieve profitability in the future is dependent upon achieving a level of revenues adequate to support the Company's cost structure. The Company may never achieve profitability, and unless and until it does, the Company will continue to need to raise additional capital. If the Company raises funds through the issuance of additional equity, whether through private placements or additional public offerings, such an issuance would dilute the stockholders' ownership in the Company. There can be no assurances, however, that additional funding will be available on terms acceptable to the Company, or at all.

2. Summary of significant accounting policies and recent accounting pronouncements

The accompanying unaudited condensed consolidated financial statements reflect the application of certain significant accounting policies as described below and elsewhere in these notes to the condensed consolidated financial statements. As of June 30, 2018, the Company's significant accounting policies, which are detailed in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2017 (the "2017 10-K"), have not changed, other than as noted below.

Accounts receivable and allowance for doubtful accounts

Accounts receivable are stated at their carrying values, net of any allowances for doubtful accounts. Accounts receivable consist primarily of amounts due from specialty retailers and sports teams, for which collection is probable based on the customer's intent and ability to pay. Receivables are evaluated for collection probability on a regular basis and an allowance for doubtful accounts is recorded, if necessary. No allowance for doubtful accounts was deemed necessary at June 30, 2018 or December 31, 2017.

Restricted cash

The Company has restricted cash in the form of a letter of credit it maintains as a security deposit on the lease of its office space in Boston, Massachusetts.

Advertising expense

Advertising expense consists of media and production costs related to print and digital advertising. All advertising is expensed as incurred. Total advertising expenses are included in selling, general and administrative expenses in the condensed consolidated statement of operations, and were approximately $264,000 and $772,000 for the three and six months ended June 30, 2018 and approximately $1,250,000 and $1,915,000 for the three and six months ended June 30, 2017.

Shipping and handling costs

Shipping and handling costs related to the movement of inventory to the Company's co-packer and from the co-packer to the Company's third-party warehousing and fulfillment partners are capitalized as inventory and expensed as cost of product revenue when revenue is recognized. Shipping and handling costs to move finished goods from the Company's third-party warehousing and fulfillment partners to customer locations are included in selling, general and administrative expenses in the condensed consolidated statement of operations, and were approximately $29,000 and $54,000 for the three and six months ended June 30, 2018, and approximately $47,000 and $81,000 for the three and six months ended June 30, 2017.

Restructuring-related costs

The Company records employee termination costs in accordance with Accounting Standards Codification ("ASC") Topic 712, "*Compensation - Nonretirement and Postemployment Benefits"* (ASC 712), if the termination benefits are paid as part of an ongoing benefit arrangement, which includes benefits provided as part of the Company's established severance policy or as part of an executive employment agreement. The Company accrues employee termination costs associated with an on-going benefit arrangement if the obligation is attributable to prior services rendered, the rights to the benefits have vested, the payment is probable and the Company can reasonably estimate the liability. The Company accounts for employee termination benefits that represent a one-time benefit in accordance with ASC Topic 420, "*Exit or Disposal Cost Obligations"* (ASC 420). Upon communication of the termination to the employee, the Company expenses these costs over the employee's future service period, if any.

Restructuring-related costs are recorded within research and development expenses and selling, general and administrative expenses on the Company's condensed consolidated statement of operations. Liabilities associated with the Company's restructuring activities are recorded as a component of accrued expenses and other current liabilities on its condensed consolidated balance sheet. See Note 7 for additional information on the Company's current restructuring plan.

Unaudited interim financial information

Certain information and footnote disclosures normally included in the Company's annual financial statements have been condensed or omitted. Accordingly, these interim condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and notes thereto contained in the 2017 10-K.

The condensed consolidated financial statements as of June 30, 2018, for the three and six months ended June 30, 2018 and 2017, and the related information contained within the notes to the condensed consolidated financial statements, are unaudited. The unaudited condensed consolidated financial statements have been prepared on the same basis as annual audited consolidated financial statements, and in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for the fair presentation of the Company's condensed consolidated financial position as of June 30, 2018, and the statements of operations, comprehensive loss and cash flows for the three and six month periods ended June 30, 2018 and 2017. The results for the three and six months ended June 30, 2018 are not necessarily indicative of results to be expected for the year ending December 31, 2018, or any other future annual or interim periods.

Basis of presentation and use of estimates

The accompanying condensed consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States ("GAAP"). Any reference in these notes to applicable guidance is meant to refer to the authoritative GAAP as found in the ASC and Accounting Standards Update ("ASU") of the Financial Accounting Standards Board ("FASB"). The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. On an ongoing basis, the Company's management evaluates its estimates, which include, but are not limited to, estimates related to clinical study accruals, estimates related to inventory realizability, stock-based compensation expense and amounts of expenses during the reported period. The Company bases its estimates on historical experience and other market-specific or other relevant assumptions that it believes to be reasonable under the circumstances. Actual results may differ from those estimates or assumptions.

Principles of consolidation

The condensed consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries: TK Pharma, Inc., a Massachusetts Securities Corporation, and Flex Innovation Group LLC, a Delaware limited liability company, which contains the Company's consumer-related operations. All significant intercompany balances and transactions have been eliminated in consolidation.

Recent accounting pronouncements

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers ("ASC 606")*. ASC 606 supersedes the revenue recognition requirements in ASC Topic 605, *Revenue Recognition ("ASC 605")* and requires entities to recognize revenue when control of the promised goods or services is transferred to customers at an amount that reflects the consideration to which the entity expects to be entitled to in exchange for those goods or services. The Company adopted ASC 606 as of January 1, 2018 using the modified retrospective transition method. See Note 3 for further details.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. The ASU requires lessees to recognize the assets and liabilities on their balance sheet for the rights and obligations created by most leases and continue to recognize expenses on their income statements over the lease term. It will also require disclosures designed to give financial statement users information on the amount, timing and uncertainty of cash flows arising from leases.
In July 2018, the FASB issued ASU No. 2018-10, *Codification Improvements to Topic 842, Leases.* This ASU is intended to clarify or correct unintended application of the guidance outlined in ASU No. 2016-02. The guidance is effective for annual reporting periods beginning after December 15, 2018, and interim periods within those years. Early adoption is permitted. While the Company is currently evaluating the impact this standard will have on its consolidated financial statements, the Company expects that upon adoption, it will recognize right-of-use assets and lease liabilities and those amounts could be material.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments*. The update amends the guidance in ASU Topic 230 and clarifies how entities should classify certain cash receipts and cash payments on the statement of cash flows with the objective of reducing the existing diversity in practice related to eight specific cash flow issues. The Company adopted ASU No. 2016-15 in the first quarter of 2018, retrospectively. The adoption of ASU No. 2016-15 did not have a significant impact on the consolidated financial statements.

In November 2016, the FASB issued ASU No. 2016-18, *Statement of Cash Flows*, which amends ASU Topic 230. This update requires entities to show the changes in the total of cash, cash equivalents, restricted cash and restricted cash equivalents in the statement of cash flows. As a result, entities are no longer required to present transfers between cash and cash equivalents and restricted cash and restricted cash equivalents in the statement of cash flows. When cash, cash equivalents, restricted cash and restricted cash equivalents are presented in more than one line item on the balance sheet, the new guidance requires a reconciliation of the totals in the statement of cash flows to the related captions in the balance sheet. The Company adopted ASU No. 2016-18 in the first quarter of 2018, retrospectively, resulting in a change to the presentation of restricted cash on the condensed consolidated statement of cash flows.

The following table provides a reconciliation of cash and cash equivalents and restricted cash reported within the condensed consolidated balance sheets that sum to the total of such amounts in the condensed consolidated statements of cash flows:

	June 30, 2018	December 31, 2017
Cash and cash equivalents	$ 15,756,971	$ 19,186,036
Restricted cash	126,595	126,595
Cash, cash equivalents and restricted cash shown on the condensed consolidated statement of cash flows	$ 15,883,566	$ 19,312,631

In May 2017, the FASB issued ASU No. 2017-09, *Stock Compensation (Topic 718): Scope of Modification Accounting*, to provide clarity and reduce diversity in practice, cost and complexity when applying the guidance of Topic 718. The guidance is effective for fiscal years beginning after December 15, 2017 and interim periods within those years. Early adoption is permitted and the guidance should be applied prospectively. The Company adopted this guidance in the first quarter of 2018, which did not impact the Company's condensed consolidated financial statements or disclosures.

In June 2018, the FASB issued ASU No. 2018-07, *Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting*. This ASU is intended to simplify aspects of share-based compensation issued to non-employees by making the guidance consistent with the accounting for employee share-based compensation. The guidance is effective for fiscal years beginning after December 15, 2018, including interim periods within that year. The Company is currently evaluating the impact of the new standard on its condensed consolidated financial statements, but expects that the guidance will impact the way the Company currently records stock-based compensation costs for non-employee awards.

The Company believes that the impact of other recently issued standards that are not yet effective will not have a material effect on its consolidated financial position or results of operations upon adoption.

3. Revenue from contracts with customers

Adoption of ASC Topic 606, "Revenue from Contracts with Customers"

On January 1, 2018, the Company adopted ASC 606 using the modified retrospective method applied to contracts not yet completed as of January 1, 2018. Results for reporting periods beginning after January 1, 2018 are

presented under ASC 606, while prior period amounts are not adjusted and are reported in accordance with the Company's historical accounting under ASC 605.

The primary impact of the adoption of ASC 606 related to the timing of revenue recognized for e-commerce sales, due to e-commerce refund rights. Under ASC 606, the Company recognizes revenue when control of the promised good is transferred to the customer, and reflects the consideration to which the Company expects to be entitled to receive in exchange for the good. This has resulted in accelerated revenue recognition for e-commerce sales, as under ASC 605, all revenue and related costs were deferred and recognized once the refund period lapsed.

The cumulative effect of applying the new guidance to all contracts that were not completed as of January 1, 2018 was recorded as an adjustment to accumulated deficit of approximately $40,000 as of the adoption date, which was primarily the result of reducing deferred revenue by approximately $70,000 and deferred cost of product revenue and selling fees by approximately $30,000, that were recorded on the consolidated balance sheet at December 31, 2017. The Company would have recognized approximately $10,000 and $28,000 of additional total revenue during the three and six months ended June 30, 2018, respectively, if the Company had continued to recognize revenue under ASC 605.

The adoption of ASC 606 did not impact income taxes, as the Company fully reserves its net deferred tax assets. Therefore, the change to the Company's net deferred tax asset position due to adoption was offset by a corresponding change to the valuation allowance.

Revenue recognition

Revenue includes sales of HOTSHOT bottled finished goods to e-commerce customers, specialty retailers and sports teams, including professional and collegiate teams. Revenue also consists of payments made by customers for expedited shipping and handling.

The Company expenses fulfillment costs as incurred because the amortization period would be less than one year in accordance with the ASC 606 practical expedient.

In accordance with ASC 606, the Company applies the following steps to recognize revenue for the sale of bottled finished goods that reflects the consideration to which the Company expects to be entitled to receive in exchange for the promised goods:

1. *Identify the contract with a customer*

A contract with a customer exists when the Company enters into an enforceable contract with a customer. The contract is based on either the acceptance of standard terms and conditions on the websites for e-commerce customers, or the execution of terms and conditions contracts with specialty retailers and sports teams. These contracts define each party's rights, payment terms and other contractual terms and conditions of the sale. The Company applies judgment in determining the customer’s ability and intention to pay, which is based on a variety of factors including the customer’s historical payment experience and, in some circumstances, published credit and financial information pertaining to the customer.

2. *Identify the performance obligations in the contract*

Performance obligations promised in a contract are identified based on the goods that will be transferred to the customer that are both capable of being distinct and are distinct in the context of the contract, whereby the transfer of the goods is separately identifiable from other promises in the contract. The Company has concluded the sale of bottled finished goods and related shipping and handling are accounted for as a single performance obligation.

3. *Determine the transaction price*

The transaction price is determined based on the consideration to which the Company will be entitled to receive in exchange for transferring goods to the customer. For sales through June 18, 2018, the Company offered refunds to e-commerce customers, upon request, within 30 days of delivery. For sales subsequent to June 18, 2018, the Company now offers refunds to e-commerce customers, upon request, within 14 days of delivery. The Company estimates the amount of potential refunds at each reporting period using a portfolio approach of historical data, adjusted for changes in expected customer experience, including seasonality and changes in economic factors. For specialty retailers and sports teams, the Company does not offer a right of return or refund and revenue is recognized at the time products are delivered to customers.

Discounts provided to customers are accounted for as an element of the transaction price and as a reduction to revenue, and were approximately $9,000 and $17,000 for the three and six months ended June 30, 2018, respectively, and approximately $74,000 and $120,000 for the three and six months ended June 30, 2017, respectively.

Revenue is presented net of taxes collected from customers and remitted to governmental authorities.

4. Determine the satisfaction of performance obligation

Revenue is recognized when control of the bottled finished goods is transferred to the customer. Control of the bottled finished goods is transferred at a point in time, upon delivery to the customer. The period of time between the satisfaction of the performance obligation and when payment is due from the customer is not significant.

Concentrations of credit risk

The Company had no customers that represented greater than 10% of total revenue during the three and six months ended June 30, 2018 or the three and six months ended June 30, 2017. The vast majority of revenue was generated from sales within the United States.

4. Fair value measurements

The Company records cash equivalents and marketable securities at fair value. ASC Topic 820, *Fair Value Measurements and Disclosures,* established a fair value hierarchy for those instruments measured at fair value that distinguishes between assumptions based on market data (observable inputs) and the Company's own assumptions (unobservable inputs). The hierarchy consists of three levels:

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

Level 2 – Quoted prices for similar assets and liabilities in active markets, quoted prices in markets that are not active, or inputs which are observable, directly or indirectly, for substantially the full term of the asset or liability.

Level 3 – Unobservable inputs that reflect the Company's own assumptions about the assumptions market participants would use in pricing the asset or liability in which there is little, if any, market activity for the asset or liability at the measurement date.

The following tables summarize the cash equivalents and marketable securities measured at fair value on a recurring basis as of June 30, 2018 and December 31, 2017:

	Level 1	Level 2	Level 3	Balance as of June 30, 2018
Cash equivalents	$ 6,293,640	$ —	$ —	$ 6,293,640
	$ 6,293,640	$ —	$ —	$ 6,293,640

	Level 1	Level 2	Level 3	Balance as of December 31, 2017
Cash equivalents	$ 5,046,205	$ —	$ —	$ 5,046,205
Marketable securities:				
U.S. government agency securities	—	8,986,259	—	8,986,259
Commercial paper	—	4,440,689	—	4,440,689
Corporate debt securities	—	702,775	—	702,775
	$ 5,046,205	$ 14,129,723	$ —	$ 19,175,928

Cash equivalents and marketable securities have been initially valued at the transaction price and subsequently valued, at the end of each reporting period, utilizing third-party pricing services or other market observable data. The third-party pricing services utilize industry standard valuation models, including both income and market based approaches and observable market inputs to determine value. The Company's cash equivalents consist of money market funds that are valued based on publicly available quoted market prices for identical securities as of June 30, 2018. After completing its validation procedures, the Company did not adjust or override any fair value carrying amounts as of June 30, 2018.

The carrying amounts reflected in the condensed consolidated balance sheets for cash, accounts receivable, prepaid expenses and other current assets, accounts payable, accrued expenses and other current liabilities approximate their fair values at June 30, 2018 and December 31, 2017, due to their short-term nature.

The Company evaluates transfers between levels at the end of each reporting period. There were no transfers of assets or liabilities between Level 1 and Level 2 during the six months ended June 30, 2018 or the year ended December 31, 2017. The Company had no financial assets or liabilities that were classified as Level 3 at any time during the six months ended June 30, 2018 or the year ended December 31, 2017.

5. Cash equivalents and marketable securities

The Company considers all highly liquid investments with maturities of three months or less when purchased to be cash equivalents. Cash equivalents as of June 30, 2018 and December 31, 2017 consisted of money market funds.

The Company held no marketable securities as of June 30, 2018. Marketable securities as of December 31, 2017 consisted of U.S. government agency securities, commercial paper and corporate debt securities. Management determines the appropriate classification of the securities at the time they are acquired and evaluates the appropriateness of such classifications at each balance sheet date. The Company classifies its marketable securities as available-for-sale pursuant to ASC 320, *Investments – Debt and Equity Securities*. Marketable securities are recorded at fair value, with unrealized gains and losses included as a component of accumulated other comprehensive income (loss) in stockholders' equity and a component of total comprehensive income (loss) in the condensed consolidated statement of comprehensive loss, until realized. Realized gains and losses are included in investment income on a specific-identification basis. There were no realized gains on marketable securities during the three and six months ended June 30, 2018, or during the three and six months ended June 30, 2017.

The Company reviews marketable securities for other-than-temporary impairment whenever the fair value of a marketable security is less than the amortized cost and evidence indicates that a marketable security's carrying amount is not recoverable within a reasonable period of time. Other-than-temporary impairments of investments are recognized in the consolidated statement of operations if the Company has experienced a credit loss, has the intent to sell the marketable security, or if it is more likely than not that the Company will be required to sell the marketable security before recovery of the amortized cost basis. Evidence considered in this assessment includes reasons for the impairment, compliance with the Company's investment policy, the severity and the duration of the impairment and changes in value subsequent to the end of the period.

The Company held no marketable securities at June 30, 2018. Marketable securities at December 31, 2017 consisted of the following:

	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
As of December 31, 2017				
Current (due within 1 year):				
U.S. government agency securities	$ 8,987,254	$ 38	$ (1,033)	$ 8,986,259
Commercial paper	4,440,689	—	—	4,440,689
Corporate debt securities	703,027	—	(252)	702,775
Total	$ 14,130,970	$ 38	$ (1,285)	$ 14,129,723

At December 31, 2017, the Company held six debt securities that were in an unrealized loss position, all of which had been in a continuous loss position for less than 12 months. The aggregate fair value of debt securities in an unrealized loss position was $8,191,315 at December 31, 2017. There were no individual securities that were in a significant unrealized loss position as of December 31, 2017.

At December 31, 2017, all investments held by the Company were classified as current. Investments classified as current have maturities of less than one year. Investments classified as noncurrent are those that (i) have a maturity greater than one year and (ii) management does not intend to liquidate within the next year, although these funds are available for use and therefore classified as available-for-sale.

6. Inventory

Inventory has been recorded at cost as of June 30, 2018 and December 31, 2017. Costs capitalized at June 30, 2018 and December 31, 2017 relate to HOTSHOT finished goods, as well as raw materials available to be used for future production runs.

The following table presents inventory:

	June 30, 2018	December 31, 2017
Raw materials	$ 7,240	$ 17,411
Finished goods	268,453	414,480
Total inventory	$ 275,693	$ 431,891

In the second quarter of 2018, the Company wrote off raw materials that are not expected to be used in future production runs, as well as finished goods inventory no longer expected to be used for product sampling. In the prior year, the Company wrote off raw materials not expected to be used in future production runs.

Write-offs totaled approximately $85,000 for the three and six months ended June 30, 2018, and approximately $17,800 for the three and six months ended June 30, 2017, and were included in cost of product revenue in the accompanying condensed consolidated statement of operations.

7. Accrued expenses and other current liabilities

Accrued expenses and other current liabilities consisted of the following:

	June 30, 2018	December 31, 2017
Phase 2 MND and CMT clinical trial-related costs	$ 1,402,929	$ 1,850,115
Restructuring-related costs	548,882	—
Payroll and other employee-related costs	313,794	874,246
Professional fees	157,262	227,980
Other research and development-related costs	146,895	652,285
Consumer product-related costs	18,834	107,595
Total	$ 2,588,596	$ 3,712,221

Phase 2 MND and CMT clinical trial-related costs

In June 2018, the Company announced that it was ending its ongoing Phase 2 clinical trials of FLX-787 in MND and CMT due to oral tolerability concerns observed in both studies.

The close out of the studies resulted in increased expense during the second quarter of 2018, and accrued costs as of June 30, 2018 totaling approximately $1,400,000. All remaining work for the studies is expected to be completed during the third quarter of 2018. Previously, the Company expected work for the studies to take place through mid-2019.

Restructuring-related costs

In June 2018, the Company's Board of Directors ("Board") approved a corporate restructuring plan to reduce the Company's cost structure. In connection with the corporate restructuring plan, the Company reduced its workforce by approximately 60%, with the majority of the reduction completed as of June 30, 2018.

Also, in June 2018, the Board approved employee retention arrangements and certain increased severance payments related to the corporate restructuring plan, to incentivize certain employees to remain with the Company through a potential sale or merger. Cash retention benefits totaling approximately $1,210,000 will be payable to these employees upon the occurrence of a change in control event, including a sale or merger of the Company. Of this total, $500,000 relates to amounts payable only upon a change in control event, and $710,000 relates to amounts payable upon a change in control event or at certain timepoints through early 2019 if the individuals are employed by the Company and in good standing at the date of payment, even if a change in control event has not occurred. Upon a change in control event and termination without cause, these employees will be eligible for up to approximately $1,125,000, in the aggregate, of severance benefits.

The Company records employee termination costs in accordance with ASC 712, if the termination benefits are paid as part of an ongoing benefit arrangement, which includes benefits provided as part of the Company's established severance policy or as part of an executive employment agreement. The Company accrues employee termination costs associated with an on-going benefit arrangement if the obligation is attributable to prior services rendered, the rights to the benefits have vested, the payment is probable and the Company can reasonably estimate the liability. The Company accounts for employee termination benefits that represent a one-time benefit in accordance with ASC 420. Upon communication of the termination to the employee, the Company expenses these costs over the employee’s future service period, if any.

During the quarter ended June 30, 2018, the Company has recognized approximately $918,000 of expense for restructuring-related activities. This total is comprised of approximately $863,000 recorded as termination benefits under ongoing benefit arrangements for terminated employees, approximately $22,000 as one-time termination benefit costs for terminated employees, approximately $18,000 in retention benefits for seven retained employees who have retention bonuses not triggered by a change in control event and approximately $15,000 of other restructuring related costs including consulting and legal fees. There are currently no assurances a change in control event will take place. The Company does not consider the payment of severance benefits for retained employees or the payment of retention benefits only payable upon a change in control to be probable for accounting purposes as of June 30, 2018. Unless and until the Company's Board has approved a specific transaction, the Company's probability assessment regarding a change in control event is not expected to change.

The Company expects to incur between approximately $1,189,000 and $3,372,000 in total costs for its restructuring-related activities, including approximately $918,000 that was recorded during the second quarter of 2018. Approximately $270,000 is expected to be recorded during the third and fourth quarters of 2018, based on the Company's current probability assessment regarding a change in control event and termination of retained employees. The range noted above includes approximately $500,000 related to retention benefits only payable upon a change in control event, and $1,125,000 of severance benefits only payable upon a change in control event and termination under certain circumstances.

The following table outlines the Company's restructuring activities for the six months ended June 30, 2018:

Opening balance	$	—
Charges:		
Employee termination benefits		885,768
Employee retention benefits		17,602
Other		14,995
Payments		(369,483)
Accrued restructuring balance as of June 30, 2018	$	548,882

The Company's accrued restructuring balance as of June 30, 2018 is included as a component of accrued expenses and other current liabilities on the Company's condensed consolidated balance sheet as of June 30, 2018. Approximately $704,000 of the restructuring-related charges for the quarter are included in research and development expenses and approximately $214,000 are included in selling, general and administrative expenses in

the Company's condensed consolidated statement of operations for the three and six months ended June 30, 2018. Approximately $56,000 of the restructuring-related charges for the three and six months ended June 30, 2018 were incurred by our Consumer Operations segment, approximately $704,000 were incurred by our Drug Development segment and the remaining charges of approximately $158,000 related to corporate costs. The Company may incur total restructuring-related charges of up to approximately $113,000 and $1,048,000 within our Consumer Operations and Drug Development segments, respectively. The Company may incur up to $2,211,000 of corporate costs that do not relate to a reportable segment.

Litigation

On June 19, 2018, a putative class action lawsuit was filed against the Company and certain of its current executive officers in the United States District Court for the Southern District of New York, captioned Teofilina Rumaldo v. Flex Pharma, Inc., et al., Case No. 1:18-cv-05493. The complaint purports to be brought on behalf of stockholders who purchased the Company's common stock between November 6, 2017 and June 12, 2018. The complaint generally alleges that the Company and certain of its current officers violated Sections 10(b) and/or 20(a) of the Securities Exchange Act of 1934, as amended, and Rule 10b-5 promulgated thereunder by making allegedly false and misleading statements or omissions regarding the Company's business, operational and compliance policies. Specifically, the complaint alleges that the Company overstated the viability and approval prospects for its product candidate FLX-787 for the treatment of MND and CMT and, as a result, the Company's public statements were materially false and misleading at all relevant times. The complaint seeks unspecified damages, attorneys' fees and other costs. The Company denies any allegations of wrongdoing and intends to vigorously defend against this lawsuit. The Company is unable, however, to predict the outcome of this matter at this time and has not accrued any expense related to this lawsuit as of June 30, 2018.

8. Common stock

As of June 30, 2018, the Company had authorized 100,000,000 shares of common stock, $0.0001 par value per share. Each share of common stock is entitled to one vote. The holders of common stock are also entitled to receive dividends whenever funds are legally available and when declared by the board of directors. The Company does not intend to declare dividends for the foreseeable future.

Restricted common stock to founders

In March 2014, the Company sold 4,553,415 shares of restricted common stock to the founders of the Company ("recipients"), for $0.0004 per share, for total proceeds of $1,950. In April 2014, based upon anti-dilution provisions granted to the recipients, an additional 867,314 shares of restricted common stock were sold to the same recipients, after which the anti-dilution provisions were terminated. The restricted common stock vested 25% upon issuance, and the remaining 75% vested ratably over four years, during which time the Company had the right to repurchase the unvested shares held by a recipient if the relationship between such recipient and the Company ceased. Such shares were not accounted for as outstanding until they vested. Unvested restricted common stock awards to non-employees were re-measured at each vest date and each financial reporting date. All restricted common stock sold to recipients had vested as of June 30, 2018, and is no longer subject to re-valuation or eligible for repurchase.

The following is a summary of restricted common stock activity:

	Number of Shares	Weighted-Average Grant Date Fair Value
Unvested at December 31, 2017	169,654	$ 0.10
Issued	—	—
Vested	(169,654)	0.10
Forfeited	—	—
Unvested at June 30, 2018	—	$ —

Restricted common stock to consultants

During 2016, the Company issued 18,194 shares of restricted common stock to non-employee consultants and advisors. Such shares are not accounted for as outstanding until they vest. There were 14,860 shares of restricted common stock issued to consultants outstanding as of June 30, 2018. Unvested restricted common stock awards to non-employees are re-measured at each vest date and each financial reporting date.

The following is a summary of restricted common stock activity:

	Number of Shares	Weighted-Average Grant Date Fair Value
Unvested at December 31, 2017	5,334	$ 10.51
Issued	—	—
Vested	(2,000)	9.61
Forfeited	—	—
Unvested at June 30, 2018	3,334	$ 11.05

9. Stock-based compensation

In March 2014, the Company adopted the Flex Pharma, Inc. 2014 Equity Incentive Plan (the "2014 Plan"), under which it had the ability to grant incentive stock options ("ISOs"), non-qualified stock options, restricted stock awards, restricted stock units and stock appreciation rights to purchase up to 116,754 shares of common stock. In April 2014, the Company amended the 2014 Plan to reserve for the issuance of up to 1,451,087 shares of common stock pursuant to equity awards. In September 2014, the Company further amended the 2014 Plan to reserve for the issuance of up to 2,070,200 shares of common stock pursuant to equity awards. Terms of stock award agreements, including vesting requirements, were determined by the Board, subject to the provisions of the 2014 Plan. For options granted under the 2014 Plan, the exercise price equaled the fair market value of the common stock as determined by the Board on the date of grant. No further awards will be granted under the 2014 Plan.

In January 2015, the Company's Board adopted, and the Company's stockholders approved, the 2015 Equity Incentive Plan (the "2015 Plan"), which became effective immediately prior to the closing of the Company's initial public offering ("IPO"). The 2015 Plan provides for the grant of ISOs, nonstatutory stock options, restricted stock awards, restricted stock units, stock appreciation rights, performance-based stock awards and other stock-based awards. Additionally, the 2015 Plan provides for the grant of performance-based cash awards. ISOs may be granted only to the Company's employees. All other awards may be granted to the Company's employees, including officers, and to non-employee directors and consultants. As of June 30, 2018, there were 962,584 shares remaining available for the grant of stock awards under the 2015 Plan.

The Company has awarded stock options to its employees, directors, advisors and consultants, pursuant to the plans described above. Stock options subsequent to the completion of the Company's IPO are granted with an exercise price equal to the closing market price of the Company's common stock on the date of grant. Stock options generally vest over one to four years and have a contractual term of ten years. Stock options are valued using the Black-Scholes option pricing model and compensation cost is recognized based on the resulting value over the service period. Unvested awards to non-employees are re-measured at each vest date and at each financial reporting date. The following table summarizes stock option activity for employees and non-employees for the six months ended June 30, 2018:

	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Outstanding at December 31, 2017	2,580,491	$ 6.65	7.55	$ 803,600
Granted	1,467,544	2.81		
Exercised	(97,310)	1.21		
Forfeited	(621,282)	6.17		
Expired	(230,630)	9.82		
Outstanding at June 30, 2018	3,098,813	$ 4.86	7.35	$ 42,136
Exercisable at June 30, 2018	1,440,107	$ 6.72	4.99	$ 42,136
Vested or expected to vest at June 30, 2018	3,098,813	$ 4.86	7.35	$ 42,136

Total stock-based compensation expense recognized for employee and non-employee restricted common stock, and stock options granted to employees and non-employees is included in the Company's condensed consolidated statements of operations as follows:

	Three Months Ended June 30, 2018	Three Months Ended June 30, 2017	Six Months Ended June 30, 2018	Six Months Ended June 30, 2017
Research and development	$ 244,869	$ 391,602	$ 631,406	$ 786,019
Selling, general and administrative	266,124	681,744	788,527	1,476,079
Total	$ 510,993	$ 1,073,346	$ 1,419,933	$ 2,262,098

As of June 30, 2018, there was approximately $2,982,000 of total unrecognized compensation cost related to unvested equity awards. Total unrecognized compensation cost will be adjusted for the re-measurement of non-employee awards as well as future changes in employee and non-employee forfeitures, if any. The Company expects to recognize that cost over a remaining weighted-average period of 3.14 years.

In June 2018, the Company extended the three-month post termination exercisability of 877,137 option awards held by six employees and one adviser to one-year post termination. The Company also extended the three-month post termination exercisability of 500,000 option awards held by one employee to three-years post termination. The valuation of these awards did not change as a result of the modification of these awards and as such, the Company did not recognize any additional compensation expense related to the modification.

On June 14, 2018, the Company granted 654,544 stock options, in the aggregate, to seven employees as part of the Company's retention arrangements with these employees. These awards vest monthly over 48 months as the employees provide continuous service, and expense is being recognized over this period. The awards are exercisable for one to three-years post termination depending on the employee to which the stock options were granted. The awards vest in full upon a change in control event and termination of the employees under certain circumstances. A change in control event is not currently considered probable for accounting purposes. Unless and until the Company's Board has approved a specific transaction, the Company's probability assessment regarding a change in control event is not expected to change.

Employee stock purchase plan

In 2015, the Company's Board adopted, and the Company's stockholders approved, the 2015 Employee Stock Purchase Plan (the "ESPP"). As of June 30, 2018, no shares of common stock have been purchased under the ESPP.

10. Income taxes

Deferred tax assets and deferred tax liabilities are recognized based on temporary differences between the financial reporting and tax basis of assets and liabilities using statutory rates. A valuation allowance is recorded against deferred tax assets if it is more likely than not that some or all of the deferred tax assets will not be realized. Based upon the Company's history of operating losses and the uncertainty surrounding the realization of the favorable tax attributes in future tax returns, the Company has recorded a full valuation allowance against the Company's otherwise recognizable net deferred tax assets. There was no significant income tax provision or benefit for the six months ended June 30, 2018 or 2017.

In March 2018, the FASB issued ASU No. 2018-05, *Income Taxes (Topic 740), Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 118*. The ASU adds various Securities and Exchange Commission ("SEC") paragraphs pursuant to the issuance of the December 2017 SEC Staff Accounting Bulletin No. 118, Income Tax Accounting Implications of the Tax Cuts and Jobs Act (SAB 118), which was effective immediately. The SEC issued SAB 118 to address concerns about a reporting entity's ability to timely comply with the accounting requirements to recognize all of the effects of the Tax Cuts and Jobs Act in the period of enactment. SAB 118 allows disclosure that timely determination of some or all of the income tax effects from the Tax Cuts and Jobs Act are incomplete by the due date of the financial statements and, if possible, to provide a reasonable estimate. The Company's accounting for certain income tax effects is incomplete, but it has determined reasonable estimates for those effects and has included provisional amounts in its condensed consolidated financial statements as of June 30, 2018 and December 31, 2017.

11. Net loss per share

Basic net loss per share is computed by dividing the net loss attributable to common stockholders by the weighted-average number of common shares outstanding for the period. Diluted net loss per share is computed by dividing the net loss attributable to common stockholders by the weighted-average number of common shares and dilutive common stock equivalents outstanding for the period, determined using the treasury stock method and the if-converted method, for convertible securities, if inclusion of these is dilutive.

As the Company has reported a net loss for the periods presented, diluted net loss per common share is the same as basic net loss per common share.

The following potentially dilutive securities outstanding, prior to the use of the treasury stock method or if-converted method, have been excluded from the computation of diluted weighted-average shares outstanding for the periods indicated, because including them would have had an anti-dilutive impact:

	June 30, 2018	June 30, 2017
Options to purchase common stock	3,098,813	2,668,187
Unvested restricted common stock	3,334	685,890
Total	3,102,147	3,354,077

12. Segment Information

The Company operates as two reportable segments:

- The Consumer Operations segment, which reflects the total revenue and costs and expenses related to HOTSHOT and the Company's consumer operations.
- The Drug Development segment, which reflects the costs and expenses related to the Company's efforts to develop innovative and proprietary drug products; previously to treat muscle cramps, spasms and spasticity

associated with severe neurological conditions and currently to assess the potential of FLX-787 in dysphagia.

The Company discloses information about its reportable segments based on the way that the Company's Chief Operating Decision Maker, who the Company has identified as the Chief Executive Officer, and management, organize segments within the Company for making operating decisions and assessing financial performance. The Company evaluates the performance of its reportable segments based on revenue and operating income or loss. The accounting policies of the segments are the same as those described herein as well as those described in Note 2 to the audited consolidated financial statements in the 2017 Form 10-K. Corporate and unallocated amounts that do not relate to a reportable segment have been allocated to "Corporate". No asset information has been provided for the Company's reportable segments as management does not measure or allocate such assets on a reportable segment basis.

Information for the Company's reportable segments for the three months ended June 30, 2018 and 2017 are as follows:

Three Months Ended June 30, 2018	Consumer Operations	Drug Development	Corporate	Consolidated
Total revenue	$ 245,502	—	—	$ 245,502
Interest income, net	$ —	—	51,809	$ 51,809
Loss from operations	$ 645,687	6,170,488	2,287,506	$ 9,103,681

Three Months Ended June 30, 2017	Consumer Operations	Drug Development	Corporate	Consolidated
Total revenue	$ 335,523	—	—	$ 335,523
Interest income, net	$ —	—	72,342	$ 72,342
Loss from operations	$ 2,760,496	3,960,335	2,156,134	$ 8,876,965

Information for the Company's reportable segments for the six months ended June 30, 2018 and 2017 are as follows:

Six Months Ended June 30, 2018	Consumer Operations	Drug Development	Corporate	Consolidated
Total revenue	$ 424,084	—	—	$ 424,084
Interest income, net	$ —	—	111,402	$ 111,402
Loss from operations	$ 1,902,993	10,834,565	4,648,943	$ 17,386,501

Six Months Ended June 30, 2017	Consumer Operations	Drug Development	Corporate	Consolidated
Total revenue	$ 578,070	—	—	$ 578,070
Interest income, net	$ —	—	150,196	$ 150,196
Loss from operations	$ 4,748,306	7,788,616	4,686,292	$ 17,223,214

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

The following discussion and analysis should be read in conjunction with the unaudited financial information and the notes thereto included herein, as well as our audited consolidated financial statements and notes thereto contained in our Annual Report on Form 10-K for the year ended December 31, 2017. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results and the timing of selected events could

differ materially from those anticipated in these forward-looking statements as a result of several factors, including those set forth under "Risk Factors" discussed in our Annual Report on Form 10-K for the year ended December 31, 2017, in other subsequent filings with the SEC, and elsewhere in this Quarterly Report on Form 10-Q. These statements, like all statements in this report, speak only as of the date of this Quarterly Report on Form 10-Q (unless another date is indicated), and we undertake no obligation to update or revise these statements in light of future developments.

Introduction

Our Management's Discussion and Analysis of Financial Condition and Results of Operations, or MD&A, is provided in addition to the accompanying unaudited condensed consolidated financial statements and notes to assist readers in understanding our results of operations, financial condition, and cash flows. MD&A is organized as follows:

Overview - A discussion of our business and overall analysis of financial and other highlights in order to provide context for the remainder of MD&A.

Results of Operations - An analysis of our financial results comparing the three and six months ended June 30, 2018 to the three and six months ended June 30, 2017.

Liquidity and Capital Resources - An analysis of changes in our unaudited condensed consolidated balance sheets and cash flows, and discussion of our financial condition and potential sources of liquidity.

Critical Accounting Policies and Significant Judgments and Estimates - A discussion of critical accounting policies and those that require us to make subjective estimates and judgments.

Overview

We are a biotechnology company that was focused on developing innovative and proprietary treatments for muscle cramps, spasms and spasticity associated with severe neurological conditions. In June 2018, we announced that we were ending our ongoing Phase 2 clinical trials of FLX-787 in patients with motor neuron disease, or MND, primarily with amyotrophic lateral sclerosis, or ALS, and in patients with Charcot-Marie-Tooth disease, or CMT, due to oral tolerability concerns observed in both studies.

In the MND study, 31% of patients randomized to receive the oral disintegrating tablet formulation at 30 mg, taken three times a day, discontinued before the end of the 4-week treatment period due to oral adverse events. A similar proportion of subjects in the CMT study discontinued due to oral adverse events, after being randomized to the 30 mg dose. No patients randomized to the 0.5 mg low-dose control discontinued due to oral adverse events in either study.

Additionally, in June 2018, we initiated a process to explore a range of strategic alternatives for enhancing stockholder value, including the potential sale or merger of the Company. Wedbush PacGrow has been engaged to act as our strategic financial advisor. There can be no assurance that the evaluation of potential business alternatives will result in any transaction.

We also announced the restructuring of the organization to reduce our cost structure. In connection with the restructuring plan, we reduced our workforce by approximately 60%, with the majority of reduction completed as of June 30, 2018. While the strategic assessment is ongoing, we will continue to operate with a reduced internal team that will focus their efforts on assessing the potential of FLX-787 in dysphagia (difficulty swallowing) and operating the consumer business, which sells HOTSHOT®, our consumer product launched in 2016 to prevent and treat exercise-associated muscle cramps. We cannot predict to what extent we will resume drug development activities for FLX-787 or other drug product candidates beyond our current efforts to assess the potential of FLX-787 in dysphagia.

We operate as the following two reportable segments:

- The Consumer Operations segment, which reflects the total revenue and costs and expense for HOTSHOT and our consumer operations, and
- The Drug Development segment, which reflects the costs and expenses related to the Company's efforts to develop innovative and proprietary drug products; previously to treat muscle cramps, spasms and spasticity associated with severe neurological conditions and currently to assess the potential of FLX-787 in dysphagia.

We disclose information about our reportable segments based on the way that we organize segments within the Company for making operating decisions and assessing financial performance. See Note 12 to our condensed consolidated financial statements for certain financial information related to our reportable segments.

We have incurred an operating loss since our inception and we anticipate that we will continue to incur operating losses for the foreseeable future. Our net loss was $9.1 million and $17.3 million for the three and six months ended June 30, 2018, respectively, and $8.8 million and $17.1 million for the three and six months ended June 30, 2017, respectively. Our accumulated deficit was $128.3 million as of June 30, 2018. To date, we have financed our operations with net proceeds from the private placement of our preferred stock and our initial public offering. We expect to continue incurring significant expenses as we incur costs to close our Phase 2 studies in MND and CMT, complete our strategic assessment, operate as a public company, support our research and development efforts and continue to sell HOTSHOT. As a result, we will need additional capital to fund our future operations. There can be no assurance that we will be able to secure additional funds or, if such funds are available, whether the terms or conditions will be acceptable to us.

Components of Operating Results

Revenue

We adopted ASC Topic 606, *Revenue from Contracts with Customers*, or ASC 606, on January 1, 2018 using the modified retrospective method. The primary impact of the adoption of ASC 606 related to the timing of revenue recognized for e-commerce sales, due to e-commerce refund rights. Under ASC 606, we recognize revenue when control of the promised good is transferred to the customer, and it reflects the consideration to which we expect to be entitled to receive in exchange for the good. This has resulted in accelerated revenue recognition for e-commerce sales, as under ASC Topic 605, *Revenue Recognition*, all revenue and related costs were deferred and recognized once the refund period lapsed. Please refer to Note 3 in the accompanying financial statements for a discussion of the impact of adoption of ASC 606 on our condensed consolidated financial statements.

Revenue includes sales of HOTSHOT finished goods to e-commerce customers, specialty retailers and sports teams, including professional and collegiate teams. Revenue also consists of payments made by customers for expedited shipping and handling. Revenue is recognized when control of the promised goods is transferred to the customer. Control of the promised goods is transferred upon delivery to the customer. For sales through June 18, 2018, we offered refunds to e-commerce customers, upon request, within 30 days of delivery. For sales subsequent to June 18, 2018, we now offer refunds to e-commerce customers, upon request, within 14 days of delivery. We do not offer a right of return or refund to specialty retailers or sports teams. Discounts provided to customers are accounted for as a reduction of product revenue. Total revenue is presented net of any taxes collected from customers and remitted to governmental authorities.

When purchasing via our branded website, customers may purchase HOTSHOT in packs of 3, 6, 12 or 24 bottles, and are offered a first-time purchase discount for a 3 pack. Prior to 2018, we offered a first-time purchase discount for a 6 pack. We also sell HOTSHOT via third-party e-commerce websites, including a retailer that offers international shipping. Generally, we realize higher revenue per bottle from our e-commerce sales as opposed to third-party website, sports team and specialty retailer sales. HOTSHOT is generally sold to specialty retailers and sports teams in multi-pack cases.

While the Company continues to operate its Consumer Operations segment and sells HOTSHOT, future sales of HOTSHOT are expected to vary from quarter to quarter and will be impacted by the number of visitors attracted to our branded website and third-party websites, those that purchase, seasonality and the amount of repeat sales that we are able to generate through e-commerce. Future sales will also be impacted by the amount of revenue that we are able to generate through retail channels. Our inability to generate sufficient revenues could have a material adverse impact on our Consumer Operations.

We cannot predict to what extent we will generate revenue in the future. Additionally, we cannot predict to what extent we will resume drug development activities for FLX-787 or other drug product candidates beyond our current efforts to assess the potential of FLX-787 in dysphagia and to what extent we will promote and sell HOTSHOT or other consumer products in the future. Accordingly, future revenue will fluctuate from quarter to quarter and may come from a combination of consumer product sales, drug product sales, government or other third-party funding, marketing and distribution arrangements and other collaborations, strategic alliances and licensing arrangements, or a combination of these sources.

Cost of Product Revenue

We outsource the manufacture of HOTSHOT to a co-packer. Cost of product revenue includes the cost of raw materials utilized to produce HOTSHOT, co-packing fees, repacking fees, in-bound freight charges and warehouse and transportation charges incurred to bring the finished goods to salable condition. All other costs incurred after this condition is met are considered selling costs and included in selling, general and administrative expenses.

Cost of product revenue includes write-offs of inventory that becomes obsolete, that has a cost basis in excess of its estimated realizable value, or that exceeds projected sales. The amount of inventory write-offs will vary based upon factors such as inventory levels, production levels, projected sales of HOTSHOT and shelf-lives of our inventory components. If we are not successful in generating sufficient levels of revenue from HOTSHOT or if our other estimates prove to be inaccurate, future inventory write-offs may be required.

Cost of product revenue also includes depreciation expense related to manufacturing equipment purchased to support production, as well as royalty amounts payable to certain of our founders on HOTSHOT sales.

Research and Development Expenses

Our research and development expenses to date have included the costs incurred related to the development and testing of our extract formulation and expenses related to the testing and development of our drug product candidates, including FLX-787, and more recently, costs related to ending our Phase 2 clinical studies in MND and CMT. Research and development costs include salaries and other compensation-related costs, such as stock-based compensation for research and development employees and termination benefits, costs of clinical studies of our extract formulation and drug product candidates, drug substance production costs, formulation and production costs of clinical supply, including FLX-787, to support clinical studies, costs for consultants who we utilize to supplement our personnel, fees paid to third parties, facilities and overhead expenses, cost of laboratory supplies and other outside expenses.

Research and development activities have been central to our business model. Drug product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. We expect that our research and development expenses will decrease in the future as a result of ending the Phase 2 clinical trials in MND and CMT, and the related drug development efforts, and the reduction of research and development staff. We cannot predict to what extent we will resume drug development activities for FLX-787 or other drug product candidates beyond our current efforts to assess the potential of FLX-787 in dysphagia.

The probability of success for a drug product candidate that we may decide to pursue in the future will depend on numerous factors, including competition, product safety and efficacy, patent protection, regulatory approval, manufacturing capability and commercial viability. The decision to pursue a drug development program in the future will be dependent upon how much is required to fund each program in response to the scientific and clinical success of a drug product candidate, the ability to obtain regulatory approval as well as an assessment of each product candidate's commercial potential.

Research and development expenses also include costs incurred by our Consumer Operations segment for HOTSHOT, including athlete-based efficacy studies, stability studies and other efforts.

Selling, General and Administrative Expenses

Selling, general and administrative expenses include salaries and other compensation-related costs, including stock-based compensation and termination benefits, for personnel in executive, finance and accounting, legal, corporate communications and general administration roles. Other significant costs include professional service fees including legal fees relating to patent and corporate matters, accounting fees, insurance costs, costs for consultants who we utilize to supplement our personnel, travel costs and facility and office-related costs not included in research and development expenses.

Selling, general and administrative expenses also include costs related to our Consumer Operations segment for our consumer brand and HOTSHOT. These costs include personnel costs, costs related to our marketing, sales and promotional activities, including print and digital media campaigns, public relations activities, field marketing efforts, market research, other sales and promotional activities and costs related to the distribution of HOTSHOT. These distribution costs include shipping and handling costs incurred once our product is in salable condition.

Our selling, general and administrative expenses may increase as we complete our strategic assessment, operate as a public company, support our research and development efforts and continue to sell HOTSHOT.

Interest Income, Net

Interest income, net primarily consists of interest income from our cash, cash equivalents and marketable securities, amortization and accretion of investment premiums and realized gains and losses.

Results of Operations

Three Months Ended June 30, 2018 Compared to the Three Months Ended June 30, 2017

The following table sets forth the condensed consolidated results of our operations, including information related to our Consumer Operations and Drug Development segments, for the three months ended June 30, 2018 compared to the three months ended June 30, 2017.

	Three Months Ended June 30, 2018	Three Months Ended June 30, 2017	Change $	Change %
Net product revenue	$ 241,416	$ 330,688	$ (89,272)	(27)%
Other revenue	4,086	4,835	(749)	(15)%
Total revenue	245,502	335,523	(90,021)	(27)%
Costs and expenses:				
Cost of product revenue	179,945	145,325	34,620	24 %
Research and development	6,174,589	4,076,220	2,098,369	51 %
Selling, general and administrative	2,994,649	4,990,943	(1,996,294)	(40)%
Total costs and expenses	9,349,183	9,212,488	136,695	1 %
Loss from operations	(9,103,681)	(8,876,965)	(226,716)	3 %
Interest income, net	51,809	72,342	(20,533)	(28)%
Net loss	$ (9,051,872)	$ (8,804,623)	$ (247,249)	3 %

Total Revenue

Our Consumer Operations segment generated all of our revenue during the three months ended June 30, 2018, totaling $0.2 million as compared to $0.3 million for the three months ended June 30, 2017, through sales of HOTSHOT and expedited shipping and handling purchases. The decrease in revenue of $0.1 million relates to decreased marketing spend and activity during the three months ended June 30, 2018 compared to the three months ended June 30, 2017, as we have reduced our Consumer Operations spending while we have been evaluating strategic alternatives for the business.

Sales via e-commerce represented approximately 85% of our total revenue for the three months ended June 30, 2018 compared to 81% for the three months ended June 30, 2017.

During the three months ended June 30, 2018, we sold approximately 54,000 bottles of HOTSHOT at an average total revenue per bottle of $4.55, compared to 83,000 bottles at an average total revenue per bottle of $4.04 during the three months ended June 30, 2017. The increase in average total revenue per bottle is primarily related to increased specialty retailer promotions during the second quarter of 2017, as well a change to the e-commerce trial pack offer in 2018, resulting in higher revenue per bottle compared to the prior year. The decrease in volume of bottles sold in the comparative periods was primarily due to decreased marketing efforts and resulting demand.

Cost of Product Revenue

All costs of product revenue are recorded by our Consumer Operations segment and relate to the production and sale of HOTSHOT. Cost of product revenue was $0.2 million for the three months ended June 30, 2018 and $0.1 million for the three months ended June 30, 2017, and included the cost of HOTSHOT sold, royalty expense, inventory write-offs, and depreciation expense of approximately $35,000 in each period related to manufacturing equipment used to support production. Write-offs for the three months ended June 30, 2018 totaled approximately

$85,000 and relate to raw materials that are not expected to be used in future production runs, as well as finished goods inventory no longer expected to be used for product sampling. Write-offs for the three months ended June 30, 2017 totaled approximately $17,800 and related to raw materials that were not expected to be used in future production runs.

Research and Development Expenses

Our Drug Development segment incurred the majority of our research and development expenses, which were $6.2 million for the three months ended June 30, 2018 compared to $4.1 million for the three months ended June 30, 2017. The 51% increase of $2.1 million was primarily related to:

- $1.3 million increase in clinical trial costs, primarily related to our Phase 2 clinical trials of FLX-787 in MND and CMT in the United States, which commenced during the first quarter of 2017 with start-up activities, increased in activity from mid-2017 through May 2018, and incurred increased expense for close out activities in June 2018 due to the decision to end our Phase 2 clinical trials;
- $0.5 million increase in manufacturing and formulation of drug product to support clinical studies, incurred prior to the decision to end our Phase 2 clinical trials and related drug development work;
- $0.5 million increase in salary and benefit costs mainly due to restructuring-related expenses, including termination benefit expenses, incurred in the second quarter of 2018; and
- $0.2 million decrease related to stock-based compensation expense, related primarily to the final vesting of restricted common stock issued to the founders in 2014 during the first quarter of 2018.

Selling, General and Administrative Expenses

Selling, general and administrative includes expenses that are incurred by our Consumer Operations segment as well as corporate and unallocated amounts that do not relate to a reportable segment. Selling, general and administrative expenses were $3.0 million for the three months ended June 30, 2018 compared to $5.0 million for the three months ended June 30, 2017. The 40% decrease of $2.0 million was primarily related to:

- $1.3 million decrease in marketing and consulting costs within our Consumer Operations segment for HOTSHOT due to decreased activity;
- $0.4 million decrease in stock-based compensation expense, related primarily to a decrease in headcount compared to the prior year, as well as final vesting of restricted common stock issued to the founders in 2014 during the first quarter of 2018;
- $0.2 million decrease related to salaries and benefits as Consumer Operations and corporate headcount decreased from the prior year, partially offset by restructuring-related expenses incurred in the second quarter of 2018;
- $0.1 million decrease in employee travel and recruiting costs, related to decreased Consumer Operations and corporate headcount from the prior year;
- $0.1 million decrease in rent, office and other expenses primarily due to the termination of our lease agreement for our office in New York, NY in the third quarter of 2017;
- $0.1 million decrease in HOTSHOT product sampling within our Consumer Operations segment due to decreased marketing events; and
- $0.2 million increase in consulting, legal and professional expenses to supplement our corporate personnel.

Loss from Operations

Our consolidated loss from operations for the three months ended June 30, 2018 totaled $9.1 million. Of this total, $0.6 million of the operating loss was incurred by our Consumer Operations segment, $6.2 million was incurred by our Drug Development segment and the remaining $2.3 million related to corporate and unallocated costs. The operating loss incurred by the Consumer Operations segment was primarily driven by marketing, sales and promotional costs related to HOTSHOT, and personnel-related expenses, including stock-based compensation. These costs were slightly offset by the total revenue generated from HOTSHOT sales during the three months ended June 30, 2018. The operating loss incurred by the Drug Development segment relates to costs incurred for FLX-787 formulation and production and clinical study costs, including increased costs associated with the decision

to end our MND and CMT Phase 2 clinical trials, other clinical study activities and personnel-related expenses, including stock-based compensation and restructuring-related expenses, as well as consulting costs.

Interest Income, net

Interest income, net, decreased by $20,533 in the three months ended June 30, 2018 compared to the three months ended June 30, 2017, as we had lower available cash to invest.

Six Months Ended June 30, 2018 Compared to the Six Months Ended June 30, 2017

The following table sets forth the condensed consolidated results of operations, including information related to our Consumer Operations and Drug Development segments, for the six months ended June 30, 2018 compared to the six months ended June 30, 2017.

	Six Months Ended June 30, 2018	Six Months Ended June 30, 2017	Change $	Change %
Net product revenue	$ 417,671	$ 570,980	$ (153,309)	(27)%
Other revenue	6,413	7,090	(677)	(10)%
Total revenue	424,084	578,070	(153,986)	(27)%
Costs and expenses:				
Cost of product revenue	263,879	224,431	39,448	18 %
Research and development	10,854,770	7,991,194	2,863,576	36 %
Selling, general and administrative	6,691,936	9,585,659	(2,893,723)	(30)%
Total costs and expenses	17,810,585	17,801,284	9,301	— %
Loss from operations	(17,386,501)	(17,223,214)	(163,287)	1 %
Interest income, net	111,402	150,196	(38,794)	(26)%
Net loss	$ (17,275,099)	$ (17,073,018)	$ (202,081)	1 %

Total Revenue

Our Consumer Operations segment generated all of our revenue during the six months ended June 30, 2018, totaling $0.4 million, as compared to $0.6 million for the six months ended June 30, 2017 through sales of HOTSHOT and expedited shipping and handling purchases. The decrease in revenue is due to decreased marketing efforts in the six months ended June 30, 2018 compared to the six months ended June 30, 2017, as we have reduced spending in our Consumer Operations segment while we have been evaluating strategic alternatives for the business.

Sales via e-commerce represented approximately 86% of our total revenue for the six months ended June 30, 2018 compared to 84% for the six months ended June 30, 2017.

During the six months ended June 30, 2018, we sold approximately 93,000 bottles of HOTSHOT at an average total revenue per bottle of $4.56, compared to 135,000 bottles at an average total revenue per bottle of $4.28 during the six months ended June 30, 2017. The increase in average total revenue per bottle is due to various price promotions that were offered to customers during the second quarter of 2017 to attract new and repeat customers, including a specialty retailer promotion. Additionally, our e-commerce trial pack offer in 2018 generates higher revenue per bottle than the 2017 e-commerce trial pack promotions. The decrease in the number of bottles sold primarily relates to decrease in marketing efforts and resulting demand, as well as our adoption of ASC 606.

Cost of Product Revenue

All costs of product revenue are recorded by our Consumer Operations segment and relate to the production and sale of HOTSHOT. Cost of product revenue was $0.3 million for the six months ended June 30, 2018 compared to $0.2 million for the six months ended June 30, 2017. Cost of product revenue during the six months ended June 30, 2018 includes the cost of HOTSHOT sold, royalty expense, inventory write-offs and depreciation expense of

approximately $70,000 in each period related to manufacturing equipment used to support production. Write-offs for the six months ended June 30, 2018 totaled approximately $85,000 and relate to raw materials that are not expected to be used in future production runs, as well as finished goods inventory no longer expected to be used for product sampling. Write-offs for the six months ended June 30, 2017 totaled approximately $17,800 and related to raw materials that were not expected to be used in future production runs.

Research and Development Expenses

Our Drug Development segment incurred the majority of our research and development expenses, which were $10.9 million for the six months ended June 30, 2018 compared to $8.0 million for the six months ended June 30, 2017. The 36% increase of $2.9 million was primarily related to:

- $2.9 million increase in clinical activities and related work, primarily related to clinical trial costs for our Phase 2 clinical trials of FLX-787 in MND and CMT in the United States, which commenced during the first quarter of 2017 with start-up activities, increased in activity from mid-2017 through May 2018, and incurred increased expense in June 2018 due to the decision to end our Phase 2 clinical trials;
- $0.4 million increase related to salaries and benefits, mainly due to restructuring-related expenses, including termination benefit expenses, incurred during the second quarter of 2018;
- $0.3 million decrease in consulting expenses as we increased the use of consultants in the prior year to assist with our investigational new drug application and other research activities in 2017; and
- $0.1 million decrease related to stock-based compensation expense, related primarily to the final vesting of restricted common stock issued to the founders in 2014 during the first quarter of 2018.

Selling, General and Administrative Expenses

Selling, general and administrative includes expenses that are incurred by our Consumer Operations segment as well as corporate and unallocated amounts that do not relate to a reportable segment. Selling, general and administrative expenses were $6.7 million for the six months ended June 30, 2018 compared to $9.6 million for the six months ended June 30, 2017. The 30% decrease of $2.9 million was primarily related to:

- $1.4 million of decreased marketing and consulting costs within our Consumer Operations segment for HOTSHOT due to decreased activity during the strategic assessment;
- $1.0 million decrease related to salaries and benefits, as Consumer Operations and corporate headcount decreased from the prior year, including executive level employees, partially offset by restructuring-related expenses, including termination benefit expenses, incurred during the second quarter of 2018;
- $0.7 million decrease in stock-based compensation expense, related primarily to a decrease in headcount compared to the prior year and the final vesting of restricted common stock issued to the founders in 2014 during the first quarter of 2018;
- $0.2 million decrease in employee travel and recruiting costs, related to decreased Consumer Operations and corporate headcount from the prior year;
- $0.2 million decrease in rent, office and other expenses due to the termination of our lease agreement for our office in New York, NY in the third quarter of 2017; and
- $0.6 million increase in consulting, legal and professional expenses to supplement our corporate personnel.

Loss from Operations

Our consolidated loss from operations for the six months ended June 30, 2018 totaled $17.4 million. Of this total, $1.9 million of the operating loss was incurred by our Consumer Operations segment, $10.8 million was incurred by our Drug Development segment and the remaining $4.6 million related to corporate and unallocated costs. The operating loss incurred by the Consumer Operations segment was driven by sales, marketing, promotional and distribution costs related to HOTSHOT, and personnel-related expenses, including stock-based compensation. These costs were slightly offset by the total revenue generated from HOTSHOT sales during the six months ended June 30, 2018. The operating loss incurred by the Drug Development segment relates to costs incurred for FLX-787

formulation, production and clinical study costs, including increased costs associated with ending our MND and CMT Phase 2 clinical trials, other clinical study activities and personnel-related expenses, including stock-based compensation and restructuring-related expenses, as well as consulting costs.

Interest Income, net

Interest income, net, decreased by $38,794 in the six months ended June 30, 2018 compared to the six months ended June 30, 2017, as we had lower available cash to invest.

Liquidity and Capital Resources

Overview

Since inception, we have incurred operating losses and we anticipate that we will continue to incur losses for the foreseeable future. To date, we have generated limited revenue from sales of HOTSHOT, and have generated no revenue from any of our drug product candidates. We may not be successful in generating significant revenue from HOTSHOT. In addition, we cannot predict to what extent we will resume drug development activities for FLX-787 or other drug product candidates beyond our current efforts to assess the potential of FLX-787 in dysphagia. We expect that our research and development expenses will decrease in the future as a result of ending our Phase 2 clinical trials in MND and CMT, and the related drug development efforts, and the reduction of research and development staff. Our selling, general and administrative expenses may increase as we complete our strategic assessment, operate as a public company, support our research and development efforts and continue to sell HOTSHOT. We will need additional capital to fund our operations. There can be no assurances, however, that additional funding will be available on terms acceptable to the Company, or at all.

Sources of Liquidity

At June 30, 2018, we had $13.1 million of working capital and our cash and cash equivalents totaled $15.8 million, which were held in bank deposit accounts and money market funds. The Company held no marketable securities at June 30, 2018. Our cash, cash equivalents and marketable securities balance decreased during the six months ended June 30, 2018, due primarily to our net loss incurred.

Cash Flows

	Six Months Ended June 30, 2018	Six Months Ended June 30, 2017
Net cash (used in) provided by:		
Operating activities	$ (17,667,923)	$ (13,915,547)
Investing activities	14,120,848	30,624,261
Financing activities	118,010	2,047
Net increase (decrease) in cash and cash equivalents	$ (3,429,065)	$ 16,710,761

Operating Activities

Net cash used in operating activities for the six months ended June 30, 2018 was $17.7 million, an increase of $3.8 million compared to the same period in the prior year. The use of cash for the six months ended June 30, 2018 was primarily related to our net loss for the period of $17.3 million, offset by non-cash charges consisting of stock-based compensation expense of $1.4 million, as well as depreciation, amortization and accretion on investments and other non-cash items, which totaled $0.2 million. Cash used in operations also included a cash outflow of $2.0 million from changes in operating assets and liabilities.

The $2.0 million cash outflow from changes in operating assets and liabilities was driven primarily by outflows from an increase in prepaid expenses and other current assets of $0.1 million and decreases in accounts payable of $0.9 million and accrued expenses and other current liabilities of $1.1 million. The increase in prepaid expenses and other current assets relates to the timing of payments for our insurance policies. The decrease in accounts payable relates to decreased spending at June 30, 2018 compared to December 31, 2017. The decrease in accrued expenses and other current liabilities relates primarily to delayed billings of 2017 invoices at December 31, 2017,

primarily related to clinical trial expenses for the MND and CMT Phase 2 clinical trials, and decreases in accrued bonus and accrued vacation due to the terminations related to the corporate restructuring, as well as payment of prior year employee-related accruals, partially offset by the accrual for restructuring-related activities as of June 30, 2018. These outflows were offset by inflows, primarily from a decrease in inventory of $0.1 million.

Investing Activities

Net cash provided by investing activities for the six months ended June 30, 2018 compared to the six months ended June 30, 2017 decreased $16.5 million, related to a $16.6 million decrease in net purchases and sales of marketable securities. This included a $7.6 million decrease in purchases of marketable securities and a $24.2 million decrease in proceeds from maturities and sales of marketable securities.

Financing Activities

Net cash provided by financing activities for the six months ended June 30, 2018 compared to the six months ended June 30, 2017 increased $0.1 million, related to a $0.1 million increase in proceeds from exercises of common stock. Proceeds from exercises of common stock during the six months ended June 30, 2018 and June 30, 2017 were $0.1 million and $2,047, respectively.

As of June 30, 2018, we had no long-term debt.

We currently have no ongoing material financial commitments, such as lines of credit or guarantees that are expected to affect our liquidity over the next five years, other than leases.

Funding Requirements

Our future funding requirements are difficult to forecast. We expect that our research and development expenses will decrease in the future due to ending our Phase 2 clinical trials in MND and CMT and related drug development, and the reduction in research and development headcount, while our general and administrative costs may increase as we complete our strategic assessment, operate as a public company, support research and development activities and continue to sell HOTSHOT. We will need additional capital to fund our operations. There can be no assurances, however, that additional funding will be available on terms we deem to be acceptable, or at all. If we raise additional funds through the issuance of additional debt or equity securities, it could result in dilution to our existing stockholders, increased fixed payment obligations and these securities may have rights senior to those of our common stock. If we incur indebtedness, we could become subject to covenants that would restrict our operations and potentially impair our competitiveness, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. Any of these events could significantly harm our business, financial condition and prospects.

Drug Product Candidates

We cannot predict to what extent we will resume drug development activities for FLX-787 or other drug product candidates beyond our current efforts to assess the potential of FLX-787 in dysphagia. To the extent that we pursue drug development activities in the future, the successful development of any drug product candidate is highly uncertain. As such, at this time, we cannot reasonably estimate or know the nature, timing and costs of the efforts that will be necessary to complete the development of future drug product candidates. We are also unable to predict when, if ever, material net cash inflows will commence from the sale of drug product candidates. This is due to the numerous risks and uncertainties associated with developing drug products, including the uncertainty of:

- receiving regulatory approval to conduct clinical trials;
- successfully enrolling, and completing, clinical trials;
- receiving marketing approvals from applicable regulatory authorities;
- establishing arrangements with third-party manufacturers;
- obtaining and maintaining patent and trade secret protection and regulatory exclusivity; and
- launching commercial sales of our products, if and when approved, whether alone or in collaboration with others.

A change in the outcome of any of these variables with respect to the development of any of our drug product candidates would significantly change the costs and timing associated with the development of that drug product candidate.

Consumer Brand and Products

The development and growth of HOTSHOT is uncertain, including the timing and resources needed to support successful commercialization. The success of HOTSHOT depends, in large part, on a growth strategy that establishes distribution and placement of the product, attracts consumers and maintains brand loyalty. Delays or unexpected costs related to HOTSHOT could significantly change the costs and timing of expenses associated with our Consumer Operations.

Concurrent with our efforts to grow HOTSHOT, on January 22, 2018, we disclosed that we engaged an investment banking firm to assist with the consideration of strategic alternatives for our consumer business segment. Due to the announcement in June 2018 regarding the initiation of our corporate strategic review, we are now assessing the consumer business segment in conjunction with the corporate assessment process.

Outlook

Based on our research and development plans, our consumer brand and HOTSHOT expenditure plans and our expectations of timing related to ending our Phase 2 clinical trials in MND and CMT, and the related drug development work, we expect that our existing cash resources and marketable securities will enable us to fund our costs and expenses, working capital and capital expenditure requirements for at least 12 months from the date the financial statements are issued. We based this estimate on assumptions that may prove to be wrong, however, and we could use our capital resources sooner than we expect.

Contractual Obligations

There have been no material changes to our contractual obligations from those described in our Annual Report on Form 10-K for the year ended December 31, 2017, other than as noted below.

In connection with our strategic assessment, we entered into retention and severance agreements with certain employees. Based upon the terms of these agreements, we may be required to pay up to $2.3 million in retention and severance payments. See Note 7 to the accompanying unaudited condensed consolidated financial statements for more information on our retention and severance arrangements.

Off-Balance Sheet Arrangements

We did not have during the period presented, and we do not currently have, any off-balance sheet arrangements, as defined under SEC rules.

Critical Accounting Policies and Significant Judgments and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our condensed consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States, or GAAP. The preparation of these condensed consolidated financial statements requires us to make estimates, judgments and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities as of the date of the condensed consolidated balance sheet and the reported amounts of expenses during the reporting period. In accordance with GAAP, we base our estimates on historical experience and on various other assumptions that we believe are reasonable under the circumstances at the time such estimates are made. Actual results may differ materially from our estimates and judgments under different assumptions or conditions. We periodically review our estimates in light of changes in circumstances, facts and experience. The effects of material revisions in estimates are reflected in our consolidated financial statements prospectively from the date of the change in estimate.

There have been no material changes to our critical accounting policies from those described in "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in our Annual Report on Form 10-K for the year ended December 31, 2017, except that we have updated our revenue recognition policy in conjunction with our adoption of ASC 606 as further described in Note 2 and Note 3 to the accompanying unaudited condensed consolidated financial statements.

Readers should refer to our 2017 Form 10-K under “Management’s Discussion and Analysis of Financial Condition and Results of Operation—Critical Accounting Policies and Use of Estimates” and Note 2 to the accompanying financial statements for descriptions of these policies and estimates.

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 June 30, 2018, we had cash and cash equivalents of $15.8 million, and did not have any marketable securities. We invest our cash in a variety of financial instruments, principally money market funds, U.S. government securities, investment-grade 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. Available-for-sale securities that we invest in are subject to interest rate risk and may fall in value if market interest rates increase. Due to the short-term duration of our investment portfolio and the low risk profile of our investments, an immediate 100 basis point change in interest rates would not have a material effect on the fair market value of our portfolio.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our periodic and current reports that we file under the Exchange Act with the SEC is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and our Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

As of June 30, 2018, we have evaluated, under the supervision and with the participation of our management, including the Chief Executive Officer and the Chief Financial Officer, the effectiveness of the design and operation of our disclosure controls and procedures pursuant to Exchange Act Rule 13a-15. Based upon our evaluation, the Chief Executive Officer and the Chief Financial Officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

During the six months ended June 30, 2018, there was no significant change in our internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings

On June 19, 2018, a putative class action lawsuit was filed against us and certain of our current executive officers in the United States District Court for the Southern District of New York, captioned Teofilina Rumaldo v. Flex Pharma, Inc., et al., Case No. 1:18-cv-05493. The complaint purports to be brought on behalf of stockholders who purchased our common stock between November 6, 2017 and June 12, 2018. The complaint generally alleges that we and certain of our current officers violated Sections 10(b) and/or 20(a) of the Securities Exchange Act of 1934, as amended, and Rule 10b-5 promulgated thereunder by making allegedly false and misleading statements or omissions regarding our business, operational and compliance policies. Specifically, the complaint alleges that we overstated the viability and approval prospects for our product candidate FLX-787 for the treatment of MND and CMT and, as a result, our public statements were materially false and misleading at all relevant times. The complaint seeks unspecified damages, attorneys' fees, and other costs.

We deny any allegations of wrongdoing and intend to vigorously defend against this lawsuit. We are unable, however, to predict the outcome of this matter at this time. Moreover, any conclusion of this matter in a manner adverse to us and for which we incur substantial costs or damages not covered by our directors' and officers' liability insurance would have a material adverse effect on our financial condition and business. In addition, the litigation could adversely impact our reputation and divert management's attention and resources from other priorities, including the execution of business plans and strategies that are important to our business, any of which could have a material adverse effect on our business.

Item 1A. Risk Factors

You should carefully review and consider the information regarding certain factors that could materially affect our business, financial condition or future results set forth under Part I, Item 1A. (Risk Factors) in our Annual Report on Form 10-K for the fiscal year ended December 31, 2017, or the Annual Report.

There have been no material changes to the risk factors included in our Annual Report and in item 1A of Part II of our Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, except as follows:

We recently implemented a plan to reduce our workforce and initiated a process to explore a range of strategic alternatives, including the potential sale or merger of the Company. We may experience difficulties, delays or unexpected costs and not achieve anticipated benefits and savings from our restructuring plans or strategic evaluation.

Following our recent announcement that we are ending our ongoing Phase 2 clinical trial investigations of FLX-787 in MND and CMT, we implemented a reduction in force and terminated 10 employees in order to better align our resources with our operational needs going forward. These reductions in force resulted in the loss of numerous long-term employees, the loss of institutional knowledge and expertise and the reallocation of certain job responsibilities, all of which could negatively affect operational efficiencies and increase our operating expenses such that we may not fully realize anticipated savings from the restructuring and could negatively affect our ability to advance our existing drug candidate.

Additionally, we announced that we plan to explore strategic alternatives that may include a potential sale or merger of the Company, among other potential alternatives that could enhance both near and long-term value for our stockholders. The Board has established a Strategic Committee that will work with management to oversee this process and has retained Wedbush PacGrow to serve as our strategic financial advisor in the process. We do not have a defined timeline for the exploration of strategic alternatives and are not confirming that the process will result in any strategic alternative being announced or consummated. We do not intend to discuss or disclose further developments during this process unless and until our Board has approved a specific action or otherwise determined that further disclosure is appropriate. There can be no assurance that this process will result in a transaction, or that if a transaction does occur, that it will successfully enhance stockholder value. If we are unable to identify and execute such strategic alternatives, we may be forced to cease operations.

We cannot predict to what extent we will resume drug development activities for FLX-787 or any other drug product candidates, which could materially affect our business, results of operations and financial condition.

In June 2018, we announced that we are ending our ongoing Phase 2 clinical trials of FLX-787 in MND and CMT due to oral tolerability concerns observed in both studies. In the MND study, 31% of patients randomized to receive the oral disintegrating tablet formulation at 30 mg, taken three times a day, discontinued before the end of the 4-week treatment period due to oral adverse events. A similar proportion of subjects in the CMT study discontinued due to oral adverse events, after being randomized to the 30 mg dose. No patients randomized to the 0.5 mg low-dose control discontinued due to oral adverse events in either study.

We cannot predict to what extent we will resume drug development activities for FLX-787 or other drug product candidates beyond our current efforts to assess the potential of FLX-787 in dysphagia. Further, only a small minority of all research and development programs ultimately result in commercially successful drugs. Clinical failure can occur at any stage of clinical development and clinical trials may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical or preclinical trials. In addition, data obtained from trials are susceptible to varying interpretations, and regulators may not interpret our data as favorably as we do, which may delay, limit or prevent regulatory approval. Success in preclinical testing and early clinical trials does not ensure that later clinical trials will generate the same results or otherwise provide adequate data to demonstrate the efficacy and safety of a drug candidate. Further, even if we complete the development of FLX-787 or any future drug product candidate and gain marketing approvals from the FDA and comparable foreign regulatory authorities in a timely manner, we cannot be sure that such drug product candidate will be commercially successful in the pharmaceutical market. If the results of clinical trials, the anticipated or actual timing of marketing approvals, or the market acceptance of any drug product candidate, if approved, do not meet the expectations of investors or public market analysts, the market price of our common stock would likely decline.

Further, even if we do resume drug development activities beyond what is currently planned, we will need substantial additional financing to complete the development of FLX-787 or any other drug product candidates we may develop. We cannot guarantee that future financing will be available in sufficient amounts or on terms

acceptable to us, if at all. If we are unable to raise capital when needed, we could be forced to delay, reduce or eliminate our development of FLX-787 or to cease operations.

We are subject to securities class action litigation, which could distract our management and could result in substantial costs or large judgments against us.

In June 2018, we experienced a substantial decline in our stock price following our announcement that we will be ending our ongoing Phase 2 clinical trial investigations of FLX-787 in MND and CMT. As described above in Part II, Item 1. (Legal Proceedings), on June 19, 2018, a class action lawsuit was filed against us and certain of our current executive officers in federal district court in the Southern District of New York. Due to the volatility in our stock price, we may be the target of similar litigation in the future. In connection with such litigation, we could incur substantial costs and such costs and any related settlements or judgments may not be covered by insurance. We could also suffer an adverse impact on our reputation and a diversion of management's attention and resources, which could cause serious harm to our business, operating results and financial condition.

As a result of our recent stock price decline, we may not be able to maintain compliance with the minimum bid price requirement of $1.00 per share for continued listing on The Nasdaq Global Market, or Nasdaq. If we fail to continue to meet all applicable listing requirements and Nasdaq determines to delist our common stock, the delisting could adversely affect the market liquidity of our common stock and the market price of our common stock could decrease.

Our common stock is listed on Nasdaq. In order to maintain our listing, we must meet minimum financial and other requirements, including the minimum bid price requirement of $1.00 per share for continued listing. Since June 28, 2018, the closing price for our stock has been below $1.00 per share. If the closing bid price of our common stock were to continue to be below $1.00 per share for 30 consecutive trading days or we do not meet other Nasdaq listing requirements, we would fail to be in compliance with Nasdaq listing standards. There can be no assurance that we will continue to meet the minimum bid price requirement, or any other requirement in the future. If we fail to meet the minimum bid price requirement, Nasdaq may initiate the delisting process with a notification letter. If we were to receive such a notification, we would be afforded a grace period of 180 calendar days to regain compliance with the minimum bid price requirement. In order to regain compliance, shares of our common stock would need to maintain a minimum closing bid price of at least $1.00 per share for a minimum of 10 consecutive trading days. In addition, we may be unable to meet other applicable Nasdaq listing requirements, including maintaining minimum levels of stockholders' equity or market values of our common stock in which case, our common stock could be delisted. The failure to maintain our listing on Nasdaq could have an adverse effect on the market price and liquidity of our shares of common stock. Without a Nasdaq listing, stockholders may have a difficult time getting a quote for the sale or purchase of our shares, the sale or purchase of our shares would likely be made more difficult, and the trading volume and liquidity of our shares could decline. Delisting from Nasdaq could also result in negative publicity and could make it more difficult for us to raise additional capital.

Our share price has been and could remain volatile.

The market price of our common stock has historically experienced and may continue to experience significant volatility. From January 2018 through July 27, 2018, the market price of our common stock has fluctuated from a high of $8.98 per share on March 15, 2018, to a low of $0.80 per share on July 19, 2018. Our progress in developing and commercializing our products, the impact of government regulations on our products and industry, the potential sale of a large volume of our common stock by stockholders, our quarterly operating results, changes in general conditions in the economy or the financial markets and other developments affecting us or our competitors could cause the market price of our common stock to fluctuate substantially with significant market losses. If our stockholders sell a substantial number of shares of common stock, especially if those sales are made during a short period of time, those sales could adversely affect the market price of our common stock and could impair our ability to raise capital. In addition, in recent years, the stock market has experienced significant price and volume fluctuations. This volatility has affected the market prices of securities issued by many companies for reasons unrelated to their operating performance and may adversely affect the price of our common stock. In addition, we recently became subject to a securities class action litigation, which could result in substantial costs and diversion of management's attention and resources and could materially effect our stock price, business, results of operations and financial condition.

Due to our consumer business, we may be subject to foreign privacy directives and regulations.

Through our promotional efforts for HOTSHOT®, we may be subject to laws governing the collection, use, disclosure and transmission of personal and/or patient information. In December 2015, the European Union approved a General Data Protection Regulation, or GDPR, to replace the current data protection directive, Directive 95/46/EC, which took effect May 25, 2018. The GDPR governs the use and transfer of personal data and imposes

enhanced penalties for noncompliance. We are currently evaluating how to adjust our operations so as to comply with the GDPR.

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

Recent sales of unregistered securities; repurchases of equity securities

None.

Use of Proceeds

In February 2015, we completed our initial public offering pursuant to a registration statement on Form S-1 (File No. 333-201276), which the SEC declared effective on January 28, 2015. In our initial public offering, we issued and sold 5,491,191 shares of common stock (inclusive of 91,191 shares of common stock sold by us pursuant to the exercise of an overallotment option granted to the underwriters in connection with the offering) at a public offering price of $16.00 per share, for aggregate gross offering proceeds of $87.9 million. The managing underwriters for our initial public offering were Jefferies LLC, Piper Jaffray & Co., JPM Securities LLC, Cantor Fitzgerald & Co., and Roth Capital Partners, LLC.

The aggregate net proceeds received by us from our initial public offering were $79.9 million, after deducting underwriting discounts and commissions and offering expenses payable by us. No offering expenses were paid directly or indirectly to any of our directors or officers (or their associates) or persons owning 10% or more of any class of our equity securities or to any other affiliates or to any other persons.

The remaining use of proceeds from our initial public offering are expected to be used to fund a reduced internal team that will focus our efforts on assessing the potential of FLX-787 in dysphagia (difficulty swallowing) and operating our consumer business which sells HOTSHOT® while we assess strategic business alternatives, which may include a potential sale or merger of the Company.

Item 3. Defaults Upon Senior Securities

Not applicable.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

Exhibit number		Description of Document
3.1	(1)	Amended and Restated Certificate of Incorporation of the Registrant.
3.2	(2)	Amended and Restated Bylaws of the Registrant.
4.1	(3)	Form of Common Stock Certificate of the Registrant.
4.2	(4)	Amended and Restated Investors' Rights Agreement, dated July 23, 2014, by and among the Company and certain of its stockholders.
10.1	+	Amendment to Executive Employment Agreement, effective as of June 20, 2018, by and between the Registrant and William McVicar
10.2	+	Amendment to Executive Employment Agreement, effective as of June 20, 2018, by and between the Registrant and John McCabe
10.3	+	Separation Agreement, effective as of June 26, 2018, by and between the Registrant and Thomas Wessel
10.4	+	Advisor Agreement, dated June 26, 2018, by and between the Registrant and Thomas Wessel
31.1		Certification of the Principal Executive Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934.
31.2		Certification of the Principal Financial Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934.
32.1		Certification of Principal Executive Officer and Principal Financial Officer pursuant to Rule 13a-14(b) or 15d-14(b) of the Exchange Act and 18 U.S.C. Section 1350.
101		The following materials from Flex Pharma, Inc.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2018, formatted in XBRL (eXtensible Business Reporting Language):(i) Unaudited Condensed Consolidated Balance Sheets, (ii) Unaudited Condensed Consolidated Statements of Operations (iii) Unaudited Condensed Consolidated Statements of Comprehensive Loss, (iv) Unaudited Condensed Consolidated Statements of Cash Flows, and (v) Notes to Unaudited Condensed Consolidated Financial Statements.

+ Indicates management contract or compensatory plan.

(1) Incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-36812), filed with the SEC on February 9, 2015.

(2) Incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K (File No. 001-36812), filed with the SEC on February 9, 2015.

(3) Incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-1 (File No. 333-201276), as amended, filed with the SEC on January 13, 2015.

(4) Incorporated by reference to the Registrant's Registration Statement on Form S-1 (File No. 333-201276), filed with the SEC on December 29, 2014.

SIGNATURES

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

FLEX PHARMA, INC.

By: /s/ William McVicar

William McVicar, Ph.D.
President and Chief Executive Officer (Principal Executive Officer)

By: /s/ John McCabe

John McCabe
Chief Financial Officer (Principal Financial and Accounting Officer)

Date: August 1, 2018

AMENDMENT TO EXECUTIVE EMPLOYMENT AGREEMENT

This AMENDMENT TO EXECUTIVE EMPLOYMENT AGREEMENT (the "***Amendment***") between Flex Pharma, Inc., a Delaware corporation (the "***Company***"), William McVicar, Ph.D. (the "***Executive***") is effective as of June 20, 2018 (the "***Effective Date***"). Capitalized terms not otherwise defined herein shall have the meanings ascribed to them in the Employment Agreement (as defined below).

W I T N E S S E T H:

Whereas the Company and Executive entered into that certain Executive Employment Agreement dated April 5, 2017, as amended July 6, 2017 and August 1, 2017 (the "***Employment Agreement***") and the parties now wish to amend certain terms of the Employment Agreement as set forth herein.

NOW THEREFORE, in consideration of the foregoing, of the mutual promises contained herein and of other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. **AMENDMENT TO BONUS**.

(a) ANNUAL BONUS

The first two sentences of Section 5 of the Employment Agreement are deleted in entirety and replaced with the following:

"For the 2018 calendar year, and each full calendar year during the Employment Term thereafter, the Executive will be eligible to earn an annual performance bonus (the "***Annual Bonus***") of up to fifty percent (50%) of the Base Salary (the "***Target Bonus***"). For purposes of clarity, for the 2018 calendar year the Executive will be eligible to receive an Annual Bonus equal to the Target Bonus, with such bonus guaranteed for payment the earlier of a) within 30 days of the closing date of a qualifying Change in Control event, as defined in in the Flex Pharma 2015 Equity Incentive Plan or b) no later than March 15, 2019, provided the Executive is an employee in good standing at the date of payment.

b) CHANGE IN CONTROL BONUS

"In the event of a qualifying Change in Control event as defined in the Flex Pharma 2015 Equity Incentive Plan, the Executive will be eligible to receive an additional bonus in the amount of $300,000. Such bonus will be payable as a lump sum within 30 days of the closing date of a qualifying Change in Control event, upon delivery to the Company of an executed waiver and general release of any all known claims and other provisions and covenants in favor of the Company, in substantially the form attached hereto as Exhibit A".

2. **AMENDMENT TO CONSEQUENCES OF TERMINATION**.

(a) The first sentence of Section 11 (d) (i) of the Employment Agreement is deleted in its entirety and replaced with the following:

"provide, in the form of a lump sum payment, an amount equal to twelve (12) months of the Executive's monthly base pay, as in effect immediately preceding the last day of the Employment Term (ignoring any decrease in Base Salary that forms the basis for Good Reason); provided however,

that any payment otherwise scheduled to be made prior to the effective date of the General Release (namely, the date it can no longer be revoked) shall accrue and be paid in the first payroll date that follows such effective date with subsequent payment occurring on the subsequent Company payroll date".

3. **EQUITY.** All stock options granted to the Executive prior to the effective date of this Amendment shall be governed from this point forward by the terms of Amended Form of Option Agreement, which is attached to this agreement.

4. **MISCELLANEOUS.** Executive acknowledges that his employment with the Company will continue to remain "at-will." All other terms and provisions of the Employment Agreement not expressly modified hereby shall remain in full force and effect. This Amendment shall take effect as of the date hereof. This Amendment shall be binding upon and inure to the benefit of all of the parties to the Employment Agreement, their successors and assigns, heirs, devisees, legates and personal representatives. All other terms and provisions of the Employment Agreement not expressly modified by this Amendment shall remain in full force and effect. This Amendment may be executed in multiple counterparts, each of which shall be deemed an original for all purposes and all of which shall be deemed collectively to be one agreement. This Amendment shall be governed by and construed in accordance with the Commonwealth of Massachusetts applicable to contracts made and to be performed therein, without giving effect to the principles thereof relating to the conflict of laws.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, effective as of the date first written above.

Flex Pharma, Inc.

By: /s/ John McCabe
Name: John P McCabe
Title: CFO

EXECUTIVE

/s/ William McVicar
William McVicar, President & CEO

Flex Pharma, Inc.
2015 Equity Incentive Plan

Amended Form of Option Agreement
(Incentive Stock Option or Nonstatutory Stock Option)

Pursuant to your Stock Option Grant Notice ("***Grant Notice***") and this Option Agreement, Flex Pharma, Inc. (the "***Company***") has granted you an option under its 2015 Equity Incentive Plan (the "***Plan***") to purchase the number of shares of the Company's Common Stock indicated in your Grant Notice at the exercise price indicated in your Grant Notice. The option is granted to you effective as of the date of grant set forth in the Grant Notice (the "***Date of Grant***"). If there is any conflict between the terms in this Option Agreement and the Plan, the terms of the Plan will control. Capitalized terms not explicitly defined in this Option Agreement or in the Grant Notice but defined in the Plan will have the same definitions as in the Plan.

The details of your option, in addition to those set forth in the Grant Notice and the Plan, are as follows:

1. **Vesting.** Subject to the provisions contained herein, your option will vest as provided in your Grant Notice. Vesting will cease upon the termination of your Continuous Service.

2. **Number of Shares and Exercise Price.** The number of shares of Common Stock subject to your option and exercise price per share in your Grant Notice will be adjusted for Capitalization Adjustments.

3. **Exercise Restriction for Non-Exempt Employees.** If you are an Employee eligible for overtime compensation under the Fair Labor Standards Act of 1938, as amended (that is, a "***Non-Exempt Employee***"), and except as otherwise provided in the Plan, you may not exercise your option until you have completed at least six (6) months of Continuous Service measured from the Date of Grant, even if you have already been an employee for more than six (6) months. Consistent with the provisions of the Worker Economic Opportunity Act, you may exercise your option as to any vested portion prior to such six (6) month anniversary in the case of (i) your death or disability, (ii) a Corporate Transaction in which your option is not assumed, continued or substituted, (iii) a Change in Control or (iv) your termination of Continuous Service on your "retirement" (as defined in the Company's benefit plans).

4. **Exercise prior to Vesting ("Early Exercise").** If permitted in your Grant Notice (*i.e.*, the "Exercise Schedule" indicates "Early Exercise Permitted") and subject to the provisions of your option, you may elect at a time that is both (i) during the period of your Continuous Service and (ii) during the term of your option, to exercise all or part of your option, including the unvested portion of your option; *provided, however,* that:

(a) a partial exercise of your option will be deemed to cover first vested shares of Common Stock and then the earliest vesting installment of unvested shares of Common Stock;

(b) any shares of Common Stock so purchased from installments that have not vested as of the date of exercise will be subject to the purchase option in favor of the Company as described in the Company's form of Early Exercise Stock Purchase Agreement;

(c) you will enter into the Company's form of Early Exercise Stock Purchase Agreement with a vesting schedule that will result in the same vesting as if no early exercise had occurred; and

(d) if your option is an Incentive Stock Option, then, to the extent that the aggregate Fair Market Value (determined at the Date of Grant) of the shares of Common Stock with respect to which your option plus all other Incentive Stock Options you hold are exercisable for the first time by you during any calendar year (under all plans of the Company and its Affiliates) exceeds one hundred thousand dollars ($100,000), your option(s) or portions thereof that exceed such limit (according to the order in which they were granted) will be treated as Nonstatutory Stock Options.

5. **Method of Payment.** You must pay the full amount of the exercise price for the shares you wish to exercise. You may pay the exercise price in cash or by check, bank draft or money order payable to the Company or in any other manner ***permitted by your Grant Notice,*** which may include one or more of the following:

(a) Provided that at the time of exercise the Common Stock is publicly traded, pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of Common Stock, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the aggregate exercise price to the Company from the sales proceeds. This manner of payment is also known as a "broker-assisted exercise", "same day sale", or "sell to cover".

(b) Provided that at the time of exercise the Common Stock is publicly traded, by delivery to the Company (either by actual delivery or attestation) of already-owned shares of Common Stock that are owned free and clear of any liens, claims, encumbrances or security interests, and that are valued at Fair Market Value on the date of exercise. "Delivery" for these purposes, in the sole discretion of the Company at the time you exercise your option, will include delivery to the Company of your attestation of ownership of such shares of Common Stock in a form approved by the Company. You may not exercise your option by delivery to the Company of Common Stock if doing so would violate the provisions of any law, regulation or agreement restricting the redemption of the Company's stock.

(c) If this option is a Nonstatutory Stock Option, subject to the consent of the Company at the time of exercise, by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Common Stock issued upon exercise of your option by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price. You must pay any remaining balance of the aggregate exercise price not satisfied by the "net exercise" in cash or other permitted form of payment. Shares of Common Stock will no longer be outstanding under your option and will not be exercisable thereafter if those shares (i) are used to pay the exercise price pursuant to the "net exercise," (ii) are delivered to you as a result of such exercise, and (iii) are withheld to satisfy your tax withholding obligations.

6. **Whole Shares.** You may exercise your option only for whole shares of Common Stock.

7. **Securities Law Compliance.** In no event may you exercise your option unless the shares of Common Stock issuable upon exercise are then registered under the Securities Act or, if not registered, the Company has determined that your exercise and the issuance of the shares would be exempt from the registration requirements of the Securities Act. The exercise of your option also must comply with all other applicable laws and regulations governing your option, and you may not exercise your option if the Company determines that such exercise would not be in material compliance with such laws and regulations (including any restrictions on exercise required for compliance with Treas. Reg. 1.401(k)-1(d)(3), if applicable).

8. **Term.** You may not exercise your option before the Date of Grant or after the expiration of the option's term. The term of your option expires, subject to the provisions of Section 5(a) of the Plan, upon the earliest of the following:

(a) immediately upon the termination of your Continuous Service for Cause;

(b) thirty-six (36) months after the termination of your Continuous Service for any reason other than Cause, your Disability or your death (except as otherwise provided in Section 8(d) below); *provided*, *however,* that if during any part of such thirty-six (36) month period your option is not exercisable solely because of the condition set forth in the section above relating to "Securities Law Compliance," your option will not expire until the earlier of the Expiration Date or until it has been exercisable for an aggregate period of thirty-six (36) months after the termination of your Continuous Service; *provided further,* if during any part of such thirty-six (36) month period, the sale of any Common Stock received upon exercise of your option would violate the Company's insider trading policy, then your option will not expire until the earlier of the Expiration Date or until it has been exercisable for an aggregate period of thirty-six (36) months after the termination of your Continuous Service during which the sale of the Common Stock received upon exercise of your option would not be in violation of the Company's insider trading policy. Notwithstanding the foregoing, if (i) you are a Non-Exempt Employee, (ii) your Continuous Service terminates within six (6) months after the Date of Grant, and (iii) you have vested in a portion of your option at the time of your termination of Continuous Service, your option will not expire until the earlier of (x) the later of (A) the date that is seven (7) months after the Date of Grant, and (B) the date that is thirty-six (36) months after the termination of your Continuous Service, and (y) the Expiration Date;

(c) twelve (12) months after the termination of your Continuous Service due to your Disability (except as otherwise provided in Section 8(d)) below;

(d) eighteen (18) months after your death if you die either during your Continuous Service or within thirty-six (36) months after your Continuous Service terminates for any reason other than Cause;

(e) the Expiration Date indicated in your Grant Notice; or

(f) the day before the tenth (10th) anniversary of the Date of Grant.

If your option is an Incentive Stock Option, note that to obtain the federal income tax advantages associated with an Incentive Stock Option, the Code requires that at all times beginning on the Date of Grant and ending on the day three (3) months before the date of your option's exercise, you must be an employee of the Company or an Affiliate, except in the event of your death or Disability. The Company has provided for extended exercisability of your option under certain circumstances for your benefit but cannot guarantee that your option will necessarily be treated as an Incentive Stock Option if you continue to provide services to the Company or an Affiliate as a Consultant or Director after your employment terminates or if you otherwise exercise your option more than three (3) months after the date your employment with the Company or an Affiliate terminates.

9. **Exercise.**

(a) You may exercise the vested portion of your option (and the unvested portion of your option if your Grant Notice so permits) during its term by (i) delivering a Notice of Exercise (in a form designated by the Company) or completing such other documents and/or procedures designated by the Company for exercise and (ii) paying the exercise price and any applicable withholding taxes to the Company's

Secretary, stock plan administrator, or such other person as the Company may designate, together with such additional documents as the Company may then require.

(b) By exercising your option you agree that, as a condition to any exercise of your option, the Company may require you to enter into an arrangement providing for the payment by you to the Company of any tax withholding obligation of the Company arising by reason of (i) the exercise of your option, (ii) the lapse of any substantial risk of forfeiture to which the shares of Common Stock are subject at the time of exercise, or (iii) the disposition of shares of Common Stock acquired upon such exercise.

(c) If your option is an Incentive Stock Option, by exercising your option you agree that you will notify the Company in writing within fifteen (15) days after the date of any disposition of any of the shares of the Common Stock issued upon exercise of your option that occurs within two (2) years after the Date of Grant or within one (1) year after such shares of Common Stock are transferred upon exercise of your option.

(d) By exercising your option you agree that you will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale, any shares of Common Stock or other securities of the Company held by you, for a period of one hundred eighty (180) days following the effective date of a registration statement of the Company filed under the Securities Act or such longer period as the underwriters or the Company will request to facilitate compliance with FINRA Rule 2711 or NYSE Member Rule 472 or any successor or similar rules or regulation (the "***Lock-Up Period***"); *provided*, *however*, that nothing contained in this section will prevent the exercise of a repurchase option, if any, in favor of the Company during the Lock-Up Period. You further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to your shares of Common Stock until the end of such period. You also agree that any transferee of any shares of Common Stock (or other securities) of the Company held by you will be bound by this Section 9(d). The underwriters of the Company's stock are intended third party beneficiaries of this Section 9(d) and will have the right, power and authority to enforce the provisions hereof as though they were a party hereto.

10. **Transferability.** Except as otherwise provided in this Section 10, your option is not transferable, except by will or by the laws of descent and distribution, and is exercisable during your life only by you.

(a) **Certain Trusts.** Upon receiving written permission from the Board or its duly authorized designee, you may transfer your option to a trust if you are considered to be the sole beneficial owner (determined under Section 671 of the Code and applicable state law) while the option is held in the trust. You and the trustee must enter into transfer and other agreements required by the Company.

(b) **Domestic Relations Orders.** Upon receiving written permission from the Board or its duly authorized designee, and provided that you and the designated transferee enter into transfer and other agreements required by the Company, you may transfer your option pursuant to the terms of a domestic relations order, official marital settlement agreement or other divorce or separation instrument as permitted by Treasury Regulation 1.421-1(b)(2) that contains the information required by the Company to effectuate the transfer. You are encouraged to discuss the proposed terms of any division of this option with the Company prior to finalizing the domestic relations order or marital settlement agreement to help ensure the required information is contained within the domestic relations order or marital settlement agreement. If this option

is an Incentive Stock Option, this option may be deemed to be a Nonstatutory Stock Option as a result of such transfer.

(c) **Beneficiary Designation.** Upon receiving written permission from the Board or its duly authorized designee, you may, by delivering written notice to the Company, in a form approved by the Company and any broker designated by the Company to handle option exercises, designate a third party who, on your death, will thereafter be entitled to exercise this option and receive the Common Stock or other consideration resulting from such exercise. In the absence of such a designation, your executor or administrator of your estate will be entitled to exercise this option and receive, on behalf of your estate, the Common Stock or other consideration resulting from such exercise.

11. **Option not a Service Contract.** Your option is not an employment or service contract, and nothing in your option will be deemed to create in any way whatsoever any obligation on your part to continue in the employ of the Company or an Affiliate, or of the Company or an Affiliate to continue your employment. In addition, nothing in your option will obligate the Company or an Affiliate, their respective stockholders, boards of directors, officers or employees to continue any relationship that you might have as a Director or Consultant for the Company or an Affiliate.

12. **Withholding Obligations.**

(a) At the time you exercise your option, in whole or in part, and at any time thereafter as requested by the Company, you hereby authorize withholding from payroll and any other amounts payable to you, and otherwise agree to make adequate provision for (including by means of a "same day sale" pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board to the extent permitted by the Company), any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Company or an Affiliate, if any, which arise in connection with the exercise of your option.

(b) If this option is a Nonstatutory Stock Option, then upon your request and subject to approval by the Company, and compliance with any applicable legal conditions or restrictions, the Company may withhold from fully vested shares of Common Stock otherwise issuable to you upon the exercise of your option a number of whole shares of Common Stock having a Fair Market Value, determined by the Company as of the date of exercise, not in excess of the minimum amount of tax required to be withheld by law (or such lower amount as may be necessary to avoid classification of your option as a liability for financial accounting purposes). If the date of determination of any tax withholding obligation is deferred to a date later than the date of exercise of your option, share withholding pursuant to the preceding sentence shall not be permitted unless you make a proper and timely election under Section 83(b) of the Code, covering the aggregate number of shares of Common Stock acquired upon such exercise with respect to which such determination is otherwise deferred, to accelerate the determination of such tax withholding obligation to the date of exercise of your option. Notwithstanding the filing of such election, shares of Common Stock shall be withheld solely from fully vested shares of Common Stock determined as of the date of exercise of your option that are otherwise issuable to you upon such exercise. Any adverse consequences to you arising in connection with such share withholding procedure shall be your sole responsibility.

(c) You may not exercise your option unless the tax withholding obligations of the Company and/or any Affiliate are satisfied. Accordingly, you may not be able to exercise your option when desired even though your option is vested, and the Company will have no obligation to issue a certificate for such shares of Common Stock or release such shares of Common Stock from any escrow provided for herein, if applicable, unless such obligations are satisfied.

13. **Tax Consequences**. You hereby agree that the Company does not have a duty to design or administer the Plan or its other compensation programs in a manner that minimizes your tax liabilities. You will not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from your option or your other compensation. In particular, you acknowledge that this option is exempt from Section 409A of the Code only if the exercise price per share specified in the Grant Notice is at least equal to the "fair market value" per share of the Common Stock on the Date of Grant and there is no other impermissible deferral of compensation associated with the option.

14. **Notices.** Any notices provided for in your option or the Plan will be given in writing (including electronically) and will be deemed effectively given upon receipt or, in the case of notices delivered by mail by the Company to you, five (5) days after deposit in the United States mail, postage prepaid, addressed to you at the last address you provided to the Company. The Company may, in its sole discretion, decide to deliver any documents related to participation in the Plan and this option by electronic means or to request your consent to participate in the Plan by electronic means. By accepting this option, you consent to receive such documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

15. **Governing Plan Document.** Your option is subject to all the provisions of the Plan, the provisions of which are hereby made a part of your option, and is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. If there is any conflict between the provisions of your option and those of the Plan, the provisions of the Plan will control. In addition, your option (and any compensation paid or shares issued under your option) is subject to recoupment in accordance with The Dodd-Frank Wall Street Reform and Consumer Protection Act and any implementing regulations thereunder, any clawback policy adopted by the Company and any compensation recovery policy otherwise required by applicable law.

16. **Other Documents.** You hereby acknowledge receipt of and the right to receive a document providing the information required by Rule 428(b)(1) promulgated under the Securities Act, which includes the Plan prospectus. In addition, you acknowledge receipt of the Company's policy permitting certain individuals to sell shares only during certain "window" periods and the Company's insider trading policy, in effect from time to time.

17. **Effect on Other Employee Benefit Plans.** The value of this option will not be included as compensation, earnings, salaries, or other similar terms used when calculating your benefits under any employee benefit plan sponsored by the Company or any Affiliate, except as such plan otherwise expressly provides. The Company expressly reserves its rights to amend, modify, or terminate any of the Company's or any Affiliate's employee benefit plans.

18. **Voting Rights.** You will not have voting or any other rights as a stockholder of the Company with respect to the shares to be issued pursuant to this option until such shares are issued to you. Upon such issuance, you will obtain full voting and other rights as a stockholder of the Company. Nothing contained in this option, and no action taken pursuant to its provisions, will create or be construed to create a trust of any kind or a fiduciary relationship between you and the Company or any other person.

19. **Severability.** If all or any part of this Option Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity will not invalidate any portion of this Option Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Option Agreement (or part of such a Section) so declared to be unlawful or invalid shall, if possible, be

construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

20. **Miscellaneous**.

(a) The rights and obligations of the Company under your option will be transferable to any one or more persons or entities, and all covenants and agreements hereunder will inure to the benefit of, and be enforceable by the Company's successors and assigns.

(b) You agree upon request to execute any further documents or instruments necessary or desirable in the sole determination of the Company to carry out the purposes or intent of your option.

(c) You acknowledge and agree that you have reviewed your option in its entirety, have had an opportunity to obtain the advice of counsel prior to executing and accepting your option, and fully understand all provisions of your option.

(d) This Option Agreement will be subject to all applicable laws, rules, and regulations, and to such approvals by any governmental agencies or national securities exchanges as may be required.

(e) All obligations of the Company under the Plan and this Option Agreement will be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all of the business and/or assets of the Company.

* * *

All stock options granted to you prior to the effective date of your Amendment to Executive Employment Agreement shall be governed from this point forward by the terms of this Amendment Form of Option Agreement. This Amended Form of Option Agreement will be deemed to be signed by you upon the signing by you of the Amendment to Executive Employment Agreement which is attached.

AMENDMENT TO EXECUTIVE EMPLOYMENT AGREEMENT

This AMENDMENT TO EXECUTIVE EMPLOYMENT AGREEMENT (the "***Amendment***") between Flex Pharma, Inc., a Delaware corporation (the "***Company***"), and John McCabe (the "***Executive***") is effective as of June 20, 2018 (the "***Effective Date***"). Capitalized terms not otherwise defined herein shall have the meanings ascribed to them in the Employment Agreement (as defined below).

W I T N E S S E T H:

Whereas the Company and Executive entered into that certain Executive Employment Agreement dated May 27, 2015 and as amended on December 14, 2016 (the "***Employment Agreement***") and the parties now wish to amend certain terms of the Employment Agreement as set forth herein.

NOW THEREFORE, in consideration of the foregoing, of the mutual promises contained herein and of other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. **AMENDMENT TO BONUS**.

a) ANNUAL BONUS

The first two sentences of Section 5 of the Employment Agreement are deleted in entirety and replaced with the following:

" For the 2018 calendar year, and each full calendar year during the Employment Term thereafter, the Executive will be eligible to earn an annual performance bonus (the "***Annual Bonus***") of up to to forty percent (40%) of the Base Salary (the "***Target Bonus***"). For purposes of clarity, for the 2018 calendar year the Executive will be eligible to receive an Annual Bonus equal to the Target Bonus, with such bonus guaranteed for payment the earlier of a) within 30 days of the closing date of a qualifying Change in Control event, as defined in the Flex Pharma 2015 Equity Incentive Plan (b) below or b) no later than March 15, 2019, provided the Executive is an employee in good standing at the date of payment.

b) CHANGE IN CONTROL BONUS

"In the event of a qualifying Change in Control event, as defined in the Flex Pharma 2015 Equity Incentive Plan, the Executive will be eligible to receive an additional bonus in the amount of $200,000. Such bonus will be payable as a lump sum within 30 days of the closing date of a qualifying Change in Control event, upon delivery to the Company of an executed waiver and general release of any all known claims and other provisions and covenants in favor of the Company, in substantially the form attached hereto as Exhibit A".

2. **AMENDMENT TO CONSEQUENCES OF TERMINATION**.

a) The first sentence of Section 11 (d) (i) of the Employment Agreement is deleted in its entirety and replaced with the following:

"provide, in the form of a lump sum payment, an amount equal to twelve (12) months of the Executive's monthly base pay, as in effect immediately preceding the last day of the Employment Term (ignoring any decrease in Base Salary that forms the basis for Good Reason); provided however,

that any payment otherwise scheduled to be made prior to the effective date of the General Release (namely, the date it can no longer be revoked) shall accrue and be paid in the first payroll date that follows such effective date with subsequent payment occurring on the subsequent Company payroll date".

b) The first sentence of Section 11 (d) (ii) is deleted in its entirety and replaced with the following:

"if the Executive timely elects continue coverage under COBRA for himself and his covered dependents under the Company's group health plans following such termination, then the Company shall pay that portion of the COBRA premiums that it was paying prior to the Executive's termination date in order to continue the Executive's and his covered dependents' health insurance coverage in effect for himself (and his covered dependents) on the termination date until the earliest of (i) twelve months following the termination date; (ii) the date when the Executive becomes eligible for substantially equivalent health insurance coverage in connection with new employment or self-employment or (iii) the date the Executive ceases to be eligible for COBRA continuation coverage for any reason, including plan termination".

3. **EQUITY.** All stock options granted to the Executive under the Flex Pharma Inc, 2014 and 2015 Equity Incentive Plans prior to the effective date of this Amendment shall be governed from this point forward by the terms of the Amended Forms of Option Agreements, which are attached to this agreement.

4. **MISCELLANEOUS.** Executive acknowledges that his employment with the Company will continue to remain "at-will." All other terms and provisions of the Employment Agreement not expressly modified hereby shall remain in full force and effect. This Amendment shall take effect as of the date hereof. This Amendment shall be binding upon and inure to the benefit of all of the parties to the Employment Agreement, their successors and assigns, heirs, devisees, legates and personal representatives. All other terms and provisions of the Employment Agreement not expressly modified by this Amendment shall remain in full force and effect. This Amendment may be executed in multiple counterparts, each of which shall be deemed an original for all purposes and all of which shall be deemed collectively to be one agreement. This Amendment shall be governed by and construed in accordance with the Commonwealth of Massachusetts applicable to contracts made and to be performed therein, without giving effect to the principles thereof relating to the conflict of laws.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, effective as of the date first written above.

FLEX PHARMA INC.

By: /s/ William McVicar
Name: William McVicar
Title: President & CEO

EXECUTIVE

/s/ John McCabe
John McCabe

Flex Pharma, Inc.
2014 Equity Incentive Plan

AMENDED FORM OF Option Agreement
(Incentive Stock Option or Nonstatutory Stock Option)

Pursuant to your Stock Option Grant Notice ("***Grant Notice***") and this Option Agreement, **Flex Pharma, Inc.** (the "***Company***") has granted you an option under its **2014 Equity Incentive Plan** (the "***Plan***") to purchase the number of shares of the Company's Common Stock indicated in your Grant Notice at the exercise price indicated in your Grant Notice. Defined terms not explicitly defined in this Option Agreement but defined in the Plan shall have the same definitions as in the Plan.

The details of your option are as follows:

1. **Vesting.** Subject to the limitations contained herein, your option will vest as provided in your Grant Notice, provided that vesting will cease upon the termination of your Continuous Service.

2. **Number of Shares and Exercise Price.** The number of shares of Common Stock subject to your option and your exercise price per share referenced in your Grant Notice may be adjusted from time to time for Capitalization Adjustments.

3. **Exercise Restriction for Non-Exempt Employees.** In the event that you are an Employee eligible for overtime compensation under the Fair Labor Standards Act of 1938, as amended (*i.e.*, a "***Non-Exempt Employee***"), you may not exercise your option until you have completed at least six (6) months of Continuous Service measured from the Date of Grant specified in your Grant Notice, notwithstanding any other provision of your option.

4. **Exercise prior to Vesting ("Early Exercise").** If permitted in your Grant Notice (*i.e.*, the "Exercise Schedule" indicates "Early Exercise Permitted") and subject to the provisions of your option, you may elect at any time that is both (i) during the period of your Continuous Service and (ii) during the term of your option, to exercise all or part of your option, including the unvested portion of your option; *provided, however,* that:

(a) a partial exercise of your option shall be deemed to cover first vested shares of Common Stock and then the earliest vesting installment of unvested shares of Common Stock;

(b) any shares of Common Stock so purchased from installments that have not vested as of the date of exercise shall be subject to the purchase option in favor of the Company as described in the Company's form of Early Exercise Stock Purchase Agreement;

(c) you shall enter into the Company's form of Early Exercise Stock Purchase Agreement with a vesting schedule that will result in the same vesting as if no early exercise had occurred; and

(d) if your option is an Incentive Stock Option, then, to the extent that the aggregate Fair Market Value (determined at the time of grant) of the shares of Common Stock with respect to which your option plus all other Incentive Stock Options you hold are exercisable for the first time by you during any calendar year (under all plans of the Company and its Affiliates) exceeds one hundred thousand dollars

($100,000), your option(s) or portions thereof that exceed such limit (according to the order in which they were granted) shall be treated as Nonstatutory Stock Options.

5. **Method of Payment.** Payment of the exercise price is due in full upon exercise of all or any part of your option. You may elect to make payment of the exercise price in cash or by check or in any other manner ***permitted by your Grant Notice,*** which may include one or more of the following:

(a) Provided that at the time of exercise the Common Stock is publicly traded and quoted regularly in *The Wall Street Journal*, pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of Common Stock, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the aggregate exercise price to the Company from the sales proceeds.

(b) Provided that at the time of exercise the Common Stock is publicly traded and quoted regularly in *The Wall Street Journal*, by delivery to the Company (either by actual delivery or attestation) of already-owned shares of Common Stock that are owned free and clear of any liens, claims, encumbrances or security interests, and that are valued at Fair Market Value on the date of exercise. Notwithstanding the foregoing, you may not exercise your option by tender to the Company of Common Stock to the extent such tender would violate the provisions of any law, regulation or agreement restricting the redemption of the Company's stock.

(c) Pursuant to the following deferred payment alternative:

(i) Not less than one hundred percent (100%) of the aggregate exercise price, plus accrued interest, shall be due four (4) years from date of exercise or, at the Company's election, upon termination of your Continuous Service.

(ii) Interest shall be compounded at least annually and shall be charged at the minimum rate of interest necessary to avoid (1) the treatment as interest, under any applicable provisions of the Code, of any amounts other than amounts stated to be interest under the deferred payment arrangement and (2) the classification of your option as a liability for financial accounting purposes.

(iii) In order to elect the deferred payment alternative, you must, as a part of your written notice of exercise, give notice of the election of this payment alternative and, in order to secure the payment of the deferred exercise price to the Company hereunder, if the Company so requests, you must tender to the Company a promissory note and a pledge agreement covering the purchased shares of Common Stock, both in form and substance satisfactory to the Company, or such other or additional documentation as the Company may request.

6. **Whole Shares.** You may exercise your option only for whole shares of Common Stock.

7. **Securities Law Compliance.** Notwithstanding anything to the contrary contained herein, you may not exercise your option unless the shares of Common Stock issuable upon such exercise are then registered under the Securities Act or, if such shares of Common Stock are not then so registered, the Company has determined that such exercise and issuance would be exempt from the registration requirements of the Securities Act. The exercise of your option also must comply with other applicable laws and regulations governing your option, and you may not exercise your option if the Company determines that such exercise would not be in material compliance with such laws and regulations.

8. **Term.** You may not exercise your option before the commencement of its term or after its term expires. The term of your option commences on the Date of Grant and expires upon the earliest of the following:

(a) immediately upon the termination of your Continuous Service for Cause;.

(b) twelve (12) months after the termination of your Continuous Service for any reason other than Cause, your Disability or your death (except as otherwise provided in Section 8(d) below); *provided, however,* that if during any part of such twelve (12) month period your option is not exercisable solely because of the condition set forth in the section above relating to "Securities Law Compliance," your option will not expire until the earlier of the Expiration Date or until it has been exercisable for an aggregate period of twelve (12) months after the termination of your Continuous Service; *provided further,* if during any part of such twelve (12) month period, the sale of any Common Stock received upon exercise of your option would violate the Company's insider trading policy, then your option will not expire until the earlier of the Expiration Date or until it has been exercisable for an aggregate period of twelve (12) months after the termination of your Continuous Service during which the sale of the Common Stock received upon exercise of your option would not be in violation of the Company's insider trading policy. Notwithstanding the foregoing, if (i) you are a Non-Exempt Employee, (ii) your Continuous Service terminates within six (6) months after the Date of Grant, and (iii) you have vested in a portion of your option at the time of your termination of Continuous Service, your option will not expire until the earlier of (x) the later of (A) the date that is seven (7) months after the Date of Grant, and (B) the date that is twelve (12) months after the termination of your Continuous Service, and (y) the Expiration Date;

(c) twelve (12) months after the termination of your Continuous Service due to your Disability;

(d) eighteen (18) months after your death if you die either during your Continuous Service or within twelve (12) months after your Continuous Service terminates for any reason other than Cause;

(e) the Expiration Date indicated in your Grant Notice; or

(f) the day before the tenth (10th) anniversary of the Date of Grant.

If your option is an Incentive Stock Option, note that, to obtain the federal income tax advantages associated with an Incentive Stock Option, the Code requires that at all times beginning on the date of grant of your option and ending on the day three (3) months before the date of your option's exercise, you must be an employee of the Company or an Affiliate, except in the event of your death or Disability. The Company has provided for extended exercisability of your option under certain circumstances for your benefit but cannot guarantee that your option will necessarily be treated as an Incentive Stock Option if you continue to provide services to the Company or an Affiliate as a Consultant or Director after your employment terminates or if you otherwise exercise your option more than three (3) months after the date your employment terminates.

9. **Exercise.**

(a) You may exercise the vested portion of your option (and the unvested portion of your option if your Grant Notice so permits) during its term by delivering a Notice of Exercise (in a form designated by the Company) together with the exercise price to the Secretary of the Company, or to such other person

as the Company may designate, during regular business hours, together with such additional documents as the Company may then require.

(b) By exercising your option you agree that, as a condition to any exercise of your option, the Company may require you to enter into an arrangement providing for the payment by you to the Company of any tax withholding obligation of the Company arising by reason of (1) the exercise of your option, (2) the lapse of any substantial risk of forfeiture to which the shares of Common Stock are subject at the time of exercise, or (3) the disposition of shares of Common Stock acquired upon such exercise.

(c) If your option is an Incentive Stock Option, by exercising your option you agree that you will notify the Company in writing within fifteen (15) days after the date of any disposition of any of the shares of the Common Stock issued upon exercise of your option that occurs within two (2) years after the date of your option grant or within one (1) year after such shares of Common Stock are transferred upon exercise of your option.

(d) By exercising your option you agree that you shall not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale, any shares of Common Stock or other securities of the Company held by you, for a period of one hundred eighty (180) days following the effective date of a registration statement of the Company filed under the Securities Act or such longer period as necessary to permit compliance with NASD Rule 2711 or NYSE Member Rule 472 and similar rules and regulations (the "***Lock-Up Period***"); *provided*, *however*, that nothing contained in this section shall prevent the exercise of a repurchase option, if any, in favor of the Company during the Lock-Up Period. You further agree to execute and deliver such other agreements as may be reasonably requested by the Company and/or the underwriter(s) that are consistent with the foregoing or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to your shares of Common Stock until the end of such period. The underwriters of the Company's stock are intended third party beneficiaries of this Section 9(d) and shall have the right, power and authority to enforce the provisions hereof as though they were a party hereto. In the event that current or future investors in the Company agree to be bound by the terms of market stand-off provision(s) in addition to or different from this Subsection 9(d), you agree to become bound by the same provision(s) and to execute and deliver any agreements or other documentation necessary to document such changes.

(e) By exercising your option you agree that you will not, without the prior written consent of the Company, during the period commencing on consummation of a Qualified Form 10 Transaction (as defined in the Company's Certificate of Incorporation) and ending on the date that is one hundred eighty (180) days after shares of the Company's Common Stock (or the shares of common stock of any parent of the Company) are listed on a national securities exchange (i) lend; offer; pledge; sell; contract to sell; sell any option or contract to purchase; purchase any option or contract to sell; grant any option, right, or warrant to purchase; or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock (or the shares of common stock of any parent of the Company) or any securities convertible into or exercisable or exchangeable (directly or indirectly) for Common Stock (or the shares of common stock of any parent of the Company) held immediately before the effective date of the registration statement for such offering or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock (or the shares of common stock of any parent of the Company) or other securities, in cash, or otherwise. Nothing contained in this section shall prevent the exercise of a repurchase option, if any, in favor of the Company during the Lock-Up Period. You further agree to execute and deliver such other agreements as may be reasonably requested by the Company, lead

bookrunning underwriter or lead placement agent that are consistent with the foregoing or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to your shares of Common Stock until the end of such period. The placement agent and/or underwriters of the Company's stock are intended third party beneficiaries of this Section 9(e) and shall have the right, power and authority to enforce the provisions hereof as though they were a party hereto. In the event that current or future investors in the Company agree to be bound by the terms of market stand-off provision(s) in addition to or different from this Subsection 9(e), you agree to become bound by the same provision(s) and to execute and deliver any agreements or other documentation necessary to document such changes.

10. **Transferability.** Your option is not transferable, except by will or by the laws of descent and distribution, and is exercisable during your life only by you. Notwithstanding the foregoing, by delivering written notice to the Company, in a form satisfactory to the Company, you may designate a third party who, in the event of your death, shall thereafter be entitled to exercise your option. In addition, if permitted by the Company you may transfer your option to a trust if you are considered to be the sole beneficial owner (determined under Section 671 of the Code and applicable state law) while the option is held in the trust, provided that you and the trustee enter into a transfer and other agreements required by the Company.

11. **Right of First Refusal.** Shares of Common Stock that you acquire upon exercise of your Option are subject to any right of first refusal that may be described in the Company's bylaws in effect at such time the Company elects to exercise its right; *provided, however,* that if there is no right of first refusal described in the Company's bylaws at such time, the right of first refusal described below will apply. The Company's right of first refusal will expire on the first date upon which any security of the Company is listed (or approved for listing) upon notice of issuance on a national securities exchange or quotation system (the "***Listing Date***").

(a) Prior to the Listing Date, you may not validly Transfer (as defined below) any shares of Common Stock acquired upon exercise of your Option, or any interest in such shares, unless such Transfer is made in compliance with the following provisions:

(i) Before there can be a valid Transfer of any shares of Common Stock or any interest therein, the record holder of the shares of Common Stock to be transferred (the "***Offered Shares***") will give written notice (by registered or certified mail) to the Company. Such notice will specify the identity of the proposed transferee, the cash price offered for the Offered Shares by the proposed transferee (or, if the proposed Transfer is one in which the holder will not receive cash, such as an involuntary transfer, gift, donation or pledge, the holder will state that no purchase price is being proposed), and the other terms and conditions of the proposed Transfer. The date such notice is mailed will be hereinafter referred to as the "***Notice Date***" and the record holder of the Offered Shares will be hereinafter referred to as the "***Offeror***." If, from time to time, there is any stock dividend, stock split or other change in the character or amount of any of the outstanding Common Stock which is subject to the provisions of your Option, then in such event any and all new, substituted or additional securities to which you are entitled by reason of your ownership of the shares of Common Stock acquired upon exercise of your Option will be immediately subject to the Company's Right of First Refusal (as defined below) with the same force and effect as the shares subject to the Right of First Refusal immediately before such event.

(ii) For a period of thirty (30) calendar days after the Notice Date, or such longer period as may be required to avoid the classification of your Option as a liability for financial accounting purposes, the Company will have the option to purchase all (but not less than all) of the Offered Shares at the purchase price and on the terms set forth in Section 11(a)(iii) (the Company's "***Right of First Refusal***").

In the event that the proposed Transfer is one involving no payment of a purchase price, the purchase price will be deemed to be the Fair Market Value of the Offered Shares as determined in good faith by the Board in its discretion. The Company may exercise its Right of First Refusal by mailing (by registered or certified mail) written notice of exercise of its Right of First Refusal to the Offeror prior to the end of said thirty (30) days (including any extension required to avoid classification of the Option as a liability for financial accounting purposes).

(iii) The price at which the Company may purchase the Offered Shares pursuant to the exercise of its Right of First Refusal will be the cash price offered for the Offered Shares by the proposed transferee (as set forth in the notice required under Section 11(a)(i)), or the Fair Market Value as determined by the Board in the event no purchase price is involved. To the extent consideration other than cash is offered by the proposed transferee, the Company will not be required to pay any additional amounts to the Offeror other than the cash price offered (or the Fair Market Value, if applicable). The Company's notice of exercise of its Right of First Refusal will be accompanied by full payment for the Offered Shares and, upon such payment by the Company, the Company will acquire full right, title and interest to all of the Offered Shares.

(iv) If, and only if, the option given pursuant to Section 11(a)(ii) is not exercised, the Transfer proposed in the notice given pursuant to Section 11(a)(i) may take place; *provided, however*, that such Transfer must, in all respects, be exactly as proposed in said notice except that such Transfer may not take place either before the tenth (10^{th}) calendar day after the expiration of the thirty (30) day option exercise period or after the ninetieth (90^{th}) calendar day after the expiration of the thirty (30) day option exercise period, and if such Transfer has not taken place prior to said ninetieth (90^{th}) day, such Transfer may not take place without once again complying with this Section 11(a). The option exercise periods in this Section 11(a)(iv) will be adjusted to include any extension required to avoid the classification of your option as a liability for financial accounting purposes.

(b) As used in this Section 11, the term "***Transfer***" means any sale, encumbrance, pledge, gift or other form of disposition or transfer of shares of Common Stock or any legal or equitable interest therein; *provided, however*, that the term Transfer does not include a transfer of such shares or interests by will or intestacy to your Immediate Family (as defined below). In such case, the transferee or other recipient will receive and hold the shares of Common Stock so transferred subject to the provisions of this Section, and there will be no further transfer of such shares except in accordance with the terms of this Section. As used herein, the term "***Immediate Family***" will mean your spouse, the lineal descendant or antecedent, father, mother, brother or sister, child, adopted child, grandchild or adopted grandchild of you or your spouse, or the spouse of any child, adopted child, grandchild or adopted grandchild of you or your spouse.

(c) None of the shares of Common Stock purchased on exercise of your Option will be transferred on the Company's books nor will the Company recognize any such Transfer of any such shares or any interest therein unless and until all applicable provisions of this Section 11 have been complied with in all respects. The certificates of stock evidencing shares of Common Stock purchased on exercise of your Option will bear an appropriate legend referring to the transfer restrictions imposed by this Section 11.

(d) To ensure that the shares subject to the Company's Right of First Refusal described in this Section 11 will be available for repurchase by the Company, the Company may require you to deposit the certificates evidencing the shares that you purchase upon exercise of your Option with an escrow agent designated by the Company under the terms and conditions of an escrow agreement approved by the Company. If the Company does not require such deposit as a condition of exercise of your Option, the Company reserves the right at any time to require you to so deposit the certificates in escrow. As soon as practicable after the expiration of the Company's Right of First Refusal the agent will deliver to you the shares and any other

property no longer subject to such restriction. In the event the shares and any other property held in escrow are subject to the Company's exercise of its Right of First Refusal, the notices required to be given to you will be given to the escrow agent, and any payment required to be given to you will be given to the escrow agent. Within thirty (30) days after payment by the Company for the Offered Shares, the escrow agent will deliver the Offered Shares that the Company has repurchased to the Company and will deliver the payment received from the Company to you.

(e) Notwithstanding the foregoing provisions of this Section 11, if you are a party to the Amended and Restated Right of First Refusal and Co-Sale Agreement, dated as of March 21, 2014, by and among the Company and certain stockholders of the Company parties thereto (such agreement, as the same may be amended, restated or otherwise modified from time to time, the "***Co-Sale Agreement***"), then such transfer shall be subject to the restrictions set forth in the Co-Sale Agreement in lieu of the restrictions set forth in this Section 11.

12. **Drag-Along Right; Equitable Remedies; Power of Attorney.**

(a) In the event that the Board and stockholders holding shares of capital stock of the Company that represent a majority by voting power of all outstanding shares of capital stock of the Company (the "***Majority Stockholders***") approve a Corporate Transaction, then you agree with respect to all shares of capital stock of the Company that you hold or otherwise exercise dispositive power:

(i) in the event such transaction requires the approval of the stockholders of the Company, (x) if the matter is to be brought to a vote at a stockholder meeting, after receiving proper notice of any meeting of stockholders of the Company to vote on the approval of a Corporate Transaction, to be present, in person or by proxy, as a holder of shares of capital stock, at all such meetings and be counted for the purposes of determining the presence of a quorum at such meetings; and (y) to vote (in person, by proxy or by action by written consent, as applicable) all shares of capital stock in favor of such Corporate Transaction and in opposition of any and all other proposals that could reasonably be expected to delay or impair the ability of the Company to consummate such Corporate Transaction;

(ii) in the event that the Corporate Transaction is to be effected by the sale of shares of capital stock by the Company's stockholders (the "Selling Holders") without the need for stockholder approval, you agree to sell all shares of capital stock that you beneficially hold (or in the event that the Selling Holders are selling fewer than all of their shares of capital stock of the Company, shares in the same proportion as the Selling Holders are selling) to the person to whom the Selling Holders propose to sell their shares of capital stock;

(iii) to refrain from exercising any dissenters' rights or rights of appraisal under applicable law at any time with respect to such Corporate Transaction;

(iv) to execute and deliver all related documentation and take such other action in support of the Corporate Transaction as shall reasonably be requested by the Company; and

(v) not to deposit any voting securities owned by you in a voting trust or subject any such voting securities to any arrangement or agreement with respect to the voting of such shares of capital stock, unless specifically requested to do so by the acquiror in connection with a Corporate Transaction.

(b) Notwithstanding the foregoing Section 12(a), you will not be required to comply with Section 12(a) above in connection with any proposed Corporate Transaction unless (1) you receive with

respect to your shares of a class or series of capital stock consideration per share that is no less than every other stockholder participating in the Corporate Transaction with respect to his, her or its shares of the same class or series of capital stock, (2) the proceeds payable to you in connection with such transaction are equal to or greater than the proceeds required to be paid to you pursuant to the Company's Certificate of Incorporation in effect at such time, (3) your maximum liability in connection with such Corporate Transaction does not exceed the consideration payable to you in such Corporate Transaction (other than in the case of potential liability for fraud or willful misconduct or breach of a representation by you relating to your title to your securities as to which liability there need not be any such limitation) and (4) the terms of such transaction applicable to you are materially no less favorable than the terms applicable to each other stockholder holding the same class or series of shares as you.

(c) Notwithstanding the foregoing provisions of Sections 12(a) and 12(b), if you are a party to the Voting Agreement, dated as of July 1, 2013, by and among the Company and certain stockholders of the Company parties thereto (such agreement, as the same may be amended, restated or otherwise modified from time to time, the "***Voting Agreement***"), then you shall be subject to the "drag along" provision set forth in the Voting Agreement in lieu of the restrictions set forth in Sections 12(a) and 12(b).

(d) You acknowledge and agree that any breach of Sections 11 and 12 of this Agreement would result in substantial harm to the Company for which monetary damages alone could not adequately compensate. Therefore, you unconditionally and irrevocably agree that the Company shall be entitled to seek protective orders, injunctive relief and other remedies available at law or in equity (including, without limitation, seeking specific performance or the rescission of purchases, sales and other transfers of capital stock not made in strict compliance with this Agreement).

(e) By your execution of this Agreement, you hereby constitute and appoint the President and Secretary of the Company, and each of them, with full power of substitution, as your proxies with respect to the matters set forth in this Section 12, including without limitation, votes regarding any Corporate Transaction pursuant to Section 12 hereof, and hereby authorize each of them to represent and to vote, if and only if you (i) fail to vote or (ii) attempt to vote (whether by proxy, in person or by written consent), in a manner that is inconsistent with the terms of this Agreement, all of your shares of capital stock of the Company in favor of any Corporate Transaction pursuant to and in accordance with the terms and provisions hereof. The proxy granted pursuant to the immediately preceding sentence is given for good and valuable consideration the receipt and sufficiency is hereby acknowledged and, as such, is coupled with an interest and shall be irrevocable unless and until this Agreement terminates or expires.

13. **Option not a Service Contract.** Your option is not an employment or service contract, and nothing in your option shall be deemed to create in any way whatsoever any obligation on your part to continue in the employ of the Company or an Affiliate, or of the Company or an Affiliate to continue your employment. In addition, nothing in your option shall obligate the Company or an Affiliate, their respective stockholders, Boards of Directors, Officers or Employees to continue any relationship that you might have as a Director or Consultant for the Company or an Affiliate.

14. **Withholding Obligations.**

(a) At the time you exercise your option, in whole or in part, or at any time thereafter as requested by the Company, you hereby authorize withholding from payroll and any other amounts payable to you, and otherwise agree to make adequate provision for (including by means of a "cashless exercise" pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board to the extent permitted by the Company), any sums required to satisfy the federal, state, local and foreign tax

withholding obligations of the Company or an Affiliate, if any, which arise in connection with the exercise of your option.

(b) Upon your request and subject to approval by the Company, in its sole discretion, and compliance with any applicable legal conditions or restrictions, the Company may withhold from fully vested shares of Common Stock otherwise issuable to you upon the exercise of your option a number of whole shares of Common Stock having a Fair Market Value, determined by the Company as of the date of exercise, not in excess of the minimum amount of tax required to be withheld by law (or such lower amount as may be necessary to avoid classification of your option as a liability for financial accounting purposes). If the date of determination of any tax withholding obligation is deferred to a date later than the date of exercise of your option, share withholding pursuant to the preceding sentence shall not be permitted unless you make a proper and timely election under Section 83(b) of the Code, covering the aggregate number of shares of Common Stock acquired upon such exercise with respect to which such determination is otherwise deferred, to accelerate the determination of such tax withholding obligation to the date of exercise of your option. Notwithstanding the filing of such election, shares of Common Stock shall be withheld solely from fully vested shares of Common Stock determined as of the date of exercise of your option that are otherwise issuable to you upon such exercise. Any adverse consequences to you arising in connection with such share withholding procedure shall be your sole responsibility.

(c) You may not exercise your option unless the tax withholding obligations of the Company and/or any Affiliate are satisfied. Accordingly, you may not be able to exercise your option when desired even though your option is vested, and the Company shall have no obligation to issue a certificate for such shares of Common Stock or release such shares of Common Stock from any escrow provided for herein unless such obligations are satisfied.

15. **Tax Consequences**. You hereby agree that the Company does not have a duty to design or administer the Plan or its other compensation programs in a manner that minimizes your tax liabilities. You shall not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from your option or your other compensation. In particular, you acknowledge that this option is exempt from Section 409A of the Code only if the exercise price per share specified in the Grant Notice is at least equal to the "fair market value" per share of the Common Stock on the Date of Grant and there is no other impermissible deferral of compensation associated with the option. Because the Common Stock is not traded on an established securities market, the Fair Market Value is determined by the Board, perhaps in consultation with an independent valuation firm retained by the Company. You acknowledge that there is no guarantee that the Internal Revenue Service will agree with the valuation as determined by the Board, and you shall not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates in the event that the Internal Revenue Service asserts that the valuation determined by the Board is less than the "fair market value" as subsequently determined by the Internal Revenue Service.

16. **Notices.** Any notices provided for in your option or the Plan shall be given in writing and shall be deemed effectively given upon receipt or, in the case of notices delivered by mail by the Company to you, five (5) days after deposit in the United States mail, postage prepaid, addressed to you at the last address you provided to the Company.

17. **Governing Plan Document.** Your option is subject to all the provisions of the Plan, the provisions of which are hereby made a part of your option, and is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. In the event of any conflict between the provisions of your option and those of the Plan, the provisions of the Plan shall control.

* * *

All stock options granted to you prior to the effective date of your Amendment to Executive Employment Agreement shall be governed from this point forward by the terms of this Amendment Form of Option Agreement. This Amended Form of Option Agreement will be deemed to be signed by you upon the signing by you of the Amendment to Executive Employment Agreement which is attached.

Flex Pharma, Inc.
2015 Equity Incentive Plan

Amended form of Option Agreement
(Incentive Stock Option or Nonstatutory Stock Option)

Pursuant to your Stock Option Grant Notice ("***Grant Notice***") and this Option Agreement, Flex Pharma, Inc. (the "***Company***") has granted you an option under its 2015 Equity Incentive Plan (the "***Plan***") to purchase the number of shares of the Company's Common Stock indicated in your Grant Notice at the exercise price indicated in your Grant Notice. The option is granted to you effective as of the date of grant set forth in the Grant Notice (the "***Date of Grant***"). If there is any conflict between the terms in this Option Agreement and the Plan, the terms of the Plan will control. Capitalized terms not explicitly defined in this Option Agreement or in the Grant Notice but defined in the Plan will have the same definitions as in the Plan.

The details of your option, in addition to those set forth in the Grant Notice and the Plan, are as follows:

1. **Vesting.** Subject to the provisions contained herein, your option will vest as provided in your Grant Notice. Vesting will cease upon the termination of your Continuous Service.

2. **Number of Shares and Exercise Price.** The number of shares of Common Stock subject to your option and exercise price per share in your Grant Notice will be adjusted for Capitalization Adjustments.

3. **Exercise Restriction for Non-Exempt Employees.** If you are an Employee eligible for overtime compensation under the Fair Labor Standards Act of 1938, as amended (that is, a "***Non-Exempt Employee***"), and except as otherwise provided in the Plan, you may not exercise your option until you have completed at least six (6) months of Continuous Service measured from the Date of Grant, even if you have already been an employee for more than six (6) months. Consistent with the provisions of the Worker Economic Opportunity Act, you may exercise your option as to any vested portion prior to such six (6) month anniversary in the case of (i) your death or disability, (ii) a Corporate Transaction in which your option is not assumed, continued or substituted, (iii) a Change in Control or (iv) your termination of Continuous Service on your "retirement" (as defined in the Company's benefit plans).

4. **Exercise prior to Vesting ("Early Exercise").** If permitted in your Grant Notice (*i.e.*, the "Exercise Schedule" indicates "Early Exercise Permitted") and subject to the provisions of your option, you may elect at a time that is both (i) during the period of your Continuous Service and (ii) during the term of your option, to exercise all or part of your option, including the unvested portion of your option; *provided, however,* that:

(a) a partial exercise of your option will be deemed to cover first vested shares of Common Stock and then the earliest vesting installment of unvested shares of Common Stock;

(b) any shares of Common Stock so purchased from installments that have not vested as of the date of exercise will be subject to the purchase option in favor of the Company as described in the Company's form of Early Exercise Stock Purchase Agreement;

(c) you will enter into the Company's form of Early Exercise Stock Purchase Agreement with a vesting schedule that will result in the same vesting as if no early exercise had occurred; and

(d) if your option is an Incentive Stock Option, then, to the extent that the aggregate Fair Market Value (determined at the Date of Grant) of the shares of Common Stock with respect to which your option plus all other Incentive Stock Options you hold are exercisable for the first time by you during any calendar year (under all plans of the Company and its Affiliates) exceeds one hundred thousand dollars ($100,000), your option(s) or portions thereof that exceed such limit (according to the order in which they were granted) will be treated as Nonstatutory Stock Options.

5. **Method of Payment.** You must pay the full amount of the exercise price for the shares you wish to exercise. You may pay the exercise price in cash or by check, bank draft or money order payable to the Company or in any other manner ***permitted by your Grant Notice,*** which may include one or more of the following:

(a) Provided that at the time of exercise the Common Stock is publicly traded, pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of Common Stock, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the aggregate exercise price to the Company from the sales proceeds. This manner of payment is also known as a "broker-assisted exercise", "same day sale", or "sell to cover".

(b) Provided that at the time of exercise the Common Stock is publicly traded, by delivery to the Company (either by actual delivery or attestation) of already-owned shares of Common Stock that are owned free and clear of any liens, claims, encumbrances or security interests, and that are valued at Fair Market Value on the date of exercise. "Delivery" for these purposes, in the sole discretion of the Company at the time you exercise your option, will include delivery to the Company of your attestation of ownership of such shares of Common Stock in a form approved by the Company. You may not exercise your option by delivery to the Company of Common Stock if doing so would violate the provisions of any law, regulation or agreement restricting the redemption of the Company's stock.

(c) If this option is a Nonstatutory Stock Option, subject to the consent of the Company at the time of exercise, by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Common Stock issued upon exercise of your option by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price. You must pay any remaining balance of the aggregate exercise price not satisfied by the "net exercise" in cash or other permitted form of payment. Shares of Common Stock will no longer be outstanding under your option and will not be exercisable thereafter if those shares (i) are used to pay the exercise price pursuant to the "net exercise," (ii) are delivered to you as a result of such exercise, and (iii) are withheld to satisfy your tax withholding obligations.

6. **Whole Shares.** You may exercise your option only for whole shares of Common Stock.

7. **Securities Law Compliance.** In no event may you exercise your option unless the shares of Common Stock issuable upon exercise are then registered under the Securities Act or, if not registered, the Company has determined that your exercise and the issuance of the shares would be exempt from the registration requirements of the Securities Act. The exercise of your option also must comply with all other applicable laws and regulations governing your option, and you may not exercise your option if the Company determines that such exercise would not be in material compliance with such laws and regulations (including any restrictions on exercise required for compliance with Treas. Reg. 1.401(k)-1(d)(3), if applicable).

8. **Term.** You may not exercise your option before the Date of Grant or after the expiration of the option's term. The term of your option expires, subject to the provisions of Section 5(a) of the Plan, upon the earliest of the following:

(a) immediately upon the termination of your Continuous Service for Cause;

(b) twelve (12) months after the termination of your Continuous Service for any reason other than Cause, your Disability or your death (except as otherwise provided in Section 8(d) below); *provided*, *however,* that if during any part of such twelve (12) month period your option is not exercisable solely because of the condition set forth in the section above relating to "Securities Law Compliance," your option will not expire until the earlier of the Expiration Date or until it has been exercisable for an aggregate period of twelve (12) months after the termination of your Continuous Service; *provided further,* if during any part of such twelve (12) month period, the sale of any Common Stock received upon exercise of your option would violate the Company's insider trading policy, then your option will not expire until the earlier of the Expiration Date or until it has been exercisable for an aggregate period of twelve (12) months after the termination of your Continuous Service during which the sale of the Common Stock received upon exercise of your option would not be in violation of the Company's insider trading policy. Notwithstanding the foregoing, if (i) you are a Non-Exempt Employee, (ii) your Continuous Service terminates within six (6) months after the Date of Grant, and (iii) you have vested in a portion of your option at the time of your termination of Continuous Service, your option will not expire until the earlier of (x) the later of (A) the date that is seven (7) months after the Date of Grant, and (B) the date that is twelve (12) months after the termination of your Continuous Service, and (y) the Expiration Date;

(c) twelve (12) months after the termination of your Continuous Service due to your Disability (except as otherwise provided in Section 8(d)) below;

(d) eighteen (18) months after your death if you die either during your Continuous Service or within twelve (12) months after your Continuous Service terminates for any reason other than Cause;

(e) the Expiration Date indicated in your Grant Notice; or

(f) the day before the tenth (10th) anniversary of the Date of Grant.

If your option is an Incentive Stock Option, note that to obtain the federal income tax advantages associated with an Incentive Stock Option, the Code requires that at all times beginning on the Date of Grant and ending on the day three (3) months before the date of your option's exercise, you must be an employee of the Company or an Affiliate, except in the event of your death or Disability. The Company has provided for extended exercisability of your option under certain circumstances for your benefit but cannot guarantee that your option will necessarily be treated as an Incentive Stock Option if you continue to provide services to the Company or an Affiliate as a Consultant or Director after your employment terminates or if you otherwise exercise your option more than three (3) months after the date your employment with the Company or an Affiliate terminates.

9. **Exercise.**

(a) You may exercise the vested portion of your option (and the unvested portion of your option if your Grant Notice so permits) during its term by (i) delivering a Notice of Exercise (in a form

designated by the Company) or completing such other documents and/or procedures designated by the Company for exercise and (ii) paying the exercise price and any applicable withholding taxes to the Company's Secretary, stock plan administrator, or such other person as the Company may designate, together with such additional documents as the Company may then require.

(b) By exercising your option you agree that, as a condition to any exercise of your option, the Company may require you to enter into an arrangement providing for the payment by you to the Company of any tax withholding obligation of the Company arising by reason of (i) the exercise of your option, (ii) the lapse of any substantial risk of forfeiture to which the shares of Common Stock are subject at the time of exercise, or (iii) the disposition of shares of Common Stock acquired upon such exercise.

(c) If your option is an Incentive Stock Option, by exercising your option you agree that you will notify the Company in writing within fifteen (15) days after the date of any disposition of any of the shares of the Common Stock issued upon exercise of your option that occurs within two (2) years after the Date of Grant or within one (1) year after such shares of Common Stock are transferred upon exercise of your option.

(d) By exercising your option you agree that you will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale, any shares of Common Stock or other securities of the Company held by you, for a period of one hundred eighty (180) days following the effective date of a registration statement of the Company filed under the Securities Act or such longer period as the underwriters or the Company will request to facilitate compliance with FINRA Rule 2711 or NYSE Member Rule 472 or any successor or similar rules or regulation (the "***Lock-Up Period***"); *provided*, *however*, that nothing contained in this section will prevent the exercise of a repurchase option, if any, in favor of the Company during the Lock-Up Period. You further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to your shares of Common Stock until the end of such period. You also agree that any transferee of any shares of Common Stock (or other securities) of the Company held by you will be bound by this Section 9(d). The underwriters of the Company's stock are intended third party beneficiaries of this Section 9(d) and will have the right, power and authority to enforce the provisions hereof as though they were a party hereto.

10. **Transferability.** Except as otherwise provided in this Section 10, your option is not transferable, except by will or by the laws of descent and distribution, and is exercisable during your life only by you.

(a) **Certain Trusts.** Upon receiving written permission from the Board or its duly authorized designee, you may transfer your option to a trust if you are considered to be the sole beneficial owner (determined under Section 671 of the Code and applicable state law) while the option is held in the trust. You and the trustee must enter into transfer and other agreements required by the Company.

(b) **Domestic Relations Orders.** Upon receiving written permission from the Board or its duly authorized designee, and provided that you and the designated transferee enter into transfer and other agreements required by the Company, you may transfer your option pursuant to the terms of a domestic relations order, official marital settlement agreement or other divorce or separation instrument as permitted by Treasury Regulation 1.421-1(b)(2) that contains the information required by the Company to effectuate the transfer. You are encouraged to discuss the proposed terms of any division of this option with the Company

prior to finalizing the domestic relations order or marital settlement agreement to help ensure the required information is contained within the domestic relations order or marital settlement agreement. If this option is an Incentive Stock Option, this option may be deemed to be a Nonstatutory Stock Option as a result of such transfer.

(c) **Beneficiary Designation.** Upon receiving written permission from the Board or its duly authorized designee, you may, by delivering written notice to the Company, in a form approved by the Company and any broker designated by the Company to handle option exercises, designate a third party who, on your death, will thereafter be entitled to exercise this option and receive the Common Stock or other consideration resulting from such exercise. In the absence of such a designation, your executor or administrator of your estate will be entitled to exercise this option and receive, on behalf of your estate, the Common Stock or other consideration resulting from such exercise.

11. **Option not a Service Contract.** Your option is not an employment or service contract, and nothing in your option will be deemed to create in any way whatsoever any obligation on your part to continue in the employ of the Company or an Affiliate, or of the Company or an Affiliate to continue your employment. In addition, nothing in your option will obligate the Company or an Affiliate, their respective stockholders, boards of directors, officers or employees to continue any relationship that you might have as a Director or Consultant for the Company or an Affiliate.

12. **Withholding Obligations.**

(a) At the time you exercise your option, in whole or in part, and at any time thereafter as requested by the Company, you hereby authorize withholding from payroll and any other amounts payable to you, and otherwise agree to make adequate provision for (including by means of a "same day sale" pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board to the extent permitted by the Company), any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Company or an Affiliate, if any, which arise in connection with the exercise of your option.

(b) If this option is a Nonstatutory Stock Option, then upon your request and subject to approval by the Company, and compliance with any applicable legal conditions or restrictions, the Company may withhold from fully vested shares of Common Stock otherwise issuable to you upon the exercise of your option a number of whole shares of Common Stock having a Fair Market Value, determined by the Company as of the date of exercise, not in excess of the minimum amount of tax required to be withheld by law (or such lower amount as may be necessary to avoid classification of your option as a liability for financial accounting purposes). If the date of determination of any tax withholding obligation is deferred to a date later than the date of exercise of your option, share withholding pursuant to the preceding sentence shall not be permitted unless you make a proper and timely election under Section 83(b) of the Code, covering the aggregate number of shares of Common Stock acquired upon such exercise with respect to which such determination is otherwise deferred, to accelerate the determination of such tax withholding obligation to the date of exercise of your option. Notwithstanding the filing of such election, shares of Common Stock shall be withheld solely from fully vested shares of Common Stock determined as of the date of exercise of your option that are otherwise issuable to you upon such exercise. Any adverse consequences to you arising in connection with such share withholding procedure shall be your sole responsibility.

(c) You may not exercise your option unless the tax withholding obligations of the Company and/or any Affiliate are satisfied. Accordingly, you may not be able to exercise your option when desired even though your option is vested, and the Company will have no obligation to issue a certificate for such shares of Common Stock or release such shares of Common Stock from any escrow provided for herein, if applicable, unless such obligations are satisfied.

13. **Tax Consequences**. You hereby agree that the Company does not have a duty to design or administer the Plan or its other compensation programs in a manner that minimizes your tax liabilities. You will not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from your option or your other compensation. In particular, you acknowledge that this option is exempt from Section 409A of the Code only if the exercise price per share specified in the Grant Notice is at least equal to the "fair market value" per share of the Common Stock on the Date of Grant and there is no other impermissible deferral of compensation associated with the option.

14. **Notices.** Any notices provided for in your option or the Plan will be given in writing (including electronically) and will be deemed effectively given upon receipt or, in the case of notices delivered by mail by the Company to you, five (5) days after deposit in the United States mail, postage prepaid, addressed to you at the last address you provided to the Company. The Company may, in its sole discretion, decide to deliver any documents related to participation in the Plan and this option by electronic means or to request your consent to participate in the Plan by electronic means. By accepting this option, you consent to receive such documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

15. **Governing Plan Document.** Your option is subject to all the provisions of the Plan, the provisions of which are hereby made a part of your option, and is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. If there is any conflict between the provisions of your option and those of the Plan, the provisions of the Plan will control. In addition, your option (and any compensation paid or shares issued under your option) is subject to recoupment in accordance with The Dodd-Frank Wall Street Reform and Consumer Protection Act and any implementing regulations thereunder, any clawback policy adopted by the Company and any compensation recovery policy otherwise required by applicable law.

16. **Other Documents.** You hereby acknowledge receipt of and the right to receive a document providing the information required by Rule 428(b)(1) promulgated under the Securities Act, which includes the Plan prospectus. In addition, you acknowledge receipt of the Company's policy permitting certain individuals to sell shares only during certain "window" periods and the Company's insider trading policy, in effect from time to time.

17. **Effect on Other Employee Benefit Plans.** The value of this option will not be included as compensation, earnings, salaries, or other similar terms used when calculating your benefits under any employee benefit plan sponsored by the Company or any Affiliate, except as such plan otherwise expressly provides. The Company expressly reserves its rights to amend, modify, or terminate any of the Company's or any Affiliate's employee benefit plans.

18. **Voting Rights.** You will not have voting or any other rights as a stockholder of the Company with respect to the shares to be issued pursuant to this option until such shares are issued to you. Upon such issuance, you will obtain full voting and other rights as a stockholder of the Company. Nothing contained in this option, and no action taken pursuant to its provisions, will create or be construed to create a trust of any kind or a fiduciary relationship between you and the Company or any other person.

19. **Severability.** If all or any part of this Option Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity will not invalidate any portion of this Option Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Option Agreement (or part of such a Section) so declared to be unlawful or invalid shall, if possible, be

construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

20. **Miscellaneous**.

(a) The rights and obligations of the Company under your option will be transferable to any one or more persons or entities, and all covenants and agreements hereunder will inure to the benefit of, and be enforceable by the Company's successors and assigns.

(b) You agree upon request to execute any further documents or instruments necessary or desirable in the sole determination of the Company to carry out the purposes or intent of your option.

(c) You acknowledge and agree that you have reviewed your option in its entirety, have had an opportunity to obtain the advice of counsel prior to executing and accepting your option, and fully understand all provisions of your option.

(d) This Option Agreement will be subject to all applicable laws, rules, and regulations, and to such approvals by any governmental agencies or national securities exchanges as may be required.

(e) All obligations of the Company under the Plan and this Option Agreement will be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all of the business and/or assets of the Company.

* * *

All stock options granted to you prior to the effective date of your Amendment to Executive Employment Agreement shall be governed from this point forward by the terms of this Amendment Form of Option Agreement. This Amended Form of Option Agreement will be deemed to be signed by you upon the signing by you of the Amendment to Executive Employment Agreement which is attached.

FLEXPharma

June 12, 2018

Thomas Wessel
[ ]
[ ]

BY HAND DELIVER

Re: Separation Agreement

Dear Tom:

This Separation Agreement constitutes notice, including, but not limited to notice under Section 10(d) of your Executive Employment Agreement dated December 23, 2014, as amended on May 27, 2015 and January 8, 2018 ("Employment Agreement"), that your employment with Flex Pharma Inc. (along with its affiliates, the "Company") will terminate on June 26, 2018. This Separation Agreement sets forth the understanding between you and the Company relating to the termination of your employment with the Company effective on June 26, 2018. We hope to make the transition as smooth as possible.

Notwithstanding any provisions herein, this Agreement supersedes any and all prior agreements between you and the Company, including, but not limited to, your Employment Agreement; provided, however, that your Employee Non-Solicitation, Non-Competition, Confidential Information and Inventions Assignment Agreement ("Confidentiality Agreement") that you signed as a condition of your employment, which is attached hereto as Exhibit B, shall continue in full force and effect and is expressly incorporated by reference herein.

In the interest of clarity, regardless of whether you enter into this Agreement, the following terms shall apply in connection with the ending of your employment: (i) the Company will pay you your base salary earned through the Separation Date (as defined below), as well as any accrued but unused PTO through the Separation Date, subject to standard deductions and withholdings; (ii) your current coverage under the Company's group health insurance plans will cease as of the Separation Date; (iii) if you are currently participating in the Company's group health insurance plans, you may be eligible to continue your group health insurance benefits at your own expense to the extent provided by the federal COBRA law and/or state law and the Company's current group health insurance policies, and, later, you may be able to convert to an individual policy through the provider of the Company's health insurance, if you wish; (iv) the terms of any continuation of health insurance coverage under the law will be set forth in a separate written notice; and (v) your eligibility to participate in any other employee benefit plans and programs of the Company will cease on the Separation Date in accordance with the applicable benefit plan or program terms; and (vi) any unvested stock will terminate on your Separation Date, and any vested stock will continue to be subject to the terms of any and all applicable plans, awards, grants and/or agreements. Also, regardless of whether you sign this Agreement and/or receive the Severance Payments, you remain

bound by your continuing obligations under the Confidentiality Agreement, which is intended to, and does, survive the termination of this Agreement.

With those understandings, you and the Company agree as follows:

1. Transition Period Payments And Benefits
Provided that you enter into and comply with this Agreement, including the Release of Claims in Section 4 below, you will continue to receive your base salary at the rate in effect as of the date hereof and your benefits at the same level in effect as of the date hereof, and said base salary and benefits shall continue during the Transition Period and until (and including) your Separation Date. For purposes of this Agreement, the actual last day of your employment shall be referred to as the "Separation Date," and the time period between the date of this Agreement and the Separation Date shall be referred to as the "Transition Period."

During the Transition Period, you shall perform your responsibilities to the Company satisfactorily and as required by the Company, and to otherwise fulfill your duties and obligations as set forth herein.

2. Severance Payments

Provided that you enter into and comply with this Agreement, including the Release of Claims in Section 4 below and the Release of Claims attached to this Agreement as Exhibit A, and provide a resignation of all offices, directorships and fiduciary positions with the Company, its affiliates and employee benefit plans as of the Separation Date (pursuant to section 12(c) of your Employment Agreement), the Company will provide the following severance payments to you:

(a) The Company will pay you a lump sum payment of two hundred fifty-seven thousand, two hundred fifty dollars ($257,250.00) which is equivalent to nine (9) months of your base pay ("Lump Sum Payment"). The Company may deduct from the Lump Sum Payment any required withholding taxes, government payments and benefit premium contributions. Notwithstanding any language to the contrary, no Lump Sum Payment shall be made until the first regularly scheduled payroll date following your execution and non-revocation of this Agreement and the Release of Claims in Exhibit A; provided, however, that you shall execute the Release of Claims in Exhibit A no earlier than the Separation Date. You agree that this Lump Sum Payment is above and beyond any payments otherwise owed to you under the terms of your employment and Employment Agreement, and not required by law.

(b) In addition, if you timely elect continued coverage under COBRA for yourself and your covered dependents under the Company's group health plans, then the Company shall pay that employer portion of the COBRA premiums that it was paying prior to the Separation Date in order to continue your health insurance coverage in effect for yourself (and your covered dependents) on the Separation Date until the earliest of: (i) the last day of the ninth month after your Separation Date; (ii) the date when you become eligible for substantially equivalent health insurance coverage in connection with new employment or self-employment; or (iii) the date you cease to be eligible for COBRA continuation coverage for any reason, including plan termination (such period from the termination date through the earlier of (i)-(iii), the "COBRA Payment Period"). Notwithstanding the foregoing, if at any time the Company determines that its payment of COBRA premiums on your behalf would result in a violation of applicable law (including but not limited to the 2010 Patient Protection and Affordable Care Act, as amended by the 2010 Health Care and Education Reconciliation Act), then in lieu of paying COBRA

premiums pursuant to this Section, the Company shall pay you on the last day of each remaining month of the COBRA Payment Period, a fully taxable cash payment equal to the COBRA premium for such month, subject to applicable tax withholding (such amount, the "Special Severance Payment"). Nothing in this Agreement shall deprive you of your rights under COBRA or ERISA for benefits under plans and policies arising under your employment by the Company.

Except as expressly provided in this Agreement, and except as to any vested right that you may have under the express terms of any written benefit plan, by signing this Agreement you agree that the payments and benefits set forth herein will be complete and unconditional payment, settlement, accord and/or satisfaction with respect to your Employment Agreement and all other obligations and liabilities of the Company to you, including, without limitation, all claims for back wages, salary, vacation pay, incentive pay, bonuses, stock and stock options, commissions, severance pay, reimbursement of expenses, any and all other forms of compensation or benefits, attorney's fees, or other costs or sums. You acknowledge that, except as provided in this Agreement, you will not receive any additional compensation, severance, payments or benefits after the Separation Date, with the exception of any vested right you may have under the express terms of a written ERISA-qualified benefit plan (e.g., 401k account).

3. Stock Options

You were granted options to purchase shares of the common stock of Flex Pharma, Inc. ("Flex Pharma") pursuant to the Flex Pharma's 2015 Equity Incentive Plan (the "Plan") and one or more Stock Option Grant Notice and Option Agreements (the "Option Agreements"). Following the Separation Date, vesting of your stock options will cease and your rights to exercise your options as to any vested shares will be as set forth in the Plan and Option Agreements and as amended by the Advisor Agreement entered into by the parties that is effective on June 26, 2018. Any unvested stock options will immediately be cancelled in accordance with the Plan terms.

4. Return of Property

By signing below, you certify that you will return to the Company by the Separation Date all Company property, including, without limitation, files, notes, passwords, passcodes, software, drawings, records, business plans and forecasts, financial information, specifications, computer-recorded information, tangible property (computer equipment, laptops, keys and access cards, identification badges, credit cards, cell phone) and any documents (including computerized data and any copies made of any computerized data or software) containing or embodying information concerning the Company, its business or its business relationships (in the latter two cases, actual or prospective), provided you may retain certain non-confidential personnel and benefits documents that related to your employment. Please coordinate the return of Company property with Lauren Mastrocola, Controller. Receipt of the Severance and Retention Payments as described in this Agreement is expressly conditioned on return of all Company property. After you return all such property, you commit to deleting and finally purging any duplicates of files or documents that may contain Company information from any non-Company computer or other device that remains in your possession after the Separation Date. If you later discover that you continue to retain any of the Company's property or information, you shall return it to the Company immediately.

5. Release of Your Claims

A. General Release

In exchange for the payments and other consideration under this Agreement, including, but not limited to the payments and benefits described in Sections 1 and 2, to which you would not otherwise be entitled, and except as otherwise set forth in this Agreement, you hereby generally and completely release, acquit and forever discharge the Company, its parents and subsidiaries, and its and their officers, directors, managers, partners, agents, employees, attorneys, shareholders, successors, assigns and affiliates ("Releasees"), of and from any and all claims, liabilities, demands, causes of action, costs, expenses, attorney's fees, damages, indemnities and obligations of every kind and nature, in law, equity, or otherwise, both known and unknown, suspected and unsuspected, disclosed and undisclosed, arising out of or in any way related to agreements, events, acts or conduct at any time prior to and including the execution date of this Agreement, including but not limited to: all such claims and demands directly or indirectly arising out of or in any way connected with your employment with the Company or the termination of that employment; claims or demands related to salary, bonuses, commissions, stock, stock options, or any other ownership interests in the Company, vacation pay, fringe benefits, expense reimbursements, severance pay, or any other form of compensation; claims pursuant to any federal, state or local law, statute, or cause of action; tort law; or contract law. The claims and causes of action you are releasing and waiving in this Agreement include, but are not limited to, any and all claims and causes of action that the Company, its parents and subsidiaries, and its and their respective officers, directors, agents, servants, employees, attorneys, shareholders, successors, assigns or affiliates:

- has violated its personnel policies, handbooks, contracts of employment, or covenants of good faith and fair dealing;

- has discriminated or retaliated against you on the basis of age, race, color, sex (including sexual harassment), national origin, ancestry, disability, religion, sexual orientation, gender identity, marital status, or other protected category in violation of any local, state or federal law, constitution, ordinance, or regulation, including but not limited to: Title VII of the Civil Rights Act of 1964, as amended; 42 U.S.C. § 1981, as amended; the Age Discrimination in Employment Act, as amended ("ADEA"); the Equal Pay Act; the Americans With Disabilities Act; the Family and Medical Leave Act; the Massachusetts Fair Employment Practice Act; the Massachusetts Privacy Act; the Massachusetts Consumer Protection Act; the Massachusetts Right-to-Know Law; the Massachusetts Equal Pay Act and any other Massachusetts law;

- has violated any statute, including but not limited to the Massachusetts Wage Act; the Massachusetts Privacy Act; the Massachusetts Consumer Protection Act; the Massachusetts Right-to-Know Law; the Employee Retirement Income Security Act; the Employee Retirement Income Security Act; Section 510; and the National Labor Relations Act; the Immigration Reform and Control Act; the Worker Adjustment and Retraining Notification Act; the Fair Credit and Reporting Act; the Sarbanes-Oxley Act; and

- has violated any public policy or common law, including but not limited to claims for retaliatory discharge; negligent hiring, retention or supervision; defamation; intentional or negligent infliction of emotional distress and/or mental anguish; intentional interference with contract; negligence; detrimental reliance; loss of consortium to you or any member of your family

and/or promissory estoppel.

- **Notwithstanding anything to the contrary in this paragraph 5, this release does not include the release of any rights that cannot by law be released by private agreement, including but not limited to those relating to workers' compensation and unemployment benefits. In addition, nothing in this Agreement shall bar or prohibit you from contacting, seeking assistance from or participating in any proceeding before any federal or state administrative agency to the extent permitted by applicable federal, state and/or local law. However, you nevertheless will be prohibited to the fullest extent authorized by law from obtaining monetary damages in any agency proceeding in which you do so participate.**

- Nothing in this Agreement prevents you from cooperating with, or participation in any proceeding before the Equal Employment Opportunity Commission or a state fair employment practices agency, except that you acknowledge and agree that you may not be able to recover any monetary benefits in connection with any such proceeding. Nothing contained in this Agreement prevents, impedes or interferes with your ability to engage in any activities that cannot be released as a matter of law under the National Labor Relations Board, the Occupational Safety and Health Administration, the Securities and Exchange Commission or any other federal, state or local governmental agency or commission ("Government Agency" or "Government Agencies"), without notice to the Company. This Agreement does not prevent, impede or interfere with your right to receive an award for information provided to any Government Agencies.

- THIS RELEASE CONTAINS A WAIVER OF RIGHTS UNDER THE MASSACHUSETTS WAGE ACT: You acknowledge, agree and understand that employees have certain rights under the Massachusetts Wage Act, M.G.L. chapter 149 et seq. (the "MA Wage Act") regarding when, how, and how much they must be paid, including but not limited to the right to be paid wages earned within timeframes provided in the MA Wage Act; that wages include amounts payable to employee for hours worked, which may include salaries, determined and due commissions, overtime pay, tips, and earned vacation or holiday payments due to employees under oral or written agreements; and that employees have the right to bring private lawsuits for violation of the MA Wage Act.

B. Voluntary Release

By signing this Agreement:

- You agree that in consideration for the payments described in this Agreement, which you are not otherwise entitled to receive, you specifically and voluntarily waive such rights and/or claims under the ADEA to the extent such rights and/or claims arose through the date you sign this Agreement;

- You acknowledge that you are hereby advised by the Company of the right to consult with an attorney prior to signing this Agreement, you have had the opportunity to review and reflect on all terms of this Agreement and you have not been subject to any undue or improper influence interfering with the exercise of free will to sign this Agreement; and

- You further acknowledge that when presented with the original draft of this Agreement, and the Release of Claims attached hereto as Exhibit A, you were informed that you had at least

forty-five (45) calendar days within which to consider their terms and to consult with or seek advice from an attorney or any other person of your choosing, subject to the confidentiality provisions herein ("Consideration Period").

- You agree that any changes, material or immaterial, to this Agreement shall not extend, re-start or otherwise affect the forty-five (45) day Consideration period for the Agreement or the Release of Claims in Exhibit A. If you sign this Agreement or the Release of Claims in Exhibit A within less than forty-five (45) days, you acknowledge that such decision was entirely voluntary and that you had the opportunity to consider said Agreement and the Release of Claims until the end of the Consideration Period. **Please note, however, that you shall sign the Release of Claims in Exhibit A no earlier than your Separation Date.** To accept this Agreement and the Release of Claims annexed as Exhibit A, you shall deliver a signed copy of each to Lauren Mastrocola at lmastrocola@flex-pharma.com within the Consideration Period for each.

- You acknowledge that you have also been given a period of seven (7) days (the "Revocation Period") from the date when you execute this Agreement and the Release of Claims annexed as Exhibit A to revoke said Agreement and Release of Claims by written notice that is received by Lauren Mastrocola at lmastrocola@flex-pharma.com on or before the last day of the Revocation Period. This Agreement and the Release of Claims in Exhibit A shall take effect only if executed within the Consideration Period as set forth above and if not revoked pursuant to the preceding sentence ("Effective Date"); provided, however, that you shall execute the Release of Claims in Exhibit A no earlier than the Separation Date.

- Attached to this Agreement as Exhibit C is an ADEA disclosure that is required by law. You are reminded to consult an attorney before signing below.

C. Acknowledgments

You represent and agree that: (i) the payments and benefits set forth in this Agreement, together with payments and benefits previously provided to you, are complete payment, settlement, accord and satisfaction with respect to all obligations and liabilities of Releasees to you, and with respect to all claims, causes of action and damages that could be asserted by you against the Releasees regarding your employment with, change in employment status with, and/or termination from employment, including, without limitation, all claims for wages, salary, commissions, vacation pay, draws, car allowances, incentive pay, bonuses, business expenses, paid time off, stock and stock options, severance pay, attorneys' fees, compensatory damages, exemplary damages, or other compensation, benefits, costs or sums; (ii) you have no known workplace injuries or occupational diseases for which you have not already filed a claim; (iii) you either have been provided or you have not been denied any leave requested under the Family and Medical Leave Act or state law providing leave benefits; and (iv) you have not complained of and you are not aware of any fraudulent activity or any act(s) which would form the basis of a claim of fraudulent or illegal activity by the Releasees.

6. Non-disparagement

You agree not to make at any time any disparaging statements concerning the Company or any of its affiliated entities or any of its or their products or services, current or former officers, directors,

managers, affiliates, shareholders, employees, agents or attorneys, in any manner likely to be harmful to them or their business, business reputation or personal reputation. You represent that during the Transition Period, you have not made any such disparaging statements. These non-disparagement obligations shall not in any way affect your obligation to testify truthfully in any legal proceeding.

7. Confidentiality

You agree to keep the existence and terms of this Agreement ("Agreement-Related Information") in the strictest confidence and not reveal, unless legally compelled to do so, any Agreement-Related Information to any persons except your immediate family, your attorney, accountant, auditor, tax preparer, and your financial advisor, and to them only provided that they first agree for the benefit of the Company to keep Agreement-Related Information confidential, and except to taxing authorities in connection with any application for unemployment compensation benefits. In particular, you agree not to disclose the existence and the terms of this Agreement to any current or former employee, consultant or independent contractor of the Company. Nothing in this Section 6 shall be construed to prevent you from disclosing Agreement-Related Information to the extent required by a lawfully issued subpoena or duly issued court order; *provided* that you provide the Company with advance written notice and a reasonable opportunity to contest such subpoena or court order.

8. Acknowledgment of Wage Payments, Compensation

Except as expressly provided in this Agreement, and except as to any vested right that you may have under the express terms of any written benefit plan, you have received all wage payments and benefits, and that these payments and benefits will be complete and unconditional payment, settlement, accord and/or satisfaction with respect to your Employment Agreement and all other obligations and liabilities of the Company to you, including, without limitation, all claims for back wages, salary, vacation pay, incentive pay, bonuses, stock and stock options, commissions, severance pay, reimbursement of expenses, any and all other forms of compensation or benefits, attorney's fees, or other costs or sums, except as specifically set forth in this Agreement.. You acknowledge that, except as provided in this Agreement, you will not receive any additional compensation, severance or benefits after the Separation Date, with the exception of any vested right you may have under the express terms of a written ERISA-qualified benefit plan (e.g., 401k account).

9. Expense Reimbursements

You agree that, within ten (10) days of the Separation Date, you will submit your final documented expense reimbursement statement reflecting all business expenses you incurred through the Separation Date, if any, for which you seek reimbursement. The Company will reimburse you for reasonable business expenses pursuant to regular business practice.

10. Reaffirmation of Ongoing And Post-Termination Obligations

Both during and after your employment you acknowledge your continuing obligations under the Confidentiality Agreement, which is attached hereto at Exhibit B. Your obligations not to use or disclose any confidential or proprietary information of the Company and to refrain from certain solicitation and competitive activities survive the termination of your employment, continue in full force and effect and are unaffected by this Agreement. Please familiarize yourself with the enclosed

Confidentiality Agreement. If you have any doubts as to the scope of the restrictions in your Confidentiality Agreement, you should contact John McCabe, Chief Financial Officer immediately to assess your compliance. As you know, the Company will enforce its contract rights. If you breach any of the terms of the Confidentiality Agreement, you agree that (to the extent permitted by law) the Company may cease providing the payments and benefits herein to you and pursue any and all other legal or equitable relief, including but not limited to all relief set forth herein and in the Confidentiality Agreement.

11. Consideration

You agree that the payments and other benefits to which you are eligible, pursuant to the above terms, in exchange for the general release(es) of claims is sufficient consideration. You further agree that the Company has fully satisfied all terms and conditions of your Employment Agreement. You also agree that the payments, benefits and other terms and goodwill received from the Company are payments, benefits, terms and goodwill to which you would not have otherwise been entitled.

12. No Assignment

You represent that you have not assigned to any other person or entity any Claims against any Releasee.

13. Pending Claims/Administrative Charge

You represent that no charges, complaints or actions of any kind have been filed by you or on your behalf against the Company or any of its subsidiaries or affiliates with any federal, state or local court or agency. Nothing in this Agreement will bar or prohibit you from filing an administrative charge, contacting, seeking assistance from or participating in any proceeding before any federal or state administrative agency to the extent permitted by applicable federal, state and/or local law. However, you nevertheless will be prohibited to the fullest extent authorized by law from obtaining monetary damages in any proceeding in which you do so participate.

14. Tax Treatment

The Company shall undertake to make deductions, withholdings and tax reports with respect to payments and benefits under this Agreement to the extent that it reasonably and in good faith determines that it is required to make such deductions, withholdings and tax reports. Payments under this Agreement shall be in amounts net of any such deductions or withholdings. Nothing in this Agreement shall be construed to require the Company to make any payments to compensate you for any adverse tax effect associated with any payments or benefits or for any deduction or withholding from any payment or benefit.

15. Cooperation

Following the Separation Date, to the extent reasonably requested by the Company, you agree that you shall fully cooperate with the Company in connection with matters arising out of your service to the Company, including, but not limited to, making yourself reasonably available during regular business hours in all matters relating to the transition of your work and responsibilities on behalf of the Company, such as, any present, prior or subsequent relationships and the orderly transfer of any such work and institutional knowledge to such other persons as the Company may designate;

provided that the Company shall make reasonable efforts to minimize disruption of your other activities. The Company shall reimburse you for reasonable expenses incurred in connection with such cooperation and also shall compensate you at an hourly rate based upon your regular rate of pay on the Separation Date.

16. Breach

You agree that upon any breach of this Agreement you will forfeit all amounts paid or owing to you under this Agreement. Further, you acknowledge that it may be impossible to assess the damages caused by your violation of the terms of this Agreement and further agree that any threatened or actual violation or breach of this Agreement will constitute immediate and irreparable injury to the Company. You therefore agree that any such breach of this Agreement is a material breach of this Agreement, and, in addition to any and all other damages and remedies available to the Company upon your breach of this Agreement, the Company shall be entitled to an injunction (without the posting of a bond) to prevent you from violating or breaching this Agreement. You agree that if the Company is successful in whole or part in any legal or equitable action against you under this Agreement, you agree to pay all of the costs, including reasonable attorney's fees, incurred by the Company in enforcing the terms of this Agreement.

17. Other Terms

(a) Legal Representation; Review of Agreement. You acknowledge that you have been advised to discuss all aspects of this Agreement with your attorney prior to entering into it, that you have carefully read and fully understand all of the provisions of this Agreement, and that you are voluntarily entering into this Agreement.

(b) Binding Nature of Agreement. This Agreement shall be binding upon you and upon your heirs, administrators, representatives and executors.

(c) Modification of Agreement; Waiver. This Agreement may be amended, only upon a written agreement executed by you and a duly authorized officer of the Company.

(d) Severability. If at any future time it is determined by an arbitrator or court of competent jurisdiction that any covenant, clause, provision or term of this Agreement is illegal, invalid or unenforceable, the remaining provisions and terms of this Agreement shall not be affected thereby and the illegal, invalid or unenforceable term or provision shall be severed from the remainder of this Agreement. In the event of such severance, the remaining covenants shall be binding and enforceable.

(e) Governing Law and Interpretation. This Agreement shall be deemed to be made and entered into in the Commonwealth of Massachusetts and shall in all respects be interpreted, enforced and governed under the laws of Massachusetts, without giving effect to the conflict of laws provisions of Massachusetts law. Any claims or legal actions by one party against the other shall be commenced and maintained in any state or federal court located in Massachusetts, and the parties hereby submit to the jurisdiction and venue of any such court. The language of all parts of this Agreement shall in all cases be construed as a whole, according to its fair meaning, and not strictly for or against either of the Parties.

(f) Entire Agreement. This Agreement constitutes the entire agreement regarding the termination of your employment with the Company and supersedes any previous agreements and understandings between the parties; provided, that the Restrictive Covenant Agreement and the Equity Documents shall continue in full force and effect binding and enforceable against you in accordance with their terms.

(g) Absence of Reliance. You acknowledge that you are not relying on any promises or representations by the Company or its agents, representatives or attorneys of either of them regarding any subject matter addressed in this Agreement.

(h) Assignment; Successors and Assigns Neither the Company nor you may make any assignment of this Agreement or any interest herein, by operation of law or otherwise, without the prior written consent of the other party; provided that the Company may assign its rights under this Agreement without the consent of you in the event that the Company shall effect a reorganization, consolidate with or merge into any other corporation, partnership, organization or other entity, or transfer all or substantially all of its properties or assets to any other corporation, partnership, organization or other entity. This Agreement shall inure to the benefit of and be binding upon the Company and you, their respective successors, executors, administrators, heirs and permitted assigns.

(i) Non-Admission. Nothing in this Agreement shall be construed as an admission by the Company, including, but not limited to, any admission by the Company of any wrongful action or violation of any federal, state or local law, statute, rule or regulation or common law rights, including those relating to the provisions of any law or statute concerning employment actions, or of any other possible or claimed violation of law or rights.

(j) Counterparts. This Agreement may be executed in any number of counterparts, including by facsimile or PDF, each of which when so executed and delivered shall be taken to be an original, but all of which together shall constitute one and the same document.

If you agree to the foregoing, kindly sign and return the enclosed copy of this letter to me at lmatsrocola@flex-pharma.com.

Best regards,

/s/ John McCabe
John McCabe
Chief Financial Officer

I REPRESENT THAT I (A) HAVE READ AND FULLY UNDERSTAND THE TERMS AND CONDITIONS OF THIS AGREEMENT; (B) HAVE HAD SUFFICIENT TIME TO CONSIDER THE AGREEMENT; AND (C) AM VOLUNTARILY AND WILLINGLY SIGNING IT.

Agreed and accepted:

/s/ Tom Wessel 22 June 2018

Tom Wessel Date

EXHIBIT A

Release of Claims As Of The Separation Date

A. **General Release**

In exchange for the payments and other consideration under the Separation Agreement between you and the FlexPharma, dated June 12, 2018 ("Agreement"), to which you would not otherwise be entitled, and except as otherwise set forth in this Agreement, you hereby generally and completely release, acquit and forever discharge the Company, its parents and subsidiaries, and its and their officers, directors, managers, partners, agents, employees, attorneys, shareholders, successors, assigns and affiliates ("Releasees"), of and from any and all claims, liabilities, demands, causes of action, costs, expenses, attorney's fees, damages, indemnities and obligations of every kind and nature, in law, equity, or otherwise, both known and unknown, suspected and unsuspected, disclosed and undisclosed, arising out of or in any way related to agreements, events, acts or conduct at any time prior to and including the execution date of this Agreement, including but not limited to: all such claims and demands directly or indirectly arising out of or in any way connected with your employment with the Company or the termination of that employment; claims or demands related to salary, bonuses, commissions, stock, stock options, or any other ownership interests in the Company, vacation pay, fringe benefits, expense reimbursements, severance pay, or any other form of compensation; claims pursuant to any federal, state or local law, statute, or cause of action; tort law; or contract law. The claims and causes of action you are releasing and waiving in this Agreement include, but are not limited to, any and all claims and causes of action that the Company, its parents and subsidiaries, and its and their respective officers, directors, agents, servants, employees, attorneys, shareholders, successors, assigns or affiliates:

- has violated its personnel policies, handbooks, contracts of employment, or covenants of good faith and fair dealing;

- has discriminated or retaliated against you on the basis of age, race, color, sex (including sexual harassment), national origin, ancestry, disability, religion, sexual orientation, gender identity, marital status, or other protected category in violation of any local, state or federal law, constitution, ordinance, or regulation, including but not limited to: Title VII of the Civil Rights Act of 1964, as amended; 42 U.S.C. § 1981, as amended; the Age Discrimination in Employment Act, as amended ("ADEA"); the Equal Pay Act; the Americans With Disabilities Act; the Family and Medical Leave Act; the Massachusetts Fair Employment Practice Act; the Massachusetts Privacy Act; the Massachusetts Consumer Protection Act; the Massachusetts Right-to-Know Law; the Massachusetts Equal Pay Act and any other Massachusetts law;

- has violated any statute, including but not limited to the Massachusetts Wage Act; the Massachusetts Privacy Act; the Massachusetts Consumer Protection Act; the Massachusetts Right-to-Know Law; the Employee Retirement Income Security Act; the Employee Retirement Income Security Act; Section 510; and the National Labor Relations Act; the Immigration Reform and Control Act; the Worker Adjustment and Retraining Notification Act; the Fair Credit and Reporting Act; the Sarbanes-Oxley Act; and

- has violated any public policy or common law, including but not limited to claims for retaliatory

discharge; negligent hiring, retention or supervision; defamation; intentional or negligent infliction of emotional distress and/or mental anguish; intentional interference with contract; negligence; detrimental reliance; loss of consortium to you or any member of your family and/or promissory estoppel.

- **Notwithstanding anything to the contrary, this release does not include the release of any rights that cannot by law be released by private agreement, including but not limited to those relating to workers' compensation and unemployment benefits. In addition, nothing in this Agreement shall bar or prohibit you from contacting, seeking assistance from or participating in any proceeding before any federal or state administrative agency to the extent permitted by applicable federal, state and/or local law. However, you nevertheless will be prohibited to the fullest extent authorized by law from obtaining monetary damages in any agency proceeding in which you do so participate.**

- Nothing in this Agreement prevents you from cooperating with, or participation in any proceeding before the Equal Employment Opportunity Commission or a state fair employment practices agency, except that you acknowledge and agree that you may not be able to recover any monetary benefits in connection with any such proceeding. Nothing contained in this Agreement prevents, impedes or interferes with your ability to engage in any activities that cannot be released as a matter of law under the National Labor Relations Board, the Occupational Safety and Health Administration, the Securities and Exchange Commission or any other federal, state or local governmental agency or commission ("Government Agency" or "Government Agencies"), without notice to the Company. This Agreement does not prevent, impede or interfere with your right to receive an award for information provided to any Government Agencies.

- THIS RELEASE CONTAINS A WAIVER OF RIGHTS UNDER THE MASSACHUSETTS WAGE ACT: You acknowledge, agree and understand that employees have certain rights under the Massachusetts Wage Act, M.G.L. chapter 149 et seq. (the "MA Wage Act") regarding when, how, and how much they must be paid, including but not limited to the right to be paid wages earned within timeframes provided in the MA Wage Act; that wages include amounts payable to employee for hours worked, which may include salaries, determined and due commissions, overtime pay, tips, and earned vacation or holiday payments due to employees under oral or written agreements; and that employees have the right to bring private lawsuits for violation of the MA Wage Act.

B. Voluntary Release

By signing this Agreement:

- You agree that in consideration for the payments described in the Agreement, which you are not otherwise entitled to receive, you specifically and voluntarily waive such rights and/or claims under the ADEA to the extent such rights and/or claims arose through the date you sign this Release of Claims;

- You acknowledge that you are hereby advised by the Company of the right to consult with an attorney prior to signing this Release of Claims, you have had the opportunity to review and reflect on all terms of this Release of Claims and you have not been subject to any

undue or improper influence interfering with the exercise of free will to sign this Release of Claims; and

- You further acknowledge that when presented with the original draft of this Release of Claims, you were informed that you had at least forty-five (45) calendar days within which to consider its terms and to consult with or seek advice from an attorney or any other person of your choosing, subject to the confidentiality provisions herein ("Consideration Period").

- You agree that any changes, material or immaterial, to this Release of Claims shall not extend, re-start or otherwise affect the forty-five (45) day Consideration period for the Release of Claims. If you sign this Release of Claims within less than forty-five (45) days, you acknowledge that such decision was entirely voluntary and that you had the opportunity to consider said Release of Claims until the end of the Consideration Period. **Please note, however, that you shall sign this Release of Claims no earlier than your Separation Date.** To accept this Release of Claims annexed as Exhibit A, you shall deliver a signed copy of each to Lauren Mastrocola at lmastrocola@flex-pharma.com.

- You acknowledge that you have also been given a period of seven (7) days (the "Revocation Period") from the date when you execute this Release of Claims annexed as Exhibit A to revoke said Release of Claims by written notice that is received by Lauren Mastrocola at lmastrocola@flex-pharma.com on or before the last day of the Revocation Period. This Release of Claims shall take effect only if executed within the Consideration Period as set forth above and if not revoked pursuant to the preceding sentence ("Effective Date"); provided, however, that you shall execute this Release of Claims no earlier than the Separation Date.
- Attached to this Agreement as Exhibit C is an ADEA disclosure that is required by law. You are reminded to consult an attorney before signing below.

C. Acknowledgments

You represent and agree that: (i) the payments and benefits set forth in the Agreement, together with payments and benefits previously provided to you, are complete payment, settlement, accord and satisfaction with respect to all obligations and liabilities of Releasees to you, and with respect to all claims, causes of action and damages that could be asserted by you against the Releasees regarding your employment with, change in employment status with, and/or termination from employment, including, without limitation, all claims for wages, salary, commissions, vacation pay, draws, car allowances, incentive pay, bonuses, business expenses, paid time off, stock and stock options, severance pay, attorneys' fees, compensatory damages, exemplary damages, or other compensation, benefits, costs or sums; (ii) you have no known workplace injuries or occupational diseases for which you have not already filed a claim; (iii) you either have been provided or you have not been denied any leave requested under the Family and Medical Leave Act or state law providing leave benefits; and (iv) you have not complained of and you are not aware of any fraudulent activity or any act(s) which would form the basis of a claim of fraudulent or illegal activity by the Releasees.

If you agree to the foregoing, please execute and return this Release of Claims to me at lmastrocola@flex-pharma.com.

/s/ John McCabe
John McCabe
Chief Financial Officer

I REPRESENT THAT I (A) HAVE READ AND FULLY UNDERSTAND THE TERMS AND CONDITIONS OF THIS AGREEMENT; (B) HAVE HAD SUFFICIENT TIME TO CONSIDER THE AGREEMENT; AND (C) AM VOLUNTARILY AND WILLINGLY SIGNING IT.

Agreed and accepted:

/s/ Tom Wessel 22 June 2018

Tom Wessel Date

Exhibit B

EMPLOYEE NON-SOLICITATION, NON-COMPETITION, CONFIDENTIAL INFORMATION AND INVENTIONS ASSIGNMENT AGREEMENT

In consideration of my employment or continued employment by Flex Pharma, Inc., a Delaware corporation ("**Company**"), and the compensation paid to me now and during my employment with the Company, I agree to the terms of this Agreement as follows:

1. **Confidential Information Protections.**

1.1 **Nondisclosure; Recognition of Company's Rights**. At all times during and after my employment, I will hold in confidence and will not disclose, use, lecture upon, or publish any of Company's Confidential Information (defined below), except as may be required in connection with my work for Company, or as expressly authorized by the Chief Executive Officer (the "**CEO**") of Company. I will obtain the CEO's written approval before publishing or submitting for publication any material (written, oral, or otherwise) that relates to my work at Company and/or incorporates any Confidential Information. I hereby assign to Company any rights I may have or acquire in any and all Confidential Information and recognize that all Confidential Information shall be the sole and exclusive property of Company and its assigns.

1.2 **Confidential Information.** The term "**Confidential Information**" shall mean any and all confidential knowledge, data or information related to Company's business or its actual or demonstrably anticipated research or development, including without limitation (a) gene sequences, cell lines, samples, chemical compounds, assays, biological materials, trade secrets, inventions, ideas, processes, data, formulae, other works of authorship, know-how, improvements, discoveries, developments, designs, and techniques; (b) information regarding products, services, plans for research and development, marketing and business plans, budgets, financial statements, contracts, prices, suppliers, and customers; (c) information regarding the skills and compensation of Company's employees, contractors, and any other service providers of Company; and (d) the existence of any business discussions, negotiations, or agreements between Company and any third party.

1.3 **Third Party Information.** I understand that Company has received and in the future will receive from third parties confidential or proprietary information (**"Third Party Information"**) subject to a duty on Company's part to maintain the confidentiality of such information and to use it only for certain limited purposes. During and after the term of my employment, I will hold Third Party Information in strict confidence and will not disclose to anyone (other than Company personnel who need to know such information in connection with their work for Company) or use, Third Party Information, except in connection with my work for Company or unless expressly authorized by an officer of Company in writing.

1.4 **No Improper Use of Information of Prior Employers and Others.** I represent that my employment by Company does not and will not breach any agreement with any former employer, including any noncompete agreement or any agreement to keep in confidence or refrain from using information acquired by me prior to my employment by Company. I further represent that I have not entered into, and will not enter into, any agreement, either written or oral, in conflict with my obligations under this Agreement. During my employment by Company, I will not improperly make use of, or disclose, any information or trade secrets of any former employer or other third party, nor will I bring onto the premises of Company or use any unpublished documents or any property belonging to any former employer or other third party, in violation of any lawful agreements with that former employer or third party. I will use in the performance of my duties only information that is generally known and used by persons with training and experience comparable to my own, is common knowledge in the industry or otherwise legally in the public domain, or is otherwise provided or developed by Company.

2. **Inventions.**

2.1 **Definitions.** As used in this Agreement, the term **"Invention"** means any ideas, concepts, information, materials, processes, data, programs, know-how, improvements, discoveries, developments, designs, formulae, other copyrightable works, and techniques and all Intellectual Property Rights in any of the items listed above. The term **"Intellectual Property Rights"** means all trade secrets, copyrights, trademarks, mask work rights, patents and other intellectual property rights recognized by the laws of any jurisdiction or country. The term **"Moral Rights"** means all paternity, integrity, disclosure, withdrawal, special and any other similar rights recognized by the laws of any jurisdiction or country.

2.2 **Prior Inventions.** I have disclosed on **Exhibit A** a complete list of all Inventions that (a) I have, or I have

caused to be, alone or jointly with others, conceived, developed, or reduced to practice prior to the commencement of my employment by Company; (b) in which I have an ownership interest or which I have a license to use; and (c) that I wish to have excluded from the scope of this Agreement (collectively referred to as "**Prior Inventions**"). If no Prior Inventions are listed in **Exhibit A**, I warrant that there are no Prior Inventions. I agree that I will not incorporate, or permit to be incorporated, Prior Inventions in any Company Inventions (defined below) without Company's prior written consent. If, in the course of my employment with Company, I incorporate a Prior Invention into a Company process, machine or other work, I hereby grant Company a non-exclusive, perpetual, fully-paid and royalty-free, irrevocable and worldwide license, with rights to sublicense through multiple levels of sublicensees, to reproduce, make derivative works of, distribute, publicly perform, and publicly display in any form or medium, whether now known or later developed, make, have made, use, sell, import, offer for sale, and exercise any and all present or future rights in, such Prior Invention.

2.3 **Assignment of Company Inventions.** Inventions assigned to the Company or to a third party as directed by the Company pursuant to the subsection titled Government or Third Party are referred to in this Agreement as "**Company Inventions**." Subject to the subsection titled Government or Third Party and except for Inventions that I have set forth in **Exhibit A**, I hereby assign and agree to assign in the future (when any such Inventions or Intellectual Property Rights are first reduced to practice or first fixed in a tangible medium, as applicable) to Company all my right, title, and interest in and to any and all Inventions (and all Intellectual Property Rights with respect thereto) made, conceived, reduced to practice, or learned by me, either alone or with others, during the period of my employment by Company. Any assignment of Inventions (and all Intellectual Property Rights with respect thereto) hereunder includes an assignment of all Moral Rights. To the extent such Moral Rights cannot be assigned to Company and to the extent the following is allowed by the laws in any country where Moral Rights exist, I hereby unconditionally and irrevocably waive the enforcement of such Moral Rights, and all claims and causes of action of any kind against Company or related to Company's customers, with respect to such rights. I further acknowledge and agree that neither my successors-in-interest nor legal heirs retain any Moral Rights in any Inventions (and any Intellectual Property Rights with respect thereto).

2.4 **Government or Third Party**. I agree that, as directed by the Company, I will assign to a third party, including without limitation the United States, all my right, title, and interest in and to any particular Company Invention.

2.5 **Enforcement of Intellectual Property Rights and Assistance.** During and after the period of my employment and at Company's request and expense, I will assist Company in every proper way, including consenting to and joining in any action, to obtain and enforce United States and foreign Intellectual Property Rights and Moral Rights relating to Company Inventions in all countries. If the Company is unable to secure my signature on any document needed in connection with such purposes, I hereby irrevocably designate and appoint Company and its duly authorized officers and agents as my agent and attorney in fact, which appointment is coupled with an interest, to act on my behalf to execute and file any such documents and to do all other lawfully permitted acts to further such purposes with the same legal force and effect as if executed by me.

3. **Records.** I agree to keep and maintain adequate and current records (in the form of notes, sketches, drawings and in any other form that is required by the Company) of all Inventions made by me during the period of my employment by the Company, which records shall be available to, and remain the sole property of, the Company at all times.

4. **Additional Activities.**

4.1 **Noncompetition.** During the term of my employment with the Company and for a period of twelve (12) months immediately following the termination of my employment with the Company for any reason, whether voluntary or involuntary, or with or without cause, I will not within the United States or any other geographic region in which the Company conducts its business, and in any capacity, whether individually or as an employee, consultant, director, officer, agent, advisor or otherwise for or on behalf of any entity (a "**Competing Organization**"), engage in any business activities that are competitive with any of the material business activities of the Company, including without limitation the research, development, sale or marketing of any material product, process or service, in existence or being conducted, provided or developed by the Company, unless my duties at such Competing Organization do not include duties relating to any product, process, service or business activity that competes or is reasonably expected to compete with a material product, process, service or business activity in existence or being conducted, provided or developed by the Company, and provided that I have delivered to the Company a written statement, confirmed by my prospective employer or consulting client, as the case may be, describing my duties and stating that such duties are consistent with my obligations under this Agreement. I acknowledge and agree that the covenants contained in this Section 4.1 are (i) reasonable and valid in geographical and temporal scope and in all other respects and (ii) essential to protect the value of the business and assets of the Company. If any court of competent jurisdiction shall at any time deem the duration or the geographic scope of any of the provisions of this Section 4.1 unenforceable, the other provisions of this Section 4.1 shall nevertheless stand, and the duration and/or geographic scope set forth herein shall be deemed to be the longest period and/or greatest size permissible by law under the circumstances, and the parties hereto agree that such court shall reduce the time period and/or geographic scope to permissible duration or size.

4.2 **Prior Relationships.** Without limiting Section 4.1, I represent that I have no other agreements, relationships or commitments to any other person or entity that conflict with my obligations to the Company under this Agreement or my ability to become employed and perform the services for which I am being hired by the Company. I further agree that if I have signed a confidentiality agreement or similar type of agreement with any former employer or other entity, I will comply with the terms of any such agreement to the extent that its terms are lawful under applicable law. I represent and warrant that after undertaking a careful search (including searches of my computers, cell phones, electronic devices and documents); I have returned all property and confidential information belonging to all prior employers. Moreover, in the event that the Company or any of its directors, officers, agents, employees, investors, shareholders, administrators, affiliates, divisions, subsidiaries, predecessor or successor corporations, or assigns is sued based on any obligation or agreement to which I am a party or am bound, I agree to fully indemnify the Company, its directors, officers, agents, employees, investors, shareholders, administrators, affiliates, divisions, subsidiaries, predecessor and successor corporations, and assigns for all verdicts, judgments, settlements, and other losses incurred by the Company (the indemnitee) in the event that it is the subject of any legal action resulting from any breach of my obligations under this Agreement, as well as any reasonable attorneys' fees and costs if the plaintiff is the prevailing party in such an action.

4.3 **Nonsolicitation.** I agree that for the period of my employment by Company and for a period of twelve (12) months immediately following the termination of my employment with the Company for any reason, whether voluntary or involuntary, with or without cause, I will not, either directly or indirectly, solicit or attempt to solicit any employee, independent contractor, or consultant of Company to terminate his, her or its relationship with Company in order to become an employee, consultant, or independent contractor to or for any other person or entity.

5. **Return Of Company Property.** Upon termination of my employment or upon Company's request at any other time, I will deliver to Company all of Company's property, equipment, and documents, together with all copies thereof, and any other material containing or disclosing any Inventions, Third Party Information or Confidential Information and certify in writing that I have fully complied with the foregoing obligation. I agree that I will not copy, delete, or alter any information contained upon my Company computer or Company equipment before I return it to Company. In addition, if I have used any personal computer, server, or e-mail system to receive, store, review, prepare or transmit any Company information, including but not limited to, Confidential Information, I agree to provide the Company with a computer-useable copy of all such Confidential Information and then permanently delete and expunge such Confidential Information from those systems; and I agree to provide the Company access to my system as reasonably requested to verify that the necessary copying and/or deletion is completed. I further agree that any property situated on Company's premises and owned by Company is subject to inspection by Company's personnel at any time with or without notice. Prior to the termination of my employment or promptly after termination of my employment, I will cooperate with Company in attending an exit interview and certify in writing that I have complied with the requirements of this section.

6. **Notification Of New Employer.** If I leave the employ of Company, I consent to the notification of my new employer of my rights and obligations under this Agreement, by Company providing a copy of this Agreement or otherwise.

7. **General Provisions.**

7.1 **Governing Law and Venue.** This Agreement and any action related thereto will be governed and interpreted by and under the laws of the Commonwealth of Massachusetts, without giving effect to any conflicts of laws principles that require the application of the law of a different state. I expressly consent to personal jurisdiction and venue in the state and federal courts for the county in which Company's principal place of business is located for any lawsuit filed there against me by Company arising from or related to this Agreement.

7.2 **Severability.** If any provision of this Agreement is, for any reason, held to be invalid or unenforceable, the other provisions of this Agreement will remain enforceable and the invalid or unenforceable provision will be deemed modified so that it is valid and enforceable to the maximum extent permitted by law.

7.3 **Survival.** This Agreement shall survive the termination of my employment and the assignment of this Agreement by Company to any successor or other assignee and shall be binding upon my heirs and legal representatives.

7.4 **Employment**. I agree and understand that nothing in this Agreement shall give me any right to continued employment by Company, and it will not interfere in any way with my right or Company's right to terminate my employment at any time, with or without cause and with or without advance notice.

7.5 **Notices.** Each party must deliver all notices or other communications required or permitted under this Agreement in writing to the other party at the address listed on the signature page, by courier, by certified or registered mail (postage prepaid

and return receipt requested), or by a nationally-recognized express mail service. Notice will be effective upon receipt or refusal of delivery. If delivered by certified or registered mail, notice will be considered to have been given five (5) business days after it was mailed, as evidenced by the postmark. If delivered by courier or express mail service, notice will be considered to have been given on the delivery date reflected by the courier or express mail service receipt. Each party may change its address for receipt of notice by giving notice of the change to the other party.

7.6 **Injunctive Relief**. I acknowledge that, because my services are personal and unique and because I will have access to the Confidential Information of Company, any breach of this Agreement by me would cause irreparable injury to Company for which monetary damages would not be an adequate remedy and, therefore, will entitle Company to injunctive relief (including specific performance). The rights and remedies provided to each party in this Agreement are cumulative and in addition to any other rights and remedies available to such party at law or in equity.

7.7 **Waiver.** Any waiver or failure to enforce any provision of this Agreement on one occasion will not be deemed a waiver of that provision or any other provision on any other occasion.

7.8 **Export**. I agree not to export, reexport, or transfer, directly or indirectly, any U.S. technical data acquired from Company, or any products utilizing such data, in violation of the United States export laws or regulations.

7.9 **Counterparts.** This Agreement may be executed in one or more counterparts, each of which shall be deemed an original and all of which shall be taken together and deemed to be one instrument.

7.10 **Entire Agreement.** If no other agreement governs nondisclosure and assignment of inventions during any period in which I was previously employed or am in the future employed by Company as an independent contractor, the obligations pursuant to sections of this Agreement titled Confidential Information Protections and Inventions shall apply. This Agreement is the final, complete and exclusive agreement of the parties with respect to the subject matter hereof and supersedes and merges all prior communications between us with respect to such matters. No modification of or amendment to this Agreement, or any waiver of any rights under this Agreement, will be effective unless in writing and signed by me and the CEO of Company. Any subsequent change or changes in my duties, salary or compensation will not affect the validity or scope of this Agreement.

This Agreement shall be effective as of __December 29__, 2014.

Employee:

I have read, understand, and Accept this agreement and have been given the opportunity to Review it with independent legal counsel.

/s/ Thomas Wessel
(Signature)

By: ___Thomas C. Wessel___

Address: _____

Company: Flex Pharma, Inc.

Accepted and agreed:

/s/ Robert Hadfield
(Signature)

By: __Rob Hadfield_____

Title: __General Counsel__

Address: _____

Exhibit A

INVENTIONS

1. Prior Inventions Disclosure. The following is a complete list of all Prior Inventions (as provided in Subsection 2.2 of the attached Employee Confidential Information and Inventions Assignment Agreement, defined herein as the "Agreement"):

☒ None

o See immediately below:

Exhibit C

ADEA DISCLOSURE

As you have been informed, Flex Pharma Inc. (along with its affiliates, the "Company") is terminating your employment as part of a job elimination or reorganization at the Company. The Company is offering employees who have been laid off as part of this job elimination or reorganization the opportunity to receive certain severance benefits ("Severance Benefits") as part of a group termination program ("Program") in exchange for, among other things, the affected employee's agreement to release any and all claims he or she may have against the Company and related persons and entities. The terms of this offer as it applies to you are described in the attached Separation Agreement and Release (the "Separation Agreement").

The federal Age Discrimination in Employment Act (the "ADEA") requires that when an employee who is 40 or more years of age is provided certain benefits and asked to sign a release in connection with a group employment termination program, the employee must be provided with certain information. Consistent with this, the Company is providing that information to you.

1. **Eligibility:** All Company employees who have been provided with the Separation Agreement as part of the Program are eligible for Severance Benefits. The Company determined which employees would be selected for layoff based on the Company's assessment of its future business needs and the extent to which employees' job duties, abilities and skill sets matched the Company's future business needs.

2. **Time Limits for Decisions Concerning the Severance Benefits:** As set forth in the attached Agreement, you have at least forty-five (45) days to review and sign the Agreement and return it to Lauren Mastrocola at lmastrocola@flex-pharma.com. You will have seven (7) days after you sign the Agreement to change your mind and revoke it; if you do not do so, the Agreement will be effective on the eighth day after you sign the Agreement.

3. **Listing of Persons Selected and Not Selected:** Under the ADEA, some laid off employees are entitled to certain information about other persons selected for the Program and thus offered Severance Benefits and those who were not selected and thus not offered Severance Benefits. The information to be provided covers persons in the "decisional unit." The decisional unit is the portion of the Company's organization from which the Company decided who would be selected for the Program, and thus offered Severance Benefits, and who would not be selected for the Program. In this case, the decisional unit is Flex Pharma Inc. The following lists the ages and job titles of all employees in the decisional unit, identifying those who were and were not selected for the Program.

   This list is current as of the date it is provided to you.

Job Title	Age	Selected for Program	Not Selected for Program
VP, Research and Translational Development	**48**		**X**
Associate Director Clincial Operations	**38**	**X**	
CFO	**48**		**X**
Office Manager	**61**	**X**	
Director, Finance and Accounting/Controller	**33**		**X**
SVP Corporate Communications and Investor Relations	**51**	**X**	
Chief Medical Officer	**62**	**X**	
VP, Corporate Development and Program Management	**44**	**X**	
Sr. Clincal Project Manager	**41**	**X**	
Executive Assistant	**62**	**X**	
Manager, Finance and Accounting	**33**		**X**
Senior Director, Pharmaceutical Development and Quality	**60**	**X**	
Manager Finance and Accounting	**29**		**X**
President and CEO	**60**		**X**
VP, Marketing	**41**	**X**	
VP Clincial Operations	**48**	**X**	
EA to CEO & SVP, IR	**33**		**X**
VP, Marketing	**41**	**X**	

FLEX PHARMA, INC.

ADVISOR AGREEMENT

Date: June 26, 2018

This **Advisor Agreement** (this "***Agreement***"), effective as of the date written above (the "***Effective Date***"), is between Flex Pharma, Inc., a Delaware corporation (the "***Company***"), and Thomas Wessel ("***Advisor***").

Whereas, on the Effective Date, Advisor's employment with the Company terminated and the Advisor will now perform advisory services for the Company in accordance with the terms hereof.

Now, Therefore, the parties hereby agree as follows:

1. **Advisory Services**. The Company retains Advisor, and Advisor agrees to provide, advisory services to the Company relating to the certain strategic and operationsl affairs of the Company's businesses (the "***Advisory Services***") as the Company may from time to time reasonably request. Advisor agrees to render the Advisory Services to the Company, or to its designee on a commercially reasonable basis. Advisor will comply with all rules, procedures and standards promulgated from time to time by the Company with regard to Advisor's access to and use of the Company's property, information, equipment and facilities.

2. **Compensation**.

a) In consideration for the Advisory Services rendered by Advisor, the Company will pay Advisor an hourly rate of $350 per hour. On the last day of each calendar month, Consultant will invoice the Company for Advisory Services rendered and expenses incurred during the preceding month. Undisputed payments will be made by the Company within thirty (30) days from the Company's receipt of Advisor's invoice. Invoices will contain such detail as the Company may reasonably require.

b) The parties acknowledge and agree that Advisor was granted options to purchase shares of the Company's common stock (the "***Stock Options***") pursuant to the Company's 2014 Equity Incentive Plan (the "***2014 Plan***") and the Company's 2015 Equity Incentive Plan (the "***2015 Plan***", together with the 2014 Plan, the "***Plans***") and one or more Stock Option Grant Notice and Option Agreements (the "***Option Agreements***"). The Stock Options shall continue to vest in accordance with the applicable Option Agreements and the Plans during the Term of this Agreement. In addition, the terms of the Option Agreements are hereby amended such that the exercisability of all options granted to the Advisor that are vested as of the date of termination of the Agreement shall be extended from three (3) months after the termination of this agreement to twelve (12) months after the termination of this agreement for any reason other than for cause, disability or death, as defined in the Option Agreements. No other terms of the Option Agreements are amended.

3. **Inventions**.

a) **Definition**. "***Inventions***" means all inventions, discoveries, improvements, ideas, designs, processes, products, computer programs, works of authorship, databases, samples, chemical compounds, assays, mask works, trade secrets, know-how, research and creations (whether or not patentable or subject to copyright or trade secret protection) that Advisor makes, conceives or reduces to practice, either alone or jointly with others, and that (a) result from the performance of the Advisory Services, and/or (b) result from use of facilities, equipment, supplies, or Confidential Information (defined below) of the Company.

b) **Ownership**. Advisor will promptly disclose all Inventions in confidence to the Company. Advisor agrees to irrevocably transfer and assign and hereby does irrevocably transfer and assign to the

Company or its successors the entire right, title and interest now existing or that may exist in the future in and to all right, title and interest in and to all Inventions and any and all related patents, patent applications, copyrights, copyright applications, trademarks, trade names, trade secrets and other proprietary rights in the United States and throughout the world ("***Work Product***"). All Work Product will be the exclusive property of the Company. For purposes of the copyright laws of the United States, all Work Product will constitute "works made for hire", except to the extent such Inventions cannot by law be "works made for hire". Advisor agrees to execute, at the Company's request and expense, all documents and other instruments necessary or desirable to confirm such assignment. In the event that Advisor does not, for any reason, execute such documents within a reasonable time of the Company's request, Advisor hereby irrevocably appoints the Company as Advisor's attorney-in-fact for the purpose of executing such documents on Advisor's behalf, which appointment is coupled with an interest. Advisor further agrees to assist the Company in every proper way to enforce the Company's rights relating to the Work Product in any and all countries, including, but not limited to, executing, verifying and delivering such documents and performing such other acts (including appearing as a witness) as the Company may reasonably request for use in obtaining, perfecting, evidencing, sustaining and enforcing the Company's rights relating to the Work Product. Advisor shall make and maintain adequate and current written records of all Inventions, which records shall be available to and remain the property of the Company at all times.

4. **Confidential Information**

a) **Definition.** "***Confidential Information***" means information with respect to the facilities and methods of the Company, trade secrets, Inventions, systems, patents and patent applications, procedures, manuals, confidential reports, financial information, business plans, prospects, or opportunities, personnel information, lists of customers and suppliers, and information of third parties provided by the Company to Advisor. Confidential Information does not include information which (i) is in the public domain or which becomes part of the public domain through no wrongful act on Advisor's part but only after it becomes so publicly known, or (ii) that becomes known to Advisor through disclosure by a third party having the right to disclose the information, as evidenced by written or electronic records.

b) **Obligations of Confidentiality**. Advisor will not directly or indirectly publish, disseminate or otherwise disclose, use for Advisor's own benefit or for the benefit of a third party, deliver or make available to any third party, any Confidential Information, other than in furtherance of the purposes of this Agreement, and only then with the prior written consent of the Company, and it is understood that all Confidential Information shall remain the sole property of the Company. If required, Advisor may disclose the Confidential Information to a governmental authority or by order of a court of competent jurisdiction, provided that such disclosure is subject to all applicable governmental or judicial protection available for like material and reasonable advance notice is given to the Company. Advisor will exercise all reasonable precautions to physically protect the integrity and confidentiality of the Confidential Information and will not remove any Confidential Information or copies thereof from the Company' premises except to the extent necessary to fulfill the Advisory Services, and then only with the Company's prior consent.

c) **Third Party Confidential Information**. Advisor recognizes that the Company has received and in the future will receive from third parties confidential or proprietary information subject to a duty on the Company's part to maintain the confidentiality of such information and to use it only for certain limited purposes. Advisor agrees that Advisor owes the Company and such third parties, during the term of this Agreement and thereafter, a duty to hold all such confidential or proprietary information in the strictest confidence in accordance with the Company's obligations to such third party, and not to disclose it to any person, firm or corporation or to use it except in carrying out the Advisory Services for the Company consistent with the Company's agreement with such third party.

5. **Representations and Warranties.** Advisor represents and warrants that: (a) Advisor is under no contractual or other obligation or restriction which is inconsistent with Advisor's execution of this Agreement or the performance of the Advisory Services; (b) Advisor has the full right and authority to enter into this Agreement and perform Advisor's obligations hereunder; (c) Advisor has the right and unrestricted ability to assign the Work Product pursuant hereto; and (d) Advisor's performance of all the terms of this Agreement and as a provider of services to the Company does not and will not breach any agreement to keep in confidence proprietary information, knowledge or data acquired by Advisor in confidence or in trust prior to or during this Agreement.

6. **Nondisparagement.** Advisor agrees not to disparage the Company, and the Company's attorneys, directors, managers, partners, employees, agents and affiliates, in any manner likely to be harmful to them or their business, business reputation or personal reputation. The Company agrees that the members of its senior management team will not disparage Advisor in any manner likely to be harmful to her or her business, business reputation or personal reputation. Notwithtanding the foregoing, any person or entity may respond accurately and fully to any question, inquiry or request for information when required by legal process.

7. **Term and Termination**

a) **Term**. This Agreement will commence on the Effective Date and continue until the six (6) month anniversary thereof.

b) **Termination by the Company**. Either party may terminate this Agreement at any time without cause upon not less than thirty (30) days' prior written notice to the other party.

c) **Effect of Expiration/Termination.** Upon expiration or termination of this Agreement, neither the Company nor Advisor will have any further obligations under this Agreement, except (a) the liabilities accrued through the date of termination, and (b) the obligations under sections 3, 4, 5, 6, 7 and 8 will survive. Upon expiration or termination, and in any case upon the Company's request, Advisor will return immediately to the Company any Company property and all tangible Confidential Information, including all copies and reproductions thereof, except for one (1) copy which may be retained solely for archival purposes, and shall delete any such Company Confidential Information from Advisor's computer storage or any other media (including, but not limited to, online and off-line libraries).

8. **Miscellaneous**

a) **Independent Contractor**. All Advisory Services will be rendered by Advisor as an independent contractor and this Agreement does not create an employer-employee relationship between the Company and Advisor. Advisor will not in any way represent himself to be an employee, partner, joint venturer, or agent of the Company. Advisor is not authorized to make any representation, contract, or commitment on behalf of the Company or incur any liabilities or obligations of any kind in the name of or on behalf of the Company.

b) **Taxes.** Advisor and the Company agree that the Company will treat Advisor as an independent contractor for purposes of all tax laws (local, state and federal) and file forms consistent with that status. Advisor agrees, as an independent contractor, that Advisor is not entitled to unemployment benefits in the event this Agreement terminates, or workers' compensation benefits in the event that Advisor is injured in any manner while performing obligations under this Agreement. Advisor will be solely responsible to pay any and all local, state, and/or federal income, social security and unemployment taxes for Advisor and

Advisor's employees. The Company will not withhold any taxes or prepare W-2 Forms for Advisor, but will provide Advisor with a Form 1099, if required by law. Advisor is solely responsible for, and will timely file all tax returns and payments required to be filed with, or made to, any federal, state or local tax authority with respect to the performance of services and receipt of fees under this Agreement.

c) **Assignability and Binding Effect**. The Advisory Services to be rendered by Advisor are personal in nature. Advisor may not assign or transfer this Agreement or any of Advisor's rights or obligations hereunder except to a corporation of which Advisor is the sole stockholder. In no event will Advisor assign or delegate responsibility for actual performance of the Advisory Services to any other natural person. This Agreement will be binding upon and inure to the benefit of the parties and their respective legal representatives, heirs, successors and permitted assigns. The Company may assign this Agreement to any other corporation or entity which acquires (whether by purchase, merger, consolidation or otherwise) all or substantially all of the business and/or assets of the Company.

d) **Notices**. Any notices or other communications from one party to the other will be in writing and will be given by addressing the same to the other at the address or facsimile number set forth in this Agreement. Notices to the Company will be marked "Attention: Chief Fnancial Officer". Notice will be deemed to have been duly given when (a) deposited in the United States mail with proper postage for first class Registered or Certified Mail prepaid, return receipt requested, (b) sent by any reputable commercial courier, delivery confirmation requested, (c) delivered personally, or (d) if promptly confirmed by mail or commercial courier as provided above, when dispatched by facsimile.

e) **Amendment.** This Agreement may be amended or modified only by a writing signed by authorized representatives of both parties.

f) **No. Waiver.** No waiver of any term or condition of this Agreement shall be valid or binding on either party unless the same shall be been mutually assented to in writing by both parties. The failure of either party to enforce at any time any of the provisions of this Agreement, or the failure to require at any time performance by the other party of any of the provisions of this Agreement, shall in no way be construed to be a present or future waiver of such provisions, nor in any way affect the right of either party to enforce each and every such provision thereafter. The express waiver by either party of any provision, condition or requirement of this Agreement shall not constitute a waiver of any future obligation to comply with such provision, condition or requirement.

g) **Severability.** In the event that any one or more of the provisions contained in this Agreement will, for any reason, be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability will not affect any other provisions of this Agreement, and all other provisions will remain in full force and effect. If any provision of this Agreement is held to be excessively broad, it will be reformed and construed by limiting and reducing it so as to be enforceable to the maximum extent permitted by law.

h) **Entire Agreement.** This Agreement and the Option Agreements constitute the entire agreement of the parties with regard to its subject matter, and supersede all previous written or oral representations, agreements and understandings between the parties. Nothing contained herein shall relieve Advisor of any obligations under that certain Employee Non-Solicitation, Non-Competition, Confidential Information and Inventions Assignment Agreement executed by Advisor in connection with the commencement of Advisor's employment with the Company.

i) **Governing Law**. This Agreement will be governed by, and construed and enforced in accordance with, the laws of the Commonwealth of Massachusetts applicable to contracts made and to be

performed therein, without giving effect to the principles thereof relating to the conflict of laws, and any action arising out of or related to this Agreement shall be maintained in a court sitting in the Suffolk County, and the Commonwealth of Massachusetts.

j) **Remedies.** Advisor's obligations under this Agreement are of a unique character that gives them particular value; breach of any of such obligations will result in irreparable and continuing damage to the Company for which there will be no adequate remedy at law; and, in the event of such breach, the Company will be entitled to injunctive relief and/or a decree for specific performance, and such other and further relief as may be proper. Advisor and the Company further agree that no bond or other security shall be required in obtaining such equitable relief.

k) **Counterparts**. This Agreement may be executed in any number of counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.

[***Signature Page Follows***]

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the Effective Date.

Flex Pharma, Inc.

By: /s/ John McCabe

Name: John P. McCabe

Title: CFO

Address: 800 Boylston Street, 24th Floor
Boston, MA 02199

Thomas Wessel

/s/ Thomas Wessel

Address: [ ]
[ ]

Exhibit 31.1

Certification Pursuant to Securities Exchange Act Rules 13a-14 and 15d-14 as adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, William McVicar, President and Chief Executive Officer, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Flex Pharma, Inc.;

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

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

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

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

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

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

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

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

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

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

/s/ William McVicar

William McVicar, Ph.D.

President and Chief Executive Officer
(Principal Executive Officer)

August 1, 2018

Exhibit 31.2

Certification Pursuant to Securities Exchange Act Rules 13a-14 and 15d-14 as adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, John McCabe, Chief Financial Officer, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Flex Pharma, Inc.;

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

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

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

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

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

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

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

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

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

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

/s/ John McCabe

John McCabe

Chief Financial Officer
(Principal Financial and Accounting Officer)

August 1, 2018

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 Flex Pharma, Inc. (the "Company") for the fiscal period ended June 30, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of their knowledge:

(1) The Report 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.

/s/ William McVicar

William McVicar, Ph.D.

President and Chief Executive Officer
(Principal Executive Officer)

August 1, 2018

/s/ John McCabe

John McCabe

Chief Financial Officer
(Principal Financial and Accounting Officer)

August 1, 2018

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Flex Pharma, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.