ADAMAS PHARMACEUTICALS INC

FORM 10-Q
(Quarterly Report)

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Sector	Healthcare
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

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

For the quarterly period ended June 30, 2017

or

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

For the transition period from to

Commission File No. 001-36399

ADAMAS PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**42-1560076**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)
1900 Powell Street, Suite 750	
Emeryville, CA	**94608**
(Address of Principal Executive Offices)	(Zip Code)

Registrant's Telephone Number, Including Area Code: **(510) 450-3500**

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

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

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

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

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

Number of shares outstanding of the issuer's common stock, par value $0.001 per share, as of July 31, 2017 was 22,514,076 .

ADAMAS PHARMACEUTICALS, INC.
QUARTERLY REPORT ON FORM 10-Q
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PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

ADAMAS PHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(unaudited)
(in thousands, except share and per share data)

	June 30, 2017	December 31, 2016
Assets		
Current assets		
Cash and cash equivalents	$ 33,618	$ 23,735
Available-for-sale securities	94,725	89,917
Accounts receivable	34	794
Prepaid expenses and other current assets	1,814	2,541
Total current assets	130,191	116,987
Property and equipment, net	3,107	3,156
Available-for-sale securities, non-current	16,586	22,292
Other assets	38	38
Total assets	$ 149,922	$ 142,473
Liabilities and stockholders' equity		
Current liabilities		
Accounts payable	$ 4,385	$ 3,589
Accrued liabilities	6,396	5,867
Other current liabilities	268	287
Total current liabilities	11,049	9,743
Long-term debt	33,768	—
Other non-current liabilities	1,201	547
Total liabilities	46,018	10,290
Commitments and Contingencies (Note 6)		
Stockholders' equity		
Preferred stock, $0.001 par value — 5,000,000 shares authorized, and zero shares issued and outstanding at June 30, 2017 and December 31, 2016	—	—
Common stock, $0.001 par value — 100,000,000 shares authorized, 22,462,838 and 22,013,644 shares issued and outstanding at June 30, 2017 and December 31, 2016, respectively	27	27
Additional paid-in capital	263,042	254,558
Accumulated other comprehensive loss	(183)	(193)
Accumulated deficit	(158,982)	(122,209)
Total stockholders' equity	103,904	132,183
Total liabilities and stockholders' equity	$ 149,922	$ 142,473

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

ADAMAS PHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(unaudited)
(in thousands, except per share data)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Revenue	$ 2	$ 222	$ 2	$ 397
Operating expenses				
Research and development	7,176	9,224	14,264	16,746
General and administrative, net	13,115	8,058	22,259	14,699
Total operating expenses	20,291	17,282	36,523	31,445
Loss from operations	(20,289)	(17,060)	(36,521)	(31,048)
Interest and other income, net	222	184	426	344
Interest expense	(729)	—	(729)	—
Loss before income taxes	(20,796)	(16,876)	(36,824)	(30,704)
Benefit for income taxes	(51)	—	(51)	—
Net loss	$ (20,745)	$ (16,876)	$ (36,773)	$ (30,704)
Net loss per share, basic and diluted	$ (0.93)	$ (0.78)	$ (1.65)	$ (1.43)
Weighted average shares used in computing net loss per share, basic and diluted	22,392	21,650	22,300	21,452

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

ADAMAS PHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(unaudited)
(in thousands)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Net loss	$ (20,745)	$ (16,876)	$ (36,773)	$ (30,704)
Unrealized gain (loss) on available-for-sale securities	(17)	21	10	190
Comprehensive loss	$ (20,762)	$ (16,855)	$ (36,763)	$ (30,514)

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

ADAMAS PHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(unaudited)
(in thousands)

	Six Months Ended June 30,	
	2017	**2016**
Cash flows from operating activities		
Net loss	$ (36,773)	$ (30,704)
Adjustments to reconcile net loss to net cash used in operating activities		
Depreciation	572	328
Stock-based compensation	6,649	5,184
Non-cash interest expense	729	—
Net accretion of discounts and amortization of premiums of available-for-sale securities	(71)	407
Changes in assets and liabilities		
Accrued interest of available-for-sale securities	(50)	226
Prepaid expenses and other assets	730	(1,227)
Accounts receivable	760	424
Accounts payable	509	1,525
Accrued liabilities and other liabilities	325	(674)
Net cash used in operating activities	(26,620)	(24,511)
Cash flows from investing activities		
Purchases of property and equipment	(621)	(1,244)
Purchases of available-for-sale securities	(40,071)	—
Maturities of available-for-sale securities	41,100	37,653
Net cash provided by investing activities	408	36,409
Cash flows from financing activities		
Proceeds from issuance of long-term debt	34,600	—
Proceeds from public offerings, net of offering costs	—	61,822
Payment of debt issuance costs	(136)	—
Proceeds from issuance of common stock upon exercise of stock options	1,201	2,122
Proceeds from employee stock purchase plan	430	326
Net cash provided by financing activities	36,095	64,270
Net increase in cash and cash equivalents	9,883	76,168
Cash and cash equivalents at beginning of period	23,735	33,104
Cash and cash equivalents at end of period	$ 33,618	$ 109,272
Supplemental disclosure of noncash investing and financing activities		
Debt issuance costs in accounts payable and accrued expense	$ 460	$ —
Purchases of property and equipment in accounts payable and accrued expense	$ 51	$ 267

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

ADAMAS PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(unaudited)

1. DESCRIPTION OF BUSINESS

Adamas Pharmaceuticals, Inc. (the "Company") discovers and develops new medicines to treat chronic neurologic disorders. The Company's portfolio includes:

ADS-5102 : a high-dose amantadine therapy taken once-daily at bedtime.

ADS-5102 for Levodopa-Induced Dyskinesia in Patients with Parkinson's Disease

A New Drug Application ("NDA") for the treatment of levodopa-induced dyskinesia (LID) in patients with Parkinson's disease is under review by the Food and Drug Administration ("FDA") with a Prescription Drug User Fee Act ("PDUFA") date, or deadline by which the FDA must review the NDA, of August 24, 2017. Levodopa-induced dyskinesia is a form of dyskinesia (abnormality or impairment of voluntary movement) associated with levodopa therapy, a drug used to treat Parkinson's disease. If approved, the Company plans to initiate access to ADS-5102 for patients in 2017 and execute a full launch of the medicine via the deployment of sales representatives with marketing and promotional support in January 2018.

ADS-5102 for Multiple Sclerosis Walking Impairment

The Company completed a Phase 2, 4-week proof-of-concept study designed to evaluate ADS-5102 in patients with multiple sclerosis (MS) who have walking impairment, with plans to initiate a Phase 3 study in Q1 2018.

ADS-4101 : an investigational high-dose lacosamide to be taken once-daily at bedtime.

ADS-4101 for Partial Onset Seizures in Patients with Epilepsy

Lacosamide is an anti-epilepsy active ingredient previously approved by the FDA and currently marketed by UCB SA/NV as VIMPAT ® (lacosamide). The Company is currently conducting a multi-dose Phase 1b study designed to evaluate the tolerability and pharmacokinetic profile of three ascending doses of ADS-4101 (up to 600 mg/day) taken once -daily at bedtime compared to ascending doses of twice daily VIMPAT tablets in 24 healthy volunteers.

Namzaric ® (memantine hydrochloride extended-release and donepezil hydrochloride) capsules and **Namenda XR** ® (memantine hydrochloride) extended-release capsules.

These two commercially available medicines currently marketed by Forest Laboratories Holdings Limited ("Forest"), an indirect wholly-owned subsidiary of Allergan plc (collectively, "Allergan") in the United States for the treatment of moderate to severe Alzheimer's disease. The Company is eligible to receive royalties on net sales of Namenda XR ® and Namzaric ® beginning in June of 2018 and May of 2020, respectively.

The Company was incorporated in the State of Delaware on November 15, 2000, and operates as one segment. The Company's headquarters and operations are located in Emeryville, California.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. The unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") for interim financial information and with instructions to Form 10-Q and Article 10 of Regulation S-X. The financial statements include all adjustments (consisting only of normal recurring adjustments) that the Company believes are necessary for a fair presentation of the periods presented. The condensed consolidated balance sheet at December 31, 2016 was derived from the audited consolidated financial statements, but does not include all disclosures required by U.S. GAAP. These

interim financial results are not necessarily indicative of results to be expected for the full fiscal year or any other future period and should be read in conjunction with the audited consolidated financial statements and the related notes thereto for the year ended December 31, 2016 , included in the Company's Annual Report on Form 10-K filed with the U.S. Securities and Exchange Commission, or SEC.

Use of Estimates

The preparation of the accompanying consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities and the reported amounts of revenues and expenses in the consolidated financial statements and the accompanying notes. On an ongoing basis, management evaluates its estimates, including those related to revenue recognition, clinical trial accruals, fair value of assets and liabilities including short-term and long-term classification, embedded derivatives, income taxes, and stock-based compensation. Management bases its estimates on historical experience and on various other market-specific and relevant assumptions that management believes to be reasonable under the circumstances. Actual results may differ from those estimates.

Liquidity and Financial Condition

To date, a substantial majority of the Company's resources have been dedicated to the research and development of its products. The Company has not generated any commercial revenue from the sale of its products, and does not anticipate the generation of any commercial product revenue until it receives the necessary regulatory approval to launch one of its products.

Based upon the current status of, and plans for, its product development and commercialization, the Company believes that the existing cash, cash equivalents, and investments of $144.9 million as of June 30, 2017 will be adequate to satisfy the Company's capital needs through at least the next twelve months from the issuance of this Quarterly Report on Form 10-Q. However, the process of developing and commercializing products requires significant research and development, preclinical testing and clinical trials, manufacturing arrangements, as well as regulatory approvals. These activities, together with the Company's general and administrative expenses, are expected to result in significant operating losses until the commercialization of the Company's products or license agreements generate sufficient revenue to offset expenses. While the Company had net income during 2014, 2013, and 2012, it has not generated any commercial revenue from sales of its products. Under its license agreement with Allergan, the Company received the final milestone payment in 2014, and is not entitled to receive any royalties for net sales of Namzaric ® until mid-2020 and Namenda XR ® until mid-2018. To achieve sustained profitability, the Company, alone or with others, must successfully develop its product candidates, obtain required regulatory approvals, and successfully manufacture and market its products.

Revenue Recognition

The Company recognizes revenue when all four of the following criteria have been met: (i) persuasive evidence of an arrangement exists, (ii) delivery has occurred or services have been rendered, (iii) the fee is fixed or determinable, and (iv) collectability is reasonably assured. Revenue under license arrangements is recognized based on the performance requirements of the contract. Determinations of whether persuasive evidence of an arrangement exists and whether delivery has occurred or services have been rendered are based on management's judgments regarding the fixed nature of the fees charged for deliverables and the collectability of those fees. Should changes in conditions cause management to determine that these criteria are not met for any new or modified transactions, revenue recognized could be adversely affected.

The Company generates revenue from collaboration and license agreements for the development and commercialization of products. Collaboration and license agreements may include non-refundable upfront license fees, partial or complete reimbursement of research and development costs, contingent consideration payments based on the achievement of defined objectives, and royalties on sales of commercialized products. The Company's performance obligations under the collaboration and license agreements may include the license or transfer of intellectual property rights, obligations to provide research and development services and related materials, and obligations to participate on certain development and/or commercialization committees with the partners.

For revenue agreements with multiple-element arrangements, the Company allocates revenue to each non-contingent element based on the relative-selling-price of each element in an arrangement. When applying the relative-

selling-price method, the Company determines the selling price for each deliverable using the following estimation hierarchy: (i) vendor-specific objective evidence of fair value of the deliverable, if it exists, (ii) third-party evidence of selling price, if vendor-specific objective evidence is not available, or (iii) the vendor's best estimate of selling price, if neither vendor-specific nor third-party evidence is available. Revenue allocated is then recognized when the four basic revenue recognition criteria, mentioned above, are met for each element.

The Company recognizes payments that are contingent upon achievement of a substantive milestone in their entirety in the period in which the milestone is achieved. Milestones are defined as events that can only be achieved based on the Company's performance and there is substantive uncertainty about whether the event will be achieved at the inception of the arrangement. Events that are contingent only on the passage of time or only on counterparty performance are not considered milestones subject to this guidance. Further, the amounts received must relate solely to prior performance, be reasonable relative to all of the deliverables and payment terms within the agreement and commensurate with the Company's performance to achieve the milestone after commencement of the agreement.

Amounts related to research and development funding and full-time equivalent employees assigned to the license agreement are recognized as the related services or activities are performed, in accordance with the contract terms.

Accounts Receivable

The Company's accounts receivable balance consists of amounts due from Allergan, in accordance with the contract terms of the license agreement, for research and development funding and full-time equivalent employees assigned to the Allergan license agreement, as well as for reimbursement of external costs, recorded as contra-expense, associated with supporting prosecution and litigation of intellectual property rights.

Clinical Trial Accruals

The Company's clinical trial accruals are based on estimates of patient enrollment and related costs at clinical investigator sites as well as estimates for the services received and efforts expended pursuant to contracts with multiple research institutions and contract research organizations ("CROs") that conduct and manage clinical trials on the Company's behalf.

The Company estimates clinical trial expenses based on the services performed pursuant to contracts with research institutions and CROs that conduct and manage clinical trials on its behalf. In accruing service fees, the Company obtains the reported level of patient enrollment at each site and estimates the time period over which services are to be performed and activity expended in each period. If the actual timing of the performance of services or the level of effort varies from the estimate, the Company will adjust the accrual accordingly. Payments made to third parties under these arrangements in advance of the receipt of the related services are recorded as prepaid expenses until the services are rendered.

Research and Development

Research and development ("R&D") expenses include salaries and related compensation, contractor and consultant fees, external clinical trial expenses performed by CROs, licensing fees, acquired intellectual property with no alternative future use, and facility and administrative expense allocations. In addition, the Company funds R&D at research institutions under agreements that are generally cancelable at its option. Research costs typically consist of applied research and preclinical and toxicology work. Pharmaceutical manufacturing development costs consist of product formulation, chemical analysis, and the transfer and scale-up of manufacturing at facilities operated by the Company's contract manufacturers. Clinical development costs include the costs of Phase 1, Phase 2, and Phase 3 clinical trials. These costs are a significant component of the Company's research and development expenses.

The Company accrues costs for clinical trial activities performed by contract research organizations and other third parties based upon the estimated amount of work completed on each study as provided by the CRO. These estimates are reviewed for reasonableness by the Company's internal clinical personnel, and the Company aims to match the accrual to actual services performed by the organizations as determined by patient enrollment levels and related activities. The Company monitors patient enrollment levels and related activities using available information; however, if the Company underestimates activity levels associated with various studies at a given point in time, the Company could be required to record significant additional R&D expenses in future periods when the actual activity level becomes

known. The Company charges all such costs to R&D expenses. Non-refundable advance payments are capitalized and expensed as the related goods are delivered or services are performed.

Long-Term Debt

Long-term debt consists of the Company's loan agreement with HealthCare Royalty Partners ("HCRP"). The Company accounted for the loan agreement as a debt financing arrangement. Interest expense is accrued using the effective interest rate method over the estimated period the debt will be repaid. Debt issuance costs have been recorded as a debt discount in the Company's consolidated balance sheets and are being amortized and recorded as interest expense throughout the life of the loan using the effective interest rate method. The Company must make certain assumptions and estimates, including future royalties and net product sales, in determining the expected repayment term and amortization period of the debt discount, as well as the classification between current and long-term portions. The Company periodically assesses these assumptions and estimates, and adjusts the liabilities accordingly.

Embedded Derivatives Related to Debt Instruments

Embedded derivatives that are required to be bifurcated from their host contract are evaluated and valued separately from the debt instrument. Under the Company's loan agreement with HCRP, upon the occurrence of a default or a change in control, the Company may be required to make mandatory prepayments of the borrowings. The prepayment premium is considered an embedded derivative, as the holder of the loans may exercise the option to require prepayment by the Company. Further, in the event of a regulatory change that results in a material adverse effect on HCRP's rate of return, the Company shall pay directly to HCRP an amount that compensates HCRP for such reduction. The embedded derivative is presented as a component of other non-current liabilities. The Company will remeasure the embedded derivatives each reporting period and report changes in the estimated fair value as gains or losses in interest and other income, net, in the condensed consolidated statement of operations.

Basic and Diluted Net Loss Per Share

Basic net loss per share is based upon the weighted average number of common shares outstanding during the period. Diluted net loss per share is based upon the weighted average number of common shares outstanding and dilutive common stock equivalents outstanding during the period. Common stock equivalents are options granted under the Company's stock awards plans and are calculated under the treasury stock method. Common equivalent shares from unexercised stock options and unvested restricted stock units are excluded from the computation when there is a loss as their effect is anti-dilutive, or if the exercise price of such options is greater than the average market price of the stock for the period. The Company incurred net losses for all periods presented and there were no reconciling items for potentially dilutive securities. For the three and six months ended June 30, 2017 , approximately 6,107,000 and 5,899,000 , respectively, shares of potentially dilutive securities were excluded from the computation of diluted net income per share as their effect would have been anti-dilutive. For the three and six months ended June 30, 2016 , approximately 5,714,000 and 5,542,000 , respectively, shares of potentially dilutive securities were excluded from the computation of diluted net income per share as their effect would have been anti-dilutive.

Stock-Based Compensation

The Company accounts for stock-based compensation of stock options granted to employees and directors and for employee stock purchase plan shares by estimating the fair value of stock-based awards using the Black-Scholes option-pricing model. The Company accounts for stock-based compensation of restricted stock units granted to employees based on the closing price of the Company's common stock on the date of grant. The fair value of stock-based awards is recognized and amortized over the applicable vesting period. All stock options awarded to non-employees are accounted for at the fair value of the consideration received or the fair value of the equity instrument issued, as calculated using the Black-Scholes model. Stock options granted to non-employees are subject to periodic revaluation at each reporting date as the underlying equity instruments vest.

In order to estimate the value of share-based awards, the Company uses the Black-Scholes model, which requires the use of certain subjective assumptions. The most significant subjective assumptions are management's estimates of the expected volatility and the expected term of the award. In addition, judgment is also required in estimating the amount of share-based awards that are expected to be forfeited. If actual results differ significantly from any of these estimates, stock-based compensation expense and the Company's results of operations could be materially impacted.

Recent Accounting Pronouncements

In May 2014, the FASB issued Accounting Standards Update ("ASU") No. 2014-09, *Revenue from Contracts with Customers* . The amendment in this ASU provides guidance on the revenue recognition to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The core principle of this update provides guidance to identify the performance obligations under the contract(s) with a customer and how to allocate the transaction price to the performance obligations in the contract. It further provides guidance to recognize revenue when (or as) the entity satisfies a performance obligation. This standard will replace most existing revenue recognition guidance. On July 9, 2015, the FASB approved a one-year deferral of the effective date of this standard to 2018 for public companies, with an option that would permit companies to adopt the standard as early as the original effective date of 2017. Early adoption prior to the original effective date is not permitted. Since the issuance of ASU 2014-09, the FASB has issued several amendments which clarify certain points, including ASU 2016-08, *Principal versus Agent Considerations (Reporting Revenue Gross versus Net)* , ASU 2016-10, *Identifying Performance Obligations and Licensing* , ASU 2016-11, *Rescission of SEC Guidance Because of Accounting Standards Updates 2014-09 and 2014-16 Pursuant to Staff Announcements at the March 3, 2016 EITF Meeting* , ASU 2016-12, *Narrow-Scope Improvements and Practical Expedients,* and ASU 2016-20 *, Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers.* The Company plans to adopt the new standard in the first quarter of fiscal year 2018. The Company is currently evaluating the method of adoption and effect the new guidance will have on its consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, *Leases* . The authoritative guidance significantly amends the current accounting for leases. Under the new provisions, all lessees will report a right-of-use asset and a liability for the obligation to make payments for all leases with the exception of those leases with a term of 12 months or less. All other leases will fall into one of two categories: (i) a financing lease or (ii) an operating lease. Lessor accounting remains substantially unchanged with the exception that no leases entered into after the effective date will be classified as leveraged leases. For sale leaseback transactions, a sale will only be recognized if the criteria in the new revenue recognition standard are met. For public business entities, this guidance is effective for fiscal periods beginning after December 15, 2018 and interim periods thereafter. Early adoption is permitted. The Company is currently evaluating the effect the new guidance will have on its consolidated financial statements.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses of Financial Instruments.* The new guidance changes the methodology for measuring credit losses on financial instruments and the timing of when such losses are recorded. This guidance is effective for fiscal years beginning after December 15, 2019. Early adoption is permitted. The Company is currently evaluating the effect the new guidance will have on its consolidated financial statements.

In May 2017, the FASB issued ASU No. 2017-09, *Compensation-Stock Compensation (Topic 718) – Scope of Modification Accounting.* The new guidance clarifies when to account for a change to the terms or conditions of a share-based payment award as a modification. This guidance is effective for fiscal years beginning after December 15, 2017. Early adoption is permitted. The Company does not expect the adoption of the new guidance to have a material impact on its consolidated financial statements.

3. FAIR VALUE MEASUREMENTS

In accordance with ASC 820-10, Fair Value Measurements and Disclosures, the Company determines the fair value of financial and non-financial assets and liabilities using the fair value hierarchy, which establishes three levels of inputs that may be used to measure fair value, as follows:

- Level 1 inputs, which include quoted prices in active markets for identical assets or liabilities;
- Level 2 inputs, which include observable inputs other than Level 1 inputs, such as quoted prices for similar assets or liabilities, quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the asset or liability. For available-for-sale securities, the Company reviews trading activity and pricing as of the measurement date. When sufficient quoted pricing for identical securities is not available,

the Company uses market pricing and other observable market inputs for similar securities obtained from various third-party data providers. These inputs either represent quoted prices for similar assets in active markets or have been derived from observable market data; and

- Level 3 inputs, which include unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the underlying asset or liability. Level 3 assets and liabilities include those whose fair value measurements are determined using pricing models, discounted cash flow methodologies, or similar valuation techniques, as well as significant management judgment or estimation.

The following table represents the fair value hierarchy for the Company's financial assets and liabilities which require fair value measurement on a recurring basis (in thousands):

	June 30, 2017			
	Total	Level 1	Level 2	Level 3
Assets:				
Money market	$ 19,960	$ 19,960		$ —
Corporate debt	43,120	—	43,120	—
U.S. Treasury notes	68,191	—	68,191	—
Total assets measured at fair value	$ 131,271	$ 19,960	$ 111,311	$ —
Liabilities:				
Embedded derivative liability	$ 764	$ —	$ —	$ 764
Total liabilities measured at fair value	$ 764	$ —	$ —	$ 764

	December 31, 2016			
	Total	Level 1	Level 2	Level 3
Assets:				
Money market	$ 192	$ 192	$ —	$ —
Corporate debt	51,233	—	51,233	—
U.S. Treasury notes	60,976	—	60,976	—
Total assets measured at fair value	$ 112,401	$ 192	$ 112,209	$ —

Money market funds are highly liquid investments and are actively traded. The pricing information on these investment instruments are readily available and can be independently validated as of the measurement date. This approach results in the classification of these securities as Level 1 of the fair value hierarchy.

Corporate debt and U.S. Treasury notes are measured at fair value using Level 2 inputs. The Company reviews trading activity and pricing for these investments as of each measurement date. When sufficient quoted pricing for identical securities is not available, the Company uses market pricing and other observable market inputs for similar securities obtained from various third party data providers. These inputs represent quoted prices for similar assets in active markets or these inputs have been derived from observable market data. This approach results in the classification of these securities as Level 2 of the fair value hierarchy. In certain cases where there is limited activity or less transparency around inputs to valuation, the related assets or liabilities are classified as Level 3. The Company classified an embedded derivative related to the Royalty-Backed Loan as a Level 3 liability.

The fair value of the embedded derivative as a result of a change in control was calculated using a probability-weighted discounted cash flow model. The model used in valuing this embedded derivative requires the use of significant estimates and assumptions including but not limited to: 1) expected cash flows the Company expects to receive on U.S. net sales of ADS-5102 and on royalties from Allergan on U.S. net sales of Namzaric ®; 2) the Company's risk adjusted discount rates; 3) the probability of FDA approval and receipt of Orphan Drug exclusivity for ADS-5102 for the treatment of LID; and 4) the probability of a change in control occurring during the term of the note based on the percentage of similar companies that were acquired over the previous five year period. Changes in the estimated fair value of the bifurcated embedded derivative are reported as gains or losses in interest and other income, net, in the condensed consolidated statement of operations. In the periods presented, the embedded derivative value as a result of an event of default and the value as a result of increased costs due to a regulatory change are both not material, but could

become material in future periods if a specified event of default or regulatory change became more probable than is currently estimated. See Note 7 “Long-Term Debt,” for further description.

There were no transfers between any of the levels of the fair value hierarchy during the three and six months ended June 30, 2017 .

4. INVESTMENTS

The Company’s investments consist of corporate debt and U.S. Treasury notes classified as available-for-sale securities.

The Company limits the amount of investment exposure as to institution, maturity, and investment type. To mitigate credit risk, the Company invests in investment grade corporate debt and United States Treasury notes. Such securities are reported at fair value, with unrealized gains and losses excluded from earnings and shown separately as a component of accumulated other comprehensive loss within stockholders’ equity. Realized gains and losses are reclassified from other comprehensive loss to other income (expense) on the condensed consolidated statements of operations when incurred. The Company may pay a premium or receive a discount upon the purchase of available-for-sale securities. Interest earned and gains realized on available-for-sale securities and amortization of discounts received and accretion of premiums paid on the purchase of available-for-sale securities are included in investment income.

The following table is a summary of amortized cost, unrealized gain and loss, and the fair value of available-for-sale securities as of June 30, 2017 and December 31, 2016 (in thousands):

	June 30, 2017			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Investments:				
Corporate debt	$ 43,185	$ 1	$ (66)	$ 43,120
U.S. Treasury notes	68,309	—	(118)	68,191
Total	$ 111,494	$ 1	$ (184)	$ 111,311
Reported as:				
Short-term investments	$ 94,891	$ 1	$ (167)	$ 94,725
Long-term investments	16,603	—	(17)	16,586
Total	$ 111,494	$ 1	$ (184)	$ 111,311

	December 31, 2016			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Investments:				
Corporate debt	$ 51,354	$ —	$ (121)	$ 51,233
U.S. Treasury notes	61,048	5	(77)	60,976
Total	$ 112,402	$ 5	$ (198)	$ 112,209
Reported as:				
Short-term investments	$ 90,050	$ 1	$ (134)	$ 89,917
Long-term investments	22,352	4	(64)	22,292
Total	$ 112,402	$ 5	$ (198)	$ 112,209

Short-term and long-term investments include accrued interest of $0.4 million and $0.1 million , respectively, as of June 30, 2017 . Short-term and long-term investments includes accrued interest of $0.3 million and $0.1 million , respectively, as of December 31, 2016 . The Company has not incurred any realized gains or losses on investments for the three and six months ended June 30, 2017 and 2016 . Investments are classified as short-term or long-term depending on

the underlying investment's maturity date. Long-term investments held by the Company have a maturity date range of greater than 12 months and a maximum of 15 months as of June 30, 2017 .

5. LICENSE AGREEMENTS

In November 2012, the Company granted Allergan an exclusive license, with right to sublicense, certain of the Company's intellectual property rights relating to human therapeutics containing memantine in the United States. In connection with these rights, Allergan markets and sells Namzaric ® and Namenda XR ® for the treatment of moderate to severe dementia related to Alzheimer's disease. Pursuant to the agreement, Allergan made an upfront payment of $65.0 million . The Company earned and received additional cash payments totaling $95.0 million upon achievement by Allergan of certain development and regulatory milestones. Under the agreement, external costs incurred related to the prosecution and litigation of intellectual property rights are reimbursable. For the six months ended June 30, 2017 and 2016 , reimbursed expenses amounting to zero and $1.2 million , respectively, are reflected as a reduction to general and administrative, net. In addition, the Company may earn tiered royalty payments based on future net sales of Namzaric ® and Namenda XR ® .

The Company is entitled to receive royalties on net sales in the United States by Allergan, its affiliates, or any of its sublicensees of controlled-release versions of memantine products covered by the terms of the license agreement. Beginning in May 2020, the Company will be entitled to receive royalties in the low to mid-teens from Allergan for sales of Namzaric ® in the United States. Beginning in June 2018, the Company will be entitled to receive royalties in the low to mid-single digits for sales of Namenda XR ® in the United States. Allergan's obligation to pay royalties with respect to fixed-dose memantine-donepezil products, including Namzaric ® , continues until the later of (i) 15 years after the commercial launch of the first fixed-dose memantine-donepezil product by Allergan in the United States or (ii) the expiration of the Orange Book listed patents for which Allergan obtained rights from the Company covering such product. Allergan's obligation to pay royalties with respect to Namenda XR ® continues until the expiration of the Orange Book listed patents covering such products. However, Allergan's obligation to pay royalties for any product covered by the license is eliminated in any quarter where there is significant competition from generics.

6. COMMITMENTS AND CONTINGENCIES

Lease Commitments

The Company leases approximately 18,500 square feet of office space in Emeryville, California under an operating lease that expires April 30, 2020. The lease provides for periods of escalating rent. The total cash payments over the life of the lease are divided by the total number of months in the lease period and the average rent is charged to expense each month during the lease period.

As of June 30, 2017 , future minimum lease payments under the non-cancelable facility operating lease were as follows (in thousands):

	June 30, 2017
2017 (remaining)	$ 307
2018	634
2019	653
2020	224
2021	—
Thereafter	—
Total	$ 1,818

Purchase Commitments

The Company enters into contracts in the normal course of business that include, among others, arrangements with CROs for clinical trials, vendors for pre-clinical research, and vendors for manufacturing. These contracts generally provide for termination upon notice, and therefore the Company believes that its obligations under these agreements are not material.

Contingencies

In the normal course of business, the Company enters into contracts and agreements that contain a variety of representations and warranties and provide for general indemnifications. The Company's exposure under these agreements is unknown, because it involves claims that may be made against the Company in the future, but have not yet been made. The Company accrues a liability for such matters when it is probable that future expenditures will be made and such expenditures can be reasonably estimated.

Indemnification

In accordance with the Company's amended and restated certificate of incorporation and amended and restated bylaws, the Company has indemnification obligations to its officers and directors for certain events or occurrences, subject to certain limits, while they are serving in such capacity. There have been no claims to date, and the Company has a directors and officers liability insurance policy that may enable it to recover a portion of any amounts paid for future claims.

Litigation and Other Legal Proceedings

In November 2012, the Company granted Forest an exclusive license to certain of the Company's intellectual property rights relating to human therapeutics containing memantine in the United States. Under the terms of that license agreement, Forest has the right to enforce such intellectual property rights which are related to its right to market and sell Namzaric ® and Namenda XR ® for the treatment of moderate to severe dementia related to Alzheimer's disease. The Company has a right to participate in, but not control, such enforcement actions by Forest.

As of the date of this filing, several companies have submitted Abbreviated New Drug Applications, or ANDAs, including one or more certifications pursuant to 21 U.S.C. § 355(j)(2)(A)(vii)(iv) to the FDA requesting approval to manufacture and market generic versions of Namenda XR ®, on which the Company is entitled to receive royalties from Forest beginning in June 2018. In the notices, these companies allege that the patents associated with Namenda XR ®, some of which are owned by Forest or licensed by Forest from Merz Pharma GmbH & Co. KGaA, and others of which are owned by the Company and licensed by the Company exclusively to Forest in the United States, are invalid, unenforceable, and/or will not be infringed by the companies' manufacture, use, or sale of generic versions of Namenda XR ®. The Company, Forest, Merz Pharma GmbH & Co. KGaA, and Merz Pharmaceuticals GmbH (together Merz) filed lawsuits in the U.S. District Court for the District of Delaware for infringement of the relevant patents against all of these companies. The Company and Forest will continue to enforce the patents associated with Namenda XR ®.

The Company and Forest have entered into a series of settlement agreements with all Namenda XR ® ANDA filers, except for one recent ANDA filer. Entry dates for generic Namenda XR ® are governed by the settlement agreements in that action. Subject to those agreements, the earliest date on which any of these agreements grants a license to market generic version of Namenda XR ® is January 31, 2020 or in the alternative, an option to launch an authorized generic version of Namenda XR ® beginning on January 31, 2021.

In January 2016, the Delaware District Court issued a claim construction (Markman) ruling in the Namenda XR ® litigation that includes findings of indefiniteness as to certain claim terms in the asserted patents licensed by the Company to Forest. On July 26, 2016, the District Court issued a final judgment of invalidity on those patents based upon the Markman ruling. The Company and Forest filed the notice of appeal of that final judgment to the United States Court of Appeals for the Federal Circuit. The appeal is ongoing. If the appeal is unsuccessful, generic entry of Namenda XR® could occur prior to January 31, 2020.

On June 2, 2017, the Company and Forest filed a lawsuit against the remaining ANDA filer in the U.S. District Court for the District of Delaware for infringement of certain patents based on that filer's filing of an ANDA seeking FDA approval to manufacture and market generic versions of Namenda XR ® that included one or more certifications pursuant to 21 U.S.C. § 355(j)(2)(A)(vii)(iv). This action is ongoing and in a very early stage.

On July 24, 2017, an ANDA filer that previously entered into a settlement agreement with Forrest and Adamas filed a complaint against the Company and Forest in the Court of Chancery of the State of Delaware alleging that Forest and the Company breached the license agreement and settlement agreement entered into with that filer to settle the litigation related to its ANDA referencing Namenda XR ® as the reference listed drug. This action is ongoing and in a very early stage.

Additionally, as of the date of this filing, a number of companies have submitted ANDAs including one or more certifications pursuant to 21 U.S.C. § 355(j)(2)(A)(vii)(iv) to the FDA requesting approval to manufacture and market generic versions of Namzaric ®, on which the Company is entitled to receive royalties from Forest beginning in May 2020. The Company and Forest have filed lawsuits alleging infringement of the relevant patents against Namzaric ® ANDA filers, who are seeking to launch generic versions of Namzaric ®, in the same court as heard the Namenda XR ® litigation. As of the date of this filing, the Company and Forest have settled with all but one of the ANDA filers, including all first filers on all the available dosage forms of Namzaric ® . Entry dates for generic Namzaric ® are governed by the settlement agreements in those actions. Subject to those agreements, the earliest date on which any of these agreements grants a license to market generic version of Namzaric ® is January 1, 2025 or in the alternative, an option to launch an authorized generic version of Namzaric ® beginning on January 1, 2026. The Company and Forest intend to continue to enforce the patents associated with Namzaric ® .

On June 2, 2017, the Company and Forest filed a lawsuit against the remaining ANDA filer in the U.S. District Court for the District of Delaware for infringement of certain patents based on its filing of an ANDA seeking FDA approval to manufacture and market generic versions of Namzaric ® that included one or more certifications pursuant to 21 U.S.C. § 355(j)(2)(A)(vii)(iv). This action is ongoing and in a very early stage.

On April 20, 2017, an opposition was filed against Adamas' European Patent EP 2 506 709 B1, which relates to extended-release compositions comprising amantadine or a pharmaceutically acceptable salt thereof. On May 26, 2017, the Company received a Communication of Notices of Opposition (R. 79(1) EPC) from the European Patent Office that requested the Company file its observations in response to the opposition within a period of four months from May 26, 2017. The Company intends to continue to challenge this opposition.

From time to time, the Company may be party to legal proceedings, investigations, and claims in the ordinary course of its business. Other than the matters described above, the Company is not currently party to any material legal proceedings.

7. LONG-TERM DEBT

Royalty-Backed Loan Agreement

In May 2017, the Company, through a new wholly-owned subsidiary, Adamas Pharma, LLC, entered into a Royalty-Backed Loan with HCRP, whereby the Company borrowed $35.0 million and has the right to receive an additional $65.0 million upon FDA approval and receipt of Orphan Drug exclusivity of ADS-5102 (amantadine) extended-release capsules for the treatment of LID in patients with Parkinson's disease if achieved prior to a specified date. Principal and interest will be payable quarterly from the proceeds of a 12.5% royalty on U.S. net sales of ADS-5102 and up to $15.0 million of the Company's annual royalties from Allergan on U.S. net sales of Namzaric ® starting in May 2020, pursuant to the Company's license agreement with Allergan. The royalty rate on net sales of ADS-5102 will drop to 6.25% after the principal amount of the loan has been repaid in full, until the Company has made total payments of 200% of the funded amounts. The Company may elect to voluntarily prepay the loan at any time in which case the amount due will be 200% of the funded amounts, less total payments made to date. Royalty rates are subject to increase to 17.5% and 22.5% if total principal and interest payments have not reached minimum specified levels at measurement dates on December 2021 and December 2022, respectively. Under the terms of the loan, HCRP has recourse to Adamas Pharma, LLC, not the Company. The loan agreement matures in December 2026 but as the repayment of the loan amount is contingent upon the sales volumes of ADS-5102 and royalties from Allergan, the repayment term may be shortened depending on the actual sales of ADS-5102 and actual royalties received from Allergan.

The loans bear interest at an annual rate of 11% on the outstanding principal amount and includes an interest-only period until the interest payment date following the ninth full calendar quarter after the earlier of the $65.0 million additional loan or October 2018. To the extent that royalties are insufficient to pay interest in full, any unpaid portion of the quarterly interest payment will be added to the principal amount of the loans. For the three months ended June 30, 2017, accrued interest in the amount of $ 0.7 million was added to the principal balance of the loan.

In connection with the Royalty-Backed Loan, the Company paid HCRP a lender expense amount of $0.4 million and incurred additional debt issuance costs totaling $ 0.8 million . The lender expense and additional debt issuance costs have been recorded as a debt discount and are being amortized and recorded as interest expense over the estimated

term of the loan using the effective interest method. The Company recorded interest expense, including amortization of the debt discount, related to the Royalty-Backed Loan, of $ 0.7 million for the three months ended June 30, 2017 . The effective interest rate on the amounts borrowed under the Royalty-Backed Loan, including the amortization of the debt discount was 16.6% .

The assumptions used in determining the expected repayment term of the loan and amortization period of the debt discount require that we make estimates that could impact the short and long-term classification of these costs, as well as the period over which these costs will be amortized.

The Company may be required to make mandatory prepayments of the borrowings under the Royalty-Backed Loan, subject to specified prepayment trigger events, including: (1) the occurrence of any event of default or (2) the occurrence of a change in control. Upon the prepayment of all or any of the outstanding principal balance, the Company shall pay in addition to such prepayment, a prepayment premium. As the holder of the loans may exercise the option to require prepayment by the Company, the prepayment premium is considered to be an embedded derivative which is required to be bifurcated from its host contract and accounted for as a separate financial instrument. The embedded derivative is presented together with the debt instrument and the related debt discount on a combined basis. The valuation of the embedded derivative is described further in Note 3.

Long-term debt and unamortized debt discount balances are as follows (in thousands):

	June 30, 2017
Loans payable, gross	$ 35,000
Less: Unamortized debt discount and issuance costs	(1,888)
Plus: Unpaid portion of quarterly interest payment	656
Carrying value of loans payable	33,768
Less: Current portion of long-term debt	—
Non-current portion of long-term debt	$ 33,768

The estimated fair value of the long-term debt, as measured using Level 3 inputs, approximates the carrying amounts as presented on the balance sheet as of June 30, 2017. The estimated fair value was calculated in the same manner as the valuation of the embedded derivative as described further in Note 3.

There are no contractual minimum principal payments due until the loan matures in December 2026 as the repayment of the loan amount is contingent upon the sales volumes of ADS-5102 and royalties from Allergan.

8. STOCKHOLDERS' EQUITY

Common Stock

The amended and restated certificate of incorporation authorizes the Company to issue 100,000,000 shares of common stock. Common stockholders are entitled to dividends as and when declared by the board of directors, subject to the rights of holders of all classes of stock outstanding having priority rights as to dividends. There have been no dividends declared to date. Each share of common stock is entitled to one vote.

Public Offering

In January 2016, the Company completed a follow-on public offering of 2,875,000 shares of common stock, which includes the exercise in full by the underwriters of their option to purchase 375,000 shares of common stock, at an offering price of $23.00 per share. Proceeds from the follow-on public offering were approximately $61.8 million , net of underwriting discounts and offering-related transaction costs.

Shares Reserved for Future Issuance

Shares of the Company's common stock reserved for future issuance are as follows:

	June 30, 2017	December 31, 2016
Common stock awards issued and outstanding	6,130,397	5,483,557
Authorized for future issuance under 2014 Equity Incentive Plan	1,623,483	1,576,926
Authorized for future issuance under 2016 Inducement Plan	556,562	334,062
Employee stock purchase plan	718,210	532,849
Total	9,028,652	7,927,394

Sales Agreement

In May 2017, the Company entered into a sales agreement ("Sales Agreement") with Cowen and Company, LLC ("Cowen"), as sales agent, pursuant to which the Company may, from time to time, issue and sell at its option, shares of the Company's common stock for an aggregate offering price of up to $50.0 million under an at-the-market offering ("ATM Offering"). Sales of the common stock, if any, will be made pursuant to a shelf registration statement that was declared effective by the Securities and Exchange Commission ("SEC") on November 21, 2016. Cowen is acting as sole sales agent for any sales made under the Sales Agreement and the Company will pay Cowen a commission of up to 3% of the gross proceeds. The Company's common stock will be sold at prevailing market prices at the time of the sale, and, as a result, prices may vary.

The Company is not obligated to make any sales of shares of common stock under the Sales Agreement. Unless otherwise terminated earlier, the Sales Agreement continues until all shares available under the Sales Agreement have been sold. As of June 30, 2017, no shares have been sold under the Sales Agreement.

9. STOCK-BASED COMPENSATION

Stock Compensation Plans

In January 2017 , the common stock available for issuance under the 2014 Equity Incentive Plan (the "2014 Plan") automatically increased by 4% of the total number of shares of the Company's capital stock outstanding on December 31, 2016 , or 880,362 shares.

In March 2016, the Company's board of directors approved the 2016 Inducement Plan (the "Inducement Plan") under which 450,000 shares of the Company's common stock were made available for issuance. In January 2017, an amendment to the Inducement Plan was approved to increase the number of shares available for issuance an additional 450,000 shares for a total of 900,000 shares.

Employee Stock Purchase Plan

In January 2017 , the common stock available for issuance under the 2014 Employee Stock Purchase Plan (the "ESPP") automatically increased by 1% of the total number of shares of the Company's capital stock outstanding on December 31, 2016 , or 220,090 shares.

Stock-Based Compensation Expense

The following table reflects stock-based compensation expense recognized for the three and six months ended June 30, 2017 and 2016 (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Research and development:				
Employees	$ 849	$ 691	$ 1,624	$ 1,276
Non-employee consultants	46	40	92	122
General and administrative:				
Employees	2,870	1,877	4,921	3,710
Non-employee consultants	—	23	12	76
Total expense	$ 3,765	$ 2,631	$ 6,649	$ 5,184

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations together with our condensed consolidated financial statements and related notes included elsewhere in this report. This discussion and other parts of this report contain forward-looking statements that involve risk and uncertainties, such as statements of our plans, objectives, expectations and intentions. Our actual results could differ materially from those discussed in these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in the section of this report entitled "Risk factors."

Overview

At Adamas, we believe in the power and the promise of medicines derived from a deep understanding of time-dependent biology. All biological processes, including the body's responses to disease and drug interventions, are governed by complex timing patterns. When the timing of disease and drug responses are out of sync, patient outcomes can be compromised.

Our expertise lies in uncovering and mapping the relationship between disease and drug activity timing patterns. From there, we strive to create medicines with therapeutic profiles that match the pattern of disease to drive a significant and durable clinical effect. As a result, our medicines are designed to provide patients with what they need, when they need it-the right level of drug at the right place and time to enhance efficacy-and then lower levels of drug when they don't need it. Our goal is to develop medicines that are timed for the benefit of patients.

A unique understanding of time-dependent biological processes informs our every innovation, targeting advancement in treatment of chronic neurologic disorders. Our portfolio includes:

ADS-5102 : ADS-5102 is a high-dose, extended-release amantadine capsule taken once daily at bedtime.

ADS-5102 for Levodopa-Induced Dyskinesia in Patients with Parkinson's Disease

Parkinson's disease is a chronic neurodegenerative disorder affecting close to 1 million people in the United States. Levodopa, which replaces lost dopamine, is considered the "gold standard" and the most effective therapy for Parkinson's disease. Over time, people with Parkinson's disease require increasingly higher or more frequent doses of levodopa in order to avoid recurrent periods of OFF time - characterized by slowness of movement, rigidity, impaired walking, tremor, and postural instability - when the underlying symptoms of Parkinson's disease return. As Parkinson's disease progresses, nearly all people on levodopa therapy will also experience levodopa-induced dyskinesia, which is characterized by involuntary movements that are non-rhythmic, purposeless, and unpredictable.

In a robust clinical program consisting of three randomized placebo-controlled studies and a two-year, ongoing, open label safety study, ADS-5102 demonstrated a durable reduction in both dyskinesia and OFF time in people with Parkinson's disease.

A new drug application (NDA) for ADS-5102 for the treatment of levodopa-induced dyskinesia in patients with Parkinson's disease is under review by the FDA with a Prescription Drug User Fee Act (PDUFA) action date of August 24, 2017.

If approved, ADS-5102 has the potential to be the first and only FDA-approved medicine for the treatment of levodopa-induced dyskinesia (LID) in patients with Parkinson's disease. In that event, we are planning to initiate access to ADS-5102 for patients in 2017, and execute a full launch of the medicine via the deployment of sales representatives with marketing and promotional support in January 2018.

ADS-5102 for Multiple Sclerosis Walking Impairment

We completed a Phase 2, 4-week proof-of-concept study designed to evaluate ADS-5102 in patients with multiple sclerosis who have walking impairment. A significant benefit in walking speed was observed versus placebo on both mean value and the proportion of participants with a clinically significant ≥20% improvement. The results for timed-up-and-go (TUG) and 2-minute walking test (2MWT) also suggested benefit on other aspects of mobility and walking. We plan to initiate a Phase 3 study in this indication in Q1 2018.

ADS-4101 : ADS-4101 is an investigational high-dose, modified-release lacosamide capsule, taken once-daily at bedtime.

ADS-4101 for Partial Onset Seizures in Patients with Epilepsy

Lacosamide is an anti-epilepsy active ingredient previously approved by the FDA and currently marketed by UCB SA/NV as VIMPAT ® (lacosamide). ADS-4101 was designed to temper the initial rate-of-rise in lacosamide concentrations, potentially improving the adverse event profile and dose limitations due to dizziness following administration of VIMPAT. The slow initial rise may enable a higher once-daily dose at bedtime, which results in a higher daytime concentration that may be more effective for patients than VIMPAT.

The data from a Phase 1 study of 24 healthy volunteers showed that a single 400 mg dose of ADS-4101 has improved tolerability compared to the equivalent dose of VIMPAT (lacosamide) immediate-release (IR) tablets. The data also demonstrated that ADS-4101 exhibited the desired pharmacokinetic properties, namely a reduced initial rate-of-rise of lacosamide concentration and prolonged time to maximum drug concentration (Tmax) appropriate for bedtime dosing.

We are currently conducting a multi-dose Phase 1b study designed to evaluate the tolerability and pharmacokinetic profile of three ascending doses of ADS-4101 (up to 600 mg/day) taken once-daily at bedtime compared to ascending doses of twice daily VIMPAT tablets in 24 healthy volunteers. We expect to announce topline data for the Phase 1b trial in the third quarter of 2017.

Namzaric ® (memantine hydrochloride extended-release and donepezil hydrochloride) capsules and **Namenda XR** ® (memantine hydrochloride) extended-release capsules.

These two commercially available medicines are currently marketed by Forest Laboratories Holdings Limited (“Forest”), an indirect wholly-owned subsidiary of Allergan plc (collectively, “Allergan”), in the United States for the treatment of moderate to severe Alzheimer's disease. We are eligible to receive royalties on sales of Namenda XR ® and Namzaric ® beginning in June of 2018 and May of 2020, respectively.

Financial operations overview

Summary

Our revenue to date has been generated primarily from license, milestone, and development revenue pursuant to our license agreement with Allergan. We have not generated any commercial product revenue. As of June 30, 2017 , we had an accumulated deficit of $159.0 million . Although we reported net income in each of the years ended December 31, 2014, 2013, and 2012, this was primarily due to the recognition of revenue pursuant to our license agreement with Allergan. There are no further milestone payments to be earned under our license agreement with Allergan. We incurred significant losses in the six months ended June 30, 2017 , in 2016, 2015, and prior to 2012, and expect to continue to incur significant losses as we advance our product candidates into later stages of development and, if approved, commercialization.

We plan to commercialize ADS-5102 for LID, if approved, and potentially other wholly-owned product candidates by developing a commercial organization, including either our own sales force or a contract sales organization, targeting neurologists and movement disorder specialists in the United States, or possibly through partnership agreements with pharmaceutical companies. Consequently, we expect general and administrative expenses to increase as we approach a potential product commercialization of ADS-5102 for LID currently contemplated to be initiated later in 2017. In addition, we expect to continue to incur significant research and development expenses as we continue to advance our product candidates through clinical development. Because of the numerous risks and uncertainties associated with drug development and commercialization, we are unable to predict the timing or amount of expenses incurred or when, or if, we will be able to achieve or maintain profitability.

Under our agreement with Allergan, beginning in May 2020, we are entitled to receive tiered royalties in the low to mid-teens for net sales of Namzaric ® in the United States. In addition, we are also entitled to receive tiered royalties in the low to mid-single digits from Allergan for net sales of Namenda XR ® in the United States beginning in June 2018; however, we do not expect the Namenda XR ® royalties will make a significant financial contribution to our business. Pursuant to the agreement, we received a non-refundable upfront license fee of $65.0 million in 2012, which we recognized on a straight-line basis from November 2012 to February 2013. We also earned and received additional

cash payments totaling $95.0 million upon achievement by Allergan of certain development and regulatory milestones, which we recognized in 2013 and 2014.

Prior to our initial public offering of our common stock, or IPO, in April 2014, we had raised an aggregate of approximately $87.2 million through the sale of convertible preferred stock and $1.0 million through the exercise of preferred stock warrants. In 2014, we issued and sold 3,081,371 shares of common stock in our IPO and received net proceeds of approximately $42.6 million, which included partial exercise of the underwriters' option to purchase additional shares and after deducting underwriting discounts and offering expenses. In connection with the completion of our IPO, all convertible preferred stock converted into common stock. In June 2015, we entered into a Controlled Equity Offering Sales Agreement, pursuant to which we were able to issue and sell shares of common stock having an aggregate offering value of up to $25.0 million , which was terminated in November 2016. During the term of the agreement, we issued 509,741 shares of common stock and raised net proceeds of $9.7 million . In January 2016, we raised $61.8 million from the sale of 2,875,000 shares of common stock in a follow-on public offering. In May 2017, we entered into a sales agreement with Cowen and Company, LLC, pursuant to which we may, from time to time, issue and sell shares of common stock having an aggregate offering value of up the $50.0 million. As of June 30, 2017 , no shares have been sold under the sales agreement. Also in May 2017, we entered into a royalty-backed loan agreement ("Royalty-Backed Loan") with HealthCare Royalty Partners ("HCRP"), whereby we borrowed $35.0 million and have the right to receive an additional $65.0 million upon FDA approval and receipt of Orphan Drug exclusivity of ADS-5102 (amantadine) extended-release capsules for the treatment of LID in patients with Parkinson's disease if achieved prior to a specified date.

As of June 30, 2017 , we had cash, cash equivalents, and available-for-sale securities of $144.9 million .

Revenue

We have not generated any revenue from commercial product sales to date. Our revenue to date has been generated primarily from non-refundable upfront license payments, milestone payments, reimbursements for research and development expenses and full-time equivalents assigned under our license agreement with Allergan, and to a lesser degree reimbursement for research and development expenses from NIH grants and government contracts. We do not expect to recognize any further milestone payments under our license agreement with Allergan, and we expect reimbursements for full-time equivalents assigned to the license agreement to be inconsequential in future periods. Beginning in May 2020, we will be entitled to receive royalties in the low to mid-teens from Allergan for net sales of Namzaric ® in the United States, and in June 2018 we will be entitled to receive royalties in the low to mid-single digits for net sales of Namenda XR ® in the United States; however, we do not expect the Namenda XR ® royalties will make a significant financial contribution to our business. We were also awarded a continuation of an NIH grant for $1.0 million in August 2014 that terminated in July 2016, which we administered, but conducted through subcontractors.

Research and development expenses

Research and development expenses represent costs incurred to conduct research, such as the discovery and development of our wholly-owned product candidates and, to a lesser degree, the development of product candidates pursuant to our agreement with Allergan. We recognize all research and development costs as they are incurred.

Research and development expenses consist of:

- fees paid to clinical investigators, clinical trial sites, consultants, and vendors, including contract research organizations, or CROs, in conjunction with implementing, conducting, and monitoring our clinical trials and acquiring and evaluating clinical trial data, including all related fees, such as for investigator grants, patient screening fees, laboratory work, and statistical compilation and analysis;
- expenses related to production of clinical supplies, including fees paid to contract manufacturing organizations, or CMOs;
- expenses related to establishment and validation of manufacturing capabilities for commercial supply, should approval be obtained;
- expenses related to compliance with regulatory requirements;
- other consulting fees paid to third parties; and

- employee-related expenses, which include salaries, benefits, and stock-based compensation.

The following table summarizes our research and development expenses incurred during the three and six months ended June 30, 2017 and 2016 (in thousands):

	Three Months Ended June 30,		Increase (Decrease)	Six Months Ended June 30,		Increase (Decrease)
	2017	2016		2017	2016	
ADS-5102	$ 4,864	$ 8,053	$ (3,189)	$ 10,546	$ 14,237	$ (3,691)
ADS-4101	1,924	—	1,924	2,976	—	2,976
Other research and development expenses	388	1,171	(783)	742	2,509	(1,767)
Total research and development expenses	$ 7,176	$ 9,224	$ (2,048)	$ 14,264	$ 16,746	$ (2,482)

The program-specific expenses summarized in the table above include costs directly attributable to our product candidates. Other research and development expenses include costs for early stage programs and costs not allocated to a specific program. We allocate research and development salaries, benefits, stock-based compensation, and indirect costs to our product candidates on a program-specific basis, and we include these costs in the program-specific expenses. We begin to track and report program-specific expenses for early stage programs once they have been nominated and selected for further development and clinical-stage work has commenced.

The largest component of our total operating expenses has historically been our investment in research and development activities, including the clinical development of our product candidates. We anticipate incurring significant research and development expenses as we continue to support: the FDA's review of ADS-5102 for LID; clinical trials for ADS-5102 in indications beyond LID, including but not limited to walking impairment in multiple sclerosis patients and other Parkinson's disease indications earlier in the Parkinson's disease treatment journey; ADS-4101 for treatment of epilepsy; and potentially additional clinical-stage programs in more indications or for future product candidates. The process of conducting the necessary clinical research to obtain FDA approval is costly and time consuming. We consider the active management and development of our clinical pipeline to be crucial to our long-term success. The actual probability of success for each product candidate and clinical program may be affected by a variety of factors, including but not limited to, the quality of the product candidate, early clinical data, investment in the program, competition, manufacturing capability, and commercial viability. Furthermore, in the past we have entered into licensing arrangements with other pharmaceutical companies to develop and commercialize our product candidates, and we may enter into additional licensing arrangements or collaborations in the future. In situations in which third parties have control over the clinical development of a product candidate, the estimated completion dates are largely under the control of such third parties and not under our control. We cannot forecast with any degree of certainty which of our product candidates, if any, will be subject to future licensing or collaboration arrangements or how such arrangements would affect our development plans or capital requirements. As a result of the uncertainties discussed above, we are unable to determine the duration and completion costs of our research and development projects or when and to what extent we will generate revenue from the commercialization and sale of any of our product candidates.

General and administrative expenses, net

General and administrative expenses, net, consist primarily of personnel and related benefit costs, facilities, professional services, insurance, and public company related expenses, as well as increasingly the costs associated with establishing commercial capabilities in support of the potential commercialization of ADS-5102 for LID, reduced to a small degree by reimbursement from Allergan for external costs related to supporting prosecution and litigation of intellectual property rights under our license agreement. We anticipate our general and administrative expenses will increase significantly as we continue to establish our commercial capabilities and support our potential commercial-stage programs. If ADS-5102 is approved by the FDA, we plan to market and sell through our own sales force with support from a contract sales organization for certain functions, targeting neurologists and movement disorder specialists in the United States.

Interest and other income (expense), net

Interest and other income (expense), net, consists primarily of interest received on our investments.

Interest expense

Interest expense consists of accrued interest pursuant to our Royalty-Based Loan and amortization of debt issuance costs.

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 financial statements, which have been prepared in accordance with United States generally accepted accounting principles, or U.S. GAAP. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported revenue generated and expenses incurred during the reporting periods. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. We have discussed the development, selection, and disclosure of these estimates with the Audit Committee of our Board of Directors. Actual results may differ from these estimates under different assumptions or conditions. Refer to "Note 2 - Summary of Significant Accounting Policies" in the accompanying "Notes to Condensed Consolidated Financial Statements (unaudited)," which information is incorporated by reference here, for changes to our critical accounting policies during the six months ended June 30, 2017 , as compared to those disclosed in "Management's Discussion and Analysis of Financial Condition and Results of Operations," in our Annual Report on Form 10-K for the year ended December 31, 2016 .

Results of operations

Comparison of the three and six months ended June 30, 2017 and 2016

The following table summarizes our results of operations for the three and six months ended June 30, 2017 and 2016 (in thousands, except percentages):

	Three Months Ended June 30,				Six Months Ended June 30,			
	2017	2016	Increase (Decrease)	% Increase (Decrease)	2017	2016	Increase (Decrease)	% Increase (Decrease)
Revenue	$ 2	$ 222	$ (220)	(99)%	$ 2	$ 397	$ (395)	(99)%
Research and development expenses	7,176	9,224	(2,048)	(22)%	14,264	16,746	(2,482)	(15)%
General and administrative expenses, net	13,115	8,058	5,057	63 %	22,259	14,699	7,560	51 %
Interest and other income, net	222	184	38	21 %	426	344	82	24 %
Interest expense	729	—	729	100 %	729	—	729	100 %

Revenue

Revenue for both the three and six months ended June 30, 2017 was $2,000 , compared to $0.2 million and $0.4 million for the three and six months ended June 30, 2016 . Revenue for all periods presented was primarily related to reimbursement of certain expenses as provided for in our license agreement with Allergan, as well as from government contracts.

Research and development expenses

Research and development expenses decreased by $2.0 million , or 22% , to $7.2 million for the three months ended June 30, 2017 from $9.2 million for the three months ended June 30, 2016 . The decrease in research and development expenses was mainly attributable to costs associated with the clinical development of ADS-5102, due to the conclusion of two Phase 3 clinical trials assessing ADS-5102 for the treatment of LID, in addition to decreased costs associated with the ongoing open-label safety study and decreased volume of pre-commercial manufacturing activities. The decrease was offset in part by increased activity related to clinical work associated with ADS-4101 for the treatment of partial onset seizures in patients with epilepsy. Included in research and development expenses was stock-based

compensation expense, which was $0.9 million compared to $0.7 million for the three months ended June 30, 2017 and 2016 , respectively.

Research and development expenses decreased by $2.5 million , or 15% , to $14.3 million for the six months ended June 30, 2017 from $16.7 million for the six months ended June 30, 2016 . The decrease in research and development expenses was mainly attributable to costs associated with the clinical development of ADS-5102, due to the conclusion of two Phase 3 clinical trials assessing ADS-5102 for the treatment of LID, in addition to costs associated with the ongoing open-label safety study which also decreased from the prior year. The decrease was offset by increased activity related to clinical work associated with ADS-4101 for the treatment of partial onset seizures in patients with epilepsy. Included in research and development expenses was stock-based compensation expense, which was $1.7 million compared to $1.4 million for the six months ended June 30, 2017 and 2016 , respectively.

General and administrative expenses, net

General and administrative expenses, net, increased by $5.1 million , or 63% , to $13.1 million for the three months ended June 30, 2017 from $8.1 million for the three months ended June 30, 2016 . The increase in general and administrative expenses was primarily due to increased costs associated with establishing commercial capabilities in anticipation of the commercialization of ADS-5102 for the treatment of LID, pending regulatory approval, including an increase in headcount-related expenses and commercial activities. General and administrative expenses also included stock-based compensation expense of $2.9 million compared to $1.9 million for the three months ended June 30, 2017 and 2016 , respectively.

General and administrative expenses, net, increased by $7.6 million , or 51% , to $22.3 million for the six months ended June 30, 2017 from $14.7 million for the six months ended June 30, 2016 . The increase in general and administrative expenses was primarily due to increased costs associated with establishing commercial capabilities in anticipation of the commercialization of ADS-5102 for the treatment of LID, pending regulatory approval, including an increase in headcount-related expenses and commercial activities. General and administrative expenses also included stock-based compensation expense of $4.9 million compared to $3.8 million for the six months ended June 30, 2017 and 2016 , respectively.

Interest and other income, net

Interest and other income, net, was essentially unchanged at $0.2 million for the three months ended June 30, 2017 and 2016 , and $0.4 million compared to $0.3 million for the six months ended June 30, 2017 and 2016 , respectively. Net interest income is primarily due to interest income earned on investments.

Interest expense

The increase in interest expense to $0.7 million for the three and six months ended June 30, 2017 compared to the three and six months ended June 30, 2016 was due to the new Royalty-Backed Loan entered into in May 2017.

Liquidity, capital resources and plan of operation

We have funded our operations primarily through $160.0 million of payments received pursuant to our license agreement with Allergan, $88.2 million sales of convertible preferred stock and warrants, $114.1 million pursuant to sales of our common stock, and $35.0 million pursuant to our Royalty-Backed Loan with HCRP. In April 2014, we completed our IPO and raised net proceeds of $42.6 million, including the underwriters' partial exercise of their option to purchase additional shares. In June 2015, we entered into a Controlled Equity Offering Sales Agreement, pursuant to which we were able to, from time to time, issue and sell shares of common stock having an aggregate offering value of up to $25.0 million, which was terminated in November 2016. During the term of the agreement we issued 509,741 shares of common stock and raised net proceeds of $9.7 million. In January 2016, we completed a follow-on public offering of 2,875,000 shares of common stock, which includes the exercise in full by the underwriters of their option to purchase 375,000 shares of common stock, at an offering price of $23.00 per share. Proceeds from the follow-on public offering were approximately $61.8 million, net of underwriting discounts and offering-related transaction costs. In May 2017, we entered into a Royalty-Backed Loan with HCRP, whereby we borrowed $35.0 million and have the right to receive an additional $65.0 million upon FDA approval and receipt of Orphan Drug exclusivity of ADS-5102 (amantadine) extended-release capsules for the treatment of LID in patients with Parkinson's disease.

We have not generated any revenue from the sale of products. We incurred losses and generated negative cash flows from operations since inception through the year ended December 31, 2011. Although we recognized a profit and positive cash flow in 2014, 2013, and 2012 as a result of payments received pursuant to our license agreement with Allergan, we received our final milestone payment from Allergan in December 2014. We do not currently receive any royalties from Allergan, nor do we have other license agreements or collaborations from which we might expect milestone or royalty revenue. Consequently, we expect to continue to incur substantial and increasing losses for the foreseeable future. Our principal sources of liquidity were our cash, cash equivalents, and investments, which totaled $144.9 million as of June 30, 2017 , compared to $ 135.9 million at December 31, 2016 .

We believe our existing cash, cash equivalents, and investments will be sufficient to fund our projected operating requirements, including operations related to the continued development and potential commercialization of ADS-5102 for the treatment of LID, for at least the next 12 months. However, it is possible that we will not achieve the progress that we expect, because the actual costs and timing of drug development, particularly clinical studies, and regulatory approvals are difficult to predict, subject to substantial risks and delays, and often vary depending on the particular indication and development strategy. Moreover, the costs associated with commercializing drugs are high and market acceptance is uncertain.

We expect to continue significant spending in connection with the development and commercialization of our product candidates, particularly for ADS-5102 for the treatment of LID, as well as other indications, and also for ADS-4101 for indications in epilepsy, for which Phase 3 clinical trials may be initiated in 2018. In order to continue these activities, we may decide to raise additional funds through a combination of public or private equity offerings, debt financings, royalty financings, collaborations, strategic alliances, licensing arrangements, asset sales, and other marketing and distribution arrangements. Sufficient additional funding may not be available on acceptable terms, or at all. If adequate funds are not available in the future, we may need to delay, reduce the scope of, or put on hold our clinical studies, research and development programs, or commercialization efforts.

The following table summarizes our cash flows for the periods indicated (in thousands):

	Six Months Ended June 30,	
	2017	2016
Net cash (used in) provided by:		
Operating activities	$ (26,620)	$ (24,511)
Investing activities	408	36,409
Financing activities	36,095	64,270
Net increase in cash and cash equivalents	$ 9,883	$ 76,168

Net cash used in operating activities was $26.6 million for the six months ended June 30, 2017 compared to $24.5 million for the same period in the prior year. Net loss of $36.8 million for the six months ended June 30, 2017 included net non-cash adjustments of $7.9 million , which consisted primarily of stock-based compensation of $6.6 million . Net loss of $30.7 million for the six months ended June 30, 2016 included non-cash adjustments of $5.9 million , primarily related to $5.2 million in stock-based compensation. The primary use of cash for the six months ended June 30, 2017 was to fund activities in support of the NDA and pre-commercial activities in preparation for the commercialization for ADS-5102 for the treatment of LID, if approved. Additionally, cash was used to fund development of ADS-4101 for indications in epilepsy.

Net cash provided by investing activities was $0.4 million for the six months ended June 30, 2017 , compared to $36.4 million for the same period in the prior year. In the six months ended June 30, 2017 , we received $1.0 million as a result of net maturities of available-for-sale securities, offset by $0.6 million in purchases of property and equipment. In the six months ended June 30, 2016 we received $37.7 million as a result of maturities of available-for-sale securities, offset by $1.2 million in purchases of property and equipment.

Net cash provided by financing activities was $36.1 million for the six months ended June 30, 2017 , compared to $64.3 million for the six months ended June 30, 2016 . In the period ended June 30, 2017 , we received net proceeds of $34.6 million from long-term debt and received cash proceeds of $1.6 million related to the exercise of stock options and purchases of common stock under the Employee Stock Purchase Plan. In the six months ended June 30, 2016 , we

received net cash proceeds of $61.8 million related to the sale of common stock under a follow-on public offering, coupled with $2.4 million related to the exercise of stock options and purchases of common stock under the Employee Stock Purchase Plan.

Off-balance sheet arrangements

Since our inception, we have not engaged in any off-balance sheet arrangements, including the use of structured finance, special purpose entities, or variable interest entities.

Contractual obligations

Our future contractual obligations at June 30, 2017 , were not materially different than at December 31, 2016 .

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The primary objective of our investment activities is to preserve our capital to fund our operations. We also seek to maximize income from our investments without assuming significant risk. To achieve our objectives, we maintain a portfolio of cash equivalents and investments in a variety of securities of high credit quality. As of June 30, 2017 , we had cash, cash equivalents, and investments of $144.9 million , compared to $ 135.9 million at December 31, 2016 , consisting of cash and cash equivalents, as well as short and long-term investment grade available-for-sale securities. A portion of our investments may be subject to interest rate risk and could fall in value if market interest rates increase. However, because our investments are primarily short-term in duration and our holdings in US government bonds and corporate debt securities mature prior to our expected need for liquidity, we believe that our exposure to interest rate risk is not significant and, as a consequence, a one percentage point movement in market interest rates would not have a significant impact on the total value of our portfolio. We actively monitor changes in interest rates.

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 reports under the Securities Exchange Act of 1934, as amended, or the Exchange Act, and the rules and regulations thereunder, 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 principal executive officer and principal financial officer, as appropriate, to allow for timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

As required by Rule 13a-15(b) under the Exchange Act, our management, under the supervision and with the participation of our principal executive officer and principal financial officer, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of June 30, 2017 . Based on such evaluation, our principal executive officer and principal financial officer have concluded that, as of June 30, 2017 , our disclosure controls and procedures were effective.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the quarter ended June 30, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

For information regarding legal proceedings, refer to *Litigation* in "Note 6 - Commitments and Contingencies" in the accompanying "Notes to Condensed Consolidated Financial Statements (unaudited)," which information is incorporated by reference here.

ITEM 1A. RISK FACTORS

We have identified the following risks and uncertainties that may have a material adverse effect on our business, financial condition, results of operations, and future growth prospects. Our business could be harmed by any of these risks. The risks and uncertainties described below are not the only ones we face. The trading price of our common stock could decline due to any of these risks, and you may lose all or part of your investment. In assessing these risks, you should also refer to the other information contained in this Quarterly Report on Form 10-Q, including our unaudited condensed consolidated financial statements and related notes.

Risks related to the development, regulatory approval, and commercialization of our current and future product candidates, including ADS-5102

Our success depends heavily on the timely approval and successful commercialization of our product candidates, including ADS-5102. If we are unable to successfully commercialize our product candidates or if we experience significant delays in doing so, our business will be materially harmed.

We have invested a significant portion of our efforts and financial resources into the development and potential commercialization of our product candidates, including ADS-5102, an oral once daily extended-release version of the FDA-approved drug amantadine, for the treatment of levodopa-induced dyskinesia ("dyskinesia" or "LID"), for the treatment of walking impairment in patients with multiple sclerosis, and potentially other indications, as well as ADS-4101 for the treatment of partial onset seizures in epilepsy. Our ability to generate product revenue will depend heavily on the successful development, regulatory approval, and commercialization of ADS-5102 and our other product candidates. The success of our product candidates will depend on numerous factors, including:

- successfully completing the development program for ADS-5102 and other product candidates in a timely manner;
- receiving marketing approval for ADS-5102 and other product candidates from the FDA in a timely manner;
- successfully establishing and maintaining commercial manufacturing with third parties;
- commercializing ADS-5102 and other product candidates, if approved, including marketing, sales, and distribution of the product independently or in partnership with another company;
- acceptance by the medical community and patients of the approved product;
- the pricing and placement of ADS-5102 on payers' formulary tiers and the reimbursement rates established for the approved products;
- effectively competing with other approved or used medicines and future compounds in development;
- continued demonstration of an acceptable safety profile of the approved products following approval; and
- obtaining, maintaining, enforcing, and defending intellectual property rights and claims.

If we do not achieve one or more of these factors in a timely manner or at all, we could experience significant delays or an inability to successfully commercialize our product candidates, which would materially harm our business.

If ADS-5102 for the treatment of LID fails to receive approval by regulatory authorities, our business will be adversely impacted and substantially harmed.

Our new drug application ("NDA") for ADS-5102 for the treatment of LID in patients with Parkinson's disease was accepted for filing by the FDA in January 2017 and has a Prescription Drug User Fee Act ("PDUFA") date of August 24, 2017. We cannot give any assurance that our NDA for ADS-5102 for the treatment of LID will be approved by regulatory authorities and even if approved, the prescribing information may not reflect the clinical claims needed to successfully promote the product and we may be subject to post-marketing requirements or commitments. Although we have substantially completed the clinical trial program for ADS-5102 for the treatment of LID, except for the long-term open-label safety study of ADS-5102 for the treatment of LID, we do not know if the clinical package for ADS-5102 for the treatment of LID will adequately demonstrate sufficient safety and efficacy to the satisfaction of the FDA to achieve regulatory approval.

In addition, NDAs are complex, multipart documents that must meet strict regulatory requirements to be acceptable for regulatory approval. NDAs must include preclinical and clinical study data and chemistry, manufacturing, and controls data. Our contract manufacturer of ADS-5102 is subject to inspection for Good Manufacturing Practice compliance, our contract analytical testing facilities may be subject to pre-approval inspection for Good Laboratory Practice and data integrity, and our ADS-5102 LID clinical trial sites are subject to bioresearch monitoring inspections for Good Clinical Practice compliance and data integrity. Adverse inspectional findings at our contract manufacturer, at any of our contract analytical testing facilities, or at any of our clinical trial sites may lead to our receipt of a Complete Response Letter rather than NDA approval. Additionally, this is our first NDA that we have submitted. As a result, we do not know whether or not our NDA submission will meet the strict regulatory requirements for regulatory approval or will adequately demonstrate sufficient safety and efficacy to the satisfaction of the FDA to achieve regulatory approval. Failure to achieve regulatory approval for ADS-5102 for the treatment of LID would harm our business.

If we are unable to obtain orphan exclusivity for ADS-5102 for the treatment of LID, our business would be substantially harmed.

Under the Orphan Drug Act, the FDA may designate a drug product as an orphan drug if it is a drug or biologic intended to treat a rare disease or condition. Generally, if a drug product with an orphan drug designation receives the first marketing approval for the indication for which it has such designation, the drug product is entitled to a period of marketing exclusivity, which may preclude the FDA from approving another marketing application for the same drug product for the same therapeutic indication. The applicable period of exclusivity is up to seven (7) years in the United States. Even though we have orphan drug designation for ADS-5102 for the treatment of LID, we may not receive orphan designation upon approval due to changes in our application or because we may not be the first to obtain marketing approval. If we do not receive orphan exclusivity at approval, we will also not be eligible to receive additional funds under our Royalty-Backed Loan agreement with HCRP.

With respect to LID, both ADS-5102 and a competitor, Osmotica Pharmaceutical LLC, amantadine product candidate for the treatment of LID have been granted orphan drug designation. If Osmotica were to obtain regulatory approval for its product candidate prior to ADS-5102, it would obtain orphan drug exclusivity for their product candidate and the approval of our marketing application for ADS-5102 could be delayed for so long as Osmotica has exclusivity for its product. The NDA for ADS-5102 for LID is currently under review by the FDA with a PDUFA date of August 24, 2017. We are unaware of the status of Osmotica's clinical development program in LID.

Even if we are first to obtain marketing approval for ADS-5102 for the treatment of LID, the FDA could still subsequently approve the same drug with the same active moiety for the same condition, if the FDA concludes that the later drug is safer, more effective, or makes a major contribution to patient care. If we are unable to obtain or maintain orphan exclusivity for ADS-5102 for the treatment of LID, our business would be substantially harmed.

Our product candidates, including ADS-5102, may fail to achieve the degree of market acceptance by physicians, patients, healthcare payers, and others in the medical community necessary for commercial success, negatively impacting our business.

Our product candidates, including ADS-5102, may fail to gain sufficient market acceptance by physicians, hospital administrators, patients, healthcare payers, and others in the healthcare community. The degree of market acceptance of our products, after FDA approval, will depend on a number of factors, including:

- the prevalence and severity of any side effects;
- efficacy, duration of response, and potential advantages compared to alternative treatments;
- the price;
- the willingness of physicians to change their current treatment practices;
- convenience and ease of administration compared to alternative treatments;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- the effectiveness of marketing, promotion, selling, and distribution support; and
- the availability of third-party insurance coverage or reimbursement.

The failure of our product candidates, including ADS-5102, to achieve market acceptance would negatively impact our business.

We currently have only limited commercial experience and capabilities with no sales personnel. If we are unable to develop or obtain commercial capabilities, including sales, marketing and market access personnel, we will not be successful in commercializing ADS-5102.

We have only a limited commercial infrastructure and have limited experience in the commercialization, sale, marketing, or distribution of pharmaceutical products, like ADS-5102, if approved. To achieve commercial success for any approved product, including ADS-5102, we must either develop a commercial organization, including sales, marketing and market access personnel or outsource these functions to third parties. We expect that the primary focus of our commercialization efforts will be in the United States. We intend to commercialize ADS-5102 through our own sales force personnel with support from a contract sales organization ("CSO") in certain functions. Commercialization of ADS-5102 and other future product candidates outside of the United States, to the extent pursued, is likely to require collaboration with one or more third parties.

There are risks involved with both establishing our own commercial capabilities and relying on third parties to perform these services. For example, recruiting and building a marketing organization and/or field sales representatives are expensive and time-consuming, and if our product candidates are not commercially successful, our investment would be lost if we cannot retain or reposition our sales and marketing personnel.

Also, if we do not establish sales and marketing capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing ADS-5102 or any other of our future product candidates.

If we are unable to effectively build, train and equip our sales force, our ability to successfully commercialize ADS-5102 will be harmed.

If approved, ADS-5102 will be a newly-marketed drug and, therefore, none of the members of our sales force will have ever promoted ADS-5102 prior to its launch. In addition, ADS-5102 would be the first drug approved by the FDA for the treatment of LID. As a result, we will be required to expend significant time and resources to train our sales force to be credible, persuasive, and compliant with applicable laws in marketing ADS-5102 to neurologists, movement disorder specialists, and pharmacists. In addition, we must train our sales force to ensure that we deliver a consistent and appropriate message about ADS-5102 to our potential customers. If we are unable to effectively train our sales force and equip them with effective materials, including medical and sales literature to help them inform and educate potential customers about the benefits and risks of ADS-5102 and its proper administration, our efforts to successfully commercialize ADS-5102 could be put in jeopardy, which would negatively impact our ability to generate product revenues.

Failure to successfully obtain coverage and reimbursement of our products, including ADS-5102, or if coverage and reimbursement is only available at limited levels in the United States, our ability to generate product revenue will be diminished.

Our ability to commercialize any products successfully in the United States will depend in part on the extent to which coverage and reimbursement for these products becomes available from third-party payers, including government health administration authorities, such as those that administer the Medicare and Medicaid programs, and private health insurers. Patients who are prescribed medicine for the treatment of their conditions generally rely on third-party payers to reimburse all or part of the costs associated with their prescription drugs. Coverage and adequate reimbursement from governmental healthcare programs, such as Medicare and Medicaid, and commercial payers is critical to new product acceptance. Coverage decisions may depend upon clinical and economic standards that disfavor new drug products when more established or lower cost therapeutic alternatives are already available or subsequently become available. Coverage and reimbursement may not be available for products that we commercialize and, if reimbursement is available, we cannot guarantee what the level of reimbursement will be. Coverage and reimbursement may impact the demand for, or the price of, any product for which we obtain marketing approval.

There may be significant delays in obtaining coverage and reimbursement for approved products, and coverage may be more limited than the purposes for which the product is approved by the FDA. Moreover, eligibility for reimbursement does not imply that any product will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, distribution, marketing, and sale. Interim payments for new products, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Payment rates may vary according to the use of the product, the clinical setting in which it is used, and generic competitor availability, and may be based on initial payments for generic competitors or payments allowed for lower cost products that are already reimbursed and may be incorporated into existing payments for other services. Net prices for products may be reduced by mandatory discounts or rebates required by government healthcare programs, e.g., the federal 340B Drug Pricing Program, or private third-party payers and by any future relaxation of laws that currently restrict imports of products from countries where they may be sold at lower prices than in the United States. In the United States, private third-party payers often rely upon Medicare coverage and reimbursement policies and payment limitations in setting their own coverage and reimbursement policies. Our inability to promptly obtain coverage, reimbursement, and profitable payment rates from both government funded and private third-party payers for new products that we develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize products, and our overall financial condition.

Also, even if we obtain coverage for ADS-5102, the resulting reimbursement payment rates might not be adequate or may require co-payments or co-insurance payments that patients find unacceptably high. Patients may not use ADS-5102 if coverage is not provided or reimbursement is inadequate to cover a significant portion of its cost. If coverage and reimbursement is not available or is available only to limited levels, we may not be able to successfully commercialize any product candidate for which we receive marketing approval, including ADS-5102.

We face substantial competition, which may result in others discovering, developing, or commercializing products before or more successfully than we do.

The development and commercialization of new pharmaceutical products is highly competitive. We face competition with respect to our current product candidates, including ADS-5102, and will face competition with respect to any future products that we may seek to develop or commercialize from major pharmaceutical companies, specialty pharmaceutical companies, and biotechnology companies worldwide. For example, ADS-5102, if approved for the treatment of LID, may face competition from various drugs approved for treatment of Parkinson's disease, though not LID, such as Azilect (Teva Pharmaceuticals Industries, Ltd.), Requip XL (GlaxoSmithKline plc), Mirapex ER (Boehringer Ingelheim Pharmaceuticals Inc.), Neupro Patch (UCB SA/NV), Sinemet (Merck & Co., Inc.), Parcopa (Jazz Pharmaceuticals, Inc.), Rytary (Impax), Duopa (AbbVie), Xadago (safinamide) (Newron Pharmaceuticals S.p.A.) and immediate-release amantadine. ADS-5102 may also face competition from drugs currently in development for LID or for Parkinson's disease from a number of pharmaceutical companies, such as Merck, Novartis, Osmotica Pharmaceuticals Corp., Avanir Pharmaceuticals, Neurolixis, Amarantus BioScience, Addex Pharma, and Neurim Pharmaceuticals Ltd. Other products in late stage development for Parkinson's disease includes product candidates from Kyowa Hakko, Acorda, Neuroderm, Bial-Portela CSA, Genervon Biopharmaceuticals, Pharma Two B, and Depomed.

Many of our competitors, including a number of large pharmaceutical companies that compete directly with us, have significantly greater financial resources and expertise in research and development, manufacturing, conducting clinical trials, obtaining regulatory approvals, and commercializing approved products than we do. These third parties will compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical study sites, and patient registration for clinical studies, as well as in acquiring technologies and products complementary to, or necessary for, our programs. Finally, many of our competitors are large pharmaceutical companies that will have a greater ability to reduce prices for their competing drugs in an effort to gain market share and undermine the value proposition that we might otherwise be able to offer to payers.

ADS-5102 will face competition from generic versions of immediate-release amantadine and potentially from other extended-release versions of amantadine that may be in development. For example, while immediate-release amantadine is not approved for use in Parkinson's disease for the treatment of LID, some physicians may still prescribe it for such conditions. In addition, a competitor has registered two Phase 3 clinical trials of extended-release amantadine for LID on clinicaltrials.gov.

The NDA for ADS-5102 for the treatment of LID is still under review and there is an ongoing open label safety study with ADS-5102 in LID; therefore, there could be new safety findings regarding ADS-5102 or the FDA may have a different interpretation of our previously reported positive clinical results at approval.

The NDA for ADS-5102 for LID is still under review and we have an ongoing safety study. If any new safety concerns emerging from the FDA's review or our ongoing clinical study, we may:

- be delayed in obtaining marketing approval;
- not obtain marketing approval at all;
- obtain approval for indications that are not as broad as intended;
- have the product removed from the market after obtaining marketing approval;
- be subject to additional post-marketing testing requirements; or
- be subject to restrictions on how the product is distributed, marketed, or used.

Any of these unforeseen events could impair our ability to gain approval of ADS-5102 or commercialize ADS-5102 and harm our business and results of operations.

If ADS-5102 is approved and commercialized for patients with LID, unforeseen safety issues could emerge thereafter that could require us to change the prescribing information in the future to adding warnings, limit use of the product, and/or result in litigation. Any of these events could have a negative impact on our business.

Discovery of unforeseen safety problems, or increased focus on a known problem, with an approved product could impact our ability to commercialize ADS-5102 and could result in restrictions on its permissible uses, including withdrawal of the medicine from the market.

If we or others identify additional undesirable side effects caused by ADS-5102 after approval:

- regulatory authorities may require the addition of labeling statements, specific warnings, contraindications, or field alerts to physicians and pharmacies;
- regulatory authorities may withdraw their approval of the product and require us to take our approved drugs off the market;
- we may be required to change the way the product is administered, conduct additional clinical trials, change the labeling of the product, or implement a Risk Evaluation and Mitigation Strategy (REMS);
- we may have limitations on how we promote our drugs;
- third-party payers may limit coverage or reimbursement for ADS-5102;
- sales of ADS-5102 may decrease significantly;

- we may be subject to litigation or product liability claims; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the affected product and could substantially increase our commercialization costs and expenses, which in turn could delay or prevent us from generating significant revenue from its sale.

Further, ADS-5102 may also be affected by the safety and tolerability of its parent drugs or drugs with similar mechanisms of action. Although amantadine, which is a component of ADS-5102, has been used in patients for many years, newly observed toxicities or worsening of known toxicities in preclinical studies or in subjects in clinical studies receiving amantadine, or reconsideration of known toxicities of compounds in the setting of new indications, could result in increased regulatory scrutiny of our products and product candidates.

In addition, problems with approved products marketed by third parties that utilize the same therapeutic target or that belong to the same therapeutic class as amantadine could adversely affect the commercialization of ADS-5102.

If a safety issue emerges post-approval, we may become subject to costly product liability litigation by our customers or their patients. Product liability claims could divert management's attention from our core business, be expensive to defend, and result in sizable damage awards against us that may not be covered by insurance. If we cannot successfully defend ourselves against claims that our product candidates or products caused injuries, we will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidates or products that we may develop;
- the inability to commercialize any products that we may develop;
- injury to our reputation and significant negative media attention;
- withdrawal of patients from clinical studies or cancellation of studies;
- significant costs to defend the related litigation;
- substantial monetary awards to patients; and
- loss of revenue.

We currently hold $10.0 million in product liability insurance coverage, which may not be adequate to cover all liabilities that we may incur at our current stage of development. Insurance coverage is increasingly expensive. If and when our product candidates are approved and we launch such products commercially, we may not be able to obtain insurance coverage at a reasonable cost or in amounts adequate to satisfy any liability or associated costs that may arise in the future. These events could harm our business and results of operations and cause our stock price to decline.

We will face risks in the development of ADS-5102 for additional indications and other product candidates.

There are risks associated with pursuing clinical trials in other indications for ADS-5102, as we may experience numerous unforeseen events during, or as a result of, clinical studies that could harm our ability to commercialize ADS-5102 or to receive regulatory approval for other indications of ADS-5102, including that:

- clinical studies may produce negative or inconclusive results or raise significant safety concerns, and we may decide, or regulators may require us, to conduct additional clinical studies or abandon product development programs;
- even if clinical studies demonstrate statistically significant efficacy and acceptable safety, the FDA or similar authorities outside the United States may not consider the results of our studies to be sufficient for approval of ADS-5102;
- our clinical sites and clinical investigators may fail to comply with, or inconsistently apply, the trial protocols, regulatory requirements including Good Clinical Practices, contractual obligations, and the rating assessments;

- our third-party vendors, including our Contract Research Organizations ("CROs") may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;
- we might have to suspend or terminate clinical studies for various reasons, including a finding that our product candidates have unanticipated serious side effects or other unexpected characteristics or that the patients are being exposed to unacceptable health risks;
- regulators or institutional review boards may require that we or our investigators suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements; and
- the supply or quality of ADS-5102 or other materials necessary to conduct clinical studies may be insufficient or inadequate.

Although the safety profile of amantadine, the active pharmaceutical ingredient in ADS-5102, is already characterized in the approved label for amantadine (i.e., Symmetrel ®) and in the ADS-5102 clinical trial data in the LID population, there can be no assurance that our program for ADS-5102 for walking impairment associated with multiple sclerosis or future studies in other indications, will not reveal additional safety or tolerability issues. In such an event, our ability to commercialize ADS-5102 for LID and/or expand our business could be compromised.

If we are forced to delay or abandon development of our product candidates, our business, results of operations, and financial condition will be materially and adversely harmed.

The marketing and promotion of ADS-5102, if approved, will be limited to the approved indication for use and the information and clinical data included in or consistent with the approved prescribing information. If we want to expand the marketing and promotion of ADS-5102 beyond the approved indication or with information not consistent with the approved prescribing information, we will need to obtain additional regulatory approvals, which may not be granted.

In October 2016, we submitted an NDA seeking regulatory approval of ADS-5102 for the treatment of LID. If this product candidate is approved, we will be permitted to market or promote it only for the treatment of LID and not for other uses. We are developing ADS-5102 for at least one additional indication, treatment of walking impairment in patients with multiple sclerosis, and potentially others. In order to market and promote ADS-5102 for these additional indications, we will need to conduct additional clinical trials that will likely be time-consuming and expensive, and to obtain regulatory approval for such uses. Additionally, our marketing and promotional efforts will be limited to the use of information included in or deemed to be consistent with the approved prescribing information for ADS-5102 for the treatment of LID, including the clinical data and results reflected in the prescribing information. To use information not consistent with the approved prescribing information, will require additional regulatory approvals.

If our product candidates are approved for marketing and we are found to have improperly promoted unapproved uses of such products, or if physicians misuse our products, we may be subject to restrictions on the sale or marketing of our products, significant fines, penalties, and sanctions, product liability claims, and our image and reputation within the industry and marketplace could be harmed.

The FDA and other regulatory agencies, including regulatory authorities outside the United States, strictly regulate the marketing and promotional claims that are made about drug products, such as ADS-5102, if approved. In particular, promotion for a product must be consistent with its labeling approved by the FDA or by regulatory agencies in other countries. For example, if we receive marketing approval for ADS-5102 for the treatment of LID, the first indication we are pursuing, we cannot prevent physicians from prescribing ADS-5102 for indications or uses that are inconsistent with the approved label. If, however, we are found to have promoted such unapproved uses prior to the FDA's approval for an additional indication, we may, among other consequences, receive untitled or warning letters and become subject to significant liability, which would materially harm our business. Both the U.S. federal government and foreign regulatory authorities have levied significant civil and criminal fines against companies and individuals for alleged improper promotion and have entered into settlement agreements with pharmaceutical companies to limit inappropriate promotional activities. If we become the target of such an investigation or prosecution based on our marketing and promotional practices, we could face similar sanctions, which would materially harm our business. In addition, management's attention could be diverted from our business operations, significant legal expenses could be incurred, and our reputation could be damaged.

Physicians' prescribing of our products for unapproved uses may also subject us to product liability claims, to the extent such uses lead to adverse events, side effects, or injury. Product liability claims could divert management's attention from our core business, be expensive to defend, and result in sizable damage awards against us that may not be covered by insurance. Furthermore, the use of our products for indications other than those approved by the FDA or regulatory authorities outside the United States may not effectively treat such conditions, which could harm our reputation in the marketplace among physicians and patients. Any of these events could harm our business and results of operations and cause our stock price to decline.

If we fail to comply with our reporting and payment obligations under the Medicaid Drug Rebate Program or other governmental pricing programs in the United States, we could be subject to additional reimbursement requirements, fines, sanctions and exposure under other laws which could have a material adverse effect on our business, results of operations and financial condition.

We will participate in the Medicaid Drug Rebate Program, as administered by CMS, and other federal and state government pricing programs in the United States, and we may participate in additional government pricing programs in the future. These programs generally require us to pay rebates or otherwise provide discounts to government payers in connection with drugs that are dispensed to beneficiaries/recipients of these programs. In some cases, such as with the Medicaid Drug Rebate Program, the rebates are based on pricing that we report on a monthly and quarterly basis to the government agencies that administer the programs. Pricing requirements and rebate/discount calculations are complex, vary among products and programs, and are often subject to interpretation by governmental or regulatory agencies and the courts. The requirements of these programs, including, by way of example, their respective terms and scope, change frequently. Responding to current and future changes may increase our costs, and the complexity of compliance will be time consuming. Invoicing for rebates is provided in arrears, and there is frequently a time lag of up to several months between the sales to which rebate notices relate and our receipt of those notices, which further complicates our ability to accurately estimate and accrue for rebates related to the Medicaid program as implemented by individual states. Thus, there can be no assurance that we will be able to identify all factors that may cause our discount and rebate payment obligations to vary from period to period, and our actual results may differ significantly from our estimated allowances for discounts and rebates. Changes in estimates and assumptions may have a material adverse effect on our business, results of operations and financial condition.

In addition, the Office of Inspector General of the Department of Health and Human Services and other Congressional, enforcement and administrative bodies have recently increased their focus on pricing requirements for products, including, but not limited to the methodologies used by manufacturers to calculate average manufacturer price, or AMP, and best price, or BP, for compliance with reporting requirements under the Medicaid Drug Rebate Program. We are liable for errors associated with our submission of pricing data and for any overcharging of government payers. For example, failure to submit monthly/quarterly AMP and BP data on a timely basis could result in a civil monetary penalty of $10,000 per day for each day the submission is late beyond the due date. Failure to make necessary disclosures and/or to identify overpayments could result in allegations against us under the Federal False Claims Act and other laws and regulations. Any required refunds to the U.S. government or responding to a government investigation or enforcement action would be expensive and time consuming and could have a material adverse effect on our business, results of operations and financial condition. In addition, in the event that the CMS were to terminate our rebate agreement, no federal payments would be available under Medicaid or Medicare for our covered outpatient drugs.

Our product candidates, including ADS-5102, are complex to manufacture, and manufacturing disruptions may occur that could delay the launch or commercialization of our product candidates.

Our product candidates, including ADS-5102, include extended-release versions of existing drugs. The manufacture of extended-release versions of drugs is more complex than the manufacture of the immediate-release versions of drugs. Notwithstanding the fact that we have validated our process, manufacturing disruptions may occur. Such problems may prevent the production of lots that meet the specifications required for sale of the product and may be difficult and expensive to resolve. If any such issues were to arise with respect to ADS-5102 or our future product candidates, our business, financial results, or stock price could be adversely affected.

We may expend our limited resources to pursue a particular product candidate or indication and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.

Because we have limited financial and managerial resources, we have chosen to focus on research programs and product candidates for specific indications. As a result, we may forego or delay pursuit of opportunities with other product candidates or other indications that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our investment in current and future research and development programs and product candidates for specific indications may not yield any commercially viable products.

If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing, or other royalty arrangements in cases in which it would have been advantageous for us to retain sole development and commercialization rights.

If manufacturers obtain approval for generic versions of our products, including ADS-5102, or of products with which we compete, our business may suffer.

Under the U.S. Food, Drug and Cosmetic Act, or FDCA, the FDA can approve an Abbreviated New Drug Application, or ANDA, for a generic version of a branded drug without the ANDA applicant undertaking the clinical testing necessary to obtain approval to market a new drug. Generally, in place of such clinical studies, an ANDA applicant usually needs only to submit data demonstrating that its product has the same active ingredient(s), strength, dosage form, route of administration and that it is bioequivalent to the branded product.

The FDCA requires that an applicant for approval of a generic form of a branded drug certify either that its generic product does not infringe any of the patents listed by the owner of the branded drug in the *Approved Drug Products with Therapeutic Equivalence Evaluations* , also known as the Orange Book, or that those patents are not enforceable. This process is known as a paragraph IV challenge. Upon receipt of the paragraph IV notice, the owner has 45 days to bring a patent infringement suit in federal district court against the company seeking ANDA approval of a product covered by one of the owner's patents. The discovery, trial, and appeals process in such suits can take several years. If this type of suit is commenced, the FDCA provides a 30-month stay on the FDA's approval of the competitor's application. This type of litigation is often time-consuming and costly and may result in generic competition if the patents at issue are not upheld or if the generic competitor is found not to infringe the owner's patents. Such litigation has been commenced by Forest Laboratories Holdings Limited ("Forest"), an indirect wholly-owned subsidiary of Allergan plc (collectively, "Allergan") and us to enforce certain patents related to Namenda XR ® and Namzaric ® . See *Litigation* in "Note 6 - Commitments and Contingencies" in the accompanying "Notes to Condensed Consolidated Financial Statements (unaudited)" for more information.

If the litigation is resolved in favor of the ANDA applicant or the challenged patent expires during the 30-month stay period, the stay is lifted and the FDA may thereafter approve the application based on the standards for approval of ANDAs. Once an ANDA is approved by the FDA, the generic manufacturer may market and sell the generic form of the branded drug in competition with the branded medicine.

Risks related to our financial condition and need for additional capital

If we do not have adequate funds to cover all of our development and commercial activities, we may have to raise additional capital or curtail or cease operations.

While we are a clinical-stage pharmaceutical company and do not currently market any products, if approved, we expect to begin commercialization of ADS-5102 in 2017. The completion of the development and the potential commercialization of our product candidates, including ADS-5102, should they receive approval, will require substantial funds. In addition, funds are required for the continued operation of our business, as we seek to advance additional product candidates through the research and clinical development to regulatory approval and commercialization. As of June 30, 2017 , we had approximately $144.9 million in cash, cash equivalents, and investments. We believe that our available cash, cash equivalents, and investments will be sufficient to fund our anticipated level of operations for at least the next 12 months, but there can be no assurance that this will be the case.

We have financed our operations primarily through proceeds from our license agreement with Allergan, public and private equity offerings, and, to a lesser extent, our Royalty-Backed Loan with HCRP, government grants, venture debt, and benefits from tax credits made available under a federal stimulus program supporting drug development. We have devoted substantially all of our efforts to research and development, including clinical studies, of our product candidates, including ADS-5102 for the treatment of LID in patients with Parkinson's disease. We anticipate that our cash requirements will increase substantially as we:

- enhance operational, financial, and information management systems and hire more personnel, including personnel to support development of our product candidates and, if a product candidate is approved, our commercial operations;
- commercialize ADS-5102, if it is approved by the FDA, including establishing distribution, marketing, and sales capabilities;
- manufacture ADS-5102 for commercial use, if approved by the FDA;
- investigate ADS-5102 in preclinical and clinical trials for the treatment of walking impairment in patients with MS, and potentially other indications;
- conduct preclinical and clinical trials of ADS-4101 for the treatment of epilepsy (partial onset seizures);
- seek regulatory approvals for our product candidates that successfully complete clinical studies;
- continue the research, development, and manufacture of our current product candidates; and
- seek to discover or in-license additional product candidates.

If we do not have adequate funds to support these activities, our business opportunities could be hindered.

If we need additional funds to operate our business and if we cannot raise additional capital when needed, or if additional capital is not available to us on favorable terms, our stockholders may be adversely affected or our business may be harmed.

If we need additional funds to support our business and additional funding is not available under our Royalty-Backed Loan with HCRP, or from new funding sources on favorable terms or at all, we may need to delay or reduce the scope of our research and clinical development programs or commercialization efforts. We do not have any committed external source of funds or other support for our development efforts other than under our Royalty-Backed Loan with HCRP, or from new funding sources or under our license agreement with Allergan, which may be terminated by Allergan upon delivery of notice. We expect to finance future cash needs through a combination of public or private equity offerings, debt financings, royalty financings, collaborations, strategic alliances, licensing arrangements, asset sales, and other marketing and distribution arrangements. Additional financing may not be available to us when we need it or it may not be available on favorable terms. If we raise additional capital through debt financings, royalty financings, collaborations, strategic alliances, or licensing arrangements with third parties, we may have to relinquish certain valuable rights to our product candidates, technologies, future revenue streams, or research programs or grant licenses on terms that may not be favorable to us. If we raise additional capital through equity offerings, the ownership interest of our existing stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect our stockholders' rights. If we raise additional capital through debt financing, in addition to the repayment of principal and interest on negotiated terms, we may be subject to covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we are unable to obtain adequate financing when needed, we may have to delay, reduce the scope of, or suspend one or more of our clinical studies or research and development programs or our commercialization efforts.

We have outstanding debt backed by two of our principal assets, ADS-5102 and royalties we may receive on Namzaric, and failure by us or our royalty subsidiary to fulfill our obligations under the applicable loan agreements may cause the repayment obligations to accelerate.

In May 2017, we, through a newly formed wholly-owned subsidiary, entered into a royalty-backed note arrangement with HealthCare Royalty Partners III, L.P. ("HCRP") pursuant to which we initially borrowed $35 million and have the potential to borrow an additional $65 million upon FDA approval and receipt of Orphan Drug exclusivity of

ADS-5102 (amantadine) extended-release capsules for the treatment of levodopa-induced dyskinesia in patients with Parkinson's disease if achieved prior to a specified date. Interest and principal on the loan will be payable from the proceeds of royalty on U.S. net sales of ADS-5102 and up to $15 million of the Company's annual royalties from Allergan on U.S. net sales of Namzaric ® starting in May 2020. The HCRP notes mature in December 2026, if not earlier prepaid.

We secured the loan with rights to ADS-5102 and rights to certain payment amounts on Namzaric and the loan documents further provide for assignment into our subsidiary holding these rights to any future intellectual property, licenses, assets and agreements with respect to the manufacture, development, supply, distribution, sale and commercialization of ADS-5102. The loan documents contain customary events of default permitting HCRP to accelerate and require mandatory prepayment of outstanding principal and interest, including: failure to timely pay principal and interest when due and payable; failure to perform specified covenants with respect to maintenance of the collateral and prohibitions on liens with respect to the collateral; limitations on payments of dividends, additional loans, acquisition or merger transactions not in accordance with the arrangement. Upon the occurrence, an event of default under the loan documents, we could be required to prepay the entire loan and, if we are not able to do so, we may lose control over certain rights and payments to ADS-5102 and royalty payments with respect to Namzaric, either of which would seriously harm our business.

Our operating results may fluctuate significantly, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations.

Our quarterly and annual operating results may fluctuate significantly in the future, which makes it difficult for us to predict our future operating results. Any future revenue will depend on the successful commercialization and sales of our product candidates, including ADS-5102 for the treatment of LID, if approved, the payment of royalties to us from Allergan under terms of our licensing agreement regarding Namenda XR ® and Namzaric ® , or the establishment of potential future collaboration and license agreements, if any, and the achievement of any upfront or milestone payments provided thereunder. Furthermore, our operating results may fluctuate due to a variety of other factors, many of which are outside of our control and may be difficult to predict, including:

- the level of demand for our products, should any of our product candidates receive regulatory approval, which may vary significantly as they are launched and compete for position in the marketplace;
- pricing and reimbursement policies with respect to our products candidates, if approved, and the competitive response from existing and potential future therapeutic approaches that compete with our product candidates;
- the cost of manufacturing our product candidates, which may vary due to a number of factors, including the terms of our agreements with contract manufacturing organizations, or CMOs;
- the timing, cost, level of investment, and success or failure of research and development activities relating to our preclinical and clinical-stage product candidates, which may change from time to time;
- expenditures that we may incur to acquire and develop additional product candidates and technologies;
- the timing and success or failure of clinical studies for competing product candidates, or any other change in the competitive landscape of our industry, including consolidation among our competitors or partners;
- the timing and magnitude of upfront and milestone payments under any potential future collaboration and licensing agreements;
- future accounting pronouncements or changes in our accounting policies; and
- changing or volatile U.S., European, and global economic environments.

The cumulative effects of these factors could result in large fluctuations and unpredictability in our quarterly and annual operating results. As a result, comparing our operating results on a period-to-period basis may not be meaningful. Investors should not rely on our past results as an indication of our future performance. This variability and unpredictability could also result in our failing to meet the expectations of industry or financial analysts or investors for any period. If our operating results fall below the expectations of analysts or investors or below any forecasts we may

provide to the market, or if the forecasts we provide to the market are below the expectations of analysts or investors, the price of our common stock could decline substantially. Such a stock price decline could occur even when we have met any previously publicly stated operating results and/or earnings guidance that we may provide.

Risks related to our reliance on third parties

We rely on third-party contract manufacturing organizations to manufacture, serialize and supply our product candidates, including ADS-5102, for us. If one of our suppliers or manufacturers fails to perform adequately or fulfill our needs, we may be required to incur significant costs and devote significant efforts to find new suppliers or manufacturers and qualify them. We may also face delays in the development, commercialization, and supply of our product candidates.

We currently have limited experience in, and we do not own facilities for, clinical and commercial manufacturing of our product candidates and we rely upon third-party contract manufacturing organizations to manufacture, serialize and supply drug product for our clinical studies and, upon regulatory approval, to meet potential future commercial demand. The manufacture of pharmaceutical products in compliance with the FDA's current Good Manufacturing Practices, or cGMPs, requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. Manufacturers of pharmaceutical products often encounter difficulties in production, including difficulties with production costs and yields, quality control, including stability of the product candidate and quality assurance testing, shortages of qualified personnel, as well as compliance with strictly enforced cGMP requirements, other federal and state regulatory requirements, and foreign regulations. If our manufacturers were to encounter any of these difficulties or otherwise fail to comply with their obligations to us or under applicable regulations, our ability to gain approval of the NDA for ADS-5102 or to provide study drugs in our clinical trials and future commercial supply would be jeopardized. Any delay or interruption in the supply of clinical study materials or commercial product could cause delays in our clinical programs, harm our ability to gain approval from regulatory authorities, and potentially disrupt patient access to our future approved products. These events would substantially harm our business, reputation and stock price.

All third-party manufacturers of our product candidates and ingredients thereof must comply with cGMP requirements enforced by the FDA through its facilities inspection program. These requirements include, among other things, quality control, quality assurance, and the maintenance of records and documentation. Manufacturers of our product candidates may be unable to comply with these cGMP requirements and with other FDA, state and foreign regulatory requirements. The FDA or similar foreign regulatory agencies may also implement new standards at any time, or change their interpretation and enforcement of existing standards for manufacture, packaging, or testing of products. We have little control over our manufacturers' compliance with these regulations and standards. A failure to comply with these requirements may result in fines and civil penalties, suspension of production, suspension or delay in product approval, product seizure or recall, or withdrawal of product approval. If the safety of any product supplied is compromised due to our manufacturers' failure to adhere to applicable laws or for other reasons, we may not be able to obtain regulatory approval for or successfully commercialize our products and we may be held liable for any injuries sustained as a result. Any of these factors could cause a delay of clinical studies, regulatory submissions, approvals, commercialization or supply of our product candidates, entail higher costs, impair our reputation, and potentially disrupt patient access or our future approved products.

We rely on a single source third-party contract manufacturing organization for the manufacture and supply of our drug substances and drug product candidates, including ADS-5102.

We currently rely on single source suppliers for our drug substances and drug product candidates, including ADS-5102, and continue to seek additional long-term supply agreements and supplier qualifications. A failure of our single source manufacturer or drug substance supplier or our failure to qualify at least one other manufacturer organization on a timely basis and validate the manufacturing process employed at that manufacturer or supplier would delay approval of an NDA and commercialization of our product candidates, including ADS-5102. Although we believe alternative sources of supply exist, the number of third-party suppliers with the necessary manufacturing and regulatory expertise and facilities is limited, and it could be expensive and take a significant amount of time to arrange and negotiate acceptable long-term contracts and obtain regulatory approvals and qualifications, which would adversely affect our business. New suppliers of any product candidate would be required to be qualified under applicable regulatory requirements, including demonstration of bioequivalence of the product made at the new supplier, and would

need to have sufficient rights under applicable intellectual property laws to the method of manufacturing the product candidate. Obtaining the necessary FDA approvals or other qualifications under applicable regulatory requirements and ensuring non-infringement of third-party intellectual property rights could result in a significant interruption of supply and could require the new manufacturer to bear significant additional costs, which may be passed on to us. Qualifying and negotiating long-term contracts with manufacturers and providers of packaging services is a lengthy process. If at any time, one or more of our qualified contract manufacturing organizations were not able to manufacture our drug substance or drug product or provide the requisite services, our business and financial condition would be materially adversely affected.

In our existing or any future potential collaborations or partnerships, we will likely not be able to control all aspects of the development and commercialization of our product candidates. This lack of control could subject us to additional risks that could harm our business.

Collaborations or license agreements involving our current or future products are subject to numerous risks, which may include that:

- partners have significant discretion in determining the efforts and resources that they will apply to collaborations;
- partners may not pursue development and commercialization of our product candidates or may elect not to continue or renew development or commercialization programs based on clinical study results, changes in their strategic focus due to the acquisition of competitive products, availability of funding, or other external factors, such as a business combination that diverts resources or creates competing priorities;
- partners may delay clinical studies, provide insufficient funding for a clinical study program, stop a clinical study, abandon a product candidate, repeat or conduct new clinical studies, or require a new formulation of a product candidate for clinical testing;
- partners could independently develop, or develop with third parties, products that compete directly or indirectly with our products or product candidates;
- a partner with marketing, manufacturing, and distribution rights to one or more products may not commit sufficient resources to or otherwise not perform satisfactorily in carrying out these activities;
- we could grant exclusive rights to our partners that would prevent us from collaborating with others;
- Allergan and future partners may not properly maintain or defend our intellectual property rights or may use our intellectual property or proprietary information in a way that gives rise to actual or threatened litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential liability;
- Allergan and future partners may not aggressively or adequately pursue litigation against ANDA filers or may settle such litigation on unfavorable terms, and as Allergan substantially controls the current ANDA litigation and terms of settlement and has different economic interests than ours, Allergan may grant licenses to generic manufacturers that permit them to make and sell generic versions of Namenda XR ® and Namzaric ® , which would negatively impact the royalties we receive under our license with Allergan;
- disputes may arise between us and a partner that causes the delay or termination of the research, development, or commercialization of our current or future products or that results in costly litigation or arbitration that diverts management attention and resources;
- agreements may be terminated, sometimes at-will, without penalty, and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable current or future products;
- partners may own or co-own intellectual property covering our products that results from our collaborating with them, and in such cases, we would not have the exclusive right to commercialize such intellectual property; and

- a partner's sales and marketing activities or other operations may not be in compliance with applicable laws resulting in civil or criminal proceedings.

We rely on third parties to conduct our clinical trials, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of these trials.

We do not independently conduct clinical studies of our product candidates. Instead, we rely on third parties, such as CROs, clinical data management organizations, medical institutions, and clinical investigators to perform this function. Our reliance on these third parties for clinical development activities reduces our control over these activities, but does not relieve us of our responsibilities. For example, the FDA requires us to comply with standards, commonly referred to as Good Clinical Practice, for conducting, recording, and reporting the results of clinical studies to assure that data and reported results are credible and accurate and that the rights, integrity, and confidentiality of patients in clinical studies are protected, even though we are not in control of these processes. These third parties may also have relationships with other entities, some of which may be our competitors. If these third parties do not successfully carry out their contractual duties, meet expected deadlines, or conduct our clinical studies in accordance with regulatory requirements or our stated protocols, we will not be able to obtain, or may be delayed in obtaining, regulatory approvals for our product candidates and will not be able to, or may be delayed in our efforts to, successfully commercialize our product candidates. The FDA may inspect certain of our clinical trial sites from the ADS-5102 development program for Good Clinical Practice compliance and data integrity prior to being able approve, if at all, our NDA for LID. Adverse findings in such inspections could result in the issuance of a Complete Response Letter to our NDA.

We also rely on other third parties to store and distribute supplies for our clinical studies. Any performance failure on the part of our existing or future distributors could delay clinical development or regulatory approval of our product candidates or commercialization of our products, producing additional losses and depriving us of potential product revenue.

Risks related to Namenda XR ® and Namzaric ®

Under our license agreement with Allergan, if Allergan fails to successfully commercialize Namenda XR ® and Namzaric ® for any reason or if the license agreement with Allergan is terminated, the potential royalties we are eligible to receive under our license agreement with Allergan may not occur or be minimal, and would have a negative impact on our revenue potential and harm our business.

In November 2012, we entered into a license agreement with Allergan pursuant to which we granted Allergan a right to develop and commercialize Namenda XR ® and Namzaric ® in the United States. Under that agreement, we expect to receive future royalties from Allergan on the net sales of Namenda XR ® and Namzaric ®, starting in 2018 and 2020, respectively. If Allergan fails to successfully commercialize Namenda XR ® and, more importantly, Namzaric ®, on which we are eligible to receive double digits percentage royalties for any reason, we may not receive such future royalties or receive minimal amounts, and our business will be harmed.

Under the license agreement, we are reliant on Allergan to commercialize Namenda XR ® and Namzaric ® and in that capacity Allergan has the discretion to:

- determine the efforts and resources that they apply towards commercialization;
- market, manufacture, and distribute the licensed products or to otherwise not perform satisfactorily in carrying out these activities; and
- to terminate the agreement without penalty and, such termination, may result in a need for additional capital to pursue further development or commercialization of the applicable current or future products.

Under the license agreement, Allergan substantially controls the intellectual property rights subject to the agreement and the current ANDA litigation and potential settlement thereof, and has economic interests different from ours. Accordingly, Allergan may manage the litigation and settlements on terms which may have a material and negative impact on our business.

We and Allergan are currently involved in ANDA litigation to enforce our intellectual property rights against generic manufacturers, who are seeking to bring generic versions of Namenda XR ® and Namzaric ® to the market. See

Litigation in "Note 6 - Commitments and Contingencies" in the accompanying "Notes to Condensed Consolidated Financial Statements (unaudited)". Under the terms of that license agreement, Allergan has the right to enforce such intellectual property rights and control such litigation. Specifically, Allergan has the discretion to:

- maintain or defend our intellectual property rights or may use our intellectual property or proprietary information in a way that gives rise to actual or threatened litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential liability; and
- not adequately pursue litigation against ANDA filers or settle such litigation on unfavorable terms, and as Allergan substantially controls the current ANDA litigation and terms of settlement and has different economic interests than ours, Allergan may grant licenses to generic manufacturers that permit them to make and sell generic versions of Namenda XR ® and Namzaric ® , which would negatively impact the royalties we receive under our license with Allergan.

We have a right to participate in, but not control, such litigations. If Allergan decides not to enforce the intellectual property rights licensed under the agreement or the litigation is resolved in favor of the generic manufacturers or if the FDA approves the ANDA filed by the generic manufacturers, such manufacturers may be able to market and sell the generic form of the branded drug in competition with Namenda XR ® and Namzaric ® . This could harm our business.

The post-marketing safety risks relating to Namzaric ® and Namenda XR ® are the same as those facing ADS-5102.

The post-marketing safety risks relating to Namzaric ® and Namenda XR ® are the same as those facing ADS-5102, which are described in the risk factor captioned "The NDA for ADS-5102 for the treatment of LID is still under review and there is an ongoing open label safety study with ADS-5102 in LID; therefore, there could be new safety findings regarding ADS-5102 or the FDA may have a different interpretation of our previously reported positive clinical results at approval." These things could lead us to experience failure to receive regulatory approval or receive approval with unexpected safety information in the prescribing information that could limit physician and patient acceptance of the product. Additionally, if ADS-5102 is approved and commercialized for patients with LID, unforeseen safety issues could emerge thereafter that could require us to change the prescribing information in the future to adding warnings or limit use. Any of these events could have a negative impact on our business.

Risks related to government regulation

The regulatory approval process is expensive, time consuming, and uncertain and may prevent us or our collaboration partners from obtaining approvals for the commercialization of some or all of our product candidates.

The research, development, manufacturing, quality control, labeling, approval, safety, effectiveness, storage, record keeping, reporting, selling, import, export, advertising, promotion, marketing, and distribution of drug products are subject to extensive regulation by the FDA and other regulatory authorities in the United States, and by regulatory authorities in other countries, with different regulations from country to country. Neither we nor our collaboration partners are permitted to market our product candidates in the United States or other countries until we receive FDA approval of an NDA. We have not received marketing approval for any of our product candidates. Obtaining approval of an NDA or analogous marketing authorization outside of the United States can be a lengthy, expensive, and uncertain process.

To receive approval to commercialize any of our product candidates in the United States, we and our collaboration partners must demonstrate with substantial evidence from adequate and well-controlled clinical studies, and to the satisfaction of the FDA, that such product candidates are safe and effective for their intended uses. Results from preclinical studies and clinical studies can be interpreted in different ways. Even if we and our collaboration partners believe the preclinical or clinical data for our product candidates are promising, such data may not be sufficient to support approval by the FDA. Administering any of our product candidates to humans may produce undesirable side effects, which could interrupt, delay, or cause suspension of clinical studies of our product candidates and result in the denial of approval of our product candidates for any or all targeted indications.

FDA approval of an NDA is not guaranteed, and the approval process is expensive and may take several years. The FDA also has substantial discretion in the approval process. Despite the time and expense we invest, failure can

occur at any stage, and we could encounter problems that require us to repeat clinical studies, perform additional preclinical studies and clinical studies, or abandon development and commercialization of a product candidate altogether. The number of preclinical studies and clinical studies that will be required for FDA approval varies depending on, among other factors, the product candidate, the disease or condition that the product candidate is designed to address, and the regulations applicable to any particular product candidate. The FDA can delay, limit, or deny approval of a product candidate for many reasons, including, but not limited to:

- disagreement with the design or implementation of our clinical trials;
- failure of clinical trials to show the level of statistical significance or clinical meaningfulness needed for approval;
- failure to demonstrate that a product candidate is safe or effective;
- insufficient data from preclinical and clinical studies to support an application;
- a finding by an institutional review board (IRB), Data Safety Monitoring Board (DSMB), Data Monitoring Committee (DMC), or the FDA that the clinical trial exposes subjects or patients to an unacceptable health risk;
- disapproval of our or our third-party manufacturer's processes or facilities; or
- changes to FDA's approval policies or regulations.

If any of our product candidates fails to demonstrate safety and efficacy in clinical studies or does not gain regulatory approval, our business and results of operations will be materially and adversely harmed.

If the FDA concludes that our product candidates do not satisfy the requirements for approval under the Section 505(b)(2) regulatory approval pathway, or if the requirements for approval under Section 505(b)(2) are not as we expect, the approval pathway for our products will likely take significantly longer, cost significantly more, and entail significantly greater complications and risks than anticipated, and in any case may not be successful. Similar obstacles may arise in other countries.

We are developing our current and future product candidates, including ADS-5102, with the expectation that they will be eligible for approval through the Section 505(b)(2) regulatory pathway. Section 505(b)(2) of the FDCA allows an NDA to rely in part on the FDA's prior conclusions regarding the safety and effectiveness of an approved drug product, or reference listed drug (RLD). Use of the Section 505(b)(2) regulatory pathway could reduce the time required for the development programs of our product candidates by, for example, potentially decreasing the amount of preclinical and/or clinical data specific to a product candidate that we would need to generate in order to obtain FDA approval. If the FDA does not allow us to pursue the Section 505(b)(2) regulatory pathway as anticipated, we may need to conduct additional clinical trials, provide additional data and information, and meet additional standards for product approval. If this were to occur, the time and financial resources required to obtain FDA approval for our product candidates, and the complications and risks associated with regulatory approval would likely substantially increase. Moreover, our inability to pursue the Section 505(b)(2) regulatory pathway may result in competitive products reaching the market more quickly than our product candidates, which would adversely impact our competitive position and prospects. Even if we are able to utilize the Section 505(b)(2) regulatory pathway, there is no guarantee that utilizing this pathway will ultimately lead to faster product development or earlier approval for ADS-5102 or any other product candidate that we may attempt to develop and commercialize.

An NDA submitted through the Section 505(b)(2) regulatory pathway for a drug product with an active moiety that has been previously approved in another product (e.g., amantadine) may be entitled to three years of regulatory exclusivity if the NDA contains data from clinical investigations (other than bioavailability or bioequivalence studies) conducted by or for the sponsor and deemed essential to FDA's approval of the NDA. This regulatory exclusivity precludes, among other things, approval of another 505(b)(2) NDA for a product with the same conditions of approval. Although obtaining such exclusivity for our product candidates could provide a competitive benefit for us, the availability of such exclusivity to competitors, if their products were to be approved before our product candidates, presents a risk. If a competing product were approved in our target indication and granted three years of exclusivity, and if the FDA were to find that our product candidate does not differ with respect to the relevant conditions of approval of

the approved competing product, then approval of the 505(b)(2) NDA for our product candidate in the target indication may be delayed for as long as the competitor has exclusivity.

With a Section 505(b)(2) NDA, we also must certify to the FDA concerning any patents listed for the RLD in the Orange Book. A certification that our product candidate does not infringe the RLD's Orange Book-listed patents, or that such patents are invalid (known as a paragraph iv certification) would require providing notice of that certification to the patent holder and the sponsor of the RLD NDA, and we could then be challenged in court by the patent owner or the holder of the approved NDA for the RLD. If such a lawsuit were to be filed within a specified timeframe, it would lead to a 30-month period during which FDA would be precluded from approving our NDA.

Even if we receive regulatory approval for a particular product candidate, we will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense and subject us to penalties if we fail to comply with applicable regulatory requirements.

Once regulatory approval has been granted for a particular product candidate, the manufacturing, marketing, and further development of the approved product are subject to continual review by the FDA and/or analogous non-U.S. regulatory authorities. Any regulatory approval that we or our collaboration partners receive for our product candidates will be subject to limitations on the indicated uses for which the product may be marketed, and may be subject to requirements for potentially costly post-marketing follow-up studies to monitor the safety and efficacy of the product. In addition, if the FDA and/or analogous non-U.S. regulatory authorities approve any of our product candidates, we will be subject to extensive and ongoing regulatory requirements with regard to the labeling, packaging, adverse event reporting, storage, distribution, advertising, promotion, tracking, recordkeeping, and periodic reporting for our products. Further, we and our contract manufacturers of our drug products are required to comply with cGMP regulations, which include requirements related to quality control and quality assurance and maintenance of records and documentation. Regulatory authorities must approve manufacturing facilities before they can be used to manufacture our drug products, and these facilities are subject to continual review and periodic inspections by the FDA and other regulatory authorities for compliance with cGMP regulations. Certain changes to the manufacturing processes for our product candidates, if approved, would also be subject to pre-approval by regulatory authorities. In addition, if we or a third party discover previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured, a regulatory authority may impose restrictions on that product, its manufacturer, or us, including but not limited to requiring withdrawal of the product from the market or suspension of manufacturing. If we, our product candidates or the manufacturing facilities for our product candidates fail to comply with regulatory requirements of the FDA and/or applicable non-U.S. regulatory authorities, we could be subject to administrative or other sanctions, including:

- warning letters or untitled letters;
- civil or criminal penalties and fines;
- injunctions;
- suspension, variation, or withdrawal of regulatory approval;
- suspension of ongoing clinical studies;
- voluntary or mandatory product recalls;
- requirements for dissemination of corrective information or modifications to promotional materials;
- refusal to approve pending applications for marketing approval of new drugs or supplements to approved applications filed by us;
- refusal to permit import or export of our products;
- restrictions on operations, including costly new manufacturing requirements; or
- seizure or detention of our products.

Regulatory requirements and policies may change, and we may need to comply with additional laws and regulations that are enacted. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or in other countries. If we are not able to maintain regulatory compliance, we may not be permitted to market, or continue to market, our future products and our business may suffer.

Changes in healthcare law and implementing regulations, including government restrictions on pricing and reimbursement, as well as healthcare policy and other healthcare payer cost-containment initiatives and current societal pressures regarding pharmaceutical product pricing, may negatively impact our ability to generate revenues from or could limit or prevent our product candidates' commercial success.

In the United States, there have been and we expect there will continue to be a number of legislative and regulatory changes to the healthcare system that could affect our future revenue and profitability and the future revenue and profitability of our potential customers. Federal and state lawmakers regularly propose and, at times, enact legislation that would result in significant changes to the healthcare system, some of which are intended to contain or reduce the costs of medical products and services. For example, in March 2010, the PPACA was passed, which has substantially changed how healthcare is financed by both governmental and private insurers, and has significantly impacted the U.S. pharmaceutical industry. Details of changes under the PPACA are discussed in the business heading "Other healthcare regulations" in Part I, Item 1, of our 2016 Annual Report on Form 10-K.

Legislative and regulatory changes to the PPACA remain possible and appear likely in the 115th United States Congress and under the Trump Administration. We expect that the PPACA, as currently enacted or as it may be amended in the future, and other healthcare reform measures that may be adopted in the future, could have a material adverse effect on our industry generally and on our ability to maintain or increase sales of our existing products. There have also been proposals to impose federal rebates on Medicare Part D drugs, requiring federally-mandated rebates on all drugs dispensed to Medicare Part D enrollees or on only those drugs dispensed to certain groups of lower income beneficiaries. If any of these proposals are adopted, they could result in our owing additional rebates, which could have a negative impact on revenues from sales of our products.

The continuing efforts of the government, insurance companies, managed care organizations, other payers of healthcare services, and patient and political groups to contain or reduce costs of healthcare may, among other things, adversely affect:

- our ability to set a price we believe is fair for our products;
- the reputation of our Company;
- our ability to generate revenue and achieve or maintain profitability; and
- the availability of capital.

Our ability to commercialize our products successfully, and to attract commercialization partners for our products, will depend in significant part on the availability of adequate financial coverage and reimbursement from third party payers, including, in the U.S., governmental payers such as the Medicare and Medicaid programs, managed care organizations and private health insurers. Details of these considerations are discussed in the business heading "Other healthcare regulations" in Part I, Item 1, of our 2016 Annual Report on Form 10-K.

If we fail to comply with our reporting and payment obligations under the Medicaid Drug Rebate program or other governmental pricing programs that we may join if we successfully commercialize any of our product candidates, we could be subject to additional reimbursement requirements, penalties, sanctions and fines, which could have a material adverse effect on our business, financial condition, results of operations and growth prospects.

We intend to participate in and then will have certain price reporting obligations to the Medicaid Drug Rebate program and other governmental pricing programs.

Under the Medicaid Drug Rebate program, a manufacturer is required to pay a rebate to each state Medicaid program for its covered outpatient drugs that are dispensed to Medicaid beneficiaries and paid for by a state Medicaid program as a condition of having federal funds being made available to the states for our drugs under Medicaid and Medicare Part B. Those rebates are based on pricing data reported by the manufacturer on a monthly and quarterly basis

to the Centers for Medicare and Medicaid Services, or CMS, the federal agency that administers the Medicaid Drug Rebate program. These data include the average manufacturer price and, in the case of innovator products, the best price for each drug which, in general, represents the lowest price available from the manufacturer to any entity in the United States in any pricing structure, calculated to include all sales and associated rebates, discounts and other price concessions.

The PPACA made significant changes to the Medicaid Drug Rebate program, as discussed under the heading "Other healthcare regulations" in Part I, Item 1, of our 2016 Annual Report on Form 10-K. On February 1, 2016, CMS issued final regulations to implement the changes to the Medicaid Drug Rebate program under the PPACA. These regulations became effective on April 1, 2016. The issuance of regulations and coverage expansion by various governmental agencies relating to the Medicaid Drug Rebate program may increase our costs and the complexity of compliance and could have a material adverse effect on our results of operations if we participate in the Medicaid Drug Rebate Program if and when we successfully commercialize any of our product candidates.

Federal law requires that any company that participates in the Medicaid Drug Rebate program also participate in the Public Health Service's 340B drug pricing program in order for federal funds to be available for the manufacturer's drugs under Medicaid and Medicare Part B. The 340B program requires participating manufacturers to agree to charge no more than the 340B "ceiling price" for the manufacturer's covered outpatient drugs to a variety of community health clinics and other entities that receive health services grants from the Public Health Service, as well as hospitals that serve a disproportionate share of low-income patients. The PPACA expanded the list of covered entities to include certain free-standing cancer hospitals, critical access hospitals, rural referral centers and sole community hospitals, but exempts "orphan drugs" from the ceiling price requirements for these covered entities. The 340B ceiling price is calculated using a statutory formula based on the average manufacturer price and rebate amount for the covered outpatient drug as calculated under the Medicaid Drug Rebate program. Changes to the definition of average manufacturer price and the Medicaid rebate amount under the Healthcare Reform Act and CMS's final regulations implementing those changes also could affect the 340B ceiling price calculations for any of our product candidates that we successfully commercialize and could negatively impact our results of operations.

The PPACA obligates the Secretary of the HHS to update the agreement that manufacturers must sign to participate in the 340B program to obligate a manufacturer to offer the 340B price to covered entities if the manufacturer makes the drug available to any other purchaser at any price and to report to the government the ceiling prices for its drugs. The Health Resources and Services Administration, or HRSA, recently initiated the process of updating the agreement with participating manufacturers. The PPACA also obligates the Secretary of the HHS to create regulations and processes to improve the integrity of the 340B program. In 2015, HRSA issued proposed omnibus guidance that addresses many aspects of the 340B program, and in August 2016, HRSA issued a proposed regulation regarding an administrative dispute resolution process for the 340B program. It is unclear when or whether the guidance or regulation will be released in final form under the Trump Administration. On January 5, 2017, HRSA issued a final regulation regarding the calculation of 340B ceiling price and the imposition of civil monetary penalties on manufacturers that knowingly and intentionally overcharge covered entities. The March 6, 2017 effective date of this regulation is subject to a temporary delay directed by the Trump Administration, and the regulation could be subject to further delay or other modification by the Trump Administration. Implementation of this final rule and the issuance of any other final regulations and guidance could affect our obligations under the 340B program in ways we cannot anticipate, if and when we successfully commercialize any of our product candidates and if we participate in the 340B program. In addition, legislation may be introduced that, if passed, would further expand the 340B program to additional covered entities or would require participating manufacturers to agree to provide 340B discounted pricing on drugs used in an inpatient setting.

Pricing and rebate calculations vary across products and programs, are complex, and are often subject to interpretation by the reporting manufacturer, governmental or regulatory agencies and the courts. In the case of Medicaid pricing data, if we join the Medicaid Drug Rebate Program and become aware that our reporting for a prior quarter was incorrect, or has changed as a result of recalculation of the pricing data, we will be obligated to resubmit the corrected data for up to three years after those data originally were due. Such restatements and recalculations would increase our costs for complying with the laws and regulations governing the Medicaid Drug Rebate program and could result in an overage or underage in our rebate liability for past quarters. Price recalculations also may affect the ceiling price at which we would be required to offer any of our product candidates that we successfully commercialize under the 340B drug discount program.

We will be liable for errors associated with any submission of pricing data. In addition to retroactive rebates and the potential for 340B program refunds, if we are found to have knowingly submitted any false price information to the government, we may be liable for civil monetary penalties in the amount of $178,156 per item of false information. Our failure to submit the required price data on a timely basis could result in a civil monetary penalty of $17,816 per day for each day the information is late beyond the due date. Such failure also could be grounds for CMS to terminate our Medicaid drug rebate agreement, pursuant to which we will participate in the Medicaid program if we join the program if and when we successfully commercialize any of our product candidates. In the event that CMS terminates our rebate agreement, federal payments may not be available under Medicaid or Medicare Part B for any of our product candidates that we successfully commercialize.

CMS and the OIG have pursued manufacturers that were alleged to have failed to report these data to the government in a timely manner. Governmental agencies may also make changes in program interpretations, requirements or conditions of participation, some of which may have implications for amounts previously estimated or paid. We cannot assure you that our submissions, if we participate in the federal programs if and when we successfully commercialize any of our product candidates, will not be found by CMS to be incomplete or incorrect.

In order to be eligible to have any of our product candidates that we successfully commercialize paid for with federal funds under the Medicaid and Medicare Part B programs and purchased by the Department of Veterans Affairs ("VA"), Department of Defense, Public Health Service, and Coast Guard (the "Big Four agencies"), and certain federal grantees, we are required to participate in the VA Federal Supply Schedule ("FSS") pricing program, established under Section 603 of the Veterans Health Care Act of 1992. Under this program, we are obligated to make any of our product candidates that we successfully commercialize that meet the statutory definition of "covered drug" (biologics and single and innovator multiple source drugs) available for procurement on an FSS contract and charge a price to the Big Four agencies that is no higher than the Federal Ceiling Price ("FCP"), which is a price calculated pursuant to a statutory formula. The FCP is derived from a calculated price point called the "non-federal average manufacturer price" ("Non-FAMP"), which we will be required to calculate and report to the VA on a quarterly and annual basis. Pursuant to applicable law, knowing provision of false information in connection with a Non-FAMP filing can subject a manufacturer to penalties of $178,156 for each item of false information. The FSS contract also contains extensive disclosure and certification requirements.

Under Section 703 of the National Defense Authorization Act for FY 2008, we will be required to pay quarterly rebates on utilization of innovator products that are dispensed through the Tricare network pharmacies to Tricare beneficiaries. The rebates are calculated as the difference between the annual Non-FAMP and FCP. If we overcharge the government in connection with the FSS contract or Tricare Retail Pharmacy Rebate Program, whether due to a misstated FCP or otherwise, we are required to refund the difference to the government. Failure to make necessary disclosures and/or to identify contract overcharges can result in allegations against us under the False Claims Act and other laws and regulations. Unexpected refunds to the government, and any response to government investigation or enforcement action, would be expensive and time-consuming, and could have a material adverse effect on our business, financial condition, results of operations, and growth prospects if we successfully commercialize any of our product candidates.

If we fail to comply with healthcare regulations, we could face substantial penalties and our business, operations, and financial condition could be adversely affected.

Healthcare providers, physicians, distributors, and third-party payers play a primary role in the distribution, recommendation, and prescription of any pharmaceutical product for which we obtain marketing approval. Our arrangements with third-party payers and customers expose us to broadly applicable federal and state fraud and abuse and other laws and regulations that may constrain the business or financial arrangements through which we market, sell and distribute any products for which we have obtained or may obtain marketing approval. The laws and regulations that may affect our ability to operate include:

- the federal healthcare program Anti-Kickback Statute, which prohibits, among other things, knowingly and willfully offering, paying, soliciting, or receiving any remuneration (including any kickback, bribe or rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order, lease, arrangement or recommendation of, any good, facility, item, or service for which payment may be made, in whole or in part, under federal healthcare programs, such as the Medicare and Medicaid programs. Liability under the Anti-Kickback Statute may be established without a person or entity having actual knowledge of the statute or specific intent to violate it. In addition, the

government may assert that a claim including items or services resulting from a violation of the Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal civil False Claims Act;

- the federal civil False Claims Act, which prohibits individuals or entities from, among other things, knowingly presenting, or causing to be presented, false or fraudulent claims for payment of government funds, or knowingly using false records or statements, to obtain payment from the federal government. In recent years, several pharmaceutical and other health care companies have faced enforcement actions under the False Claims Act for, among other things, allegedly submitting false or misleading pricing information to government healthcare programs, providing free product to customers with the expectation that the customers would bill federal programs, product and patient assistance programs, including reimbursement services, and marketing products for off-label or unapproved uses;

- the federal Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), which prohibits, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payer (e.g., public or private) and knowingly and willfully falsifying, concealing, or covering up by any trick or device a material fact or making any materially false statements in connection with the delivery of, or payment for, healthcare benefits, items, or services relating to healthcare matters. HIPAA also imposes obligations on certain entities, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information. HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 (HITECH), and their respective implementing regulations, also governs the conduct of certain electronic healthcare transactions and protects the security and privacy of protected health information;

- the federal Physician Payment Sunshine Act, being implemented as the Open Payments Program, which requires manufacturers of drugs, devices, biologicals, and medical supplies for which payment is available under Medicare, Medicaid, or the Children's Health Insurance Program (with certain exceptions) to report annually to the federal government information related to payments and other transfers of value made to physicians (defined to include doctors, dentists, optometrists, podiatrists, and chiropractors) and teaching hospitals, as well as certain ownership and investment interests held by physicians and their immediate family members; and

- analogous state laws and regulations, such as anti-kickback, and false claims laws, which may be broader in scope and apply to items or services reimbursed by any third-party payer, including commercial insurers. Several states also require pharmaceutical companies to report expenses relating to the marketing and promotion of pharmaceutical products in those states and to report gifts and payments to individual health care providers in those states. Some of these states also prohibit certain marketing-relating activities, including the provision of gifts, meals, or other items to certain health care providers. In addition, several states require pharmaceutical companies to implement compliance programs or marketing codes.

If our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including civil, criminal and/or administrative penalties, damages, fines, disgorgement, possible exclusion from participation in Medicare, Medicaid, and other federal healthcare programs, reputational harm, diminished profits and future earnings, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our financial results. Any action against us for violation of these or other laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. Moreover, achieving and sustaining compliance with applicable federal and state privacy, security, and fraud laws may prove costly.

In addition, in some foreign countries, the proposed pricing for a drug must be approved before it may be lawfully marketed. Moreover, the requirements governing drug pricing and reimbursement vary widely from country to country. For example, in the European Union the sole legal instrument at the European Union level governing the pricing and reimbursement of medicinal products is Council Directive 89/105/EEC (the Price Transparency Directive). The aim of the Price Transparency Directive is to ensure that pricing and reimbursement mechanisms established in European Union member states are transparent and objective, do not hinder the free movement and trade of medicinal products in the European Union, and do not hinder, prevent or distort competition on the market. The Price Transparency Directive

does not, however, provide any guidance concerning the specific criteria on the basis of which pricing and reimbursement decisions are to be made in individual European Union member states. The national authorities of the individual European Union member states are free to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices and/or reimbursement of medicinal products for human use. Some individual European Union member states adopt policies according to which a specific price or level of reimbursement is approved for the medicinal product. Other European Union member states adopt a system of reference pricing, basing the price or reimbursement level in their territory either, on the pricing and reimbursement levels in other countries, or on the pricing and reimbursement levels of medicinal products intended for the same therapeutic indication. Furthermore, some European Union member states impose direct or indirect controls on the profitability of the company placing the medicinal product on the market.

Health Technology Assessment (HTA) of medicinal products is becoming an increasingly common part of the pricing and reimbursement procedures in some European Union member states. These countries include the United Kingdom, France, Germany, and Sweden. The HTA process in the European Union member states is governed by the national laws of these countries. HTA is the procedure according to which the assessment of the public health impact, therapeutic impact and the economic and societal impact of the use of a given medicinal product in the national healthcare systems of the individual country is conducted. HTA generally focuses on the clinical efficacy and effectiveness, safety, cost, and cost-effectiveness of individual medicinal products as well as their potential implications for the national healthcare system. Those elements of medicinal products are compared with other treatment options available on the market.

The outcome of HTA may influence the pricing and reimbursement status for specific medicinal products within individual European Union member states. The extent to which pricing and reimbursement decisions are influenced by the HTA of a specific medicinal product vary between the European Union member states.

In 2011, Directive 2011/24/EU was adopted at European Union level. This Directive concerns the application of patients' rights in cross-border healthcare. The Directive is intended to establish rules for facilitating access to safe and high-quality cross-border healthcare in the European Union. Pursuant to Directive 2011/24/EU, a voluntary network of national authorities or bodies responsible for HTA in the individual EU member states was established. The purpose of the network is to facilitate and support the exchange of scientific information concerning HTAs. This could lead to harmonization between European Union member states of the criteria taken into account in the conduct of HTA in pricing and reimbursement decisions and negatively impact price in at least some European Union member states.

If we fail to comply with data protection laws and regulations, we could be subject to government enforcement actions (which could include civil or criminal penalties), private litigation and/or adverse publicity, which could negatively affect our operating results and business.

We are subject to data protection laws and regulations (i.e., laws and regulations that address privacy and data security). In the U.S., numerous federal and state laws and regulations, including state data breach notification laws, state health information privacy laws, and federal and state consumer protection laws (e.g., Section 5 of the FTC Act), govern the collection, use, disclosure, and protection of health-related and other personal information. Failure to comply with data protection laws and regulations could result in government enforcement actions and create liability for us (which could include civil and/or criminal penalties), private litigation and/or adverse publicity that could negatively affect our operating results and business. In addition, we may obtain health information from third parties (e.g., healthcare providers who prescribe our products) that are subject to privacy and security requirements under HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act (the "HITECH Act"). Although we are not directly subject to HIPAA—other than potentially with respect to providing certain employee benefits—we could be subject to criminal penalties if we knowingly obtain or disclose individually identifiable health information maintained by a HIPAA-covered entity in a manner that is not authorized or permitted by HIPAA. HIPAA generally requires that healthcare providers and other covered entities obtain written authorizations from patients prior to disclosing protected health information of the patient (unless an exception to the authorization requirement applies). If authorization is required and the patient fails to execute an authorization or the authorization fails to contain all required provisions, then we may not be allowed access to and use of the patient's information and our research efforts could be delayed. Furthermore, use of protected health information that is provided to us pursuant to a valid patient authorization is subject to the limits set forth in the authorization (e.g., for use in research and in submissions to regulatory authorities for product approvals). In addition, HIPAA does not replace federal, state, international or other laws that may grant individuals even greater privacy protections.

EU member states and other jurisdictions where we operate have adopted data protection laws and regulations, which impose significant compliance obligations. For example, the EU Data Protection Directive imposes strict obligations and restrictions on the ability to collect, analyze and transfer personal data, including health data from clinical trials and adverse event reporting. Switzerland has adopted similar restrictions. Data protection authorities from the different EU member states may interpret the applicable laws differently, and guidance on implementation and compliance practices are often updated or otherwise revised, which adds to the complexity of processing personal data in the EU. Although there are legal mechanisms to allow for the transfer of personal data from the EU to the U.S., the decision of the European Court of Justice in the *Schrems* case (Case C-362/14 Maximillian Schrems v. Data Protection Commissioner) invalidated the Safe Harbor framework and increased uncertainty around compliance with European Union restrictions on cross-border data transfers. As a result of the decision, it was no longer possible to rely on safe harbor certification as a legal basis for the transfer of personal data from the EU to entities in the U.S. On February 29, 2016, however, the European Commission announced an agreement with the United States Department of Commerce ("DOC") to replace the invalidated Safe Harbor framework with a new EU-U.S. "Privacy Shield." On July 12, 2016, the European Commission adopted a decision on the adequacy of the protection provided by the Privacy Shield. The Privacy Shield is intended to address the requirements set out by the European Court of Justice in its ruling by imposing more stringent obligations on companies, providing stronger monitoring and enforcement by the DOC and Federal Trade Commission, and making commitments on the part of public authorities regarding access to information. U.S. companies have been able to certify to the U.S. DOC their compliance with the privacy principles of the Privacy Shield since August 1, 2016. On September 16, 2016, the Irish privacy advocacy group Digital Rights Ireland brought an action for annulment of the European Commission decision on the adequacy of the Privacy Shield before the European Court of Justice (Case T-670/16). Case T-670/16 is still pending. If, however, the European Court of Justice invalidates the Privacy Shield, it will no longer be possible to rely on the Privacy Shield certification to support transfer of personal data from the European Union to entities in the US. Adherence to the Privacy Shield is not, however, mandatory. U.S.-based companies are permitted to rely either on their adherence to the EU-US Privacy Shield or on the other authorized means and procedures to transfer personal data provided by the EU Data Protection Directive.

In December 2015, a proposal for an EU General Data Protection Regulation, intended to replace the current EU Data Protection Directive, introducing new data protection requirements in the EU, as well as substantial fines for breaches of the data protection rules, was agreed between the European Parliament, the Council of the European Union, and the European Commission. The EU General Data Protection Regulation entered into force on May 24, 2016 and will apply from May 25, 2018. The EU Data Protection Regulation will increase our responsibility and liability in relation to personal data that we process and we will also face substantial fines for breaches of the data protection rules. We may be required to put in place additional mechanisms ensuring compliance with the new EU data protection rules. Furthermore, there is a growth towards the public disclosure of clinical trial data in the European Union which adds to the complexity of processing health data from clinical trials.

If we or our vendors fail to comply with applicable data privacy laws, or if the legal mechanisms we or our vendors rely upon to allow for the transfer of personal data from the EU or Switzerland to the U.S. (or other countries not considered by the European Commission to provide an adequate level of data protection) are not considered adequate, we could be subject to government enforcement actions and significant penalties against us, and our business could be adversely impacted if our ability to transfer personal data outside of the European Union or Switzerland is restricted.

Failure to obtain regulatory approvals in foreign jurisdictions will prevent us from marketing our products internationally.

We may decide to seek marketing authorizations to commercialize ADS-5102, ADS-4101, and other future product candidates outside of the United States. To market our future products in the European Union and many other foreign jurisdictions, we must obtain separate regulatory approvals. Specifically, in the EU, medicinal products can only be commercialized after obtaining a Marketing Authorization, or MA.

Before granting an MA, the European Medicines Agency or the competent authorities of the member states of the EU make an assessment of the risk-benefit balance of the product on the basis of a Common Technical Document including, among other information, scientific criteria concerning its quality, safety, and efficacy.

Similar to the U.S., both marketing authorization holders and manufacturers of medicinal products are subject to comprehensive regulatory oversight by the EMA and the competent authorities of the individual EU member states both before and after grant of the manufacturing and Marketing Authorizations. This includes control of compliance with

cGMP rules, which govern quality control of the manufacturing process and require documentation policies and procedures. We and our third-party manufacturers are required to ensure that all of our processes, methods, and equipment are compliant with cGMP. Failure by us or by any of our third-party partners, including suppliers, manufacturers, and distributors to comply with EU laws and the related national laws of individual EU member states governing the conduct of clinical trials, manufacturing approval, marketing authorization of medicinal products, both before and after grant of marketing authorization, and marketing of such products following grant of authorization may result in administrative, civil, or criminal penalties. These penalties could include delays in or refusal to authorize the conduct of clinical trials or to grant Marketing Authorization, product withdrawals and recalls, product seizures, suspension, or variation of the marketing authorization, total or partial suspension of production, distribution, manufacturing, or clinical trials, operating restrictions, injunctions, suspension of licenses, fines, and criminal penalties.

We have had limited interactions with foreign regulatory authorities. The approval procedures vary among countries and can involve additional clinical testing, and the time required to obtain approval may differ from and be longer than that required to obtain FDA approval. Clinical studies conducted in one country may not be accepted by regulatory authorities in other countries. Approval by the FDA does not ensure approval by regulatory authorities in other countries, and approval by one or more foreign regulatory authorities does not ensure approval by regulatory authorities in other foreign countries or by the FDA. However, a failure or delay in obtaining regulatory approval in one country may have a negative effect on the regulatory process in others. The foreign regulatory approval process may include all of the risks associated with obtaining FDA approval as well as additional, different risks.

There is no assurance that we will be able to obtain marketing authorizations in foreign countries on a timely basis, if at all. We may not be able to file for foreign regulatory approvals, and even if we file we may not receive necessary approvals to commercialize our products in any market. If we are unable to obtain non-U.S. regulatory approval to market our product candidates in other countries, we may not be able to achieve the financial results we project and our stock price could decline.

Risks related to the operation of our business

Our future success depends on our ability to retain our chief executive officer and other key executives and to attract, retain, and motivate qualified personnel.

We are highly dependent on our chief executive officer and the other members of our executive and scientific teams. Our executives may terminate their employment with us at any time. The loss of the services of any of these people could impede the achievement of our research, development, and commercialization objectives. We maintain “key person” insurance for our chief executive officer, but not for any other executives or employees. Any insurance proceeds we may receive under this “key person” insurance would not adequately compensate us for the loss of our chief executive officer’s services.

Recruiting and retaining qualified scientific, clinical, manufacturing, and commercial personnel will also be critical to our success. We may not be able to attract and retain these personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategies. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us.

We expect to expand our development and sales and marketing capabilities, and, as a result, we may encounter difficulties in managing our growth, which could disrupt our operations.

As of June 30, 2017 , we had 72 full-time equivalent employees. Over the next several years, we expect to experience significant growth in the number of our employees and the scope of our operations, particularly in sales and marketing. To manage our anticipated future growth, we must continue to implement and improve our managerial, operational, informational, and financial systems, expand our facilities, and continue to recruit and train additional qualified personnel. Due to our limited financial resources and the limited experience of our management team in managing a company with such anticipated growth, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel. The physical expansion of our operations may lead to

significant costs and may divert our management and business development resources. Any inability to manage growth could delay the execution of our business plans or disrupt our operations.

We are an "emerging growth company," and we cannot be certain whether the reduced reporting requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act, or the JOBS Act, which was enacted in April 2012. For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We could be an emerging growth company for up to five years, although circumstances could cause us to lose that status earlier. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of our initial public offering, (b) in which we have total annual gross revenue of at least $1.0 billion, or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds $700 million as of the prior June 30th, and (2) the date on which we have issued more than $1.0 billion in non-convertible debt securities during the prior three-year period. We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may suffer or be more volatile.

Business disruptions could seriously harm our future revenue and financial condition and increase our costs and expenses.

Our operations could be subject to earthquakes, power shortages, telecommunications failures, floods, hurricanes, fires, extreme weather conditions, medical epidemics, and other natural or manmade disasters or business interruptions. The occurrence of any of these business disruptions could seriously harm our operations and financial condition and increase our costs and expenses. Our corporate headquarters is located in California and certain clinical sites for our product candidates, operations of our existing and future partners, and suppliers are or will be located near major earthquake faults and fire zones. The ultimate impact on us, our significant partners, suppliers, and our general infrastructure of being located near major earthquake faults and fire zones and being consolidated in certain geographical areas is unknown, but our operations and financial condition could suffer in the event of a major earthquake, fire, or other natural or manmade disaster.

Any future operations or business arrangements with entities outside the United States present risks that could materially adversely affect our business.

If we obtain approval to commercialize any approved products or utilize CMOs outside of the United States, a variety of risks associated with international operations could materially adversely affect our business. If any product candidates that we may develop are approved for commercialization outside the United States, we will be subject to additional risks related to entering into international business relationships, including:

- different regulatory requirements for drug approvals in foreign countries;
- reduced protection for intellectual property rights;
- unexpected changes in tariffs, trade barriers, and regulatory requirements;
- economic weakness, including inflation or political instability in particular foreign economies and markets;
- difficulties in assuring compliance with foreign corrupt practices laws;
- compliance with tax, employment, immigration, and labor laws for employees living or traveling abroad;
- foreign taxes, including withholding of payroll taxes;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenue, and other obligations incident to doing business in another country;

- workforce uncertainty in countries where labor unrest is more common than in the United States;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; and
- business interruptions resulting from geopolitical actions, including war and terrorism, or natural disasters, including earthquakes, hurricanes or typhoons, floods, and fires.

Our internal computer systems, or those of our CROs, CMOs, CSO, or other contractors or consultants, may fail or suffer security breaches, which could result in a material disruption of our drug development programs.

Despite the implementation of security measures, our internal computer systems and those of our CROs, CMOs, and other contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war, and telecommunication and electrical failures. While we are not aware of any such system failure, accident, or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our drug development programs or commercialization efforts. For example, the loss of clinical study data from completed or ongoing clinical studies for any of our product candidates could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. While we back-up our internal computer systems periodically and store such data off-site or in the cloud, we can offer no assurance that such off-site storage of data will allow us to continue our business without interruptions to our operations, which could result in a material disruption of our drug development programs or commercialization efforts. To the extent that any disruption or security breach were to result in a loss of or damage to our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the further development of our product candidates could be delayed.

Risks generally associated with a company-wide implementation of information systems, including an enterprise resource planning (ERP) system, may adversely affect our business and results of operations or the effectiveness of our internal controls over financial reporting.

In support of our anticipated growth and future commercial-stage operations, we intend to select and implement a number of company-wide information systems, including adding new functionality to our enterprise resource planning (“ERP”), and other similar systems. Many of these systems are complex and their successful and timely implementation is not assured, requires significant capital expenditures, and can be disruptive to our business operations. We recently implemented a new ERP system in addition to a new human resource information system (“HRIS”). These projects required and may continue to require investment of capital and human resources and the attention of many employees who would otherwise be focused on other aspects of our business. Any deficiencies in the design and implementation of the new ERP and HRIS system could result in potentially much higher costs than we had incurred and could adversely affect our ability to develop and launch solutions, provide services, fulfill contractual obligations, file reports with the SEC in a timely manner, operate our business, or otherwise affect our controls environment. Any of these consequences could have an adverse effect on our results of operations and financial condition.

Risks related to intellectual property

Our ability to successfully commercialize our technology and products may be materially adversely affected if we are unable to obtain and maintain effective intellectual property rights for our technologies and product candidates.

Our success depends in large part on our ability to obtain and maintain patent and other intellectual property protection in the United States and in other countries with respect to our proprietary technology and products. In some circumstances, we may not have the right to control the preparation, filing, and prosecution of patent applications, or to maintain or enforce the patents, covering technology or products that we license to third parties or that we may license from third parties. Therefore, we cannot be certain that these patents and applications will be prosecuted and enforced in a manner consistent with the best interests of our business. In addition, if third parties who license patents to us or from us fail to maintain such patents, or lose rights to those patents, the rights we have licensed may be reduced or eliminated.

We have sought to protect our proprietary position by filing patent applications in the United States and abroad related to our novel technologies and products that are important to our business. This process is expensive and time-consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable

cost or in a timely manner. In addition, we may not pursue or obtain patent protection in all relevant markets. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. Our pending and future patent applications may not result in patents being issued which protect our technology or products, in whole or in part. In addition, our existing patents and any future patents we obtain may not be sufficiently broad to prevent others from using our technologies or from developing competing products and technologies.

The patent position of pharmaceutical and biotechnology companies generally is highly uncertain and involves complex legal and factual questions for which many legal principles remain unresolved. In recent years, patent rights have been the subject of significant litigation. As a result, the issuance, scope, validity, enforceability, and commercial value of our patent rights are highly uncertain. Our pending and future patent applications may not result in patents being issued in the United States or in other jurisdictions which protect our technology or products or which effectively prevent others from commercializing competitive technologies and products. Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our patents or narrow the scope of our patent protection. In addition, the laws of foreign countries may not protect our rights to the same extent as the laws of the United States. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, we cannot be certain that we were the first to make the inventions claimed in our patents or pending patent applications, or that we were the first to file for patent protection of such inventions. In addition, the United States Patent and Trademark Office, or USPTO, might require that the term of a patent issuing from a pending patent application be disclaimed and limited to the term of another patent that is commonly owned or names a common inventor. As a result, the issuance, scope, validity, enforceability, and commercial value of our patent rights is highly uncertain.

Recent or future patent reform legislation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents. In March 2013, under the Leahy-Smith America Invents Act, or America Invents Act, the United States moved from a “first to invent” to a “first-to-file” system. Under a “first-to-file” system, assuming the other requirements for patentability are met, the first inventor to file a patent application generally will be entitled to a patent on the invention regardless of whether another inventor had made the invention earlier. The America Invents Act includes a number of other significant changes to U.S. patent law, including provisions that affect the way patent applications are prosecuted, redefine prior art and establish a new post-grant review system. The effects of these changes are currently unclear, as the USPTO only recently developed new regulations and procedures in connection with the America Invents Act and many of the substantive changes to patent law, including the “first-to-file” provisions, only became effective in March 2013. In addition, the courts have yet to address any of these provisions and the applicability of the act and new regulations on specific patents discussed herein have not been determined and would need to be reviewed. However, the America Invents Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business and financial condition.

From time to time, we may become involved in opposition, interference, derivation, *inter partes* review, or other proceedings challenging our patent rights or the patent rights of others, and the outcome of any proceedings are highly uncertain. An adverse determination in any such proceeding could reduce the scope of, or invalidate, our patent rights, allow third parties to commercialize our technology or products and compete directly with us or Allergan, without payment to us.

Even if our patent applications issue as patents, they may not issue in a form that will provide us with any meaningful protection, prevent competitors from competing with us, or otherwise provide us with any competitive advantage. Our competitors may be able to circumvent our owned or licensed patents by developing similar or alternative technologies or products in a non-infringing manner. The issuance of a patent is not conclusive as to its scope, validity, or enforceability, and our owned and licensed patents may be challenged in the courts or patent offices in the United States and abroad. Such challenges may result in the patent claims of our owned or licensed patents being narrowed, invalidated, or held unenforceable, which could limit our ability to stop or prevent us from stopping others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our technology and products. Given the amount of time required for the development, testing, and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are

commercialized. As a result, our patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours or otherwise provide us with a competitive advantage.

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

Filing, prosecuting, and defending patents on all of our product candidates throughout the world would be prohibitively expensive. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where we have patent protection but where enforcement is not as strong as in the United States. These products may compete with our product candidates in jurisdictions where we do not have any issued patents, and our patent claims or other intellectual property rights may not be effective or sufficient to prevent them from so competing. Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biopharmaceuticals, which could make it difficult for us to stop the infringement of our patents or marketing of competing products against third parties in violation of our proprietary rights generally. The initiation of proceedings by third parties to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business.

Obtaining and maintaining our patent protection depends upon compliance with various procedural, document submission, fee payment, and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment, and other provisions during the patent prosecution process and following the issuance of a patent. Our failure to comply with such requirements could result in abandonment or lapse of a patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, competitors might be able to enter the market earlier than would otherwise have been the case if our patent were in force.

We may become involved in lawsuits or other proceedings to protect or enforce our patents or other intellectual property, which could be expensive, time-consuming, and unsuccessful.

Competitors may infringe or otherwise violate our patents, trademarks, copyrights or other intellectual property. To counter infringement or unauthorized use, we or our licensees may be required to file infringement claims, which can be expensive and time-consuming. For example, we, Forest, Forest Laboratories, Inc., Merz Pharma GmbH & Co. KGaA, and Merz Pharmaceuticals GmbH filed patent infringement lawsuits under Forest's patents and patents owned by us and licensed to Forest, against several manufacturers of generic pharmaceuticals that have filed ANDAs with the FDA seeking approval to manufacture and sell generic versions of Namzaric ® and Namenda XR ® . We anticipate that the prosecution of the lawsuits will require a significant amount of time and attention of our chief executive officer and other senior executives. In addition, in a patent infringement proceeding, a court may decide that a patent of ours is invalid or unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any of the Forest litigations or any other litigation or proceeding could put one or more of our patents at risk of being invalidated or interpreted narrowly. Such a result could limit our ability to prevent others from using or commercializing similar or identical technology and products, limit our ability to prevent others from launching generic versions of our products and could limit the duration of patent protection for our products, all of which could have a material adverse effect on our business. A successful challenge to our patents could reduce or eliminate our right to receive royalties from Forest. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation.

Third parties may initiate legal proceedings alleging that we or our partners are infringing their intellectual property rights, the outcome of which would be uncertain and could have a material adverse effect on the success of our business.

Our commercial success depends upon our ability and the ability of our partners to develop, manufacture, market, and sell our product candidates and to use our proprietary technologies without infringing, misappropriating, or otherwise violating the proprietary rights or intellectual property of third parties. We or our partners may become party to, or be threatened with, future adversarial proceedings or litigation regarding intellectual property rights with respect to our products and technology, including interference, derivation, re-examination, *inter partes* review, post-grant review,

opposition, or similar proceedings before the USPTO and its foreign counterparts. The costs of these proceedings could be substantial, and the proceedings may result in a loss of such intellectual property rights. Some of our competitors may be able to sustain the costs of complex patent disputes and litigation more effectively than we can, because they have substantially greater resources. In addition, any uncertainties resulting from the initiation and continuation of any disputes or litigation could adversely affect our ability to raise the funds necessary to continue our operations. Third parties may assert infringement claims against us or our partners based on existing patents or patents that may be granted in the future. Under our license agreement with Allergan we are obliged to indemnify Allergan under certain circumstances and our royalty entitlements may also be reduced. Our indemnification obligation to Allergan, while subject to customary limitations, has no monetary cap, and our right to receive royalties from Allergan may be eliminated in any calendar quarter in which certain third party generic competition exists. If we or our partners are found to infringe a third-party's intellectual property rights, we could be required to obtain a license from such third-party to continue developing and marketing our products and technology. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. We could be forced, including by court order, to cease commercializing the infringing technology or product. In addition, we could be found liable for monetary damages. A finding of infringement could prevent us from commercializing our product candidates or force us to cease some of our business operations, which could materially harm our business. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business.

We may be unable to protect the confidentiality of our trade secrets, thus harming our business and competitive position.

In addition to our patented technology and products, we rely upon trade secrets, including unpatented know-how, technology, and other proprietary information, to develop and maintain our competitive position, which we seek to protect, in part, by confidentiality agreements with our employees, our partners, and consultants. We also have agreements with our employees and selected consultants that obligate them to assign their inventions to us. However, while it is our policy to require our employees and contractors who may be involved in the conception or development of intellectual property to execute such agreements, we may be unsuccessful in executing such an agreement with each party who in fact conceives or develops intellectual property that we regard as our own. In addition, it is possible that technology relevant to our business will be independently developed by a person that is not a party to such an agreement.

While to our knowledge the confidentiality of our trade secrets has not been compromised, if the employees, consultants or partners that are parties to these agreements breach or violate the terms of these agreements, we may not have adequate remedies for any such breach or violation, and we could lose our trade secrets through such breaches or violations. Further, our trade secrets could be disclosed, misappropriated, or otherwise become known or be independently discovered by our competitors. In addition, intellectual property laws in foreign countries may not protect our intellectual property to the same extent as the laws of the United States. If our trade secrets are disclosed or misappropriated, it would harm our ability to protect our rights and adversely affect our business.

Risks related to ownership of our common stock

Our stock price may be volatile, and purchasers of our common stock could incur substantial losses.

Our stock price has fluctuated in the past and may be volatile in the future. The stock market in general and the market for securities of pharmaceutical and biotechnology companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, investors may experience losses on their investments in our stock.

In addition, the clinical development stage of our operations may make it difficult for investors to evaluate the success of our business to date and to assess our future viability. The market price for our common stock may be influenced by many factors, including:

- whether or not our NDA for ADS-5102 for the treatment of LID in patients with Parkinson's disease is approved by the FDA;
- our success in commercializing ADS-5102 for the treatment of LID in patients with Parkinson's disease, if approved by the FDA;

- the availability of reimbursement by payers at acceptable levels, or at all, for ADS-5102;
- the success of competitive products or technologies;
- results of clinical studies of our product candidates or those of our competitors;
- introductions and announcements of new products and product candidates by us, our commercialization partners, or our competitors, and the timing of these introductions or announcements;
- actions taken by regulatory agencies with respect to our or our competitors' products, product candidates, clinical studies, manufacturing process, or sales and marketing terms;
- variations in our financial results or those of companies that are perceived to be comparable to us;
- our revenue performance, both in absolute terms and relative to analyst and shareholder expectations;
- the success of our efforts to acquire or in-license additional products or product candidates;
- developments concerning our collaborations, including but not limited to those with our sources of manufacturing and our commercialization partners;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures, or capital commitments;
- developments or disputes concerning patents or other proprietary rights, including patents, litigation matters, and our ability to obtain patent protection for our current or future products;
- our ability or inability to raise additional capital and the terms on which we raise it;
- the recruitment or departure of key personnel;
- changes in the structure of healthcare reimbursement systems;
- regulatory or legal developments in the United States and other countries, especially changes in laws or regulations applicable to our current or future products;
- market conditions in the pharmaceutical and biotechnology sectors;
- actual or anticipated changes in revenue forecasts, earnings estimates or changes in stock market analyst recommendations regarding our common stock, other comparable companies or our industry generally;
- trading volume of our common stock;
- sales of our common stock by us or our stockholders;
- general economic, industry, and market conditions; and
- the other risks described in this "Risk Factors" section.

These broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance. Additionally, following periods of volatility in the market, securities class-action litigation has often been instituted against companies. Such litigation, if instituted against us, could result in substantial costs and diversion of management's attention and resources, which could materially and adversely affect our business, financial condition, results of operations, and growth prospects.

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

Sales of a substantial number of shares of our common stock in the public market, or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital

through the sale of additional equity securities. We are unable to predict the effect that sales may have on the prevailing market price of our common stock.

Concentration of ownership of our common stock among our existing executive officers, directors, and principal stockholders may prevent new investors from influencing significant corporate decisions.

Our executive officers, directors and current beneficial owners of 5% or more of our common stock, in the aggregate, beneficially own a significant percentage of our outstanding common stock. These persons, acting together, will be able to significantly influence all matters requiring stockholder approval, including the election and removal of directors and any merger or other significant corporate transactions. The interests of this group of stockholders may not coincide with the interests of other stockholders.

We will continue to incur increased costs and demands upon management as a result of complying with the laws and regulations affecting public companies, and we could fail to successfully improve our systems, procedures, and controls, which could affect our operating results.

As a public company, we will continue to incur legal, accounting and other expenses associated with reporting requirements and corporate governance requirements, including requirements under the Sarbanes-Oxley Act of 2002, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, as well as new rules implemented by the SEC and the NASDAQ Stock Market LLC. We expect that we will need to continue to improve existing, and implement new operational, financial, and information management systems, procedures, and controls to manage our business effectively. Any delay in the implementation of, or disruption in the transition to, new or enhanced systems, procedures, or controls may cause our operations to suffer and we may be unable to conclude that our internal control over financial reporting is effective.

An active trading market for our common stock may not be maintained.

Our stock is currently traded on NASDAQ, but we can provide no assurance that we will be able to maintain an active trading market on NASDAQ or any other exchange in the future or that the daily trading volume will be adequate to allow orderly purchases or sales of our common stock without significantly impacting the price per share. If an active market for our common stock is not maintained, it may be difficult for our stockholders to sell shares without depressing the market price for the shares or at all.

If securities or industry analysts do not publish research, or publish inaccurate or unfavorable research, about us or our business, our stock price and trading volume could decline.

The trading market for our common stock depends, in part, on the research and reports that securities or industry analysts publish about us or our business. Securities and industry analysts may cease to publish research on our company at any time in their discretion. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, demand for our stock could decrease, which might cause our stock price and trading volume to decline. In addition, if one or more of the analysts who cover us downgrade our stock or publish inaccurate or unfavorable research about our business, our stock price would likely decline. If our operating results fail to meet the forecast of analysts, our stock price will likely decline.

Provisions in our corporate charter documents and under Delaware law could make an acquisition of us more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our corporate charter and our bylaws may discourage, delay, or prevent a merger, acquisition, or other change in control of us that stockholders may consider favorable, including transactions in which stockholders might otherwise receive a premium for their shares. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. Because our board of directors is responsible for appointing the members of our management team, these provisions could in turn affect any attempt by our stockholders to replace current members of our management team. Among others, these provisions include that:

- our board of directors is divided into three classes with staggered three-year terms, which may delay or prevent a change of our management or a change in control;

- our board of directors has the right to change the size of our board of directors and to elect directors to fill a vacancy created by the expansion of the board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors;
- our stockholders may not act by written consent or call special stockholders' meetings; as a result, a holder, or holders, controlling a majority of our capital stock would not be able to take certain actions other than at annual stockholders' meetings or special stockholders' meetings called by the board of directors or the chairman of the board and chief executive officer;
- our certificate of incorporation prohibits cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- stockholders must provide advance notice and additional disclosures in order to nominate individuals for election to the board of directors or to propose matters that can be acted upon at a stockholders' meeting, which may discourage or deter a potential acquiror from conducting a solicitation of proxies to elect the acquiror's own slate of directors or otherwise attempting to obtain control of our company; and
- our board of directors may issue, without stockholder approval, shares of undesignated preferred stock, and the ability to issue undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to acquire us.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner.

Because we do not anticipate paying any cash dividends on our common stock in the foreseeable future, capital appreciation, if any, will be our stockholders' sole source of gain.

We have never declared or paid cash dividends on our common stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. In addition, the terms of existing or any future debt agreements may preclude us from paying dividends. As a result, capital appreciation, if any, of our common stock will be our stockholders' sole source of gain for the foreseeable future.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Not applicable.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

Not applicable.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

Not applicable.

ITEM 6. EXHIBITS

The exhibits filed as part of this Quarterly Report on Form 10-Q are set forth on the Exhibit Index, which is incorporated here by reference.

SIGNATURES

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

Adamas Pharmaceuticals, Inc.
(Registrant)

Date: August 8, 2017

/s/ Gregory T. Went, Ph.D.
Gregory T. Went, Ph.D.
Chief Executive Officer
(Principal Executive Officer)

Date: August 8, 2017

/s/ Alfred G. Merriweather
Alfred G. Merriweather
Chief Financial Officer
(Principal Financial and Accounting Officer)

EXHIBIT INDEX

Exhibit Number	Exhibit Description	Incorporation By Reference				Filed/Furnished Herewith
		Form	SEC File No.	Exhibit	Filing Date	
3.1	Amended and Restated Certificate of Incorporation of Adamas Pharmaceuticals, Inc.	8-K	001-36399	3.1	4/15/2014	
3.2	Amended and Restated Bylaws of Adamas Pharmaceuticals, Inc.	S-1	333-194342	3.4	3/5/2014	
4.1	Reference is made to Exhibits 3.1 through 3.2.					
4.2	Form of Common Stock Certificate of Adamas Pharmaceuticals, Inc.	S-1	333-194342	4.1	3/26/2014	
4.3	Fourth Amended and Restated Investor Rights Agreement, dated as of June 30, 2011, by and among the registrant and certain of its stockholders.	S-1	333-194342	10.5	3/5/2014	
10.1	Offer Letter by and between the registrant and Richard A. King, dated April 17, 2017.					X
10.2	Offer Letter by and between the registrant and Alfred G. Merriweather, dated June 26, 2017.					X
10.3	Separation Agreement by and between the registrant and William Dawson, dated June 27, 2017.					X
10.4*	Loan Agreement dated May 11, 2017 between Adamas Pharma, LLC and Healthcare Royalty Partners III, L.P.					X
10.5	Secured Promissory Note dated May 11, 2017 between Adamas Pharma, LLC and Healthcare Royalty Partners III, L.P.					X
31.1	Certification of Principal Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.					X
31.2	Certification of Principal Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.					X
32.1	Certification of Principal Executive Officer and Principal Financial Officer pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.(1)					X
101.INS	XBRL Instance Document					
101.SCH	XBRL Taxonomy Extension Schema Document					
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document					
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document					

101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

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* Confidential Treatment Requested

(1) 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 the Registrant 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.

Exhibit 10.1

April 14, 2017

Richard King

Dear Richard:

We are very excited to have you join Adamas Pharmaceuticals, Inc. ("the Company"). In this letter, I would like to set forth the terms and conditions of your employment relationship with the Company.

Title and Responsibilities. I am pleased to offer you the full-time position of Chief Operating Officer working at our offices in **Emeryville, CA** . Your position with the Company, pursuant to the terms and conditions of this letter and accompanying Confidential Information and Invention Assignment Agreement, will commence on April 28, 2017. You will report to me and your duties and responsibilities include, but are not limited to, leading the commercial and operations organizations, including marketing, sales, market access, distribution, technical operations, information technology, and product planning. Of course, the Company may change your position, duties, and work location from time to time.

Compensation. You will initially receive an annual base salary of $470,000. Your salary will be paid periodically in accordance with normal Company payroll practices and are subject to the usual required deductions and tax withholdings. In addition to your salary, you will be eligible to participate in the Company's Bonus Plan, as described in the applicable Plan Document, pursuant to the terms of this Plan. The annual target bonus for your position is forty percent (40%) of your annual base salary, and any award would be based upon both the Company's achievement of its performance goals and your achievement of your personal goals to be set with me. The actual award, if any, will be prorated from your date of hire for your first year of employment and will be subject to the usual required deductions and tax withholdings. The Company may change your compensation and benefits from time to time in its sole discretion.

Equity Awards . In addition, subject to the approval of the Company's Board of Directors or its Compensation Committee, it will be recommended that as a material inducement to you to accept this offer and to enter into employment with the Company, it will be recommended that you be granted two equity awards, each of which will be granted under, and be subject to the terms of, either the Company's 2014 Equity Incentive Plan, or the Company's 2016 Inducement Plan (each, the "Plan"). The equity awards will be: (1) a stock option to purchase 168,750 shares of the Company's common stock (the "Option"), and (2) an award of 28,125 Restricted Stock Units (the "RSU Award"). The exercise price per share of the Option will equal the fair market value of a share of Common Stock on the date of grant, as determined by the Board of Directors or Compensation Committee. If approved, and provided that you remain in Continuous Service to the Company on each date, 25% of the Option shares shall vest and become exercisable on the one year anniversary of your employment commencement date and an additional 1/48 th of the Option shares shall vest and become exercisable on a monthly basis thereafter over the following 36 months, as described in the applicable Plan and your Option grant documents. If approved, and provided that you remain in Continuous Service to the Company on each date, 25% of the shares under the RSU Award will vest annually, as described in the applicable Plan and your RSU Award grant documents.

Sign-on Advance . The Company will provide you a sign-on advance in the amount of $204,250, less customary deductions and withholdings (the "Advance"). The Company will pay this Advance to you during your first month of employment. You will earn the full amount of the Advance if you remain employed with the Company for a total of two (2) years. Accordingly, you acknowledge and agree that if you voluntarily resign from the Company within one (1) year of receiving this Advance, you will be obligated to return the full amount of the Advance to the Company within thirty (30) days of your employment separation date. You further acknowledge and agree that should you voluntarily resign from the Company at any time after one (1) year of receipt of this payment but before completing two (2) years of service with the Company, you will be obligated to return a prorated amount of the Advance, calculated based on your employment termination date. You will be required to repay that prorated amount of the Advance within thirty (30) days of your employment separation date.

Benefit Plans. During your employment with the Company, you will be eligible to participate in the employee benefit plans currently and hereafter maintained by the Company of general applicability to other employees of the Company. Details about these benefits are provided in the Employee Handbook and Summary Plan Descriptions, available for your review. Where a particular benefit is subject to a formal plan (for example, medical insurance or life insurance), eligibility to participate in and receive any particular benefit from the plan is governed solely by the applicable plan document.

Paid Time Off. As part of these benefits, you will be entitled to paid time off ("PTO") in accordance with the Company's PTO policy as in effect from time to time. Currently, the Company offers full-time employees 21 days of PTO per calendar year.

Executive Severance Plan. Given your position with the Company, you will initially be eligible to participate in the Executive Severance Plan pursuant to the terms of that Plan.

Company Policies and Confidential Information. You will be expected to abide by all Company rules and policies, and acknowledge in writing that you have read and will comply with the Company's Employee Handbook. The Company considers the protection of its confidential information, proprietary materials and goodwill to be extremely important. Consequently, as a condition of your employment with the Company, you also are required to sign and fully comply with the Confidential Information and Invention Assignment Agreement enclosed with this letter. In your work for the Company, you will be expected not to use or disclose any confidential information or materials, including trade secrets, of any former employer or other person to whom you have an obligation of confidentiality. Rather, you will be expected to use only that information which is generally known and used by persons with training and experience comparable to your own, which is common knowledge in the industry or otherwise legally in the public domain, or which is otherwise provided or developed by the Company.

Conflicting Outside Employment. While employed by the Company, you may not work as an employee or consultant of any other organization or engage in any other activities which conflict or interfere with your employment obligations to the Company, including working for a competitive organization, or undertaking any activities that could create a conflict of interest. Notwithstanding the foregoing, you will be allowed to serve as a Director on the Board of Directors for up to two external organizations, provided that such activities do not interfere with your job duties or present a conflict of interest with Adamas. Any

such role is to be reviewed and approved by the Adamas Board of Directors or its delegate, and such approval will not be unreasonably withheld.

At-Will Employment. Your employment with the Company is "at-will," which means that either you or the Company may terminate your employment at any time, with or without cause, and with or without advance notice. No provision of this offer letter or the accompanying Confidential Information and Invention Assignment Agreement shall be construed to create an express or implied employment contract, or a promise of employment for any specific period of time.

Authorization to Work. This offer is conditioned upon the following: (1) you presenting sufficient evidence of your authorization to work in the United States and your identity sufficient to allow the Company to complete the Form I-9 required by law; (2) satisfactory completion of a background and reference check; and (3) your signature on the Confidential Information and Invention Agreement. You agree to assist as needed and to complete any documentation at the Company's request to meet these conditions.

Integration, Modification and Governing Law. This letter, together with your Employee Confidential Information and Invention Agreement, forms the complete and exclusive statement of your employment agreement with the Company. It supersedes any other agreements or promises made to you by anyone, whether oral or written. Changes in your employment terms, other than those changes expressly reserved to the Company's discretion in this letter, require a written modification signed by an officer of the Company. The unenforceability of any provision of this agreement will not affect the validity or enforceability of any other provision of the agreement. This letter will be governed by the laws of the state of California.

Please contact me at (510) 450-3502 if you have any questions. I am happy to welcome you to the Company, and I look forward to your participation in the Company's future success. Please sign below to indicate your acceptance and agreement to the terms set forth in this offer letter and return the signed offer letter to your Human Resources Representative.

This offer will expire on **April 17, 2017,** unless accepted by you in writing prior to such date.

Best regards,

/s/ Gregory T. Went

Gregory T. Went
Chief Executive Officer & Chairman
Adamas Pharmaceuticals, Inc.

Enclosures:

Confidential Information and Inventions Agreement

ACCEPTANCE OF EMPLOYMENT OFFER

I, Richard King, have read, understand, and accept employment on the terms and conditions outlined in this letter agreement. I am not relying on any representations made to me by anyone other than as set forth above.

/s/ Richard King	April 17, 2017
Richard King	Date

1900 Powell St. Suite 750 Emeryville, CA 94608
Tel|510.450.3500 Fax|510.428.0519
www.adamaspharma.com

June 26, 2017

Alfred Merriweather

Dear Alf:

We are very excited to have you join Adamas Pharmaceuticals, Inc. ("the Company"). In this letter, I would like to set forth the terms and conditions of your employment relationship with the Company.

Title and Responsibilities. I am pleased to offer you the full-time position of Chief Financial Officer working at our offices in **Emeryville, CA** . Your position with the Company, pursuant to the terms and conditions of this letter and accompanying Confidential Information and Invention Assignment Agreement, will commence on June 29, 2017. You will report to me and your duties and responsibilities, consistent with the CFO role will include, but are not limited to, providing broad financial strategy and execution, financial planning and analysis, accounting management, SEC reporting and compliance, investor relations and human resources management. Of course, the Company may change your position, duties, and work location from time to time in its discretion.

Compensation. You will initially receive an annual base salary of **$400,000.** Your salary will be paid periodically in accordance with normal Company payroll practices and is subject to the usual required deductions and tax withholdings. In addition to your salary, you will be eligible to participate in the Company's Bonus Plan, as described in the applicable Plan Document, pursuant to the terms of this Plan. The annual target bonus for your position is forty percent (40%) of your annual base salary, and any award would be based upon both the Company's achievement of its performance goals and your achievement of your personal goals to be set with me. The actual award, if any, will be prorated from your date of hire for your first year of employment and will be subject to the usual required deductions and tax withholdings. The Company may change your compensation and benefits from time to time in its sole discretion.

Equity Awards . In addition, subject to the approval of the Company's Board of Directors or its Compensation Committee, it will be recommended that as a material inducement to you to accept this offer and to enter into employment with the Company, it will be recommended that you be granted two equity awards, each of which will be granted under, and be subject to the terms of, either the Company's 2014 Equity Incentive Plan, or the Company's 2016 Inducement Plan (each, the "Plan"). The equity awards will be: (1) a stock option to purchase 112,500 shares of the Company's common stock (the "Option"), and (2) an award of 18,750 Restricted Stock Units (the "RSU Award"). The exercise price per share of the Option will equal the fair market value of a share of Common Stock on the date of grant, as determined by the Board of Directors or Compensation Committee. If approved, and provided that you remain in Continuous Service to the Company on each date, 25% of the Option shares shall vest and become exercisable on the one year anniversary of your employment commencement date and an additional 1/48 th of the Option shares shall vest and become exercisable on a monthly basis thereafter over the following 36 months, as described in the applicable Plan and your Option grant documents. If approved, and provided that you remain in Continuous

Service to the Company on each date, 25% of the shares under the RSU Award will vest annually, as described in the applicable Plan and your RSU Award grant documents. In addition, the Company's Board of Directors reviews its executive compensation programs annually, including consideration for additional equity awards. If the Board determines that additional equity awards are appropriate, you will be eligible for consideration, with our other executive officers, for awards to be approved under the Board's sole discretion.

Relocation Assistance. You will be responsible for all relocation related expenses you incur related to your relocation to the San Francisco Bay Area. To assist you with your move to the Bay Area, the Company will provide you with relocation assistance in two payments for a total amount of $250,000, less required deductions and withholdings, as follows:

a. A first payment of $62,500 (the " **Initial Relocation Advance** ") shall be paid to you during your first month of employment. The Initial Relocation Advance shall be deemed earned if you: (i) remain employed by the Company for a one year period after your start date; and (ii) you relocate to the San Francisco Bay Area within one year of your start date. Consequently, should you voluntarily leave the company (except for a voluntary termination for Good Reason as defined in the Company's Amended and Restated Executive Severance Plan) within one year of commencing employment with the Company, or if you have not relocated during the first year of your employment, you will be obligated to return the full amount of the Initial Relocation Advance within thirty days after your one year anniversary or your separation date (whichever is earlier).

b. A second payment of $187,500 (the " **Final Relocation Advance** ") shall be paid to you no later than December 31, 2017, provided that you have relocated to the San Francisco Bay Area by that date. The Final Relocation Advance shall be deemed earned if you: (i) remain employed by the Company for a two year period after your start date; and (ii) you relocate to the San Francisco Bay Area within one year of your start date. Consequently, should you voluntarily leave the company (except for a voluntary termination for Good Reason as defined in the Company's Amended and Restated Executive Severance Plan) within two years of commencing employment with the Company, you will be obligated to return the full amount of the Final Relocation Advance within thirty days after your separation date.

Benefit Plans. During your employment with the Company, you will be eligible to participate in the employee benefit plans currently and hereafter maintained by the Company of general applicability to other employees of the Company. Details about these benefits are provided in the Employee Handbook and Summary Plan Descriptions, available for your review. Where a particular benefit is subject to a formal plan (for example, medical insurance or life insurance), eligibility to participate in and receive any particular benefit from the plan is governed solely by the applicable plan document.

Paid Time Off. As part of these benefits, you will be entitled to paid time off ("PTO") in accordance with the Company's PTO policy as in effect from time to time. Currently, the Company offers full-time employees 21 days of PTO per calendar year.

Executive Severance Plan. Given your position with the Company, you will initially be eligible to participate in the Executive Severance Plan pursuant to the terms of that Plan. A copy of this Plan is enclosed with this letter.

Company Policies and Confidential Information. You will be expected to abide by all Company rules and policies, and acknowledge in writing that you have read and will comply with the Company's Employee Handbook. The Company considers the protection of its confidential information, proprietary materials and goodwill to be extremely important. Consequently, as a condition of your employment with the Company, you also are required to sign and fully comply with the Confidential Information and Invention Assignment Agreement enclosed with this letter.

Conflicting Outside Employment. While employed by the Company, you may not work as an employee or consultant of any other organization or engage in any other activities which conflict or interfere with your employment obligations to the Company, including working for a competitive organization, or undertaking any activities that could create a conflict of interest. Notwithstanding the foregoing, you will be allowed to serve as a Director on the Board of Directors for up to two external organizations, provided that such activities do not interfere with your job duties or present a conflict of interest with Adamas. Any such role is to be reviewed and approved by the Adamas Board of Directors or its delegate, and such approval will not be unreasonably withheld.

At-Will Employment. Your employment with the Company is "at-will," which means that either you or the Company may terminate your employment at any time, with or without cause, and with or without advance notice. No provision of this offer letter or the accompanying Confidential Information and Invention Assignment Agreement shall be construed to create an express or implied employment contract, or a promise of employment for any specific period of time.

Authorization to Work. This offer is conditioned upon the following: (1) you presenting sufficient evidence of your authorization to work in the United States and your identity sufficient to allow the Company to complete the Form I-9 required by law; (2) satisfactory completion of a background and reference check; and (3) your signature on the Confidential Information and Invention Agreement. You agree to assist as needed and to complete any documentation at the Company's request to meet these conditions.

Integration, Modification and Governing Law. This letter, together with your Employee Confidential Information and Invention Agreement, forms the complete and exclusive statement of your employment agreement with the Company. It supersedes any other agreements or promises made to you by anyone, whether oral or written. Changes in your employment terms, other than those changes expressly reserved to the Company's discretion in this letter, require a written modification signed by an officer of the Company. The unenforceability of any provision of this agreement will not affect the validity or enforceability of any other provision of the agreement. This letter will be governed by the laws of the state of California.

Please contact me at (510) 450-3502 if you have any questions. I am happy to welcome you to the Company, and I look forward to your participation in the Company's future success. Please sign below to

indicate your acceptance and agreement to the terms set forth in this offer letter and return the signed offer letter to Greg Hansen.

This offer will expire on **June 28, 2017,** unless accepted by you in writing prior to such date.

Best regards,

/s/ Gregory T. Went

Gregory T. Went
Chief Executive Officer & Chairman
Adamas Pharmaceuticals, Inc.

Enclosures:

Confidential Information and Inventions Agreement
Executive Severance Plan

ACCEPTANCE OF EMPLOYMENT OFFER

I, Alfred Merriweather, have read, understand, and accept employment on the terms and conditions outlined in this letter agreement. I am not relying on any representations made to me by anyone other than as set forth above.

/s/ Alfred Merriweather
Alfred Merriweather

June 26, 2017
Date

1900 Powell St. Suite 750 Emeryville, CA 94608
Tel|510.450.3500 Fax|510.428.0519
www.adamaspharma.com

June 27, 2017

Via Hand Delivery

William J. Dawson
c/o Adamas Pharmaceuticals, Inc.

Re: Separation and Consulting Agreement

Dear Bill:

This letter sets forth the substance of the separation agreement (the " **Agreement** ") that Adamas Pharmaceuticals, Inc. (the " **Company** ") is offering to you to aid in your employment transition.

1. SEPARATION DATE. You have notified the Company of your plans to retire and have voluntarily resigned your employment with the Company, and the Company has accepted your resignation of employment. Your retirement and your last day of employment with the Company will be effective on September 30, 2017 (the " **Separation Date** "). On the Separation Date, the Company will pay you all accrued salary, and all accrued and unused paid time off (" **PTO** ") earned through the Separation Date, subject to standard payroll deductions and withholdings. You are entitled to these payments regardless of whether or not you sign this Agreement. Following the Separation Date, you will no longer hold any other employment or officer position with the Company or any of its subsidiaries or affiliated entities.

2. POSITION CHANGE AND TRANSITION PERIOD. On June 29, 2017, your position with the Company will change from Chief Financial Officer to Financial Advisor, and you will continue to serve in that capacity until your Separation Date. The time period from June 29, 2017 through your Separation Date will be the " **Transition Period** ." During the Transition Period, you shall use your best efforts to transition your duties and responsibilities, and perform other assigned duties and responsibilities, as requested by the Company (the " **Transition Services** "). You must continue to comply with all of your contractual and legal obligations to the Company and comply with the Company's policies and procedures during the Transition Period. During the Transition Period, you will continue to receive your current base salary, subject to standard withholdings and deductions; will continue to accrue PTO according to Company policy; your options will continue to vest, and you will continue to be eligible for the Company's standard benefits, subject to the terms of such plans and programs.

3. CONSULTING PERIOD. If: (i) you timely sign, date, and return this Agreement to the Company and allow all of the releases contained herein to become effective; (ii) you comply with all of your obligations to the Company as set forth herein during the Transition Period and thereafter; and (iii) on or within twenty-one (21) days after the Separation Date, you sign and return to the Company the Separation Date Release, attached hereto as Exhibit A (the " **Release** ") and allow the releases contained therein to become effective; then the Company will retain you as a consultant under the terms specified below. The consulting relationship will commence on October 1, 2017 and continue through March 31, 2018, unless terminated earlier pursuant to the terms set forth below or extended by mutual written agreement (the " **Consulting Period** "). You acknowledge and agree that prior to entering into this Agreement, the Company is under no legal obligation to retain your services as a consultant after the Separation Date and therefore this Consulting Period constitutes consideration for your obligations as specified herein.

(a) Consulting Services. During the Consulting Period, you will use your best efforts to provide consulting services as may be requested by the Company in the areas of your experience and expertise (the " **Consulting Services** "). The Company anticipates that you will provide services at the request of, and subject to the direction of, the Company's Chief Executive Officer (" **CEO** ") and Chief Financial Officer (" **CFO** ").

(b) Provision of Consulting Services . You agree to exercise the highest degree of professionalism and utilize your expertise and creative talents in performing these services. You agree to provide Consulting Services up to a maximum of one (1) day per week to the Company, as needed by the Company and at times mutually agreed between you and the CEO. You will not be required to report to the Company's offices during the Consulting Period, except as specifically requested by the Company. When providing such services, you shall abide by the Company's policies and procedures.

(c) Consulting Fees. During the Consulting Period, you will receive consulting fees in the amount of $15,000 per month (" **Consulting Fees** "). The Consulting Fees will be paid on the last business day of each respective calendar month of service during the Consulting Period (pro-rated for any partial months of service). You shall seek advance written approval prior to incurring any expenses for which you will seek reimbursement in connection with your duties during the Consulting Period.

(d) Equity. You were granted an option to purchase shares of the Company's common stock, pursuant to the Company's 2014 Equity Incentive Plan (the " **Plan** "). Notwithstanding anything to the contrary in your option agreements or the Plan, vesting of your outstanding stock options (the " **Options** ") will cease as of the Separation Date and will not continue to vest during the Consulting Period. As an additional benefit to you, the Company will extend the time period during which you may exercise all of your vested shares until June 30, 2019 (the " **Extended Exercise Period** "). You acknowledge that the Extended Exercise Period may change the tax treatment of certain Options and that the Company makes no representation or warranty as

to any such tax treatment. Except as expressly modified in this paragraph, your Options shall continue to be governed by the Plan and all applicable grant notices and agreements.

(e) Independent Contractor Relationship. During the Consulting Period, your relationship with the Company will be that of an independent contractor, and nothing in this Agreement is intended to, or should be construed to, create a partnership, agency, joint venture or employment relationship after the Separation Date. Except as expressly provided in this Agreement, you will not be entitled to, and will not receive, any benefits which the Company may make available to its employees, including but not limited to, group health or life insurance, profit-sharing or retirement benefits.

(f) Taxes and Withholding. The Company will not make any withholdings or deductions, and will issue you an IRS Form 1099, with respect to any Consulting Fees paid to you. You will be responsible for all taxes with respect to the Consulting Fees, and you agree to indemnify, hold harmless and defend the Company from any and all claims, liabilities, damages, taxes, fines or penalties sought or recovered by any governmental entity, including but not limited to the Internal Revenue Service or any state taxing authority, arising out of or in connection with the Consulting Fees.

(g) Limitations on Authority. During the Consulting Period, you will have no responsibilities or authority as a consultant to the Company other than as provided above. You will have no authority to bind the Company to any contractual obligations, whether written, oral or implied, except with the prior written authorization of an officer of the Company. You agree not to represent or purport to represent the Company in any manner whatsoever to any third party unless authorized in advance by the Company, in writing, to do so.

(h) Confidential Information and Inventions. You agree that, during the Consulting Period and thereafter, you will not use or disclose, in any manner that is not authorized by the Company or essential to your performance of specifically requested Consulting Services, any confidential or proprietary information or materials of the Company that you obtain or develop in the course of performing the Consulting Services. Any and all work product you create in the course of performing the Consulting Services will be the sole and exclusive property of the Company. As set forth in your Confidential Information and Inventions Assignment Agreement with the Company, and subject to the limitations set forth therein, you hereby assign to the Company all right, title, and interest in all inventions, techniques, processes, materials, and other intellectual property developed in the course of performing the Consulting Services. You further acknowledge and reaffirm your continuing obligations, both during the Consulting Period and thereafter (as applicable), under the Confidential Information and Inventions Assignment Agreement entered into between you and the Company, a copy of which is attached hereto as Exhibit B and incorporated herein by reference.

(i) Other Work Activities. Throughout the Consulting Period, you shall have the right to engage in employment, consulting, or other work relationships in addition to your work

for the Company, provided that such activities do not unreasonably interfere with your obligations under this Agreement, and in any event, unless otherwise waived in writing by the Company, do not compete or otherwise conflict with, directly or indirectly, the business, operations and interests of the Company. Specifically, during the Consulting Period, you are prohibited from performing any work for any business entity that is competitive with the Company and from engaging in any other work activity, or preparation for work activity, that is competitive with the Company. For purposes of this Agreement, the term "competitive" shall mean other companies or institutions that are researching and/or developing therapies for chronic disorders of the central nervous system.

(j) Termination of Consulting Period. The Consulting Period shall end on the **earliest** to occur of the following:

(i) March 31, 2018, unless the Consulting Period is extended by mutual written agreement by both you and the Company; or

(ii) Thirty (30) days after you provide written notice that you are terminating the Consulting Period for any reason; or

(iii) Immediately upon the Company's written notice to you that you have breached any of your obligations hereunder or have breached any of your obligations under your Confidential Information and Inventions Assignment Agreement; or

(iv) If the Consulting Period ends pursuant to Section 3(j)(ii) or (iii), you will be entitled to all Consulting Fees (or pro rata portion thereof) earned through the last date that you provide Consulting Services, but you shall not receive any Consulting Fees or compensation through March 31, 2018.

4. HEALTH INSURANCE. To the extent provided by the federal COBRA law or, if applicable, state insurance laws, and by the Company's current group health insurance policies, you will be eligible to continue your group health insurance benefits at your own expense. Later, you may be able to convert to an individual policy through the provider of the Company's health insurance, if you wish.

5. OTHER COMPENSATION OR BENEFITS. You acknowledge that, except as expressly provided in this Agreement, you will not receive any additional compensation, severance or benefits after the Separation Date, with the exception of any vested benefits you may have under the express terms of a written ERISA-qualified benefit plan (*e.g.* , 401(k) account). You further acknowledge that you are not eligible to receive, and will not receive, any severance benefits under any Company severance plan or any other agreements with the Company, including but not limited to, the Adamas Pharmaceuticals, Inc. Amended and Restated Executive Severance Plan.

6. EXPENSE REIMBURSEMENTS. You agree that, within ten (10) days after 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 these expenses pursuant to its regular business practice.

7. RETURN OF COMPANY PROPERTY. By no later than the close of business on the Separation Date, you shall return to the Company all Company documents (and all copies thereof) and other Company property in your possession or control. You agree that you will make a diligent search to locate any such documents, property and information within the timeframe referenced above. In addition, if you have used any personally owned computer, server, or e-mail system to receive, store, review, prepare or transmit any confidential or proprietary data, materials or information of the Company, then within five (5) business days after the Separation Date, you must provide the Company with a computer-useable copy of such information and then permanently delete and expunge such confidential or proprietary information from those systems without retaining any reproductions (in whole or in part); and you agree to provide the Company access to your system, as requested, to verify that the necessary copying and deletion is done. **Your timely compliance with the provisions of this paragraph is a precondition to your receipt of the Consulting Period and other benefits provided hereunder.** Notwithstanding the foregoing, during the Consulting Period only, the Company will permit you to retain, receive, and/or use any equipment, documents, and information reasonably necessary to perform the Consulting Services, all of which equipment, documents and information you must return to the Company upon request and no later than the last day of the Consulting Period.

8. CONFIDENTIALITY. The provisions of this Agreement will be held in strictest confidence by you and will not be publicized or disclosed in any manner whatsoever; *provided, however,* that: (a) you may disclose this Agreement to your immediate family; (b) you may disclose this Agreement in confidence to your attorneys, accountants, auditors, tax preparers, and financial advisors; and (c) you may disclose this Agreement insofar as such disclosure may be necessary to enforce its terms or as otherwise required by law. In particular, and without limitation, you agree not to disclose the terms of this Agreement to any current or former Company employee.

9. NONDISPARAGEMENT. You agree not to disparage the Company or the Company's officers, directors, employees, shareholders, parents, subsidiaries, affiliates, and agents, in any manner likely to be harmful to them or their business, business reputation or personal reputation. Likewise, the Company agrees to direct its officers and directors not to disparage you in any manner likely to be harmful to your personal or business reputations. Notwithstanding the foregoing, all parties may respond accurately and fully to any question, inquiry or request for information when required by legal process. In addition, nothing in this provision or this Agreement is intended to prohibit or restrain the parties in any manner from making disclosures that are protected under the whistleblower provisions of federal or state law or regulation.

10. NO VOLUNTARY ADVERSE ACTION. You agree that you will not voluntarily (except in response to legal compulsion) assist any person in bringing or pursuing any proposed or pending litigation, arbitration, administrative claim or other formal proceeding against the Company, its parent or subsidiary entities, affiliates, officers, directors, employees or agents.

11. COOPERATION. You agree to cooperate fully with the Company in connection with its actual or contemplated defense, prosecution, or investigation of any claims or demands by or against third parties, or other matters arising from events, acts, or failures to act that occurred during the period of your employment by the Company. Such cooperation includes, without limitation, making yourself available to the Company upon reasonable notice, without subpoena, to provide complete, truthful and accurate information in witness interviews, depositions, and trial testimony. The Company will reimburse you for reasonable out-of-pocket expenses you incur in connection with any such cooperation (excluding foregone wages) and will make reasonable efforts to accommodate your scheduling needs.

12. NO ADMISSIONS. You understand and agree that the promises and payments in consideration of this Agreement shall not be construed to be an admission of any liability or obligation by the Company to you or to any other person, and that the Company makes no such admission.

13. RELEASE OF CLAIMS .

(a) General Release. In exchange for the Consulting Period and other consideration provided to you under this Agreement to which you would not otherwise be entitled, you hereby generally and completely release the Company, its affiliated, related, parent and subsidiary entities, and its and their current and former directors, officers, employees, shareholders, partners, agents, attorneys, predecessors, successors, insurers, affiliates, and assigns (collectively, the " **Released Parties** ") from any and all claims, liabilities and obligations, both known and unknown, that arise out of or are in any way related to events, acts, conduct, or omissions occurring prior to or on the date you sign this Agreement (collectively, the " **Released Claims** ").

(b) Scope of Release. The Released Claims include, but are not limited to: (i) all claims arising out of or in any way related to your employment with the Company, or the termination of that employment; (ii) all claims related to your compensation or benefits from the Company, including salary, bonuses, commissions, vacation, expense reimbursements, severance pay, fringe benefits, stock, stock options, or any other ownership, equity, or profits interests in the Company; (iii) all claims for breach of contract, wrongful termination, and breach of the implied covenant of good faith and fair dealing; (iv) all tort claims, including claims for fraud, defamation, emotional distress, and discharge in violation of public policy; and (v) all federal, state, and local statutory claims, including claims for discrimination, harassment, retaliation, attorneys' fees, or other claims arising under the federal Civil Rights Act of 1964 (as amended), the federal Americans with Disabilities Act of 1990, the federal Age Discrimination in Employment Act of 1967 (as amended) (the " **ADEA** "), the California Labor Code (as amended), and the California Fair Employment and Housing Act (as amended).

(c) ADEA Waiver. You acknowledge that you are knowingly and voluntarily waiving and releasing any rights you may have under the ADEA (the " **ADEA Waiver** "), and that the consideration given for the ADEA Waiver is in addition to anything of value to which you are

already entitled. You further acknowledge that you have been advised, as required by the ADEA, that: (i) your ADEA Waiver does not apply to any rights or claims that may arise after the date that you sign this Agreement; (ii) you should consult with an attorney prior to signing this Agreement (although you may choose voluntarily not to do so); (iii) you have twenty-one (21) days to consider this Agreement (although you may choose voluntarily to sign it earlier); (iv) you have seven (7) days following the date you sign this Agreement to revoke the ADEA Waiver (by providing written notice of your revocation to the Company's CEO); and (v) this Agreement will not be effective until the date upon which the revocation period has expired, which will be the eighth day after the date that this Agreement is signed by you provided that you do not revoke it (the " **Effective Date"**).

(d) Section 1542 Waiver. YOU UNDERSTAND THAT THIS AGREEMENT INCLUDES A RELEASE OF ALL KNOWN AND UNKNOWN CLAIMS. In giving the release herein, which includes claims which may be unknown to you at present, you acknowledge that you have read and understand Section 1542 of the California Civil Code, which reads as follows:

"A general release does not extend to claims which the creditor does not know or suspect to exist in his or her favor at the time of executing the release, which if known by him or her must have materially affected his or her settlement with the debtor."

You hereby expressly waive and relinquish all rights and benefits under that section and any law of any other jurisdiction of similar effect with respect to your release of any unknown or unsuspected claims herein.

(e) Excluded Claims. Notwithstanding the foregoing, the following are not included in the Released Claims (the " **Excluded Claims** "): (i) any rights or claims for indemnification you may have pursuant to any written indemnification agreement with the Company to which you are a party or under applicable law; (ii) any rights which are not waivable as a matter of law; and (iii) any claims for breach of this Agreement. You hereby represent and warrant that, other than the Excluded Claims, you are not aware of any claims you have or might have against any of the Released Parties that are not included in the Released Claims. You understand that nothing in this Agreement limits your ability to file a charge or complaint with the Equal Employment Opportunity Commission, the Department of Labor, 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 Agencies** "). You further understand this Agreement does not limit your ability to communicate with any Government Agencies or otherwise participate in any investigation or proceeding that may be conducted by any Government Agency, including providing documents or other information, without notice to the Company. While this Agreement does not limit your right to receive an award for information provided to the Securities and Exchange Commission, you understand and agree that, to maximum extent permitted by law, you are otherwise waiving any and all rights you may have to individual relief based on any claims that you have released and any rights you have waived by signing this Agreement.

14. REPRESENTATIONS. You hereby represent that you have been paid all compensation owed and for all hours worked, have received all the leave and leave benefits and protections for which you are eligible, pursuant to the Family and Medical Leave Act or otherwise, and have not suffered any on-the-job injury for which you have not already filed a claim.

15. GENERAL. This Agreement, including its exhibits, constitutes the complete, final and exclusive embodiment of the entire agreement between you and the Company with regard to this subject matter. It is entered into without reliance on any promise or representation, written or oral, other than those expressly contained herein, and it supersedes any other such promises, warranties or representations. This Agreement may not be modified or amended except in a writing signed by both you and a duly authorized officer of the Company. This Agreement will bind the heirs, personal representatives, successors and assigns of both you and the Company, and inure to the benefit of both you and the Company, their heirs, successors and assigns. If any provision of this Agreement is determined to be invalid or unenforceable, in whole or in part, this determination will not affect any other provision of this Agreement and the provision in question will be modified by the court so as to be rendered enforceable to the fullest extent permitted by law, consistent with the intent of the parties. This Agreement will be deemed to have been entered into and will be construed and enforced in accordance with the laws of the State of California as applied to contracts made and to be performed entirely within California.

If this Agreement is acceptable to you, please sign below and return the original to me within twenty-one (21) days.

I wish you good luck in your future endeavors.

Sincerely,

ADAMAS PHARMACEUTICALS, INC.

By: /s/ Gregory T. Went
Gregory T. Went, Ph.D.
Chief Executive Officer and Chairman

Exhibit A – Separation Date Release
Exhibit B - Confidential Information and Inventions Assignment Agreement

ACCEPTED AND AGREED:

/s/ William J. Dawson

William J. Dawson

June 27, 2017

Date

EXHIBIT A

Separation Date Release

(To be signed on or within twenty-one (21) days after the Separation Date.)

In consideration for the various benefits provided to me by Adamas Pharmaceutical, Inc. (the " **Company** ") pursuant to the Transition and Separation Agreement with the Company dated June ____, 2017, (the " **Agreement** "), I agree to the terms below.

I hereby generally and completely release the Company, its affiliated, related, parent and subsidiary entities, and its and their current and former directors, officers, employees, shareholders, partners, agents, attorneys, predecessors, successors, insurers, affiliates, and assigns (collectively, the " **Released Parties** ") from any and all claims, liabilities and obligations, both known and unknown, that arise out of or are in any way related to events, acts, conduct, or omissions occurring prior to or on the date I sign this Agreement (collectively, the " **Released Claims** ").

The Released Claims include, but are not limited to: (i) all claims arising out of or in any way related to my employment with the Company, or the termination of that employment; (ii) all claims related to my compensation or benefits from the Company, including salary, bonuses, commissions, vacation, expense reimbursements, severance pay, fringe benefits, stock, stock options, or any other ownership, equity, or profits interests in the Company; (iii) all claims for breach of contract, wrongful termination, and breach of the implied covenant of good faith and fair dealing; (iv) all tort claims, including claims for fraud, defamation, emotional distress, and discharge in violation of public policy; and (v) all federal, state, and local statutory claims, including claims for discrimination, harassment, retaliation, attorneys' fees, or other claims arising under the federal Civil Rights Act of 1964 (as amended), the federal Americans with Disabilities Act of 1990, the federal Age Discrimination in Employment Act of 1967 (as amended) (the " **ADEA** "), the California Labor Code (as amended), and the California Fair Employment and Housing Act (as amended).

I acknowledge that I am knowingly and voluntarily waiving and releasing any rights I have under the ADEA, and that the consideration given for the waiver and releases I have given in this Release is in addition to anything of value to which I was already entitled. I further acknowledge that I have been advised, as required by the ADEA, that: (i) my waiver and release does not apply to any rights or claims that arise after the date I sign this Release; (ii) I should consult with an attorney prior to signing this Release (although I may choose voluntarily not to do so); (iii) I have twenty-one (21) days to consider this Release (although I may choose voluntarily to sign it sooner); (iv) I have seven (7) days following my signing of this Release to revoke the Release by providing written notice of my revocation; and (v) this Release will not be effective until the date upon which the revocation period has expired unexercised, which will be the eighth day after I sign this Release provided that I do not revoke it (the " **Effective Date** ").

Furthermore, in giving the releases set forth in this Release, which include claims which may be unknown to me at present, I acknowledge that I have read and understand Section 1542 of the California Civil Code which reads as follows: **"A general release does not extend to claims which the creditor does not know or suspect to exist in his or her favor at the time of executing the release, which if known by him or her must have materially affected his or her settlement with the debtor."** I hereby expressly waive and relinquish all rights and benefits under that section and any law or legal principle of similar effect in any jurisdiction with respect to my release of claims herein, including but not limited to the release of unknown and unsuspected claims.

Notwithstanding the foregoing, the following are not included in the Released Claims (the " **Excluded Claims** "): (i) any rights or claims for indemnification I may have pursuant to any written indemnification agreement with the Company to which I am a party or under applicable law; (ii) any rights which cannot be waived as a matter of law; (iii) any rights I have to file or pursue a claim for workers' compensation or unemployment insurance; and (iv) any claims for breach of this Agreement. I understand that nothing in this Agreement limits my ability to file a charge or complaint with the Equal Employment Opportunity Commission, the Department of Labor, the National Labor Relations Board, the Occupational Safety and Health Administration, or any other federal, state or local governmental agency or commission (" **Government Agencies** "). I further understand that this Agreement does not limit my ability to communicate with any Government Agencies or otherwise participate in any investigation or proceeding that may be conducted by any Government Agency, including providing documents or other information, without notice to the Company.

I hereby represent that I have been paid all compensation owed and for all hours worked, have received all the leave and leave benefits and protections for which I am eligible, pursuant to the Family and Medical Leave Act or otherwise, and have not suffered any on-the-job injury for which I have not already filed a claim.

By: _____

William J. Dawson

Date: _____

EXHIBIT B

Confidential Information and Invention Assignment Agreement

Exhibit 10.4

[*] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

EXECUTION
CONFIDENTIAL

LOAN AGREEMENT

Dated as of May 11, 2017

Between

HEALTHCARE ROYALTY PARTNERS III, L.P.,

as Lender,

and

ADAMAS PHARMA, LLC,

as Borrower

TABLE OF CONTENTS

[*] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

Exhibits

Schedules

[*] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

This LOAN AGREEMENT (this " Agreement ") dated as of May 11, 2017, is entered into by and between the entities managed by HealthCare Royalty Partners III, L.P., as lender (" Lender "), and ADAMAS PHARMA, LLC, a Delaware limited liability company, as borrower (" Borrower ").

Capitalized terms not otherwise defined herein shall have the meanings set forth in, or by reference in, Article I below.

RECITALS

WHEREAS, Borrower has requested that Lender make the Initial Tranche Loan to Borrower on the Initial Funding Date and the Lender is willing to make the Initial Tranche Loan on the Initial Funding Date, on the terms and subject to the conditions set forth herein;

WHEREAS, Borrower and the Lender wish to set forth the terms for the Subsequent Tranche Loan, in the event that the conditions precedent to the issuance of the Subsequent Tranche Loan are satisfied on or before the Subsequent Tranche Loan Availability Termination Date, on the terms and subject to the conditions set forth herein;

NOW, THEREFORE, in consideration of the mutual promises of the Parties, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, it is mutually agreed by the Parties as follows:

Article I.
CERTAIN DEFINITIONS

Section 1.01 **Definitions** . As used herein:

" Account Bank " means JPMorgan Chase or such other bank or financial institution approved by each of the Lender and Borrower.

" Accreted Principal " has the meaning set forth in Section 4.01(c) .

" Adamas Intellectual Property " means (i) the "Adamas Patent Rights" and the "Adamas Product Trademark Rights" (each as defined under the License Agreement) and (ii) all Intellectual Property necessary for the use, sale, manufacture, importation, marketing and Commercialization of ADS-5102.

" Additional Collateral " means all of Borrower's right, title and interest in, to and under, the following property, whether now owned or hereafter acquired:

(a) the Collection Account and the Disbursement Account;

(b) all rights (contractual and otherwise and whether constituting accounts, contract rights, financial assets, cash, investment property or general intangibles) arising under, connected with or in any way related to the Collection Account and the Disbursement Account; and

(c) all proceeds resulting from the assets described in the foregoing clauses (a) and (b).

" ADS-5102 " means, regardless of brand, mark or tradename under which marketed, the extended release formulation of amantadine hydrochloride for the treatment of levodopa-induced dyskinesia in patients with Parkinson's disease, being developed by the Company and, following the contribution of the Adamas Intellectual Property pursuant to the Contribution Agreement, Borrower. ADS-5102 as used in the Transaction Documents includes (a) other amantadine hydrochloride products developed now or in the future by the Company or Borrower for other indications, and (b) any other product developed now or in the future by the Company or Borrower covered by a Valid Claim in the Patent Rights assigned to Borrower pursuant to the Contribution Agreement. ADS-5102 includes products [*].

" ADS-5102 Product Payment Amount " means, for each Calendar Quarter, an amount equal to the Applicable Percentage multiplied by each of (a) in the U.S., the Net Sales in such Calendar Quarter and (b) outside of the U.S., the Ex-U.S. Borrower Consideration in such Calendar Quarter. For clarity, the Applicable Percentage used to calculate the ADS-5102 Payment Amount for a given Calendar Quarter will be based on the aggregate (x) Net Sales in the U.S. billed or invoiced in such Calendar Quarter and all prior Calendar Quarters in the applicable Calendar Year and (y) Ex-U.S. Borrower Consideration received by Borrower in a given Calendar Quarter.

" Affiliate " means any Person that directly, or indirectly through one or more intermediaries, controls, is controlled by, or is under common control with another Person. For purposes of this definition, " control " means (a) in the case of corporate entities, direct or indirect ownership of at least fifty percent (50%) of the stock or shares having the right to vote for the election of directors, and (b) in the case of non-corporate entities, direct or indirect ownership of at least fifty percent (50%) of the equity interest with the power to direct the management and policies of such non-corporate entities. Unless otherwise stated, any usage of "Affiliate" herein means an Affiliate of Borrower or as the context may require, the Company.

" Aggregate Accrual " has the meaning set forth in Section 3.02(a)(vi) .

" Agreement " has the meaning set forth in the preamble hereto.

" Amortization Payments " means the principal payments of the Loans due under Section 3.01(a) hereof.

" Amortization Start Date " has the meaning set forth in Section 3.01(a) .

" Applicable Law " means, with respect to any Person, all laws, rules, regulations and orders of Governmental Authorities applicable to such Person or any of its properties or assets.

" Applicable Percentage " means a percentage equal to:

(i) prior to the payment in full of the principal and Fixed Interest due on the Loans, if the Lender has made the Subsequent Tranche Loan, the Applicable Percentage will be equal to the highest of (A) 12.5%; (B) if the aggregate cash amount received by the Lender on the Loan on the Interest Payment Date relating to the Calendar Quarter ending on December 31, 2021 is not equal to or greater than $[*], 17.5%; and (C) if the aggregate cash amount received

by the Lender on the Loans on the Interest Payment Date relating to the Calendar Quarter ending on December 31, 2022 is not equal to or greater than $[*], 22.5%; provided that if the aggregate cash amount received by the Lender on the Loans on the Interest Payment Date relating to the Calendar Quarter ending on June 30, 2023 is equal to or greater than $100,000,000, the Applicable Percentage, if previously increased to 17.5% pursuant to the foregoing, shall decrease to 12.5% on and after December 31, 2022; and

(ii) after the payment in full of the principal and Fixed Interest due on the Loans, 6.25%;

provided that, the Applicable Percentage under clause (i)(A) of this definition shall increase on the first day of each calendar quarter commencing with January 1, 2018 and continuing until the earlier of September 30, 2018 or the Subsequent Funding Date, by [*] for each such quarter, on a cumulative basis, and such increased percentage shall be the Applicable Percentage for purposes of clause (i)(A) thereafter.

" Assignee " means any other Person to which a Lender has assigned or is assigning its rights and obligations hereunder, whether or in whole or in part.

" Assignment and Acceptance " means a written instrument of assignment in the form set forth in Exhibit H , executed by and between the parties to an assignment under Section 12.01 hereof.

" Bankruptcy Law " means Title 11 of the United States Code entitled "Bankruptcy" and all other liquidation, conservatorship, bankruptcy, assignment for the benefit of creditors, moratorium, rearrangement, receivership, insolvency, reorganization, or similar debtor relief laws of the United States or other applicable jurisdictions (domestic or foreign) from time to time in effect and affecting the rights of creditors generally.

" Bill of Sale " means the Bill of Sale and Assumption Agreement, dated the date hereof, delivered by the Company to Borrower under the Contribution Agreement with respect to the "Transferred Assets" (as such term is defined in the Contribution Agreement).

" Blocked Account " means, collectively, any segregated deposit account established and maintained at the Account Bank pursuant to a Blocked Account Control Agreement, the Security Agreement and this Agreement.

" Blocked Account Control Agreement " means any agreement entered into by the Account Bank, Borrower and the Lender substantially in the form attached hereto as Exhibit I or as otherwise in form and substance reasonably satisfactory to the Lender, pursuant to which, among other things, the Lender shall have control over the Blocked Account within the meaning of Section 9-104 of the UCC.

" Borrower " shall have the meaning set forth in the preamble hereto.

" Borrower Account " means such account as designated by Borrower to the Lender in writing from time to time into which the funds held in the Disbursement Account that

are not to be paid to Lender pursuant to this Agreement are transferred in accordance with the terms of this Agreement.

" Borrower License " means, with respect to ADS-5102, any license or sublicense to a Third Party (or any Third Party to whom any such Third Party has granted a license or sublicense) to develop, have developed, make, have made, seek Regulatory Approvals for, distribute, use, have used, import, sell, offer to sell, have sold or otherwise Commercialize ADS-5102 for either an approved indication or a novel indication, either as a monotherapy or as an element of a fixed combination formulation product. In all cases, a Borrower License shall include an obligation of the Third Party contractually to use Commercially Reasonable and Diligent Efforts in the performance of the arrangement. For clarity, agreements with vendors and service providers granting a license or sublicense with respect to ADS-5102 in order to perform services for the benefit of Borrower or its Affiliates but having no rights to sell, offer to sell, have sold or otherwise Commercialize or distribute ADS-5102 shall not be deemed a Borrower License.

" Borrower Licensee " means, with respect to ADS-5102, a Third Party with whom Borrower or any Affiliate of Borrower has entered into a Borrower License. As used in this Agreement, "Borrower Licensee" includes any Third Party to whom Borrower or any Affiliate of Borrower has granted the right (or any Third Party to whom any such Third Party has granted the right) to distribute ADS-5102; provided that the applicable Third Party that has been granted such right has the right to conduct, or the responsibility for, active sales force promotion of ADS-5102 anywhere within its distribution territory. For clarity, Borrower Licensee does not include Licensee (as defined below) unless and until such time, if ever, as Licensee enters into a Borrower License.

" Borrower's Organizational Documents " means the certificate of formation and operating agreement (or similar documents) of Borrower or the functional equivalent of the foregoing.

" Business Day " means any day that is not a Saturday, Sunday or other day on which commercial banks in New York City are authorized or required by Applicable Law to remain closed.

" Calendar Quarter " means, for the first calendar quarter, the period beginning on the Closing Date and ending on the last day of the calendar quarter in which the Closing Date falls, and thereafter each successive period of three (3) consecutive calendar months ending on March 31, June 30, September 30 or December 31.

" Calendar Year " means (a) for the initial Calendar Year, the period beginning on First Commercial Sale of ADS-5102 and ending on December 31 of the year in which such First Commercial Sale occurs, (b) for each year after the initial Calendar Year, each successive period beginning on January 1 and ending on December 31, and (c) for the year during which this Agreement expires or terminates, the period beginning on January 1 of the year in which the Agreement expires or terminates and ending on the effective date of expiration or termination of the Agreement.

" Capital Stock " of any Person means any and all shares, interests, memberships, ownership interest units, rights to purchase, warrants, options, participations or other equivalents of or interests in (however designated) equity of such Person, including any preferred stock, and including, if such Person is a partnership, partnership interests (whether general or limited) and any other interest or participation that confers on a Person the right to receive a share of the profits and losses of, or distributions of property of, such partnership, and including, if such Person is a limited liability company, membership interests and any other interest or participation that confers on a Person the right to receive an interest in the profits and losses of, or distributions of property of, such limited liability company, in each case whether outstanding on the date hereof or issued after the date hereof, but excluding any Indebtedness convertible into or exchangeable for such equity.

" Change of Control " means the acquisition by any Person or group (within the meaning of Sections 13(d)(3) or 14(d)(2) of the Exchange Act) (other than any trustee or other fiduciary holding securities under an employee benefit plan of Borrower or any entity controlled, directly or indirectly, by Borrower) of direct or indirect beneficial ownership of any Capital Stock of Borrower, if after such acquisition, such Person or group would be the "beneficial owner" (as defined in Rules 13d-3 and 13d-5 under the Exchange Act), directly or indirectly, of securities of Borrower representing more than fifty percent (50%) of the combined voting power of Borrower's then outstanding securities entitled to vote generally in the election of directors.

" Closing Date " means May 11, 2017.

" Code " means the Internal Revenue Code of 1986, as amended.

" Collateral " means the Additional Collateral, Included Product Payments, the Adamas Intellectual Property, the right to receive the Quarterly Report, the right to audit the records of the Licensee as described in Section 6.6(a) of the License Agreement, the right to make claims against the Licensee for breach of the License Agreement (other than indemnification claims pursuant to Section 10.1 of the License Agreement), the Contribution Agreement and, without duplication, the Transferred Assets therewith, the Bill of Sale, all books and records of Borrower that at any time evidence or contain information relating to any of the foregoing or are otherwise necessary or helpful in the collection or realization thereof, and all proceeds and products of the foregoing, but in no event shall Collateral include any of the following: (i) any governmental licenses or state or local franchises, charters and authorizations, to the extent a security interest in any such license, franchise, charter or authorization is prohibited or restricted thereby (after giving effect to the applicable anti-assignment provisions of the UCC or other Applicable Law), and (ii) any license or agreement (or rights thereunder) to the extent that a grant of a security interest therein would violate or invalidate such license or agreement, result in a breach thereof or create a right of termination in favor of any other party thereto (after giving effect to the applicable anti-assignment provisions of the UCC or other applicable Law).

" Collection Account " means the Blocked Account established and maintained at any Account Bank solely for the purpose of receiving remittance of proceeds of accounts receivable and royalty receivables of Borrower arising from sales of ADS-5102 in the Territory

and disbursement thereof as provided herein, and any successor Collection Account entered into in accordance with Section 4.02 and the related Blocked Account Control Agreement.

" Combination Product " means ADS-5102 that is comprised of or contains ADS-5102, as applicable, in addition to one or more additional active ingredients (whether co-formulated or co-packaged) that are neither ADS-5102, as applicable, nor generic or other non-proprietary compositions of matter. Pharmaceutical dosage form vehicles or delivery devices, adjuvants and excipients shall not be deemed "active ingredients".

" Commercialization " means, on a country-by-country basis, any and all activities with respect to the distribution, marketing, detailing, promotion, selling and securing of reimbursement of ADS-5102 in a country after Marketing Authorization for ADS-5102 in that country has been obtained, which shall include, as applicable, post-marketing approval studies, post-launch marketing, promoting, detailing, marketing research, distributing, customer service, selling ADS-5102, importing, exporting or transporting ADS-5102 for sale, and regulatory compliance with respect to the foregoing. When used as a verb, " Commercialize " means to engage in Commercialization.

" Commercially Reasonable and Diligent Efforts " means, with respect to the efforts to be expended with respect to the Commercialization of ADS-5102 in any regulatory jurisdiction, such efforts and resources normally used by a reasonably prudent company in the biotechnology industry of a size comparable to Borrower and its Affiliates, taken as a whole with respect to a pharmaceutical product for which the same regulatory approval is held as that received from the FDA in the United States with respect to ADS-5102, which pharmaceutical product is owned or licensed in the same manner as ADS-5102, which pharmaceutical product is at a similar stage in its product life and of similar market and profit potential as ADS-5102, taking into account intellectual property protection, efficacy, safety, approved labeling, the competitiveness of alternative products in such jurisdiction, pricing/reimbursement for the pharmaceutical product and the profitability of the pharmaceutical product, all as measured by the facts and circumstances in existence at the time such efforts are due.

" Company " means Adamas Pharmaceuticals, Inc., a Delaware corporation, which is the direct sole parent of Borrower.

" Confidential Information " means any and all technical and non-technical non-public information provided by either Party to the other (including, without limitation, the Third Party confidential information and reports provided pursuant to Section 4.08(d) and any notices or other information provided pursuant to Section 8.08), either directly or indirectly, whether in graphic, written, electronic or oral form, which by its context would reasonably be deemed to be confidential, including without limitation information relating to a Party's revenues, net sales, costs, technology, products and services, and any business, financial or customer information relating to a Party. The existence and terms of this Agreement shall be deemed the Confidential Information of both Parties. Confidential Information shall not include any information that a Party can demonstrate was: (i) known to the general public at the time of its disclosure to such Party or its Affiliates, or thereafter became generally known to the general public, other than as a result of actions or omissions of the receiving Party, its Affiliates, or anyone to whom the receiving Party or its Affiliates disclosed such portion; (ii) known by the receiving Party or its

Affiliates prior to the date of disclosure by the disclosing Party; (iii) disclosed to the receiving Party or its Affiliates on an unrestricted basis from a source unrelated to the disclosing Party and not known by the receiving Party or its Affiliates to be under a duty of confidentiality to the disclosing Party; or (iv) independently developed by the receiving Party or its Affiliates by personnel that did not use the Confidential Information of the disclosing Party in connection with such development.

" Confidentiality Agreement " means that certain Confidentiality Agreement by and between the Company and HealthCare Royalty Management, LLC, dated as January 20, 2017.

" Contract " means any agreement, contract, lease, commitment, license and other arrangement that is legally binding.

" Contribution " means the sale, transfer, assignment, contribution and conveyance of the Transferred Assets pursuant to the Contribution Agreement.

" Contribution Agreement " means the Contribution and Servicing Agreement, dated as of the Closing Date, between the Company and Borrower, in the form of Exhibit F hereto.

" Contributor Event of Default " has the meaning set forth in the Contribution Agreement.

" Controlled Affiliate " with respect to any Person means any other Person directly or indirectly controlling, controlled by or under common control with, such Person. For the purposes of this Agreement, " control " (including, with correlative meaning, the terms " controlling " and " controlled ") means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such Person, whether through the ownership of voting securities, by contract or otherwise.

" Default " means any condition or event which constitutes an Event of Default or which, with the giving of notice or the lapse of time or both (in each case to the extent described in the relevant sub-clauses of the definition of "Event of Default") would, unless cured or waived, become an Event of Default.

" Default Rate " means, for any period for which an amount is overdue, a rate per annum equal for each day in such period to the lesser of (i) 2% plus the rate of interest otherwise applicable to the Loans as provided in Section 4.01 and the definition of "Fixed Interest" and (ii) the maximum rate of interest permitted under Applicable Law.

" Deficiency Amount " has the meaning set forth in Section 4.01(c) .

" Disbursement Account " means the Blocked Account established and maintained at any Account Bank into which funds from the Collection Account are swept in accordance with instructions provided by Borrower and approved by the Lender, and any successor Disbursement Account entered into in accordance with Section 4.02 and the related Blocked Account Control Agreement.

" Dispute(s) " means any opposition, interference, reexamination, injunction, claim, suit, action, citation, summons, subpoena, hearing, inquiry, investigation (by the International Trade Commission or otherwise), complaint, arbitration, mediation, demand, decree or other dispute, disagreement, proceeding, claim or *inter partes* review (other than standard patent prosecution before a Patent Office).

" Disqualified Capital Stock " of any Person means any class of Capital Stock of such Person that, by its terms, or by the terms of any related agreement or of any security into which it is convertible, puttable or exchangeable, is, or upon the happening of any event (other than a Change of Control) or the passage of time would be, required to be redeemed by such Person, whether or not at the option of the holder thereof, or matures or is mandatorily redeemable, pursuant to a sinking fund obligation or otherwise, in whole or in part, on or prior to the date which is 91 days after the Scheduled Maturity Date; provided , however , that any class of Capital Stock of such Person that, by its terms, authorizes such Person to satisfy in full its obligations with respect to the payment of dividends or upon maturity, redemption (pursuant to a sinking fund or otherwise) or repurchase thereof or otherwise by the delivery of Capital Stock that is not Disqualified Capital Stock, and that is not convertible, puttable or exchangeable for Disqualified Capital Stock or Indebtedness, will not be deemed to be Disqualified Capital Stock so long as such Person satisfies its obligations with respect thereto solely by the delivery of Capital Stock that is not Disqualified Capital Stock.

" Dollars " or " $ " means lawful money of the United States of America.

" ERISA " means the Employee Retirement Income Security Act of 1974, as amended, and the regulations promulgated thereunder.

" Event of Default " means the occurrence of one or more of the following:

(a) Borrower fails to pay any principal of the Loans within [*] Business Days after the same becomes due and payable, whether on the Maturity Date or otherwise (excluding any prepayment of principal of the Loans pursuant to Section 3.02(b)).

(b) Except as permitted by Section 4.01 , Borrower fails to pay any interest on the Loans (including, without limitation, Fixed Interest) or make payment of any other amounts payable under this Agreement within [*] Business Days after the same becomes due and payable.

(c) Any representation or warranty of Borrower in any Loan Document to which it is party or in any certificate delivered by Borrower in connection with the Loan Documents to the Lender proves to have not been true and correct in all material respects at the time it was made or deemed made (except that any representation or warranty that is qualified as to "materiality" or "Material Adverse Effect"), shall be true and correct in all respects); provided , that if the consequences of the failure of such representation or warranty to be true and correct can be cured, such failure continues for a period of [*] days without such cure after the earlier of the date Borrower becomes aware of such failure or the date the Lender provides Notice of such failure to Borrower.

(d) Borrower fails to perform or observe any covenant or agreement contained in Article IX (other than Section 9.03 , which is covered under clause (e) below).

(e) Borrower fails to perform or observe any other covenant or agreement contained in the Loan Documents to which it is a party (other than those referred to in the preceding clauses of this definition) if such failure is not remedied on or before the 30 th day after Notice thereof from the Lender.

(f) A Contributor Event of Default occurs and is continuing.

(g) Borrower (i) fails to pay when due (whether by scheduled maturity, required prepayment, acceleration, demand or otherwise) any Indebtedness (other than the Obligations hereunder) of [*] or more or (ii) fails to perform or observe any covenant or agreement to be performed or observed by it contained in any agreement or in any instrument evidencing any of its Indebtedness (other than the Obligations hereunder) of [*] or more and, as a result of such failure, any other party to that agreement or instrument is entitled to exercise the right to accelerate the maturity of any Indebtedness thereunder.

(h) Any uninsured judgment, decree or order in an amount in excess of [*] shall be rendered against Borrower and either (i) enforcement proceedings shall have been commenced upon such judgment, decree or order or (ii) such judgment, decree or order shall not have been stayed or bonded pending appeal, vacated or discharged, within thirty (30) days from entry.

(i) An Insolvency Event shall occur.

(j) (i) Any of the Loan Documents shall cease to be in full force and effect, (ii) the validity or enforceability of any Loan Document is disaffirmed or challenged in writing by Borrower, the Company or any of their respective Affiliates, or by any Person (other than the Lender) asserting an interest in any substantial portion of the Collateral and such written disaffirmation or challenge is not withdrawn or disavowed by such Person within [*] after its communication or Borrower has not brought appropriate proceedings for declaratory or other relief negating such disaffirmation or challenge within [*] after such communication and has not obtained an order granting such relief within [*] after commencement of such proceedings; provided that the foregoing shall not apply to any patent infringement claims or abbreviated new drug applications filed by any Person in respect of the Licensed Product or ADS 5102.

(k) Borrower fails to perform or observe any covenant or agreement contained in any Material Contract to which it is a party or any of Borrower's Organizational Documents, and such failure is not cured or waived within any applicable grace period, and in the case of any provision in Borrower's Organizational Documents, if not cured, is not waived by the Lender, or any Material Contract shall cease to be in full force and effect, and in the case of any provision in a Material Contract, such failure to perform or observe results in a termination of such Material Contract and any such failure, cessation or termination could reasonably be expected to have a Material Adverse Effect.

(l) The License Agreement is terminated or cancelled by the Licensee, in each case prior to [*] and is not replaced in accordance with Section 8.14(b) hereof within [*] years after such termination or cancellation.

(m) Any security interest purported to be created by the Security Agreement or shall cease to be in full force and effect, or shall cease to give the rights, powers and privileges purported to be created and granted hereunder or thereunder (including a perfected first priority security interest in and Lien on substantially all of the Collateral (except as otherwise expressly provided herein and therein)) in favor of the Lender pursuant hereto or thereto (other than as a result of the failure by Lender of taking any action required to maintain the perfection of such security interests), or shall be asserted by Borrower not to be a valid, perfected, first priority (except as otherwise expressly provided in this Agreement or such Security Agreement) security interest in the Collateral.

" Exchange Act " means the Securities Exchange Act of 1934, as amended, and the regulations promulgated thereunder.

" Excluded Taxes " means, with respect to any Lender, (i) any Taxes imposed on (or measured by) net income (however denominated), branch profits Taxes, or any franchise or similar Taxes imposed in lieu thereof, imposed by any Governmental Authority, in each case (x) as a result of such Lender being organized under the laws of, or having its principal office or its applicable lending office located in, the jurisdiction imposing such Tax (or any political subdivision thereof) or (y) that are Other Connection Taxes, (ii) any U.S. federal withholding Tax imposed on amounts payable to or for the account of such Lender with respect to an applicable interest in a Loan or commitment pursuant to a law in effect on the date on which (x) such Lender acquires such interest in the applicable Loan or commitment or, if such Lender did not fund an applicable Loan pursuant to a prior commitment, on the date such Lender acquires the applicable interest in such Loan or (y) such Lender designates a new lending office, except in each case to the extent that amounts with respect to such Taxes were payable pursuant to Section 5.01 or Section 5.04 either to such Lender's assignor immediately before such Lender acquired such applicable interest in such Loan or commitment (as applicable) or to such Lender immediately before it changed its lending office, as applicable, (iii) any Tax that is attributable to such Lender's failure to comply with Section 5.01(b) and (iv) any tax withheld pursuant to FATCA.

" Exploit " means, with respect to ADS-5102 or the Licensed Product, as applicable, the development, process of seeking regulatory approval, manufacture, use, sale, offer for sale (including marketing and promotion), importation, distribution or other Commercialization; and " Exploitation " shall have the correlative meaning.

" Ex-U.S. Borrower Consideration " means all payments received by Borrower, on a gross basis without giving effect to any Taxes withheld thereon, on a country by country basis with respect to ADS-5102 outside of the U.S., whether such payment is (a) pursuant to any Borrower License in a country other than the U.S., or (b) the result of Net Sales outside of the U.S. by Borrower or its Affiliates in any country outside of the U.S. For clarity, "all payments" in this definition includes any milestones, upfront or license fees, royalties or other similar

consideration or amounts paid to Borrower that are not reimbursement for costs incurred by Borrower pursuant to such Borrower License. By way of illustration and without limitation, if Borrower receives a $90,000 milestone payment, $10,000 in royalties and reimbursement of $5,000 in Patent prosecution costs from a Third Party pursuant to a Borrower License in such Calendar Quarter and the Applicable Percentage is 12.5%, then Lender shall receive 12.5% multiplied by $100,000, or, $12,500 as Ex-U.S. Borrower Consideration for such Calendar Quarter.

" FATCA " means Sections 1471 through 1474 of the Code, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), and any current or future Treasury regulations or official interpretations thereof, any agreements entered into pursuant to Section 1471(b)(1) of the Code as of the date of this Agreement (or any amended or successor version described above), any intergovernmental agreements (and any related treaty, non-U.S. law, regulation or other official guidance) implementing any of the foregoing.

" FCPA " means the United States Foreign Corrupt Practices Act.

" FDA " means the United States Food and Drug Administration.

" FDA Approval " means the Company has received FDA approval with respect to its Marketing Authorization filed in October 2016 for ADS-5102, the FDA having previously designated ADS-5102 as an "Orphan Drug" and, by way of orphan-drug exclusive approval under 21 C.F.R. §316,34, ADS-5102 is listed by the FDA as a drug product with the Exclusivity Code "ODE" (Orphan Drug Exclusivity) in the "Approved Drug Products with Therapeutic Equivalence Evaluations" listing (i.e., the "Orange Book").

" Financial Statements " means, the consolidated balance sheets of the Company, audited at December 31, 2016, December 31, 2015, December 31, 2014 and December 31, 2013 and the related consolidated statements of operations and comprehensive loss, cash flows and changes in stockholders' equity of the Company audited for the years ended December 31, 2016, December 31, 2015, December 31, 2014 and December 31, 2013, and the accompanying notes thereto, as filed within Forms 10-K and 10-Q with the SEC.

" First Commercial Sale " means, with respect to ADS-5102, the first arm's-length sale, transfer or disposition for value recognized as revenue under GAAP to a Third Party of ADS-5102 in any country in the Territory after Marketing Authorization for ADS-5102 has been obtained in such country; provided , that, the following shall not constitute a First Commercial Sale: (i) any sale to an Affiliate or Borrower Licensee unless the Affiliate or Borrower Licensee is the ultimate end user of ADS-5102 or (ii) any sale, transfer or disposition not in excess of cost for use of ADS-5102 in clinical trials, pre-clinical studies or other research or development activities, or disposition or transfer of ADS-5102 for a bona fide charitable purpose.

" Fixed Interest " means interest with respect to the Loans, accruing with respect to the outstanding principal balance thereof at a rate *per annum* equal to 11.0%.

" Foreign Lender " means any Lender which is not a "United States person" within the meaning of Section 7701(a)(30) of the Code.

" GAAP " means the generally accepted accounting principles in the United States of America in effect from time to time; provided , that in the event such principles change after January 2, 2018 in a manner which affects compliance with this Agreement by Borrower (including without limitation in the determination of payments in respect of the Included Product Payments), such change shall be ignored for the purpose of determining such compliance.

" Governmental Authority " means any nation or government, any state or other political subdivision thereof, and any entity exercising executive, legislative, judicial, regulatory or administrative functions of, or pertaining to, government.

" Guarantee " or " Guaranty " means, as to any Person: (a) any obligation, contingent or otherwise, of such Person guaranteeing or having the economic effect of guaranteeing any Indebtedness or other obligation payable or performable by another Person (the " primary obligor ") in any manner, whether directly or indirectly, and including any obligation of such Person, direct or indirect (i) to purchase or pay (or advance or supply funds for the purchase or payment of) such Indebtedness or other obligation, (ii) to purchase or lease property, securities or services for the purpose of assuring the obligee in respect of such Indebtedness or other obligation of the payment or performance of such Indebtedness or other obligation, (iii) to maintain working capital, equity capital or any other financial statement condition or liquidity or level of income or cash flow of the primary obligor so as to enable the primary obligor to pay such Indebtedness or other obligation, or (iv) entered into for the purpose of assuring in any other manner the obligee in respect of such Indebtedness or other obligation of the payment or performance thereof or to protect such obligee against loss in respect thereof (in whole or in part); or (b) any Lien on any assets of such Person securing any Indebtedness or other obligation of any other Person, whether or not such Indebtedness or other obligation is assumed by such Person.

" Included Product Payments " mean collectively the Included Royalty Interest and the Revenue Interest.

" Included Royalty Interest " means , with respect to each Calendar Quarter, the payments received during such Calendar Quarter in respect of the Royalty Interest; provided that (i) [*] and (ii) [*].

" Indebtedness " with respect to any Person means (i) indebtedness pursuant to an agreement or instrument involving or evidencing money borrowed, the advance of credit, a conditional sale or a transfer with recourse or with an obligation to repurchase (but excluding trade credit and accounts payable in the ordinary course of business), (ii) any capitalized lease, (iii) any obligations with respect to Disqualified Capital Stock, (iv) indebtedness of a third party secured by (or for which the holder of such indebtedness has an existing right, contingent or otherwise, to be secured by) any Lien on assets owned or acquired by such Person, whether or not the indebtedness secured thereby has been assumed (but only to the extent of such Lien), (v) net amounts owing pursuant to an interest rate protection agreement, foreign currency exchange agreement or other hedging arrangement, (vi) a reimbursement obligation under a letter of credit issued for the account of such Person, or (vii) all Guarantees with respect to Indebtedness of the types specified in clauses (i) through (vi) above of another Person. For the avoidance of doubt, the Indebtedness of any Person shall include the Indebtedness of any other

entity to the extent such Person is directly liable therefor as a result of such Person's ownership interest in or other relationship with such entity, except to the extent the terms of such Indebtedness provide that such Person is not liable therefor.

" Indemnified Liabilities " means, collectively, any and all liabilities, obligations, losses, damages, penalties, claims, costs, expenses and disbursements of any kind or nature whatsoever (including the reasonable fees and disbursements of counsel for Indemnitees in connection with any investigative, administrative or judicial proceeding commenced or threatened by any Person whether or not any such Indemnitee shall be designated as a party or a potential party thereto, and whether or not such Indemnitee is required by Applicable Law to be involved therein, and any fees or expenses actually incurred by Indemnitees in enforcing the indemnity provided herein), whether direct, indirect or consequential, whether based on any federal, state or foreign laws, statutes, rules or regulations (including securities and commercial laws, statutes, rules or regulations), on common law or equitable cause or on contract or otherwise, imposed on, incurred by, or asserted against any such Indemnitee, in any manner relating to or arising out of this Agreement or the other Loan Documents or the transactions contemplated hereby or thereby (including any enforcement of any of the Loan Documents (including any sale of, collection from, or other realization upon any of the Collateral)).

" Indemnified Taxes " means all (i) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any obligation of Borrower under any Loan Documents and (ii) Other Taxes.

" Indemnitee " means each Lender and its Affiliates and their respective officers, partners, directors, trustees, employees, agents and controlling Persons.

" Initial Funding Date " means the date upon which the conditions precedent under Section 6.01 have been satisfied to the satisfaction of the Lender.

" Initial Tranche Loan " has the meaning set forth in Section 2.01(a) .

" Initial Tranche Loan Commitment " means the amount of $35,000,000.

" Initial Tranche Note " means the note, in the form attached hereto as Exhibit C-1 , issued by Borrower to the Lender evidencing the Initial Tranche Loan made on the Initial Funding Date to Borrower and any replacement(s) thereof issued in accordance with Section 12.09 .

" Insolvency Event " means the occurrence of any of the following with respect to Borrower or the Company:

(i) (A) an involuntary proceeding shall be commenced or an involuntary petition shall be filed in a court of competent jurisdiction seeking (x) relief in respect of Borrower or the Company, or of a substantial part of the property of Borrower or the Company, under any Bankruptcy Law now or hereafter in effect, (y) the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for Borrower or the Company for a substantial part of the property of Borrower or the Company or (z) the winding-up or liquidation of Borrower or the Company, which proceeding or petition

shall continue undismissed for sixty (60) calendar days or (B) an order of a court of competent jurisdiction approving or ordering any of the foregoing shall be entered;

(ii) Borrower or the Company shall (A) voluntarily commence any proceeding or file any petition seeking relief under any Bankruptcy Law now or hereafter in effect, (B) apply for the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official itself or for a substantial part of its property, (C) fail to contest in a timely and appropriate manner any proceeding or the filing of any petition described in clause (i) of this definition, (D) file an answer admitting the material allegations of a petition filed against it in any proceeding described in clause (i) of this definition, (E) make a general assignment for the benefit of creditors or (F) wind up or liquidate (except as permitted under this Agreement);

(iii) Borrower or the Company shall take any action in furtherance of or for the purpose of effecting, or indicating its consent to, approval of, or acquiescence in, any of the acts set forth in clause (i) or (ii) of this definition; or

(iv) Borrower or the Company shall become unable, admit in writing its inability, or fail generally, to pay its debts as they become due.

" Intellectual Property " means all intellectual property, including but not limited to patents, patent applications, trademarks, trademark applications and know-how, necessary for the sale, manufacture, use, importation or marketing of the Licensed Product or ADS-5102 that is owned or controlled (and if controlled, only to the extent of control) by Borrower as of the Closing Date and during term of this Agreement.

" Interest Payment Date " means, for each applicable Calendar Quarter, each February 15, May 15, August 15 and November 15, or if any such day is not a Business Day, on the next succeeding Business Day, beginning on August 15, 2017.

" Knowledge " means, with respect to Borrower or the Company, the actual knowledge, after due inquiry, of the Chief Executive Officer, Chief Financial Officer and Chief Business Officer and General Counsel of the Company, or to the extent such officer does not exist, the actual knowledge of another person with similar responsibility, regardless of title, of Borrower or the Company, respectively, relating to a particular matter.

" Law " means any federal, state, local or foreign law, including common law, and any regulation, rule, requirement, policy, judgment, order, writ, decree, ruling, award, approval, authorization, consent, license, waiver, variance, guideline or permit of, or any agreement with, any Governmental Authority.

" Lender " means Lender (as defined in the preamble hereto) and any assignee under Section 13.01(b) .

" Lender Account " means such account of the Lender maintained at such banking institution as the Lender may specify in its discretion from time to time in writing to Borrower at least five (5) Business Day prior to any Interest Payment Date or other date on which payments are to be made to Lender pursuant to the Loan Documents.

" Lender Expense Amount " means [*].

" Licensed Product " means the "Product" as such term is defined in the License Agreement, which Product is currently being marketed by Licensee under the Licensee trade name of "Namzaric".

" Licensee " means Forest Laboratories Holdings Limited, a corporation organized under the laws of the Republic of Ireland, or any successor thereto, as Party to the License Agreement.

" License Agreement " means the License Agreement, dated as of November 13, 2012, by and between Licensee and the Company, together with such amendments or other modifications attached thereto, in the form attached to a separate certificate of the Company identifying the same as complete, as assigned, transferred and contributed to Borrower pursuant to the Contribution Agreement.

" Lien " means any mortgage or deed of trust, pledge, hypothecation, lien, charge, attachment, set-off, encumbrance or other security interest in the nature thereof (including any conditional sale agreement, equipment trust agreement or other title retention agreement, a lease with substantially the same economic effect as any such agreement or a transfer or other restriction).

" Loans " means the Initial Tranche Loan, the Subsequent Tranche Loan (if any) and the Accreted Principal (if any).

" Loan Documents " means this Agreement, the Initial Tranche Note, the Subsequent Tranche Note (if any), the Security Agreement, the Stock Pledge Agreement, the Contribution Agreement, the Bill of Sale, each Blocked Account Control Agreement and all other documents delivered in connection therewith.

" Logistics Services Provider " means [*] or such other Third Party supply chain logistics and financial services provider engaged by Borrower.

" Marketing Authorization " means, with respect to ADS-5102, the Regulatory Approval required by Applicable Law to sell ADS-5102 in a country or region.

" Material Adverse Effect " means (a) an Insolvency Event, (b) a material adverse change in the business, operations, properties, liabilities, results of operations or condition (financial or other) of Borrower, taken as a whole; (c) a material adverse effect on the validity or enforceability of the Loan Documents taken as a whole or any material provision hereof or thereof; (d) a material adverse effect on the ability of Borrower or the Company to consummate the transactions contemplated by the Loan Documents, or on the ability of Borrower or the Company to perform its obligations under the Loan Documents to which it is a party, in each case, taken as a whole; or (e) a material adverse effect on the rights or remedies of Lender under any of the Loan Documents, taken as a whole.

" Material Contract " means any Contract to which Borrower, the Company, or a Subsidiary of the Company, as the case may be in the context in which used, is a party or any of

the respective assets or properties of Borrower, the Company or such Subsidiary are bound or committed (other than the Transaction Documents) and for which any breach, violation, nonperformance or early cancellation could reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect. The Material Contracts as of the date hereof are identified on Schedules 7.01(p) and 7.02(n) .

" Material Contract Counterparty " means a counterparty to any Material Contract.

" Maturity Date " means the earlier of (i) the Scheduled Maturity Date and (ii) the date of any prepayment in full of the Loans.

" Maximum Accrual " has the meaning set forth in Section 3.02(a)(vi) .

" Maximum Lawful Rate " means the highest rate of interest permissible under Applicable Law.

" Net Sales " means, with respect to ADS-5102, the gross amount billed or invoiced or otherwise recognized as revenue by Borrower, its Affiliates or Borrower Licensees in accordance with GAAP in respect of sales or other dispositions of ADS-5102 in the Territory by Borrower, its Affiliates or Borrower Licensees (or any permitted assignee or transferee hereunder) (but not including sales to an Affiliate or Borrower Licensee unless the Affiliate or Borrower Licensee is the ultimate end user of ADS-5102), less the following deductions to the extent included in the gross amount billed or invoiced in respect of sales or other dispositions of ADS-5102 or otherwise recognized or accrued by Borrower in accordance with GAAP: (a) credits or allowances actually granted for damaged products, returns or rejections of ADS-5102, or for retroactive price reductions and billing errors or adjustments; (b) normal and customary trade and quantity discounts, allowances and credits (including chargebacks); (c) excise taxes, sales taxes, duties, VAT taxes and other taxes to the extent imposed upon and paid directly with respect to the sales price, and a *pro rata* portion of pharmaceutical excise taxes imposed on sales of pharmaceutical products as a whole and not specific to ADS-5102 (such as those imposed by the U.S. Patient Protection and Affordable Care Act of 2010, Pub. L. No. 111-148, as amended) (and excluding in each case national or local taxes based on income); (d) freight, postage, shipping, customs and shipping insurance expense and other transportation charges directly related to the distribution of ADS-5102; (e) distribution services agreement fees and other similar amounts allowed or paid to Third Party distributors, including specialty distributors of ADS-5102; (f) rebates made with respect to sales paid for by any Governmental Authority, their agencies and purchasers and reimbursers, managed health care organizations, or to trade customers; (g) the portion of administrative fees paid during the relevant time period to group purchasing organizations or pharmaceutical benefit managers or similar organizations relating to ADS-5102; (h) any invoiced amounts that are not collected by Borrower, its Affiliates or Borrower Licensees, including bad debts; and (i) any customary or similar payments to the foregoing (a) – (h) that apply to the sale or disposition of pharmaceutical products.

In the event that ADS-5102 is sold as part of a Combination Product, then Net Sales for such Combination Product in a Calendar Quarter, for the purposes of determining the applicable ADS-5102 Product Payment Amount and Included Product Payments, respectively, to be paid, shall be calculated by multiplying the Net Sales of the Combination Product in such Calendar

Quarter by the fraction: A divided by (A+B), in which A is the average selling price of ADS-5102, as applicable, sold in substantial quantities comprising the related Product as the sole therapeutically active ingredient in the applicable country, and B is the average selling price of any product that is sold separately in substantial quantities comprising the other therapeutically active ingredients in such country, in each case during the accounting period in which the sales of the Combination Product were made, or if no sales of ADS-5102, as applicable, or product comprising the other active ingredients occurred during such period, then such average selling prices as sold during the most recent accounting period in which such sales did occur in such country.

If ADS-5102, as contained in such Combination Product, is not sold separately in finished form in such country, Borrower and the Lender shall determine Net Sales for ADS-5102 in such Calendar Quarter for the Combination Product by mutual agreement based on the relative contribution of ADS-5102 and each such other active ingredient in such Combination Product in accordance with the above formula, and shall take into account in good faith any applicable allocations and calculations that may have been made for the same period in other countries.

" New Arrangement " has the meaning set forth in Section 8.14(b) .

" Note " means either or both of the Initial Tranche Note and the Subsequent Tranche Note.

" Notice of Borrowing " means either or both of the Notice of Initial Tranche Borrowing and the Notice of Subsequent Tranche Borrowing.

" Notice of Prepayment " means the notice of prepayment, in the form of Exhibit A hereto.

" Notice of Initial Tranche Borrowing " means an irrevocable notice, substantially in the form set forth in Exhibit D-1 to be given by Borrower to the Lender in accordance with Section 2.02(a) .

" Notice of Subsequent Tranche Borrowing " means an irrevocable notice, substantially in the form set forth in Exhibit D-2 to be given by Borrower to the Lender in accordance with Section 2.02(b) .

" Notices " means, collectively, notices, consents, approvals, reports, designations, requests, waivers, elections and other communications.

" Obligations " means, without duplication, the Loans, Fixed Interest and all present and future Indebtedness, taxes, liabilities, obligations, covenants, duties, and debts, owing by Borrower to the Lender, arising under or pursuant to the Loan Documents, including all principal, interest, premium, charges, expenses, fees and any other sums chargeable to Borrower hereunder and under the other Loan Documents (and including any interest, fees and other charges that would accrue but for the filing of a bankruptcy action with respect to Borrower, whether or not such claim is allowed in such bankruptcy action).

" Office " means, with respect to the Lender, its Stamford, Connecticut office, and with respect to any other Lender, the office of such Lender designated as its "Office" in an Assignment and Acceptance, or such other office as may be otherwise designated in writing from time to time by such Lender to Borrower.

" Other Connection Taxes " means, with respect to any Lender, Taxes imposed as a result of a present or former connection between such Lender and the jurisdiction imposing such Tax (other than connections arising from such Lender having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced any Loan Document, or sold or assigned an interest in any Loan, commitment or Loan Document).

" Other Taxes " has the meaning set forth in Section 5.03 .

" Party " and " Parties " means the Lender and Borrower, individually and collectively.

" Patent Office " means the respective patent office (foreign or domestic) for any patent.

" Patent " means any and all issued patents and pending patent applications, including without limitation, all provisional applications, substitutions, continuations, continuations-in-part, divisions, and renewals, all letters patent granted thereon, and all patents-of-addition, reissues, reexaminations and extensions or restorations by existing or future extension or restoration mechanisms (including regulatory extensions), and all supplementary protection certificates, together with any foreign counterparts thereof anywhere, claiming or covering the AD-5102 or the Licensed Product, or composition of matter, formulation, or methods of manufacture or use thereof, that are issued or filed on or after the date of this Agreement, including those identified in Schedule 7.01 , in each such case, which are owned or controlled by, issued or licensed to, licensed by, or hereafter acquired or licensed by, Borrower or any Subsidiary.

" Patent Rights " means, collectively, with respect to a Person, all patents issued or assigned to, and all patent applications and registrations made by, such Person (whether established or registered or recorded in the United States or any other country or any political subdivision thereof), together with any and all (i) rights and privileges arising under Applicable Law with respect to such Person's use of any patents, (ii) inventions and improvements described and claimed therein, (iii) reissues, divisions, continuations, renewals, extensions and continuations-in-part thereof and amendments thereto, (iv) income, fees, royalties, damages, claims and payments now or hereafter due and/or payable thereunder and with respect thereto including damages and payments for past, present or future infringements thereof, (v) rights corresponding thereto throughout the world and (vi) rights to sue for past, present or future infringements thereof.

" Patriot Act " means the USA Patriot Act, Public Law No. 107-56.

" Payments " means due and owing payments of Amortization Payments (under Section 3.01(a) hereof) and Fixed Interest (under Section 4.01 hereof), including, in each case any default, additional interest or prepayment premium charged hereunder.

" Payment in Full " means the payment in full in good funds of the Loans and other Obligations (other than contingent indemnification obligations for which such claims have been reserved).

" Permitted Financing " means all Indebtedness and other obligations in respect of: (a) any Permitted Financing Facility, (b) any interest rate, foreign exchange or other commodity swap or hedge instruments, (c) any agreement relating to, treasury, depositary and cash management services (including, for the avoidance of doubt, credit cards, merchant cards, purchase cards and debit cards) or automated clearinghouse transfer of funds, (d) any letters of credit, banker's acceptances or similar credit transaction and (e) all obligations of other Persons of the type referred to in clauses (a), (b), (c) or (d) for the payment of which Borrower or any of its Subsidiaries is responsible or liable as a guarantor or surety.

" Permitted Financing Facility " means one or more (i) royalty sales, revenue interest sales or other similar transactions (other than a sale of the Included Product Payments); and (ii) indentures, debt facilities or commercial paper facilities, providing for the issuance of notes, revolving credit loans, term loans, receivables financing (including through the sale of receivables to lenders or to special purpose entities formed to borrow from lenders against such receivables), letters of credit, banker's acceptances and/or similar instruments, in each case under clauses (i) and (ii), as amended, supplemented, modified, extended, restructured, renewed, refinanced, restated, replaced or refunded in whole or in part from time to time.

" Permitted Financing Creditors " means the lenders and/or purchasers, and any administrative agent, collateral agent, security agent or similar agent under any Permitted Financing Facility.

" Permitted Liens " means:

(a) Liens created in favor of the Lender pursuant to any Loan Document;

(b) inchoate Liens for taxes not yet delinquent or Liens for taxes which are being contested in good faith and by appropriate proceedings and for which adequate reserves have been established in accordance with GAAP;

(c) Liens in respect of property of Borrower imposed by Applicable Law which were incurred in the ordinary course of business and do not secure Indebtedness for borrowed money, such as carriers', warehousemen's, distributors', wholesalers', materialmen's and mechanics' liens and other similar Liens arising in the ordinary course of business and secure payment obligations not yet delinquent and which are not in the aggregate in an amount material in relation to the value of the Included Product Payments;

(d) (i) banker's liens for collection or rights of set off or similar rights and remedies as to deposit accounts or other funds maintained with depositary institutions; provided that such deposit accounts or funds are not established or deposited for the purpose of providing collateral

for any Indebtedness and are not subject to restrictions on access by Borrower in excess of those required by applicable banking regulations; and (ii) customary liens incurred in the ordinary course of business to secure obligations in respect of payment processing services, business credit card programs, and netting services, overdrafts and related liabilities arising from treasury, depositary and cash management services securing maximum amounts which are not in the aggregate material in relation to the value of the Included Product Payments;

(e) Liens to secure any Permitted Financing;

(f) any right, title or interest of a licensor or any restrictions imposed under a license or sublicense to which Borrower is a party as licensee or sublicensee;

(g) (i) leases, subleases, licenses, or sublicenses of the assets or properties of Borrower thereof, in each case entered into in the ordinary course of business and not interfering in any material respect with the business of Borrower, (ii) any license for the Commercialization of ADS-5102, and (iii) the License Agreement and any New Arrangement or other license replacing the License Agreement in accordance with Section 8.14(b) ;

(h) Liens to secure surety, appeal and performance bonds, trade and government contracts, regulatory or statutory obligations, banker's acceptances and other similar obligations not incurred in connection with the borrowing of money, and attachment, judgment and other similar Liens arising in connection with court proceedings so long as the enforcement of such Liens is effectively stayed and the judgment claims secured thereby do not otherwise constitute an Event of Default under clause (h) of the definition of "Event of Default";

(i) Liens on imported goods and related shipping documents in favor of customs and revenue authorities arising as a matter of law to secure payment of customs duties in connection with the importation of such goods in the ordinary course of Borrower's business;

(j) Liens on insurance policies and the proceeds thereof securing the financing of the premiums with respect thereto;

(k) Liens on cash collateral securing hedging agreements entered into for bona fide hedging purposes in the ordinary course of business and not for speculative purposes;

(l) Liens arising from filing precautionary UCC financing statements regarding leases;

(m) Liens securing reimbursement obligations of the Borrower as account party with respect to letters of credit issued for bona fide transactional purposes in the ordinary course of business and cash-collateralized with funds other than Included Product Payments; and

(n) Liens arising out of conditional sale, title retention, consignment or similar arrangements for the sale of goods entered into by Borrower in the ordinary course of business.

" Person " means any natural person, firm, corporation, limited liability company, partnership, joint venture, association, joint-stock company, trust, unincorporated organization,

Governmental Authority or any other legal entity, including public bodies, whether acting in an individual, fiduciary or other capacity.

" Plan Assets " means assets of any (i) employee benefit plan (as defined in Section 3(3) of ERISA) subject to the fiduciary responsibility provisions of Title I of ERISA, (ii) plan (as defined in Section 4975(e)(1) of the Code) subject to Section 4975 of the Code or (iii) entity whose underlying assets include assets of any such employee benefit plan or plan by reason of the investment by an employee benefit plan or plan in such entity.

" Pledged Account " has the meaning set forth under the Security Agreement, and includes the Collection Account and the Disbursement Account.

" Prepayment Event Date " means the date of occurrence of a Prepayment Trigger or the date fixed for a voluntary prepayment of the Loans pursuant to Section 3.02(a).

" Prepayment Trigger " means (i) the occurrence of any Event of Default and (unless prohibited by operation of Law) the acceleration of the maturity of the Loans or (ii) the occurence of a Change of Control.

" Proceeding " means an action or proceeding brought against a Party as a defendant, for purposes of all legal proceedings arising out of or relating to this Agreement or the transactions contemplated hereby.

" Purpose " has the meaning set forth in Section 12.17(a) .

" Quarterly Payment Amounts " means, with respect to any Calendar Quarter, the total of (a) the aggregate amount of Net Sales of ADS-5102 in the U.S. and (b) the Ex-U.S. Borrower Consideration received by Borrower in such Calendar Quarter.

" Quarterly Report " means, with respect to the relevant Calendar Quarter of Borrower, the quarterly reports provided for under Section 6.5 of the License Agreement for the period thereunder corresponding to such quarter, together with relevant supporting documentation.

" Recipient " has the meaning set forth in Section 12.17(a) .

" Register " means a record of ownership in which Borrower registers by book entry the interests (including any rights to receive payment hereunder) of each Lender in the Loans and any assignment of any such interest, obligation or right.

" Regulatory Agency " means a Governmental Authority with responsibility for the regulation of the research, development, marketing or sale of drugs or pharmaceuticals in any jurisdiction, including the FDA and the European Medicines Agency.

" Regulatory Approval " means, with respect to a product or device in any country or regulatory jurisdiction, all actions, approvals (including, where applicable, pricing and reimbursement approval and schedule classifications), licenses, registrations or authorizations of a Regulatory Agency necessary for the making, manufacture, sale, offer for sale, distribution,

import, export, promotion, marketing or other use of such product or device in such country or jurisdiction.

" Regulatory Change " means (i) the adoption after the date hereof of any applicable law, rule or regulation or any change therein after the date hereof, or (ii) any change after the date hereof in the interpretation or administration thereof by any governmental authority, central bank or comparable agency charged with the interpretation or administration thereof, either generally or as effected through compliance with any request or directive (whether or not having the force of law) of any such authority, central bank or comparable agency.

" Representative " means, with respect to any Person, directors, officers, employees, agents, co-investors, advisors, potential investors, underwriters, rating agencies, permitted assignees, sources of financing and trustees of such Person.

" Revenue Interest " means all of Borrower's rights, title and interest in and to that portion of accounts receivable and royalty receivables arising out of sales of ADS-5102 worldwide in an amount equal to the ADS-5102 Product Payment Amount for each Calendar Quarter.

" ROW " means all the countries in the world outside of the United States.

" ROW First Sale Date " has the meaning set forth in Section 4.08(b) .

" ROW Fraction " has the meaning set forth in Section 4.08(b) , subject to annual revisions pursuant to Section 4.08(c) .

" Royalty Interest " means the royalties and other payments (together with the right to receive such royalties and payments) payable to Borrower under Section 6.3 or Section 6.4 of the License Agreement (including in each case payments constituting royalties, milestone payments, settlement payments, judgments, securities, consideration or any other remuneration of any kind payable or received in respect of, or in substitution or compensation for, or otherwise in lieu of, such royalties under the License Agreement and all "accounts" (as such term is defined in the New York Uniform Commercial Code) in respect of the Royalty Interest evidencing or giving rise to any of the foregoing) relating to Exploitation of the Licensed Product as provided in the License Agreement, and any collections, recoveries, payments or other compensation made in lieu thereof and any amounts paid or payable to Borrower and/or any of its Subsidiaries in respect of such royalties pursuant to Section 365(n) of the United States Bankruptcy Code derived from payments under the License Agreement since the Closing Date.

" Royalty Tail " has the meaning set forth in Section 3.01(d) .

" Scheduled Maturity Date " means December 31, 2026.

" SEC " means the United States Securities and Exchange Commission.

" Security Agreement " means the Security Agreement, substantially in the form of Exhibit B hereto, between the Lender and Borrower, securing the Obligations of Borrower

hereunder and the other Loan Documents, as supplemented by any amendments or supplements thereto.

" Senior Officer " means (i) in the case of Borrower, the Managers and (ii) in the case of the Company, the Chief Executive Officer or Chief Financial Officer .

" Set-off " means any right of set off, rescission, counterclaim, reduction, deduction or defense.

" Stock Pledge Agreement " means the Pledge and Security Agreement, dated as of the Closing Date, between the Company and the Lender, in the form of Exhibit G hereto, pursuant to which the Capital Stock of Borrower is pledged to the Lender.

" Subsequent Funding Date " means the date upon which the conditions precedent under Section 6.02 have been satisfied to the satisfaction of the Lender, which (subject to such satisfaction) shall be the date that is within fifteen Business Days following receipt by the Lender of the Notice of Subsequent Tranche Borrowing but which shall not be a date later than the Subsequent Tranche Commitment Termination Date without the consent of the Lender in its sole discretion.

" Subsequent Tranche Loan " has the meaning set forth in Section 2.01(b) .

" Subsequent Tranche Loan Availability Termination Date " means October 31, 2018.

" Subsequent Tranche Loan Commitment " means the amount of $65,000,000.

" Subsequent Tranche Note " means the note, in the form attached hereto as Exhibit C-2 , issued by Borrower to the Lender evidencing the Subsequent Tranche Loan, if made, on the Subsequent Funding Date to Borrower and any replacement(s) thereof issued in accordance with Section 13.09 .

" Subsidiary " means with respect to any Person any entity as to which such Person directly or indirectly owns, controls or holds with power to vote fifty percent (50%) or more of the outstanding voting securities of such entity.

" Surviving Person " means, with respect to any Person involved in or that makes any disposition, the Person formed by or surviving such disposition or the Person to which such disposition is made.

" Sweep Percentage " has the meaning set forth in Section 4.08(b) .

" Taxes " means all present and future taxes, levies, duties, imposts, deductions, charges, fees or withholdings, and all interest, penalties and other liabilities with respect thereto, that are imposed by any Governmental Authority.

" Territory " means worldwide.

" Third Party " means any Person other than Borrower or its Affiliates.

" Transaction Documents " means the Loan Documents and the Organizational Documents.

" Transferred Assets " has the meaning set forth in the Contribution Agreement.

" U.S ." means the United States of America.

" UCC " means the Uniform Commercial Code as in effect from time to time in New York; provided , that, if, with respect to any financing statement or by reason of any provisions of Applicable Law, the perfection or the effect of perfection or non-perfection of the security interest or any portion thereof granted pursuant to the Loan Documents is governed by the Uniform Commercial Code as in effect in a jurisdiction of the United States other than New York, then " UCC " means the Uniform Commercial Code as in effect from time to time in such other jurisdiction for purposes of the provisions of this Agreement and any financing statement relating to such perfection or effect of perfection or non-perfection.

" Valid Claim " means, solely with respect to Patent Rights that claim or cover the manufacture, use, sale, offer for sale or import ADS-5102 or the Licensed Product, as applicable: (a) an issued claim of any issued Patent owned or controlled by Borrower that has not expired, or been revoked, cancelled, become abandoned or disclaimed, been declared invalid and/or unenforceable by a Patent Office or a decision or judgment of a court or other appropriate body of competent jurisdiction; and (b) a claim included in a pending Patent application owned or controlled by Borrower that is being prosecuted in good faith and that has not been cancelled, withdrawn from consideration, finally determined to be unallowable by the Patent Office or applicable Governmental Authority (from which no appeal is or can be taken), or abandoned or disclaimed; provided , however, that, if a claim of a Patent application owned or controlled by Borrower has been pending for more than [*], such claim will not constitute a Valid Claim for the purposes of this Agreement unless and until a Patent issues with such claim; provided , further, that, for purposes of the foregoing proviso, any newly filed claim which claims essentially the same subject matter as any earlier filed claim shall be considered pending for the same period of time as such earlier filed claim has been pending.

Section 1.02 **Rules of Construction** . Unless the context otherwise requires, in this Agreement:

(a) An accounting term not otherwise defined has the meaning assigned to it in accordance with GAAP.

(b) Words of the masculine, feminine or neuter gender shall mean and include the correlative words of other genders.

(c) The definitions of terms shall apply equally to the singular and plural forms of the terms defined.

(d) The terms "include", "including" and similar terms shall be construed as if followed by the phrase "without limitation".

(e) Unless otherwise specified, references to an agreement or other document include references to such agreement or document as from time to time amended, restated, reformed, supplemented or otherwise modified in accordance with the terms thereof (subject to any restrictions on such amendments, restatements, reformations, supplements or modifications set forth herein or in any of the other Transaction Documents) and include any annexes, exhibits and schedules attached thereto.

(f) References to any Applicable Law shall include such Applicable Law as from time to time in effect, including any amendment, modification, codification, replacement or reenactment thereof or any substitution therefor.

(g) References to any Person shall be construed to include such Person's successors and permitted assigns (subject to any restrictions on assignment, transfer or delegation set forth herein or in any of the other Transaction Documents), and any reference to a Person in a particular capacity excludes such Person in other capacities.

(h) The word "will" shall be construed to have the same meaning and effect as the word "shall".

(i) The words "hereof", "herein", "hereunder" and similar terms when used in this Agreement shall refer to this Agreement as a whole and not to any particular provision hereof, and Article, Section and Exhibit references herein are references to Articles and Sections of, and Exhibits to, this Agreement unless otherwise specified.

(j) In the computation of a period of time from a specified date to a later specified date, the word "from" means "from and including" and each of the words "to" and "until" means "to but excluding".

(k) Where any payment is to be made, any funds are to be applied or any calculation is to be made under this Agreement on a day that is not a Business Day, unless this Agreement otherwise provides, such payment shall be made, such funds shall be applied and such calculation shall be made on the succeeding Business Day, and payments shall be adjusted accordingly.

Article II.
THE LOAN; DISBURSEMENT; CERTAIN FEES

Section 2.01 **Initial Tranche Loan; Subsequent Tranche Loan** .

(a) On the terms and subject to the conditions set forth herein, including the conditions set forth in Section 6.01 hereof, the Lender shall make a loan hereunder to Borrower in a principal amount equal to the Initial Tranche Loan Commitment on the Initial Funding Date (the " Initial Tranche Loan ") and Borrower shall accept and borrow such loan from the Lender.

(b) On the terms and subject to the conditions set forth herein, including the conditions set forth in Section 6.02 hereof, the Lender shall make a loan hereunder to Borrower in a principal amount equal to the Subsequent Tranche Loan Commitment on the Subsequent

Funding Date (the " Subsequent Tranche Loan ") and Borrower shall accept and borrow such loan from the Lender.

Section 2.02 **Notice of Borrowing** .

(a) Subject to Section 2.01(a) , Borrower shall, simultaneously with the execution and delivery of this Agreement by the Parties, deliver to the Lender a Notice of Initial Tranche Borrowing, setting forth that Borrower will borrow a principal amount equal to the Initial Tranche Loan Commitment on the Initial Funding Date. The Initial Tranche Loan Commitment shall automatically terminate upon disbursement of the Initial Tranche Loan on the Initial Funding Date.

(b) Subject to Section 2.01(b) , if FDA Approval shall have occurred on or before the Subsequent Tranche Loan Availability Termination Date, Borrower shall, not later than 5:00 PM (New York time) on or before the fifteenth (15th) Business Day following the receipt of FDA Approval, deliver to the Lender a Notice of Subsequent Tranche Borrowing. Only one Notice of Subsequent Tranche Borrowing may be given by Borrower. No later than the fifteenth (15th) Business Day following its receipt of the Notice of Subsequent Tranche Borrowing, the Lender shall make the Subsequent Tranche Loan to Borrower. The availability of the Subsequent Tranche Loan shall automatically terminate upon the earlier of (i) funding of the Subsequent Tranche Loan on the Subsequent Funding Date and (ii) fifteen (15) Business Days following the Subsequent Tranche Loan Availability Termination Date.

Section 2.03 **Disbursement and Borrowing** . On the terms and subject to the conditions set forth herein:

(a) on the Initial Funding Date, the Lender shall wire transfer an amount equal to (A) the Initial Tranche Loan Commitment, less (B) the Lender Expense Amount, to the account of Borrower which Borrower shall have designated for such purpose in the related Notice of Borrowing or a separate payment instruction, or to Borrower's order (i.e., the Initial Tranche Loan will be funded on a net basis); and

(b) on the Subsequent Funding Date, if any, the Lender shall wire transfer an amount equal to the Subsequent Tranche Loan Commitment, to the account of Borrower which Borrower shall have designated for such purpose in the related Notice of Borrowing or a separate payment instruction, or to Borrower's order.

Section 2.04 **Loan Not Revolving** . The Loans are not revolving in nature, and any amount of the Loans repaid or prepaid may not be reborrowed.

Article III.
REPAYMENT

Section 3.01 **Amortization; Maturity Date** .

(a) Except as otherwise expressly provided herein, on each Interest Payment Date, commencing with the Interest Payment Date immediately following the ninth full Calendar Quarter subsequent to the earlier of (i) the Subsequent Funding Date and (ii) the Subsequent

Tranche Loan Availability Termination Date if the Subsequent Funding Date has not occurred (such date, the " Amortization Start Date "), Borrower shall repay principal on the Loans outstanding at par to the Lender Account in an amount which is equal to the amount, if any, by which Included Product Payment for the immediately preceding Calendar Quarter for such Interest Payment Date exceed Fixed Interest accrued and payable on such Interest Payment Date (such amount, the " Amortization Payment ").

(b) If not earlier repaid in full, the unpaid balance of the outstanding principal amount of the Loans, together with any accrued and unpaid interest, and all other Obligations then outstanding, shall be due and payable in cash to the Lender Account on the Maturity Date.

(c) The outstanding principal balance of the Loans and any interest or premium due with respect thereto shall be repayable solely from Included Product Payments except (i) in connection with voluntary prepayment of the Loans pursuant to Section 3.02(b) or Section 3.03 , (ii) in connection with prepayments required pursuant to Section 3.02(a)(vi), and (iii) following the occurrence of a Prepayment Trigger, in connection with mandatory prepayments of the Loans.

(d) Once the principal balance and Fixed Interest due on the Loans have been repaid in full (other than as a result of any prepayment pursuant to Section 3.03) , Borrower shall make payments of (i) in the U.S., the Applicable Percentage of Net Sales in the U.S. and (ii) outside of the U.S., the Applicable Percentage of Ex-U.S. Borrower Consideration (collectively, such payments, the " Royalty Tail ") until cumulative cash payments of the principal, Fixed Interest and Royalty Tail totaling $200,000,000 (or $70,000,000 if only the Initial Tranche Loan has been made) have been received by Lender.

Section 3.02 **Mandatory Prepayment; Voluntary Prepayment** .

(a) Mandatory Prepayment .

(i) If any Prepayment Trigger occurs, then Lender may declare the outstanding principal amount of the Loans plus any accrued and unpaid interest thereon to be immediately due and payable hereunder, in whole but not in part, to the extent permitted by law, together, if applicable, with any additional amounts due in respect thereof pursuant to clause (ii) below, and all other Obligations then outstanding together with all other amounts in respect thereof to the Lender Account, and the provisions of this Section 3.02(a) shall apply.

(ii) Any prepayment of the Loans pursuant to Section 3.02(a)(i) shall include a prepayment premium in the amount indicated in the second column of the table below (determined as of the Prepayment Event Date):

Prepayment Event Date	Prepayment Premium
During the 36-month period commencing on the Closing Date	[*]% of the outstanding principal balance of the Loans as of the Prepayment Event Date
After the 36-month period, and through and including the end of the 48-month period, following the Closing Date	[*]% of the outstanding principal balance of the Loans as of the Prepayment Event Date
After the 48-month period, and through and including the end of the 60-month period, following the Closing Date	[*]% of the outstanding principal balance of the Loans as of the Prepayment Event Date
After the 60-month period, and through and including the end of the 72-month period, following the Closing Date	[*]% of the outstanding principal balance of the Loans as of the Prepayment Event Date
After the 72-month period following the Closing Date and thereafter	[*]% of the outstanding principal balance of the Loans as of the Prepayment Event Date

(iii) In addition to the amount in clause (ii) above, in connection with the prepayment in full of the Loans outstanding, any unpaid amounts in respect of such prepaid Loans not consisting of principal or Fixed Interest (i.e., any unpaid amounts for indemnification, tax gross-up, default interest, expense reimbursement and other amounts not consisting of principal or interest) shall be immediately due and payable.

(iv) The date of prepayment of the Loans and any other amounts due to Lender under this Section 3.02(a) , shall be a Business Day not more than 10 Business Days following the date the Prepayment Trigger has occurred. Not less than 5 Business Days prior to such prepayment date, Borrower shall provide to Lender a Notice of Prepayment showing the calculation of the amount to be prepaid and all other amounts payable in connection therewith under this Section 3.02(a) . Such Notice of Prepayment shall constitute Borrower's irrevocable commitment to prepay the Loans outstanding and all such other amounts on such prepayment date.

(v) Notwithstanding anything in this Agreement or in any other Loan Document to the contrary, if a Loan shall remain outstanding after the fifth (5th) anniversary of the initial issuance thereof and the aggregate amount that would be includible in the gross income of a Lender with respect to a Loan (within the meaning of Section 163(i) of the Code) for the periods ending on or before any Interest Payment Date that occurs after such fifth (5th) anniversary (the " Aggregate Accrual ") would otherwise exceed an amount equal to the sum of (i) the aggregate amount of interest to be paid (within the meaning of Section 163 (i) of the Code) under such Loan on or before such Interest Payment Date, and (ii) the product of (A) the issue price (as defined in Section 1273(b) of the Code) of such Loan and (B) the yield to maturity (interpreted in accordance with Section 163(i) of the code) of such Loan (such sum, the " Maximum Accrual "), then the Borrower shall pay on each applicable Interest Payment Date occurring after such fifth (5th) anniversary that portion of the outstanding principal amount of such Loan necessary to prevent such Loan from constituting an "applicable high yield discount obligation" within the meaning of Section 163(i) of the code, up to an amount equal to the excess, if any, of the Aggregate Accrual over the Maximum Accrual

(each such payment, the " AHYDO Payment ") and the amount of such AHYDO Payment and any interest thereon shall be treated for U.S. federal income tax purposes as an amount of interest to be paid (within the meaning of Section 163(i)(2)(B)(i) of the Code) under such Loan. This provision is intended to prevent the Loans from being classified as "applicable high yield discount obligations," as defined in Section 163(i) of the Code, and shall be interpreted consistently therewith.

(b) Voluntary Prepayment .

(i) Upon the occurrence of a Change of Control, or at any other time, Borrower may prepay the outstanding principal amount of the Loans plus any accrued and unpaid interest thereon, in whole but not in part, to the extent permitted by law, together, if applicable, with any additional amounts due in respect thereof pursuant to clause (ii) below, and all other Obligations then outstanding together with all other amounts in respect thereof to the Lender Account, and the provisions of this Section 3.02(b) shall apply.

(ii) Any prepayment of the Loans pursuant to Section 3.02(b)(i) shall include a prepayment premium equal to the amount indicated in the second column of the table below (determined as of the Prepayment Event Date):

Prepayment Event Date	**Prepayment Premium**
During the 36-month period commencing on the Closing Date	[*]% of the outstanding principal balance of the Loans as of the Prepayment Event Date
After the 36-month period, and through and including the end of the 48-month period, following the Closing Date	[*]% of the outstanding principal balance of the Loans as of the Prepayment Event Date
After the 48-month period, and through and including the end of the 60-month period, following the Closing Date	[*]% of the outstanding principal balance of the Loans as of the Prepayment Event Date
After the 60-month period, and through and including the end of the 72-month period, following the Closing Date	[*]% of the outstanding principal balance of the Loans as of the Prepayment Event Date
After the 72-month period following the Closing Date and thereafter	[*]% of the outstanding principal balance of the Loans as of the Prepayment Event Date

(iii) In addition to the amount in clause (ii) above, in connection with the prepayment in full of the Loans outstanding, any unpaid amounts in respect of such prepaid Loans not consisting of principal or Fixed Interest (i.e., any unpaid amounts for indemnification, tax gross-up, default interest, expense reimbursement and other amounts not consisting of principal or interest) shall be immediately due and payable.

(iv) The date of prepayment of the Loans and any other amounts due to Lender under this Section 3.02(b) , shall be a Business Day not more than 10 Business Days

following the date Borrower has provided to Lender a Notice of Prepayment showing the calculation of the amount to be prepaid and all other amounts payable in connection therewith under this Section 3.02(b). Such Notice of Prepayment shall constitute Borrower's irrevocable commitment to prepay the Loans outstanding and all such other amounts on such prepayment date; provided, however, that such Notice of Prepayment may state that such notice is conditioned upon the effectiveness of any credit facilities or one or more other events specified therein (including the occurrence of a Change of Control), in which case such notice may be revoked by Borrower (by notice to the Lender on or prior to the specified effective date) if such condition is not satisfied.

(v) Concurrently with, or at any time from and after, the prepayment of the Loans pursuant to this Section 3.02(b), Borrower may terminate the Royalty Tail upon written notice to Lender by paying to the Lender Account an amount sufficient to bring the cumulative cash payments of principal, Fixed Interest and Royalty Tail up to a total of $200,000,000 (or $70,000,000 if only the Initial Tranche Loan has been made) at the date of such payment.

Section 3.03 **Increased Cost**. (a) If any Regulatory Change occurs that has or would have the effect of

(i) imposing, modifying or deeming applicable any reserve, special deposit, compulsory loan, insurance charge or similar requirement against assets of, deposits with or for the account of, or credit extended or participated in by, the Lender;

(ii) subjecting the Lender to any Taxes (other than (A) Indemnified Taxes or (B) Excluded Taxes) on the Loans, commitments, or other obligations, or its deposits, reserves, other liabilities or capital attributable thereto; or

(iii) imposing on the Lender any other condition, cost or expense (other than Taxes) affecting this Agreement or Loans made by the Lender;

and the result of any of the foregoing shall be to reduce the rate of return on the capital of the Lender as a consequence of its obligations hereunder or arising in connection herewith to a level below that which the Lender could have achieved but for such introduction, change or compliance (taking into consideration the policies of the Lender with respect to capital adequacy) by an amount deemed by the Lender to be material, then from time to time, on the first Interest Payment Date occurring at least thirty (30) days after demand by the Lender (which demand shall be accompanied by a statement setting forth the basis for such demand and a description of the computation of such demand), Borrower shall pay directly to the Lender such additional amount or amounts as will compensate the Lender for such reduction. The Lender will take such actions reasonably requested by Borrower, at the expense of Borrower, if such actions will avoid the need for, or reduce the amount of, such compensation and will not, in the judgment of the Lender, be otherwise disadvantageous to it or inconsistent with its internal policies and procedures. In no event will the Lender be expected or required to monitor the occurrence of any of the events or contingencies described in this Section 3.03(a). Notwithstanding the foregoing, in no event shall Borrower be required to compensate the Lender pursuant to this Section 3.03 for any amounts under this Section

3.03 incurred more than one hundred-eighty (180) days prior to the date that the Lender notifies Borrower of such amount and of the Lender's intention to claim compensation therefor.

(b) In determining any amount provided for in this Section 3.03 , the Lender shall use commercially reasonable averaging and attribution methods. If the Lender makes a claim under this Section, it shall submit to Borrower a certificate setting forth the basis for such demand and a description of the computation of such demand as to such additional or increased cost or reduction, which certificate shall be conclusive absent manifest error.

(c) If the Lender submits a demand to Borrower to pay any additional amounts pursuant to this Section 3.03 , Borrower may elect, in its sole discretion, to prepay the Loans in full. Borrower shall notify the Lender in writing of such election no later than thirty (30) days following its receipt of such demand and shall specify in such notice the date upon which such prepayment shall be made which shall not be later than sixty (60) days following the date of the Lender's demand. Prepayment pursuant to this Section 3.03 shall be made together with interest accrued and unpaid on the Loans to date of prepayment and all other amounts then payable to the Lender hereunder, but shall not be subject to any prepayment amount pursuant to Section 3.02 .

Article IV.
INTEREST; EXPENSES; MAKING OF PAYMENTS

Section 4.01 **Interest Rate** .

(a) The outstanding principal amount of the Loans shall bear interest consisting of Fixed Interest, which shall be paid in cash as provided in this Section 4.01 .

(b) All interest hereunder in respect of Fixed Interest shall be computed on the basis of a 360-day year of twelve 30-day months.

(c) Except as otherwise expressly provided in Section 4.03 , accrued and unpaid Fixed Interest on the Loans shall be payable in cash by Borrower to the Lender at the Lender Account in arrears on each Interest Payment Date; provided , however , that with respect to each Interest Payment Date from the Closing Date through and including the Amortization Start Date, if payments received with respect to the Included Product Payments for the immediately preceding Calendar Quarter for such Interest Payment Date are insufficient to pay all amounts of Fixed Interest due on the Loans for such Interest Payment Date (any such deficiency, the " Deficiency Amount "), then any such Deficiency Amount shall increase the outstanding principal amount of the Loans by an amount equal to the Deficiency Amount for the applicable Interest Payment Date (rounded up to the nearest whole dollar) and the Lender shall be deemed to have made an additional term loan in a principal amount equal to the aggregate amount of such Deficiency Amount (such additional term loan, " Accreted Principal "). Accreted Principal shall be deemed to be part of the Loans made to Borrowers for all purposes under this Agreement, and the Loans shall bear interest on such increased principal amount from and after the applicable Interest Payment Date in accordance with this Section 4.01 . In the event of any repayment or prepayment of the Loans (including, without limitation, principal payments due under Section 3.01), accrued and unpaid Fixed Interest on the principal amount repaid or prepaid shall be payable on the date of such repayment or prepayment.

(d) Fixed Interest on the Loans shall be payable solely from the Included Product Payments, except (i) in connection with voluntary prepayment of the Loans pursuant to Section 3.02(b) or Section 3.03, (ii) following the occurrence of a Prepayment Trigger, to the extent of capital contributions made by the Company in its sole discretion to fund full prepayment of the Loans, and (iii) following the Amortization Start Date, at the election of Borrower, any other funds available to Borrower; provided that in the case of this clause (iii), any capital contributions by the Company shall be subject to the limitations thereon set forth in the Contribution Agreement.

Section 4.02 **Blocked Accounts**

(a) Within sixty (60) days of the Initial Funding Date or such later date as the Parties may agree, (i) Borrower shall establish with the Account Bank the Collection Account and the Disbursement Account; and (ii) the Parties shall enter into Blocked Account Control Agreements with the Account Bank.

(b) Borrower shall pay for all fees, expenses and charges of the Account Bank pursuant to the terms of the Blocked Account Control Agreement by depositing sufficient funds into the Collection Account when such fees, expenses and charges are due.

(c) Prior to the Payment in Full, Borrower shall have no right to terminate the Blocked Accounts without the Lender's prior written consent; provided that, without Lender's consent to the change of location of such accounts (provided such location is in the United States), Borrower shall have the right from time to time to establish a replacement Collection Account and a replacement Disbursement Account with a replacement Account Bank, provided that such replacement Account Bank entered into a Blocked Account Control Agreement with respect to such replacement accounts effective no later than the date of replacement, and Borrower instructs as required pursuant to Section 4.08(a) Borrower Licensees and account debtors to make payments to such new accounts.

For purposes of this Agreement, any reference to the "Blocked Account Control Agreement," "Collection Account" or "Disbursement Account" shall refer to such replacement Blocked Account Control Agreement, Collection Account, Disbursement Account or Account Bank, as the context requires.

(d) If requested by Borrower or any Permitted Financing Creditor (or agent or representative thereof), Lender shall enter into an amended or replacement Blocked Account Control Agreement that extends perfection in the Collection Account and the Disbursement Account to the Permitted Financing Creditor, which may be through "control" by the Lender over the payment interests under the License Agreement in excess of the Royalty Interest on behalf of such Permitted Financing Creditors for purposes of Section 9-104 of the UCC or other method of control for such purposes reasonably acceptable to the Lender.

Section 4.03 **Interest on Late Payments** . -If any amount payable by Borrower to the Lender hereunder is not paid when due (whether at stated maturity, by acceleration or otherwise), interest shall accrue on any such unpaid amounts, both before and after judgment during the period from and including the applicable due date, to but excluding the day the overdue amount is paid in full, at a rate per annum equal to the Default Rate. Interest accruing

under this Section 4.03 shall be payable on demand of the Lender. For the avoidance of doubt, Fixed Interest that is not paid in cash on the date due but that is added to the principal amount of the Loans as Accreted Principal in accordance with Section 4.01(c) shall accrue Fixed Interest from the date at which it is incorporated as Accreted Principal and shall thereafter accrue interest at the Default Rate in the event that the principal amount of the Loans generally bears interest at the Default Rate.

Section 4.04 **Initial Expenses**. Borrower shall pay to the Lender, on the Initial Funding Date as provided in Section 2.03, the Lender Expense Amount, which shall serve as payment for confirmatory due diligence and legal documentation expenses of the Lender associated with the execution and delivery of this Agreement as of the Closing Date.

Section 4.05 **Administration and Enforcement Expenses**. Borrower shall promptly reimburse the Lender on demand for all reasonable costs and expenses incurred by the Lender (including the reasonable fees and expenses of one outside counsel to the Lender) as a consequence of or in connection with any Default, Event of Default, Prepayment Trigger or voluntary or mandatory prepayment of the Loans.

Section 4.06 **Making of Payments**. Notwithstanding anything to the contrary contained herein, any Payment stated to be due hereunder or under any Note on a given day in a specified month shall be made or shall end (as the case may be), (i) if there is no such given day or corresponding day, on the last Business Day of such month or (ii) if such given day or corresponding day is not a Business Day, on the next succeeding Business Day.

Section 4.07 **Setoff or Counterclaim**. Each payment by Borrower under this Agreement or under any Note shall be made without setoff or counterclaim. The Lender shall have the right to set off any and all amounts owed by Borrower and/or any of its Subsidiaries under this Agreement as provided in Section 10.03.

Section 4.08 **Payment Mechanics and Disbursement Account Management.**

(a) (i) Within three (3) Business Days after the establishment of the Disbursement Account (or such later date as reasonably acceptable to Lender), Borrower shall deliver a written notice to the Licensee specifying the assignment of the License Agreement to Borrower and instructions for payment thereafter with respect to all payments that are due and payable to Borrower in respect of or derived from the License Agreement (which notice and instructions shall be in the form attached to the Contribution Agreement or otherwise reasonably satisfactory to the Lender) and shall provide that Licensee is to remit all amounts payable to Borrower in respect thereof to the Disbursement Account, and (ii) commencing with the First Commercial Sale, Borrower shall provide a similar notice and instructions directing, and shall use commercially reasonable efforts to cause, all Borrower Licensees and account debtors with respect to proceeds arising from sales of ADS 5102 by Borrower in the Territory to remit all amounts payable to Borrower in respect thereof to the Disbursement Account (in the case of Borrower Licensees) and the Collection Account (in the case of account debtors); provided that in the case of proceeds of governmental receivables arising out of sales of ADS-5102 in the United States may instead be remitted to one or more other U.S.-based accounts, not subject to any liens (other than any banker's lien under Applicable Law), so long as such accounts are

subject to daily sweeps to the Collection Account. All proceeds and other funds deposited into the Collection Account shall be verified and reconciled by the Logistics Service Provider (or its agent) and any verified and reconciled funds shall be swept to the Disbursement Account. Funds

in the Disbursement Account shall be disbursed to Borrower in accordance with Section 4.08(b) and to the Lender in accordance with Section 4.08(c) .

To the extent any such proceeds are paid directly to Borrower, Borrower shall (i) remit to the Collection Account all such amounts within fifteen (15) Business Days of receipt of any such funds, (ii) promptly instruct such Borrower Licensee or account debtor in writing to remit any future payments to the Collection Account (or other applicable account) and (iii) promptly provide to Lender a copy of such notice.

(b) At the option of Borrower, all amounts deposited in the Disbursement Account during any Calendar Quarter in respect of the Royalty Interest in excess of the Included Royalty Interest may be disbursed to the Borrower Account at such times as directed by Borrower. In addition, on a monthly basis, Borrower may direct the disbursement of amounts deposited in the Disbursement Account for any month equal to the sum of (1) the aggregate Net Sales for such month in respect of Net Sales multiplied by the Sweep Percentage (as defined below), plus (2) the aggregate amounts deposited during such month in respect of Ex-US Borrower Licensee Consideration multiplied by the Sweep Percentage. If Borrower elects to require a monthly sweep, Borrower shall provide the Account Bank notice no more frequently than monthly of such amount to be disbursed to the Borrower Account pursuant to this Section 4.08(b) . On or prior to each Interest Payment Date, Borrower shall deliver to the Lender a written reconciliation of the amount deposited in the Disbursement Account on each day of the applicable Calendar Quarter and the amount of Royalty Interest and other amounts disbursed to Borrower.

The " Sweep Percentage " shall be equal to the following:

(100% - (the Applicable Percentage + 1.0%))

(c) No later than each Interest Payment Date, Borrower shall provide to Lender the reports relating to Quarterly Payment Amounts and calculation of the Revenue Interests required under Section 8.03(f) . On each Interest Payment Date, Borrower shall instruct the Account Bank to disburse from the Disbursement Account, in the following order of priority, as follows:

(i) First, to the Lender Account:

(A) prior to the Amortization Start Date, an amount equal to the least of (1) the funds on deposit in the Disbursement Account, (2) Included Product Payments for the immediately preceding Calendar Quarter, and (3) the Fixed Interest for such Interest Payment Date; or

(B) on and after the Amortization Start Date, an amount equal to the lesser of (1) the funds on deposit in the Disbursement Account, and

(2) the sum of the Fixed Interest for such Interest Payment Date, plus any additional amounts payable pursuant to Section 3.02(a)(v) plus the Amortization Payment for such Interest Payment Date; and

(ii) Second, to the Lender Account, if, on and after the Amortization Start Date, the amount disbursed to the Lender Account pursuant to Section 4.08(c)(i) above is less than the Payments to which Lender is entitled for the relevant Calendar Quarter until such disbursements equal the amount of such shortfall; and

(iii) Third, to the Borrower Account an amount equal to the lesser of (A) the funds on deposit in the Disbursement Account as of the end of the immediately preceding Calendar Quarter, and (B) an amount equal to the amount deposited in the Disbursement Account during the immediately preceding Calendar Quarter, minus the amounts disbursed for such Calendar Quarter pursuant to Section 4.08(c)(i) and (ii) above, minus any amounts disbursed to the Borrower Account during such Calendar Quarter.

(d) Upon any disbursement of any funds from the Disbursement Account to the Borrower Account, any security interest hereunder or under the other Loan Documents granted in Borrower's right, title and interest in, to and under such funds shall be automatically released and terminated.

Section 4.09 **Mode of Payment**. All payments made by a Party hereunder shall be made by deposit of Dollars by wire transfer in immediately available funds into the applicable account.

Section 4.10 **Currency Conversion**. All payments received as part of the Included Product Payments that are not received in Dollars shall be converted to Dollars on the same basis and utilizing the same methodology for amounts thereof payable to Borrower and amounts thereof payable to Lender. The costs of any currency conversion shall be paid solely by Borrower.

Article V.
TAXES

Section 5.01 **Taxes**.

(a) Except as otherwise required by Applicable Law, any and all payments by Borrower under this Agreement or any other Loan Document (including payments with respect to the Loan) shall be made free and clear of and without deduction for any and all present and future Taxes. If Borrower or any other applicable withholding agent shall be required by Applicable Law to deduct any Taxes from or in respect of any sum payable to a Lender under this Agreement or any other Loan Document, (i) if such Taxes are Indemnified Taxes, the sum payable by Borrower shall be increased as necessary so that after all required deductions have been made by the applicable withholding agent (including deductions applicable to additional sums payable under this Section 5.01(a) for Indemnified Taxes), the Lender receives an amount equal to the sum it would have received had no such deductions been made, (ii) the applicable withholding agent shall make such deductions and (iii) the applicable withholding agent shall

pay the full amount deducted to the relevant Governmental Authority in accordance with Applicable Law.

(b) Status of Lenders

(i) Any Lender that is entitled to an exemption from or reduction of withholding Tax with respect to any payments made under any Loan Document shall deliver to Borrower or any other applicable withholding agent, at the time or times reasonably requested by Borrower or such other withholding agent, such properly completed and executed documentation reasonably requested by Borrower or such other withholding agent as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, any Lender, if reasonably requested by Borrower or any other applicable withholding agent, shall deliver such other documentation prescribed by Applicable Law or reasonably requested by Borrower or such other withholding agent as will enable Borrower or such other withholding agent to determine whether or not such Lender is subject to backup withholding or information reporting requirements.

(ii) Without limiting the generality of the foregoing:

1) If a Lender is a Foreign Lender, then such Lender shall provide to Borrower or any other applicable withholding agent (i) in the case of a Foreign Lender claiming exemption from U.S. federal withholding tax under Section 871(h) or 881(c) of the Code with respect to payments of "portfolio interest," (x) two accurate and complete original signed copies of IRS Form W-8BEN-E or W-8BEN (or a successor form) properly completed and duly executed by such Foreign Lender and (y) a certificate substantially in the form of Exhibit K-1 to the effect that such Foreign Lender is not (A) a "bank" within the meaning of Section 881(c)(3)(A) of the Code, (B) a "10 percent shareholder" of Borrower within the meaning of Section 881(c)(3)(B) of the Code or (C) a "controlled foreign corporation" described in Section 881(c)(3)(C) of the Code, (ii) if the payments receivable by the Foreign Lender are effectively connected with the conduct of a trade or business in the United States, two accurate and complete original signed copies of IRS applicable Form W-8ECI (or a successor form), (iii) in the case of a Foreign Lender that is entitled to benefits under an income tax treaty to which the United States is a party, two accurate and complete original signed copies of IRS Form W-8BEN establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the applicable article(s) of such tax treaty or (iv) to the extent a Foreign Lender is not the beneficial owner, two accurate and complete original signed copies of IRS Form W-8IMY, accompanied by two accurate and complete original signed copies of IRS Form W-8ECI, IRS Form W-8BEN, or IRS Form W-8BEN-E, a certificate substantially in the form of Exhibit K-2 or Exhibit K-3, IRS Form W-9, and/or other certification documents from each beneficial owner, as applicable; provided that if the Foreign Lender is a partnership (and not a participating Lender) and one or more direct or indirect partners of such Foreign Lender are claiming the portfolio interest exemption, such Foreign Lender may provide a certificate substantially in the form of Exhibit K-4 on behalf of each such direct and indirect partner. Such forms or certificates shall be delivered by such Foreign Lender

on or prior to the date that it becomes a Lender under this Agreement, at any time thereafter if any form or certification previously delivered expires or becomes obsolete or inaccurate in any respect, and upon a reasonable written request of Borrower or any other applicable withholding agent. Notwithstanding any other provision of this Section 5.01(c) , no Foreign Lender shall be required to deliver any form pursuant to this Section 5.01(c) that such Foreign Lender is not legally eligible to deliver.

2) Each Lender that is not a Foreign Lender shall provide two properly completed and duly executed copies of Form W-9 (or successor form) on or prior to the date on which such Lender becomes a Lender under this Agreement, at any time thereafter if any form or certification previously delivered expires or becomes obsolete or inaccurate in any respect, and upon a reasonable written request of Borrower or any other applicable withholding agent.

3) Any Foreign Lender shall, to the extent it is legally eligible to do so, deliver to the Borrower and any other applicable withholding agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or such other applicable withholding agent), executed copies of any other form prescribed by Applicable Law as a basis for claiming exemption from or a reduction in U.S. federal withholding Tax, duly completed, together with such supplementary documentation as may be prescribed by Applicable Law to permit the Borrower or such other applicable withholding agent to determine the withholding or deduction required to be made; and

4) If a payment made to a Lender under any Loan Document would be subject to U.S. federal withholding Tax imposed by FATCA if such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Code, as applicable), such Lender shall deliver to the Borrower and any other applicable withholding agent at the time or times prescribed by Applicable Law and at such time or times reasonably requested by the Borrower or such other applicable withholding agent such documentation prescribed by Applicable Law (including as prescribed by Section 1471(b)(3)(C)(i) of the Code) and such additional documentation reasonably requested by the Borrower or such other applicable withholding agent as may be necessary for the Borrower and such other applicable withholding agent to comply with their obligations under FATCA, to determine whether such Lender has complied with such Lender's obligations under FATCA or to determine the amount, if any, to deduct and withhold from such payment. Solely for purposes of this clause (D), "FATCA" shall include any amendments made to FATCA after the date of this Agreement.

(iii) Each Lender having assigned its rights and obligations hereunder in whole or in part shall collect from such assignee at the time of the assignment the documents described in Sections 5.01(b)(ii)(1) and (b)(ii)(2) as applicable.

Section 5.02 **Receipt of Payment**. Within thirty (30) days after the date of any payment of Taxes withheld by Borrower in respect of any payment to the Lender, Borrower shall furnish to the Lender the original or a certified copy of a receipt evidencing payment thereof or other evidence reasonably satisfactory to the Lender.

Section 5.03 **Other Taxes**. Borrower shall promptly pay any registration, transfer, stamp or documentary Taxes or any other excise or property Taxes arising from any payment made under any Loan Document, or from the execution, delivery or enforcement of, or otherwise with respect to, any Loan Document, except any such Taxes with respect to an assignment by a Lender that are Other Connection Taxes (all such non-excluded Taxes, " Other Taxes "), to the relevant Governmental Authority in accordance with Applicable Law.

Section 5.04 **Indemnification**. If the Lender pays any Indemnified Taxes that Borrower is required to pay pursuant to this Article V , Borrower shall indemnify the Lender on demand in full (including any Indemnified Taxes imposed by any jurisdiction on amounts payable under this Section 5.04), whether or not such Taxes were correctly or legally asserted, together with interest thereon from and including the date of payment to, but excluding, the date of reimbursement at the Default Rate and reasonable expense arising therefrom. A certificate of an affected Lender claiming any compensation under this Section 5.04 , setting forth the amounts to be paid thereunder and delivered to Borrower, shall be conclusive, binding and final for all purposes, absent manifest error.

Section 5.05 **Registered Obligation**.

(a) Borrower shall establish and maintain, at its address referred to in Section 12.03 , (i) a Register in which Borrower agrees to register by book entry the interests (including any rights to receive payment hereunder) of the Lender in the Loans, each of its obligations under this Agreement to participate in the Loans, and any assignment of any such interest, obligation or right, and (ii) accounts in the Register in accordance with its usual practice in which it shall record (1) the names and addresses of the Lender(s) (and each change thereto pursuant to Sections 12.01 and 12.02), (2) the amount of the Loans described in clause (i) above, (3) the amount of any principal or interest due and payable or paid, and (4) any other payment received and its application to the Loans.

(b) Notwithstanding anything to the contrary contained in this Agreement or elsewhere, the Loans (including any Notes evidencing such Loans) are registered obligations, the right, title and interest of the Lender and its assignees in and to such Loans shall be transferable only upon notation of such transfer in the Register and no assignment thereof shall be effective until recorded therein. This Section 5.05 and Sections 12.01 and 12.02 shall be construed so that the Loans are at all times maintained in "registered form" within the meaning of Section 5f.103-1(c) of the U.S. Treasury Regulations, Sections 163(f), 871(h)(2) and 881(c)(2) of the Code and any related regulations (and any successor provisions). The Lender shall cooperate with Borrower in all respects, notwithstanding anything else whether in the Loan Documents or otherwise and including, but not limited to, providing appropriate information, so that the Loan shall be maintained in such registered form.

Section 5.06 **Tax Treatment**.

(a) For U.S. federal income and applicable state and local income tax purposes, the Parties shall treat the Loans and the Notes as debt. Each Party agrees not to take any position that is inconsistent with the foregoing sentence on any tax return or in any audit or other administrative or judicial proceeding unless (i) each other Party has consented to such actions; or (ii) as a result of a material change in Applicable Law following the date of this Agreement, counsel for such Party has advised it in writing that taking such a position would, notwithstanding compliance with all applicable reporting requirements and disclosure obligations, subject such Party to penalties under the Code.

(b) This Agreement is not intended to create a deemed partnership, association or joint venture between or among Lender and/or Borrower or any Subsidiary. Each Party agrees not to refer to the other as a "partner" or the relationship as a "partnership" or "joint venture".

Article VI.
CLOSING CONDITIONS

Section 6.01 **Conditions Precedent to the Initial Tranche Loan**. The obligation of the Lender to advance the Initial Tranche Loan on the Initial Funding Date shall be subject to the fulfillment, to the sole satisfaction of the Lender, of all of the following conditions precedent in addition to the conditions specified in Section 2.01(a) and Section 2.02(a):

(a) Borrower shall have executed and delivered to the Lender the Initial Tranche Note, dated the Initial Funding Date.

(b) Lender shall have received on or before the Initial Funding Date an executed copy of:

(i) a certificate of each of Borrower and the Company, executed respectively by a Senior Officer thereof, dated the Initial Funding Date, substantially in the form of Exhibit J hereto; and

(ii) an opinion of Cooley LLP, counsel to Borrower and the Company, dated the Closing Date in form and substance reasonably satisfactory to the Lender.

(c) Borrower and the Company shall each have delivered to the Lender a certificate, dated the Closing Date, of a Senior Officer (the statements in which shall be true and correct on and as of the Initial Funding Date): (i) attaching copies, certified by such officer as true and complete, of such party's certificate of incorporation or other organizational documents (together with any and all amendments thereto) certified by the appropriate Governmental Authority as being true, correct and complete copies; (ii) attaching copies, certified by such officer as true and complete, of resolutions of the Board of Directors (or similar governing body) of such party authorizing and approving the execution, delivery and performance by such party of the Loan Documents to which it is a party and the transactions contemplated herein and therein; (iii) setting forth the incumbency of the officer of such party who executed and delivered such Loan Documents, including therein a signature specimen of each such officer; and (iv) attaching copies, certified by such officer as true and complete, of certificates of the appropriate

Governmental Authority of the jurisdiction of formation, stating that such party was in good standing under the laws of such jurisdiction as of the Initial Funding Date (or a date immediately prior thereto acceptable to the Lender).

(d) This Agreement and the other Loan Documents shall have been executed and delivered to the Lender by each party thereto (other than the Lender), and Borrower shall have delivered, or caused to be delivered, such other documents as the Lender reasonably requested, in each case, in form and substance satisfactory to the Lender.

(e) The Transaction Documents shall be in full force and effect.

(f) No event shall have occurred and be continuing that (i) constitutes a Default or an Event of Default or a Prepayment Trigger or (ii) could reasonably be expected to constitute a Material Adverse Effect (without giving effect to the cure period applicable to a Prepayment Trigger based thereon), in each case both at the time of, and immediately after giving effect to, the making of the Initial Tranche Loan on the Initial Funding Date.

(g) The representations and warranties made by Borrower in Article VII hereof and in the other Loan Documents shall be true and correct in all material respects as of the Initial Funding Date, except to the extent that such representations and warranties specifically refer to an earlier date, in which case they shall be true and correct in all material respects as of such earlier date, before and after giving effect to the Initial Tranche Loan (except that any representation or warranty that is qualified as to "materiality" or "Material Adverse Effect" shall be true and correct in all respects).

(h) All necessary governmental and third-party approvals, consents and filings, including in connection with the Loan, the Security Agreement, the Contribution Agreement and the other Loan Documents shall have been obtained or made and shall remain in full force and effect.

(i) Borrower shall have delivered to the Lender certified copies of UCC, United States Patent and Trademark Office and United States Copyright Office, tax and judgment lien searches, or equivalent reports or searches, each of a recent date listing all effective financing statements, lien notices or comparable documents that name Borrower as debtor and that are filed in those state and county jurisdictions in which Borrower is organized or maintains its principal place of business and such other searches that the Lender deems necessary or appropriate, none of which encumber the Collateral covered or intended to be covered by the Loan Documents (other than any Permitted Liens and other Liens acceptable to the Lender).

(j) The Lender shall have received all UCC financing statements in appropriate form for filing under the UCC, and all other certificates, agreements, instruments, filings, recordings and other actions, including recordations in the United States Patent and Trademark Office and the United States Copyright Office that are necessary or reasonably requested by the Lender in order to establish, protect, preserve and perfect the security interest in the assets of Borrower constituting Collateral as provided in the Security Agreement as a valid and perfected first priority security interest with respect to such assets shall have been duly effected (or arrangements therefor satisfactory to the Lender shall have been made).

(k) The Lender shall have received all documentation and other information required by bank regulatory authorities under applicable "know your customer" and anti-money laundering rules and regulations, including without limitation, the Patriot Act, including and the information described in Section 12.18.

Section 6.02 **Conditions Precedent to the Subsequent Tranche Loan** . The obligation of the Lender to advance the Subsequent Tranche Loan on the Subsequent Funding Date shall be subject to the fulfillment, to the sole satisfaction of the Lender, of all of the following conditions precedent prior to the Subsequent Tranche Loan Availability Termination Date, in addition to the conditions specified in Section 2.01 and Section 2.02 :

(a) Borrower shall have executed and delivered to the Lender the Subsequent Tranche Note evidencing the Subsequent Tranche Loan, dated the Subsequent Funding Date.

(b) No event shall have occurred and be continuing that constitutes a Default, an Event of Default or a Prepayment Trigger under this Agreement and no such event shall occur or shall have occurred by reason of the making of the Subsequent Tranche Loan.

(c) The representations and warranties made by Borrower in Article VII hereof and in the other Transaction Documents shall be true and correct in all material respects as of the Subsequent Funding Date, except to the extent that such representations and warranties specifically refer to an earlier date, in which case they shall be true and correct in all material respects as of such earlier date, before and after giving effect to the Subsequent Tranche Loan (except that any representation or warranty that is qualified as to "materiality" or "Material Adverse Effect" shall be true and correct in all respects).

(d) FDA Approval shall have occurred.

(e) Borrower shall provide a certificate signed by a Senior Officer of Borrower certifying that the conditions in clauses (a), (b), (c) and (d) above have been satisfied.

Article VII.
REPRESENTATIONS AND WARRANTIES

Section 7.01 **Representations and Warranties of Borrower** . Borrower hereby represents and warrants to the Lender as of the date of this Agreement, as of the Initial Funding Date and as of the Subsequent Funding Date (except for any representations and warranties which speak as to a specific date, which representations and warranties shall be made as of the date specified) as follows:

(a) Borrower is a limited liability company duly organized, validly existing and in good standing under the laws of Delaware and has all powers and authority, and all licenses, permits, franchises, authorizations, consents and approvals of all Governmental Authorities, required to own its property and conduct its business as now conducted. Borrower is duly qualified to transact business and is in good standing in every jurisdiction in which such qualification or good standing is required by Applicable Law (except where the failure to be so qualified or in good standing would not result in, and could not reasonably be expected to have resulted in (a) a Material Adverse Effect, or (b) an adverse effect, in any respect, on the timing,

amount or duration of the Included Product Payments or the right of the Lender to receive the Included Product Payments).

(b) None of the execution and delivery by Borrower of any of the Loan Documents to which Borrower is party, the performance by Borrower of the obligations contemplated hereby or thereby or the consummation of the transactions contemplated hereby or thereby will: (i) contravene, conflict with, result in a breach, violation, cancellation or termination of, constitute a default (with or without notice or lapse of time, or both) under, require prepayment under, give any Person the right to exercise any remedy (including termination, cancellation or acceleration) or obtain any additional rights under, or accelerate the maturity or performance of or payment under, in any material respect, (A) any Applicable Law or any judgment, order, writ, decree, permit or license of any Governmental Authority to which Borrower or any of its Subsidiaries or any of their respective assets or properties may be subject or bound, (B) any term or provision of any contract, agreement, indenture, lease, license, deed, commitment, obligation or instrument to which Borrower or any of its Subsidiaries is a party or by which Borrower or any of its Subsidiaries or any of their respective assets or properties is bound or committed or (C) any term or provision of any of the organizational documents of Borrower or any of its Subsidiaries, except in the case of clause (A) or (B) where any such event would not result in (1) a Material Adverse Effect, or (2) an adverse effect, in any respect, on the timing, amount or duration of the Included Product Payments or the right of the Lender to receive payments based on the Included Product Payments; or (ii), except as provided in or contemplated by any of the Transaction Documents, result in or require the creation or imposition of any Lien on the Patents, the Licensed Product, ADS-5102 or the Included Product Payments.

(c) Other than pursuant to the Loan Documents, Borrower has not granted, nor does there exist, any Lien on the Loan Documents, the Patents or the Included Product Payments (other than Permitted Liens under subclause (f) of the definition thereof with respect to Patents).

(d) Borrower has all powers and authority to execute and deliver, and perform its obligations under, the Loan Documents to which it is party and to consummate the transactions contemplated hereby and thereby. The execution and delivery of each of the Loan Documents to which Borrower is party and the performance by Borrower of its obligations hereunder and thereunder have been duly authorized by Borrower. Each of the Loan Documents to which Borrower is party has been duly executed and delivered by Borrower. Each of the Loan Documents to which Borrower is party constitutes the legal, valid and binding obligation of Borrower, enforceable against Borrower in accordance with its respective terms, subject to applicable bankruptcy, insolvency, reorganization, moratorium or similar Applicable Laws affecting creditors' rights generally, general equitable principles and principles of public policy.

(e) Upon giving effect to the Contribution (but subject to Section 2.01(c) thereof), Borrower shall be the exclusive owner of the entire right, title (legal and equitable) and interest in, to and under the Collateral, free and clear of all Liens, other than Permitted Liens and Borrower shall be entitled to be the sole recipient of all payments in respect of the Included Product Payments. The Included Product Payments constituting Collateral granted to the Lender on the Closing Date have not been pledged, sold, assigned, transferred, conveyed or granted by

Borrower to any other Person. Upon granting by Borrower of the security interests in the Included Product Payments to the Lender, the Lender shall acquire a first priority security interest in the Included Product Payments free and clear of all Liens, other than Permitted Liens. Borrower has not caused, and to the Knowledge of Borrower no other Person has caused, the claims and rights of Lender created by any Loan Document in and to the Included Product Payments, to be subordinated to any creditor or any other Person.

(f) The execution and delivery by Borrower of the Loan Documents to which Borrower is party, the performance by Borrower of its obligations hereunder and thereunder and the consummation of any of the transactions contemplated hereunder and thereunder (including the granting of security interests in the Included Product Payments to the Lender) do not require any consent, approval, license, order, authorization or declaration from, notice to, action or registration by or filing with any Governmental Authority or any other Person, except for (i) the filing of any applicable notices under securities laws, (ii) the filings necessary to perfect Liens created by the Loan Documents, (iii) those previously obtained and in full force and effect, and (iv) consent, filings and registrations in connection with the Contribution as contemplated by the Contribution Agreement.

(g) There is no action, suit, arbitration proceeding, claim, citation, summons, subpoena, investigation or other proceeding (whether civil, criminal, administrative, regulatory, investigative or informal, and including by or before a Governmental Authority) pending or, to the Knowledge of Borrower, threatened in writing by or against Borrower or any of its Subsidiaries, at law or in equity, that (i) if adversely determined, would result in a Material Adverse Effect or (ii) challenges or seeks to prevent or delay the consummation of any of the transactions contemplated by any of the Loan Documents to which Borrower is party.

(h) Upon consummation of the transactions contemplated by the Loan Documents and the application of the proceeds therefrom, (a) the present fair saleable value of the properties and assets of Borrower and its Subsidiaries, taken as a consolidated group, on a going concern basis will be greater than the sum of its debts, liabilities and other obligations, including contingent liabilities, (b) the present fair saleable value of the properties and assets of Borrower on a going concern basis will not be less than the amount that would be required to pay its probable liabilities on its existing debts, liabilities and other obligations, including contingent liabilities, as they become absolute and matured, (c) Borrower will be generally able to realize upon its assets and pay its debts, liabilities and other obligations, including contingent obligations, as they become absolute and matured, (d) Borrower will not have unreasonably small capital with which to engage in its business as now conducted, (e) Borrower has not incurred, and has not agreed to incur debts or other obligations or liabilities beyond its ability to pay such debts or other obligations or liabilities as they become absolute and matured, (f) Borrower will not have become subject to any Insolvency Event and (g) Borrower will not have been rendered insolvent within the meaning of any Applicable Law. No step has been taken by Borrower or, to its Knowledge, any other Person to make Borrower subject to an Insolvency Event.

(i) No Default, Event of Default or Prepayment Trigger has occurred and is continuing, and no such event will occur upon the making of the Loan.

(j) Borrower has filed (or caused to be filed) all Tax returns and reports required by Applicable Law to have been filed by it and has paid all Taxes required to be paid by it, except any such Taxes that are being diligently contested in good faith by appropriate proceedings and for which adequate reserves in accordance with GAAP have been set aside on its books and except where any such failure to file or pay would not result in (a) a Material Adverse Effect, or (b) an adverse effect, in any respect, on the timing, amount or duration of the Included Product Payments or the right of the Lender to receive the Included Product Payments.

(k) Except as set forth on Schedule 7.01(k), Borrower has not taken any action that would entitle any person or entity to any commission or broker's fee in connection with the transactions contemplated by this Agreement.

(l) Borrower (a) has not violated and is not in violation of, nor to its Knowledge under investigation with respect to, nor has been threatened to be charged with or been given notice of any violation of, any Applicable Law or any judgment, order, writ, decree, injunction, stipulation, consent order, permit or license granted, issued or entered by any Governmental Authority and (b) is not subject to any judgment, order, writ, decree, injunction, stipulation, consent order, permit or license granted, issued or entered by any Governmental Authority, in each case, that would result in a Material Adverse Effect. Borrower is in compliance with the requirements of all Applicable Laws, a breach of any of which would result in a Material Adverse Effect.

(m) With respect to the Licensed Product:

(1) As of the date hereof, all ANDA litigations relating to Licensed Product filed prior to April 30, 2017 have been settled, and the earliest generic entry with regard to Licensed Product by these ANDA filers will be no earlier than January 1, 2025 (unless a Third Party succeeds in invalidating the Patent Rights relating to the Licensed Product).

(2) To Borrower's Knowledge, no Third Party Patent Right has been, or is, or will be, infringed by Exploitation of the Licensed Product. To Borrower's Knowledge, other than the Patent Rights licensed pursuant to the License Agreement, no Patent Rights other than the Patents with respect to Licensed Products would limit or prohibit in any material respect Exploitation of the Licensed Product. Borrower has not received any notice of any claim by any Third Party asserting that Exploitation of the Licensed Product infringes such Third Party's Patent Rights. Borrower has not received any written opinion of counsel regarding infringement or non-infringement of any Third Party's Patent Rights by Exploitation of the Licensed Product.

(n) With respect to ADS-5102 (all references in this Section 7.01(n) to Patents, Patent Rights, Valid Claims, and Exploitation shall be interpreted as relating solely to ADS-5102):

(1) Schedule 7.01 sets forth an accurate and complete list of all Patents. For each of such Patents listed on Schedule 7.01, Borrower has indicated (i) the country or other jurisdictions in which such Patent is pending, allowed, granted, issued, registered or filed, (ii) the application number, the patent or registration number, if any, (iii) the scheduled expiration date of any issued Patent, including a notation if such scheduled expiration date includes a term

extension or supplementary protection certificate, (iv) the filing date for each pending patent application and (v) the registered owner of such Patent.

(2) Borrower (or, prior to giving effect to the Contribution, the Affiliate of Borrower indicated on Schedule 7.01) is the sole and exclusive owner of the entire right, title and interest in each of the Patents. The Patents are not subject to any encumbrance, lien or claim of ownership by any Third Party, and there are no facts that would preclude Borrower from having unencumbered title to the Patents. Neither Borrower nor any of its Affiliates has received any notice of any claim by any Third Party challenging the ownership of the rights of Borrower Parties in and to the Patents.

(3) Each Person who has or has had any rights in or to the Patents, including each inventor named on the Patents, has executed a contract assigning their entire right, title and interest in and to such Patents and the inventions embodied, described and/or claimed therein, to the owner thereof, and each such contract has been duly recorded at the United States Patent and Trademark Office.

(4) To Borrower's Knowledge, no issued Patent has lapsed, expired or otherwise been terminated. No Patent applications have lapsed, expired, been abandoned or otherwise been terminated, other than by operation of law.

(5) Borrower is current with respect to any maintenance fees, annuities or other like payments due or owing with respect to the Patents.

(6) Each of the Patents correctly identifies each and every inventor of the claims thereof as determined in accordance with the laws of the jurisdiction in which such Patent was issued or is pending. To Borrower's Knowledge, there is not any Person who is or claims to be an inventor of any of the Patents who is not a named inventor thereof. No Borrower Party has received any notice from any Person who is or claims to be an inventor of any of the Patents who is not a named inventor thereof.

(7) Each of the Patents is valid, enforceable and subsisting. Neither Borrower nor any Affiliate of Borrower has received any opinion of counsel that any of the Patents is invalid or unenforceable. Except as set forth on Schedule 7.01(n)(7), neither Borrower nor any Affiliate of Borrower has received any written notice of any claim by any Third Party challenging the validity or enforceability of any of the Patents.

(8) To the Knowledge of Borrower, each individual associated with the filing and prosecution of the Patents has complied in all material respects with all applicable duties of candor and good faith in dealing with any Patent Office, including any duty to disclose to any Patent Office all information known by such individual to be material to patentability of each such Patent, in those jurisdictions where such duties exist.

(9) There is at least one issued Valid Claim in the Patents that would be infringed by Exploitation of ADS-5102, but for Borrower's and Affiliate's rights in the Patents.

(10) Except for information disclosed to the applicable Patent Office during prosecution of the Patents, to Borrower's Knowledge, there are no Patent Rights, published

patent applications, articles, abstracts or other prior art deemed material to patentability of any of the inventions claimed in such Patents, or that would otherwise reasonably be expected to materially adversely affect the validity or enforceability of any of the claims of such Patents.

(11) There are no pending or threatened proceedings before a Governmental Authority (other than normal course patent examinations, if any) that would (i) impact the validity and/or enforceability of any of the claims of the Patents, or (ii) otherwise impact whether any claim within the Patents is a Valid Claim.

(12) There is no pending, decided or settled Dispute, and, to the Knowledge of Borrower, no such Dispute has been threatened, in each case challenging the legality, validity, enforceability, scope or ownership of any Patent, or adjudicating whether any Patent is or would be infringed by the Exploitation of ADS-5102 by a Third Party.

(13) There have not been nor are there any pending Disputes or like procedures involving any of the Patents.

(14) To Borrower's Knowledge, none of the conception, development and reduction to practice of the inventions claimed in the Patents has constituted or involved the misappropriation of trade secrets or other rights or property of any Third Party.

(15) Neither Borrower nor any Affiliate of Borrower has filed any disclaimer, other than a terminal disclaimer, or made or permitted any other voluntary reduction in the scope of any Patent.

(16) Neither Borrower nor any other Person has undertaken or omitted to undertake any acts, and no circumstances or grounds exist, that would void, invalidate, reduce or eliminate, in whole or in part, the enforceability or scope of any of the Patents.

(17) To Borrower's Knowledge, no Third Party Patent Right has been, or is, or will be, infringed by Borrower's Exploitation of ADS-5102. To Borrower's Knowledge, no Patent Right other than the Patents would limit or prohibit in any material respect Exploitation of ADS-5102. Borrower has not received any notice of any claim by any Third Party asserting that Exploitation of ADS-5102 infringes such Third Party Patent Rights. Borrower has not received any written opinion of counsel regarding infringement or non-infringement of any Third Party Patent Rights by Exploitation of ADS-5102.

(18) To Borrower's Knowledge, there are no pending, published patent applications owned by any Third Party, which Borrower or its Affiliates do not have the right to use, which if issued, would limit or prohibit in any material respect Exploitation of ADS-5102.

(19) There are no Disputes between Borrower and a Third Party relating to Exploitation of ADS-5102. Borrower has not received or given notice of any such Dispute, and to its Knowledge, there exists no circumstances or grounds upon which any such claims could be asserted. The Patents are not subject to any outstanding injunction, judgment or other decree, ruling, charge settlement or other disposition of any Dispute.

(20) To Borrower's Knowledge, no Third Party is infringing any of the issued Patents. Neither Borrower nor any Affiliate of Borrower has put any Third Party on notice of any of the issued Patents.

(o) Borrower is not engaged in the business of extending credit for the purpose of buying or carrying margin stock, and no portion of the Loan shall be used by Borrower for a purpose that violates Regulation T, U or X promulgated by the Board of Governors of the Federal Reserve System from time to time.

(p) As of the Closing Date, except as set forth on Schedule 7.01(p), Borrower is not a party to any Material Contract (other than, after giving effect to the Contribution thereof under the Contribution Agreement,the Material Contracts specified on Schedule 2.01(a)(iii) to the Contribution Agreement).

(q) Neither Borrower nor, to the Knowledge of Borrower, the Licensee, as applicable, has taken any action or omitted to take any action that would adversely impact the right of the Lender to take a security interest in the License Agreement with respect to the Royalty Interest, or the Revenue Interest; provided that neither Borrower nor the Company shall obtain any consent from the Licensee to the grant of any Lien to the Lender pursuant to the Loan Documents.

(r) Borrower has not received (A) any written notice or, to the Knowledge of Borrower, oral communication of the Licensee's intention to terminate the License Agreement in whole or in part, or (B) any written notice or, to the Knowledge of Borrower, oral communication requesting any amendment, alteration or modification to the License Agreement.

(s) To Borrower's Knowledge, except as separately disclosed in writing to Lender referencing this Section 7.01 , neither Borrower nor any Material Contract Counterparty is in breach or default of any Material Contract and no circumstances or grounds exist that would, upon the giving of notice, the passage of time or both, give rise (i) to a claim by Borrower or any Material Contract Counterparty of a breach or default of any Material Contract, or (ii) to a right of rescission, termination, revision, setoff, or any other rights, by any Person, in, to or under any Material Contract. Borrower has not received from, or delivered to, any Material Contract Counterparty, any notice alleging a breach or default under any Material Contract, which breach or default has not been cured as of the date hereof.

(t) Upon the Contribution thereof to, and assumption thereof by, Borrower, each Material Contract shall be a valid and binding obligation of Borrower and, to the Knowledge of Borrower, of the applicable Material Contract Counterparty, enforceable against each of Borrower and, to the Knowledge of Borrower, each applicable Material Contract Counterparty in accordance with its terms, except as may be limited by general principles of equity (regardless of whether considered in a proceeding at law or in equity) and by applicable bankruptcy, insolvency, moratorium and other similar laws of general application relating to or affecting creditors' rights generally. Borrower has not received any notice from any Material Contract Counterparty or any other Person challenging the validity or enforceability of any Material Contract. Neither Borrower, nor to the Knowledge of Borrower, any other Person, has

delivered or intends to deliver any written notice to Borrower or a Material Contract Counterparty challenging the validity or enforceability of any Material Contract.

(u) Neither Borrower nor to the Knowledge of Borrower, any Material Contract Counterparty, is contemplating to commence any case, proceeding or other action relating to Material Contract Counterparty's bankruptcy, insolvency, liquidation or dissolution or reorganization by any of the foregoing means.

(v) No Capital Stock has been issued by Borrower other than the Capital Stock issued to the Company that is subject to the pledge to the Lender under the Stock Pledge Agreement.

(w) The chief place of business, the chief executive office and each office where Borrower keeps its records regarding the Included Product Payments are, as of the date hereof, each located at 1900 Powell Street, Suite 750, Emeryville, California 94608.

(x) Borrower (or any predecessor by merger or otherwise) has not, within the five (5) year period preceding the date hereof, had a name that differs from its name as of the date hereof.

(y) All written information heretofore or herein supplied by or on behalf of Borrower or the Company to the Lender is accurate and complete in all material respects; provided that all written information heretofore or herein supplied by or on behalf of Borrower to the Lender and produced by any Third Party is accurate and complete in all material respects to the Knowledge of Borrower. There is no fact or circumstance known to Borrower that could reasonably be expected to have a Material Adverse Effect that has not been expressly disclosed to the Lender.

Section 7.02 **Representations and Warranties as to Company, Etc.** . Borrower hereby represents and warrants to the Lender as of the date of this Agreement, as of the Initial Funding Date and as of the Subsequent Funding Date (except for any representations and warranties which speak as to a specific date, which representations and warranties shall be made as of the date specified), with respect to the Company and other matters, as follows:

(a) The Company is a corporation duly organized, validly existing and in good standing under the laws of Delaware and has all powers and authority, and all licenses, permits, franchises, authorizations, consents and approvals of all Governmental Authorities, required to own its property and conduct its business as now conducted. The Company is duly qualified to transact business and is in good standing in every jurisdiction in which such qualification or good standing is required by Applicable Law (except where the failure to be so qualified or in good standing would not result in, and could not reasonably be expected to have resulted in (a) a Material Adverse Effect, or (b) an adverse effect, in any respect, on the timing, amount or duration of the Included Product Payments or the right of the Lender to receive the Included Product Payments).

(b) None of the execution and delivery by the Company of any of the Transaction Documents to which the Company is party, the performance by the Company of the obligations contemplated hereby or thereby or the consummation of the transactions

contemplated hereby or thereby will: (i) contravene, conflict with, result in a breach, violation, cancellation or termination of, constitute a default (with or without notice or lapse of time, or both) under, require prepayment under, give any Person the right to exercise any remedy (including termination, cancellation or acceleration) or obtain any additional rights under, or accelerate the maturity or performance of or payment under, in any respect, (A) any Applicable Law or any judgment, order, writ, decree, permit or license of any Governmental Authority to which the Company or any of its Subsidiaries or any of their respective assets or properties may be subject or bound, (B) any term or provision of any contract, agreement, indenture, lease, license, deed, commitment, obligation or instrument to which the Company or any of its Subsidiaries is a party or by which the Company or any of its Subsidiaries or any of their respective assets or properties is bound or committed or (C) any term or provision of any of the organizational documents of the Company or any of its Subsidiaries, except in the case of clause (A) or (B) where any such event would not result in (1) a Material Adverse Effect, or (2) an adverse effect, in any respect, on the timing, amount or duration of the Included Product Payments or the right of the Lender to receive the payments based on Included Product Payments; or (ii) except as provided in or contemplated by any of the Transaction Documents, result in or require the creation or imposition of any Lien on the Patents, the Licensed Product, ADS-5102 or the Included Product Payments.

(c) Except pursuant to, or as contemplated by, the Transaction Documents and except for Permitted Liens under subclause (f) of the definition thereof with respect to the Patents, the Company has not granted, nor does there exist, any Lien on the Transaction Documents, the Patents or the Included Product Payments.

(d) The Company has all powers and authority to execute and deliver, and perform its obligations under, the Transaction Documents to which it is party and to consummate the transactions contemplated hereby and thereby. The execution and delivery of each of the Transaction Documents to which the Company is party and the performance by the Company of its obligations hereunder and thereunder have been duly authorized by the Company. Each of the Transaction Documents to which the Company is party has been duly executed and delivered by the Company. Each of the Transaction Documents to which the Company is party constitutes the legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its respective terms, subject to applicable bankruptcy, insolvency, reorganization, moratorium or similar Applicable Laws affecting creditors' rights generally, general equitable principles and principles of public policy.

(e) The execution and delivery by the Company of the Transaction Documents to which the Company is party, the performance by the Company of its obligations hereunder and thereunder and the consummation of any of the transactions contemplated hereunder and thereunder (including granting of security interests in the Included Product Payments to the Lender) do not require any consent, approval, license, order, authorization or declaration from, notice to, action or registration by or filing with any Governmental Authority or any other Person, except for the filing of (i) any applicable notices under securities laws, (ii) the filings necessary to perfect Liens created by the Loan Documents, (iii) those previously obtained and in full force and effect, and (iv) consents, filings and registrations in connection with the Contribution as contemplated by the Contribution Agreement.

(f) There is no action, suit, arbitration proceeding, claim, citation, summons, subpoena, investigation or other proceeding (whether civil, criminal, administrative, regulatory, investigative or informal, and including by or before a Governmental Authority) pending or, to the Knowledge of the Company, threatened in writing (or, in the case of a threat by a Governmental Authority, threatened orally or in writing) by or against the Company or any of its Subsidiaries, at law or in equity, that (i) if adversely determined, would result in (A) a Material Adverse Effect, or (B) an adverse effect, in any respect, on the timing, amount or duration of the Included Product Payments or the right of the Lender to receive the Included Product Payments, or (ii) challenges or seeks to prevent or delay the consummation of any of the transactions contemplated by any of the Transaction Documents to which the Company is party.

(g) Upon consummation of the transactions contemplated by the Transaction Documents and the application of the proceeds therefrom, (a) the present fair saleable value of the Company's assets will be greater than the sum of its debts, liabilities and other obligations, including contingent liabilities, (b) the present fair saleable value of the properties and assets of Company and its Subsidiaries, taken as a whole, will not be less than the amount that would be required to pay its probable liabilities on its existing debts, liabilities and other obligations, including contingent liabilities, as they become absolute and matured, (c) the Company will be generally able to realize upon its assets and pay its debts, liabilities and other obligations, including contingent obligations, as they become absolute and matured, (d) the Company will not have unreasonably small capital with which to engage in its business as now conducted, (e) the Company has not incurred and has not agreed to incur debts or other obligations or liabilities beyond its ability to pay such debts or other obligations or liabilities as they become absolute and matured, (f) the Company will not have become subject to any Insolvency Event and (g) the Company will not have been rendered insolvent within the meaning of any Applicable Law. No step has been taken by the Company or, to its Knowledge, any other Person to make the Company subject to an Insolvency Event.

(h) No Default, Event of Default or Prepayment Trigger has occurred and is continuing, and no such event will occur upon the making of the Loan.

(i) The Company has timely filed (or caused to be filed) all tax returns and reports required by Applicable Law to have been filed by it and has paid all taxes required to be paid by it, except any such taxes that are being diligently contested in good faith by appropriate proceedings and for which adequate reserves in accordance with GAAP have been set aside on its books and except where any such failure to file or pay would not result in (a) a Material Adverse Effect, or (b) an adverse effect, in any respect, on the timing, amount or duration of the Included Product Payments or the right of the Lender to receive the Included Product Payments.

(j) Except as disclosed on Schedule 7.02(j), the Company has not taken any action that would entitle any person or entity to any commission or broker's fee in connection with the transactions contemplated by this Agreement.

(k) None of the Company or any of its Subsidiaries (a) has violated or is in violation of, is under investigation with respect to or has been threatened to be charged with or been given notice of any violation of, any Applicable Law or any judgment, order, writ, decree, injunction, stipulation, consent order, permit or license granted, issued or entered by any

Governmental Authority or (b) is subject to any judgment, order, writ, decree, injunction, stipulation, consent order, permit or license granted, issued or entered by any Governmental Authority, in each case, that would result in (i) a Material Adverse Effect, or (ii) an adverse effect, in any respect, on the timing, amount or duration of the Included Product Payments or the right of the Lender to receive the payments based on Included Product Payments. Each of the Company and any Subsidiary of the Company is in compliance with the requirements of all Applicable Laws, a breach of any of which would result in a Material Adverse Effect.

(l) The Company is not engaged in the business of extending credit for the purpose of buying or carrying margin stock, and no portion of the Loan shall be used by the Company for a purpose that violates Regulation T, U or X promulgated by the Board of Governors of the Federal Reserve System from time to time.

(m) The Company, its Affiliates and their agents have conducted their activities and the filings made are material compliance with all statutes, rules and regulations of the FDA and any Regulatory Agency with respect to the evaluation, testing, manufacturing and distributing of ADS-5102 and, to Company's Knowledge, the Licensee has conducted its activities in accordance with Applicable Laws. Neither the Company nor any of its Affiliates has received from any Governmental Authority any Forms 483, notices of adverse findings or warning letters or other correspondence in which such Governmental Authority asserted that the operations of the Company or any of its Affiliates may not be in material compliance with Applicable Laws, orders, judgments or decrees in connection with their respective activities relating to ADS-5102.

(n) Schedule 7.02(n) hereto contains a list of each Material Contract to which Company is a party. As of the Closing Date, there has been provided a true and complete copy of each of the Material Contracts to the Lender in the electronic data room.

(o) To Company's Knowledge, except as separately disclosed in writing to Lender referencing this Section 7.02 , neither Company nor any Material Contract Counterparty is in breach or default of any Material Contract and no circumstances or grounds exist that would, upon the giving of notice, the passage of time or both, give rise (i) to a claim by Company or any Material Contract Counterparty of a breach or default of any Material Contract, or (ii) to a right of rescission, termination, revision, setoff, or any other rights, by any Person, in, to or under any Material Contract. Company has not received from, or delivered to, any Material Contract Counterparty, any notice alleging a breach or default under any Material Contract, which breach or default has not been cured as of the date hereof.

(p) Prior to the Contribution thereof, each Material Contract is a valid and binding obligation of Company and, to the Knowledge of Company, of the applicable Material Contract Counterparty, enforceable against each of Company and, to the Knowledge of Company, each applicable Material Contract Counterparty in accordance with its terms, except as may be limited by general principles of equity (regardless of whether considered in a proceeding at law or in equity) and by applicable bankruptcy, insolvency, moratorium and other similar laws of general application relating to or affecting creditors' rights generally. Company has not received any written notice from any Material Contract Counterparty or any other Person challenging the validity or enforceability of any Material Contract.

(q) Company has not received any notice from any Material Contract Counterparty or any other Person threatening or commencing any case, proceeding or other action relating to Material Contract Counterparty's bankruptcy, insolvency, liquidation or dissolution or reorganization by any of the foregoing means.

(r) To the Knowledge of Company, all payments required to be made under the License Agreement have been made. To the Knowledge of Company, no payment required to be made under the terms of the License Agreement has been subject to any claim pursuant to any right of rescission, set-off, counterclaim, reduction or defense.

(s) The License Agreement as provided to the Lender is a true and complete copy and in full force and effect. The License Agreement has not been satisfied in full, discharged, canceled, terminated, subordinated or rescinded, in whole or in part.

(t) Neither Company nor, to the Knowledge of Company, the Licensee, as applicable, has taken any action or omitted to take any action that would adversely impact the right of the Lender to take a security interest in the License Agreement, the Royalty Interest or the Revenue Interest; provided that neither Borrower nor the Company shall obtain any consent from the Licensee to the grant of any Lien to the Lender pursuant to the Loan Documents.

(u) The execution, delivery and performance of the License Agreement was and is within the corporate powers or other organizational power of the Company and, to the Knowledge of Company, the Licensee. The License Agreement was duly authorized by all necessary action on the part of, and validly executed and delivered by, Company and, to the Knowledge of Company, the Licensee. There is no breach or default, or event which upon notice or the passage of time, or both, could give rise to any breach or default, in the performance of the License Agreement by Borrower, the Company or, to the Knowledge of Company, the Licensee, that could reasonably be expected to have a Material Adverse Effect.

(v) Except as otherwise expressly provided under the License Agreement, the Licensee has no right of set-off, rescission, counterclaim, reduction, deduction or defense against the Royalty Interest or any other amounts payable to Company thereunder.

(w) Company has not received (A) any written notice or, to the Knowledge of Company, oral communication of the Licensee's intention to terminate the License Agreement in whole or in part, or (B) any written notice or, the Knowledge of Company, oral communication requesting any amendment, supplement, alteration or modification to the License Agreement.

(x) Company (or any predecessor by merger or otherwise) has not, within the five (5) year period preceding the date hereof, had a name that differs from its name as of the date hereof.

(y) Neither Company nor to the Knowledge of Company any of Company's directors, officers, employees, Affiliates or agents, has taken any action, directly or indirectly, that would result in a violation by such Persons of the FCPA, including making use of the mails or any means or instrumentality of interstate commerce corruptly in furtherance of an offer, payment, promise to pay or authorization of the payment of any money, or other property, gift, promise to give, or authorization of the giving of anything of value to any "foreign official" (as

such term is defined in the FCPA) or any foreign political party or official thereof or any candidate for foreign political office, in contravention of the FCPA. Company, and, to the Knowledge of Company, its Affiliates have conducted their respective businesses in compliance with the FCPA and have instituted and maintain policies and procedures designed to ensure, and which are reasonably expected to continue to ensure, continued compliance therewith.

(z) Company maintains a system of accounting controls that is sufficient, in the opinion of the management of Company, to provide reasonable assurances that (i) transactions are executed in accordance with management's general or specific authorization; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

(aa) The Financial Statements of Company are complete and accurate in all material respects, were prepared in conformity with GAAP applied on a consistent basis during the periods involved (except as may be indicated in the notes thereto) and present fairly in all material respects, in accordance with applicable requirements of GAAP, the consolidated financial position and the consolidated financial results of the operations of Company and its Subsidiaries as of the dates and for the periods covered thereby and the consolidated statements of cash flows of Company and its Subsidiaries for the periods presented therein. Since December 31, 2016, there has been no Material Adverse Effect. Company and its Subsidiaries have no Indebtedness (or other liabilities) other than (i) identified in the Financial Statements or (ii) incurred by Company or its Subsidiaries in the ordinary course of business since December 31, 2016 or (c) otherwise listed and described on Schedule 7.02(aa)

(bb) The Stock Pledge Agreement, when executed and delivered by the parties thereto, is effective to create in favor of Lender, legal, valid and enforceable (subject to bankruptcy, insolvency, reorganization, moratorium or similar Laws affecting creditors' rights generally or general equitable principles (regardless of whether enforcement is sought in equity or at law)) Liens on, and security interests in, the Capital Stock of Borrower, and, when (x) financing statements and other filings in appropriate form are filed in the offices specified on Schedule 7.02(bb) and (y) upon the taking of possession or control by Lender of the Capital Stock certificates (if certificated) with duly executed instruments of transfer in blank, the Liens created by the Stock Pledge Agreement shall constitute fully perfected Liens on, and security interests in, all right, title and interest of the Company in the Capital Stock of Borrower, subject to no Liens other than Permitted Liens.

(cc) The claims and rights of Lender created by the Stock Pledge Agreement in and to the Capital Stock of Borrower and by the Security Agreement in the Collateral, will be senior to any Indebtedness or other obligation of Company, with respect to such Collateral.

(dd) Company is not an "investment company", or a company "controlled" by an "investment company", within the meaning of the Investment Company Act of 1940.

(ee) To the Knowledge of Company, there has been no indication that the FDA or any other Regulatory Agency has any material concerns with the Licensed Product or ADS-5102 or may not approve or may withdraw approval of the Licensed Product or ADS-5102, nor has the Licensed Product or ADS-5102, to the Knowledge of Company, suffered any material adverse events in any clinical trial.

Section 7.03 **Survival of Representations and Warranties**. All representations and warranties by Borrower, whether with respect to Borrower, Company, any respective Affiliate or any asset or property, contained in this Agreement shall survive the execution, delivery and acceptance thereof by the Parties and the closing of the transactions described in this Agreement and continue in effect until payment of all amounts due to Lender under the Loan Documents.

Article VIII.
AFFIRMATIVE COVENANTS

Borrower covenants and agrees with Lender that, until Payment in Full:

Section 8.01 **Maintenance of Existence**. Borrower shall at all times (a) preserve, renew and maintain in full force and effect its legal existence (except as otherwise permitted pursuant to Section 9.02(a) hereof) and good standing as a limited liability company under the Laws of the jurisdiction of its organization; (b) not change its name or its chief executive office as set forth herein without having given Lender the notice thereof required under Section 8.13; and (c) take all reasonable action to maintain all rights, privileges, permits, licenses and franchises necessary or desirable in the normal conduct of its business, except to the extent that failure to do so could not reasonably be expected to have a Material Adverse Effect.

Section 8.02 **Use of Proceeds**. Borrower shall use the net proceeds of the Initial Tranche Loan received by it to acquire assets from the Company pursuant to the Contribution Agreement and for general corporate purposes.

Section 8.03 **Financial Statements and Information**.

(a) In the event that any such information need not be filed with the SEC pursuant to Section 13 or 15(d) of the Exchange Act, Borrower shall furnish to the Lender, on or before the forty-fifth (45 th) day after the close of each quarter of each fiscal year, the unaudited consolidated balance sheet of the Company as at the close of such quarter and unaudited consolidated statement of operations and comprehensive loss and cash flows of the Company for such quarter, duly certified by the chief financial officer of the Company as having been prepared in accordance with GAAP. Concurrently with the delivery or filing of the documents described in the preceding sentence, Borrower shall furnish to the Lender a certificate of the chief financial officer of the Company, which certificate shall include a statement that such officer has no knowledge, except as specifically stated, of any condition, event or act which constitutes a Default, Event of Default or Prepayment Trigger.

(b) Borrower shall furnish to the Lender, on or before the 135th day after the close of each fiscal year, the Company's audited financial statements as at the close of such fiscal year, including the consolidated balance sheet as at the end of such fiscal year and consolidated

statement of operations and cash flows of the Company for such fiscal year, in each case accompanied by the report thereon of independent registered public accountant of nationally recognized standing reasonably satisfactory to the Lender. Concurrently with the delivery or filing of the documents described in the preceding sentence, Borrower shall furnish to the Lender a certificate of the chief financial officer of the Company, which certificate shall include a statement that such officer has no knowledge, except as specifically stated, of any condition, event or act which constitutes a Default, Event of Default or Prepayment Trigger.

(c) Borrower shall, promptly upon receipt thereof, forward or cause to be forwarded to the Lender copies of all Notices, reports, updates and other data or information (i) pertaining to the Included Product Payments and other Collateral (ii) received from the Licensee or any Third Party which relate to events or circumstances that could reasonably be expected to have a Material Adverse Effect, or that relates to Marketing Authorizations or the FDA Approval, or (iii) received from any Person that relate to the Intellectual Property and that could reasonably be expected to have a Material Adverse Effect, or that the Lender reasonably requests.

(d) For each quarter ending after the Closing Date, Borrower shall, within three (3) Business Days following receipt thereof, deliver or cause to be delivered to the Lender a true copy of the Quarterly Report for such quarter, together with a certificate of a Senior Officer of Borrower, certifying that to the Knowledge of Borrower such Quarterly Activity Report is a true, correct and accurate copy of the Quarterly Activity Report as provided to Borrower by the Licensee, and such additional information as is reasonably requested by the Lender. Lender and Borrower each shall be entitled to exercise the audit rights under Section 6.6 of the License Agreement (subject to all restrictions and limitations thereon contained in the License Agreement). The party exercising such rights shall pay the costs of the respective audit and shall be entitled to any reimbursement of the costs thereof by the Licensee as provided under Section 6.6(a) of the License Agreement. Any additional payments of the Royalty Interest due from the Licensee, together with interest thereon as provided under the License Agreement, shall be paid by the Licensee to the Disbursement Account, and any refund due to the Licensee from any overpayment in respect of the Royalty Interest determined in any such audit shall be paid by Borrower in accordance with the License Agreement. Borrower and Lender will each provide reasonable prior written notice of its intent to exercise such audit rights and will reasonably cooperate in the exercise of such audit rights in order to avoid unnecessary limitations on the timing, scope and conduct of such audits within the parameters specified in the License Agreement.

(e) Lender and its Representatives shall have the right, from time to time, not more than once per calendar quarter, during normal business hours and upon at least ten (10) Business Days' prior written notice to Borrower (provided that, after the occurrence and during the continuance of a Default or Event of Default, Lender shall have the right, as often, at such times and with such prior notice, as Lender determines in its reasonable discretion), to visit the offices and properties of Borrower and Company where books and records relating or pertaining to the Included Product Payments and the Collateral are kept and maintained (or, at Lender's option, to conduct a meeting by telecommunications), to discuss, with officers of Borrower and the Company, the business, operations, properties and financial and other condition of Borrower and the Company, to discuss the License Agreement and the Licensed Product, to discuss regulatory activities with respect to ADS-5102, to discuss the Quarterly Report, to discuss

business development and Commercialization efforts relating to ADS-5102, to verify compliance with the provisions of the Loan Documents regarding receipt and application of the Included Product Payments and, upon physical visits, to inspect and make extracts from and copies of the books and records of Borrower and Company relating or pertaining to the Included Product Payments and the Collateral.

(f) On a quarterly basis, within three (3) Business Days after the filing of its quarterly or annual report required to be filed with the SEC pursuant to Section 13 or 15(d) (but in no event later than the Interest Payment Date following such quarter), but in any event not later than the date required pursuant to Sections 8.03(a) and (b) , respectively, Borrower shall deliver or cause to be delivered to the Lender a written report in form reasonably satisfactory to the Lender setting forth (i) the amount of gross sales of ADS-5102 in each country in the Territory for the Calendar Quarter in which Quarterly Payment Amounts occurred during the applicable Calendar Quarter, itemized reasonably detailed calculation of Net Sales in the U.S. in such Calendar Quarter, and a calculation of the amount of the Revenue Interests in respect of the applicable Calendar Quarter, showing the Applicable Percentage applied thereto, and (ii) the amount of payments in respect of the Royalty Interests received during the Calendar Quarter. For three (3) years after each sale of ADS-5102 made by Borrower or any of its Affiliates, Borrower shall keep (and shall ensure that its Affiliates shall keep) complete and accurate records of such sale in sufficient detail to confirm the accuracy of the applicable Revenue Interests payable in respect thereof. Borrower shall include in each contract of Borrower related to the Commercialization of ADS-5102 entered into on or after the Closing Date, an acknowledgement and consent to the obligations of Borrower pursuant to this Section 8.03(f) and provide that the counterparty to such contract shall furnish to Borrower all information necessary for Borrower to comply with this Section 8.03(f) and calculate the Revenue Interests that are payable as set forth in this Agreement.

(g) All written information supplied by or on behalf of Borrower to the Lender pursuant to this Section 8.03 (other than Sections 8.03(a) and 8.03(b)) shall be accurate and complete in all material respects as of its date or the date so supplied and the financial statements provided pursuant to Sections 8.03(a) and 8.03(b) fairly present in all material respects the financial positions and results of operations as of the dates indicated therein. For the avoidance of doubt, Borrower makes no representations or warranties regarding the accuracy or completeness of any information it receives from a Third Party that it is required to furnish to the Lender pursuant to this Section 8.03, unless to the actual Knowledge of Borrower or the Company such information is inaccurate or incomplete, in which case Borrower or the Company shall specify such inaccuracy or incompleteness.

Section 8.04 **Books and Records**. Borrower shall keep proper books, records and accounts in which entries in conformity with sound business practices and all requirements of Law applicable to it shall be made of all dealings and transactions in relation to its business, assets and activities and as shall permit the preparation of the consolidated financial statements of Borrower in accordance with GAAP.

Section 8.05 **Governmental Authorizations**. Borrower shall obtain, make and keep in full force and effect all authorizations from and registrations with Governmental Authorities that may be required for the validity or enforceability against Borrower of this Agreement and the other Loan Documents to which it is a party.

Section 8.06 **Compliance with Laws and Contracts**.

(a) Borrower shall comply with all Applicable Laws and perform its obligations under all Material Contracts, if any, entered into after the Closing Date relative to the conduct of its business, except where the failure to comply could not reasonably be expected to result in a Material Adverse Effect. Borrower shall use commercially reasonable efforts to take all actions necessary to enforce its rights under each Material Contract, and perform all of its material obligations under each Material Contract, except to the extent that failure to do so could not reasonably be expected to have a Material Adverse Effect (subject to Section 9.09).

(b) Borrower shall at all times comply with the margin requirements set forth in Section 7 of the Exchange Act and any regulations issued pursuant thereto, including, without limitation, Regulations T, U and X of the Board of Governors of the Federal Reserve System, 12 C.F.R., Chapter II.

Section 8.07 **Plan Assets**. Borrower shall not take any action that causes its assets to be deemed to be Plan Assets at any time.

Section 8.08 **Notices**.

(a) Borrower shall promptly after an officer becomes aware thereof, give written Notice to the Lender of each Default, Event of Default or Prepayment Trigger and each other event that has or could reasonably be expected to have a Material Adverse Effect; provided that in any of the foregoing situations where Borrower knows a press release or other public disclosure is to be made, Borrower shall use all commercially reasonable efforts to provide such information to the Lender as early as possible but in no event later than simultaneously with such release or other public disclosure.

(b) Borrower shall promptly give written Notice to the Lender upon receiving notice, or an officer otherwise becomes aware, of any default or event of default under any Material Contracts.

(c) Borrower shall, promptly (and in any event within four (4) Business Days) after an officer becomes aware thereof, give written Notice to the Lender of any litigation or proceedings to which Borrower is a party or which could reasonably be expected to have a Material Adverse Effect.

(d) Borrower shall, promptly after an officer becomes aware thereof, give written Notice to the Lender of any litigation or proceedings challenging the validity of the License Agreement or otherwise required under the License Agreement, the Transaction Documents or any of the transactions contemplated therein.

(e) Borrower shall, promptly after an officer becomes aware thereof, give written Notice to the Lender of any representation or warranty made or deemed made by Borrower in any of the Loan Documents or in any certificate delivered to the Lender pursuant hereto shall prove to be untrue, inaccurate or incomplete in any material respect on the date as of which made or deemed made.

(f) Borrower shall promptly after an officer becomes aware thereof give written Notice to the Lender of the occurrence of any Material Adverse Effect.

(g) Borrower shall, promptly after receipt of any written notice from the Licensee pursuant to the License Agreement of an event which has had, or would reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect, provide a copy of such notice to Lender together with a summary of Borrower's intended response to Licensee.

(h) Borrower shall, promptly after an officer becomes aware thereof, give written Notice to the Lender of the occurrence of (i) a manufacturing disruption which has had, or would reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect on the level of Net Sales of ADS-5102 or (ii) any other Material Adverse Effect on the Exploitation of ADS-5102.

Section 8.09 **Payment of Taxes; Tax Status of Borrower**. Borrower or the Company, as applicable, shall pay all material Taxes of any kind imposed on or in respect of its income or assets that are due and payable and before any Lien on any of its assets exists as a result of nonpayment except as provided in Section 9.03 hereof and except for Taxes contested in good faith by appropriate proceedings and for which adequate reserves are maintained in accordance with GAAP. Borrower will at all times remain a disregarded entity for U.S. federal and all applicable state and local income tax purposes.

Section 8.10 **Waiver of Stay, Extension or Usury Laws**. Notwithstanding any other provision of this Agreement or the other Loan Documents, if at any time the rate of interest payable by any Person under the Loan Documents exceeds the Maximum Lawful Rate, then, so long as the Maximum Lawful Rate would be exceeded, such rate of interest shall be equal to the Maximum Lawful Rate. If at any time thereafter the rate of interest so payable is less than the Maximum Lawful Rate, such Person shall continue to pay interest at the Maximum Lawful Rate until such time as the total interest received from such Person is equal to the total interest that would have been received had applicable law not limited the interest rate so payable. In no event shall the total interest received by the Lender under this Agreement and the other Loan Documents exceed the amount which such Lender could lawfully have received, had the interest due been calculated from the Closing Date at the Maximum Lawful Rate. Without limiting the foregoing, Borrower will not at any time, to the extent that it may lawfully not do so, insist upon, or plead, or in any manner whatsoever claim or take the benefit or advantage of, any stay or extension law or other law that would prohibit or forgive Borrower from paying all or any portion of the principal of or premium, if any, or interest on the Loan as contemplated herein, wherever enacted, now or at any time hereafter in force, or that may affect the covenants or the performance of this Agreement; and, to the extent that it may lawfully do so, Borrower hereby expressly waives all benefit or advantage of any such law and expressly agrees that it will not hinder, delay or impede the execution of any power herein granted to the Lender, but will suffer and permit the execution of every such power as though no such law had been enacted.

Section 8.11 **Intellectual Property**.

(a) Borrower shall, at its sole expense, exercise its rights under the Collection Agreement to cause the Company to prepare, execute, deliver and file any and all agreements, documents or instruments which are necessary and/or desirable to (i) prosecute and maintain the material Intellectual Property (including Patents therein); and (ii) defend or assert such material Intellectual Property against commercially significant infringement or interference by any other Persons, and against any claims of invalidity or unenforceability, in any jurisdiction (including by bringing any legal action for infringement or defending any counterclaim of invalidity or action of a Third Party for declaratory judgment of non-infringement or non-interference) to the extent the Company has the right to do so. Borrower shall keep the Lender informed of all of such actions and the Lender shall have the opportunity to participate and meaningfully consult with Borrower and the Company with respect to the direction thereof and Borrower shall, and shall cause the Company to, consider all of the Lender's comments in good faith. For clarity, this subsection (a) shall apply only to the extent of Borrower's or any Affiliate's rights (including rights to review and comment) to prosecute, maintain and/or enforce the Intellectual Property.

(b) To the extent permitted under the License Agreement, Borrower shall not, and shall not permit or suffer the Company or any of its Affiliates to, consent to any judgment or settlement in any action, suit or proceeding referred to in Section 7.7(e) of the License Agreement, without the prior written consent of the Lender, which consent shall not be withheld, delayed or conditioned by Lender if doing so would result in Borrower breaching its obligation to not unreasonably withhold, delay or condition its consent under Section 7.7(e) of the License Agreement.

(c) Borrower shall cause the Company to use commercially reasonable efforts to prosecute all pending Patent applications within the Patent Rights for which the Company or its Affiliates has rights to prosecute such Patents consistent with standards in the biotechnology industry (as applicable) for similarly situated entities.

(d) Borrower and the Company and its Affiliates shall:

(i) take reasonable measures to protect the proprietary nature of material Intellectual Property and to maintain in confidence all trade secrets and confidential information comprising a part thereof;

(ii) not disclose and use commercially reasonable efforts to prevent any distribution or disclosure by others (including their employees and contractors) of any item that contains or embodies material Intellectual Property; and

(iii) take reasonable physical and electronic security measures to prevent disclosure of any item that contains or embodies material Intellectual Property.

(e) Borrower shall cause the Company to use commercially reasonable efforts to cause each individual associated with the filing and prosecution of the Patents material to the conduct of the business of Borrower and its Subsidiaries to comply in all material respects with all applicable duties of candor and good faith in dealing with any Patent Office, including any duty to disclose to any Patent Office all information known by such individual to be material to patentability of each such Patent, in those jurisdictions where such duties exist.

(f) Borrower shall furnish the Lender from time to time upon Lender's reasonable written request therefor, but in any event not more than once in any six (6)-month period so long as no Event of Default is continuing, reasonably detailed statements and schedules further identifying and describing the Intellectual Property and such other materials evidencing or reports pertaining to any Intellectual Property as the Lender may reasonably request.

Section 8.12 **Security Documents; Further Assurances** .

(a) Subject to Section 8.12(b) , Borrower shall promptly, upon the reasonable request of the Lender, at Borrower's expense, (a) execute, acknowledge and deliver, or cause the execution, acknowledgment and delivery of, and thereafter register, file or record, or cause to be registered, filed or recorded, in an appropriate governmental office, any document or instrument supplemental to or confirmatory of the Loan Documents or otherwise deemed by the Lender reasonably necessary or desirable for the continued validity, perfection and priority of the Liens on the Collateral covered thereby subject to no other Liens except as permitted by the applicable

Loan Document, or obtain any consents or waivers as may be necessary or appropriate in connection therewith; (b) deliver or cause to be delivered to the Lender from time to time such other documentation, consents, authorizations, approvals and orders in form and substance reasonably satisfactory to the Lender and the Lender shall reasonably deem necessary to perfect or maintain the Liens on the Collateral pursuant to the Loan Documents; and (c) upon the exercise by the Lender of any power, right, privilege or remedy pursuant to any Loan Document which requires any consent, approval, registration, qualification or authorization of any Governmental Authority execute and deliver all applications, certifications, instruments and other documents and papers that the Lender may require. In addition, subject to Section 8.12(b), Borrower shall promptly, at its sole cost and expense, execute and deliver to the Lender such further instruments and documents, and take such further action, as the Lender may, at any time and from time to time, reasonably request in order to carry out the intent and purpose of this Agreement and the other Loan Documents to which it is a party and to establish and protect the rights, interests and remedies created, or intended to be created, in favor of the Lender hereby and thereby.

(b) Notwithstanding anything to the contrary herein or in any other Loan Document, Borrower shall not have any obligation to (i) perfect or record any security interest or lien in any intellectual property included in the Collateral in any jurisdiction other than in the United States (or to enter into any foreign law governed charges, debentures, pledges or other security agreements in respect thereof), (ii) obtain any landlord waivers, estoppels or collateral access letters, or (iii) obtain any consent of the Licensee to the assignment and pledge to Lender of the rights under the License Agreement that are included in the Collateral.

Section 8.13 **Information Regarding Collateral**. Borrower shall not effect any change (i) in its legal name, (ii) in the location of its chief executive office, (iii) in its identity or organizational structure, (iv) in its Federal Taxpayer Identification Number or organizational identification number, if any, or (v) in its jurisdiction of organization (in each case, including by merging with or into any other entity, reorganizing, dissolving, liquidating, reorganizing or organizing in any other jurisdiction), until (A) it shall have given the Lender not less than ten (10) days prior written notice (in the form of an certificate of a duly authorized officer of Borrower), or such lesser notice period agreed to by the Lender, of its intention so to do, clearly describing such change and providing such other information in connection therewith as the Lender may reasonably request and (B) it shall have taken all action reasonably satisfactory to the Lender to maintain the perfection and priority of the security interest of the Lender in the Collateral, if applicable (subject to the limitations set forth in Section 8.12(b)). Borrower agrees to provide promptly the Lender with certified Borrower's Organizational Documents reflecting any of the changes described in the preceding sentence. Borrower also agrees to notify promptly the Lender of any change in the location of any office in which it maintains books or records relating to Collateral owned by it or any office or facility at which any portion of Collateral is located (including the establishment of any such new office or facility), other than (a) changes in location to mortgaged property, (b) Collateral which is in-transit or in the possession of employees, and (c) Collateral which is out for repair or processing.

Section 8.14 **Additional Collateral; New License Arrangement; Commercialization of ADS-5102**

(a) With respect to any Collateral acquired after the Closing Date by Borrower that is not already subject to the Lien created by any of the Loan Documents or specifically excluded from the requirement to be subject to such Lien in the Loan Documents, Borrower shall promptly (and in any event within [*] days after the acquisition thereof) (i) execute and deliver to the Lender such amendments or supplements to the relevant Loan Documents or such other documents as the Lender shall deem necessary or advisable to grant for its benefit, a Lien on such property subject to no Liens other than Permitted Liens, and (ii) take all actions necessary to cause such Lien to be duly perfected in accordance with all applicable requirements of Law, including the filing of financing statements in such jurisdictions as may be reasonably requested by the Lender. Subject to Section 8.12(b), Borrower shall otherwise take such actions and execute and/or deliver to the Lender such documents as the Lender shall reasonably require to confirm the validity, perfection and priority of the Lien of the Security Agreement on such after-acquired properties.

(b) Without limiting any other rights or remedies Lender may have under this Agreement, the Security Agreement or the Stock Pledge Agreement, if (i) Licensee terminates or provides written notice of termination of the License Agreement or the License Agreement terminates as to Licensee by operation of law or (ii) Borrower terminates the License Agreement in violation of its covenants herein or the License Agreement terminates as to Borrower by operation of law, then Borrower, in consultation with Lender, or Lender (in the case of a termination under preceding subclause (ii) or in the event that Borrower fails to so consult with Lender), in each case at Lender's option and at all times in consultation with Lender and subject to the further requirements of this Section 8.14(b) , shall identify and use commercially reasonable efforts to consummate a licensing opportunity with a Third Party that has rights (from, by or through Licensee or any successor or assignee thereof) to Commercialize the Licensed Product, covering the Intellectual Property that had been licensed to Licensee, for such Third Party's use of the Intellectual Property in the development, manufacture, use and Commercialization of the Licensed Product. Borrower shall cooperate with Lender, at Borrower's cost and expense, including Borrower's fees, if any, in connection therewith, in such efforts to identify and consummate such licensing opportunity, which license shall (i) become effective as soon as practicable but in any event not earlier than the effective date of such termination, (ii) expire not earlier than the Maturity Date and (iii) include, without the Lender's prior written consent, terms, conditions and limitations that are not materially less favorable to Borrower or Lender (other than economic terms, which shall be no less favorable to Borrower or Lender), than those contained in the License Agreement applicable to the Licensed Product at the effective date of termination, including with respect to obligations and costs imposed on Borrower, disclaimers of Borrower's liability, intellectual property ownership and control and indemnification of Borrower (any such license, a " New Arrangement "). If Borrower (in consultation with Lender) is the party pursuing such New Arrangement, Borrower and Lender shall mutually agree on the Third Party with which to enter into such New Arrangement. Should such New Arrangement be identified, Borrower agrees to use commercially reasonable efforts to execute and deliver a new license agreement effecting such New Arrangement.

(c) Borrower shall at all times following Marketing Authorization for sale of ADS-5102 in the U.S. through such date as the Loan and all other amounts due to Lender hereunder are fully paid, use or cause to be used Commercially Reasonable and Diligent Efforts to Commercialize ADS-5102, including using Commercially Reasonable and Diligent Efforts to maintain the economic benefits of its relationships with providers of goods and services under such Material Contracts as may be entered into by Borrower or replacements or substitutes therefor.

(d) Upon the occurrence of a breach of any Material Contract by any other party thereto, which would reasonably be expected to result in a Material Adverse Effect on ADS-5102, Borrower shall use Commercially Reasonable and Diligent Efforts to seek to enforce all of its (and cause its Affiliates to seek to enforce all of their) rights and remedies thereunder. In the case of Material Contracts consisting of licenses or other arrangements under which the counterparty is to make payments to Borrower in respect of such Commercialization, such counterparties shall be instructed to make all payments to the Collection Account for receipt and disbursement in accordance with the terms hereof. Borrower shall use Commercially Reasonable and Diligent Efforts to prepare, execute, deliver and file (or cause the same to be done) any and all agreements, documents or instruments that are necessary or desirable to secure and maintain, all Marketing Authorizations for ADS-5102. Except to the extent required under Applicable Law (e.g., recalls), Borrower shall not withdraw or abandon, or fail to take any action necessary to prevent the withdrawal or abandonment of, any Marketing Authorization once obtained. Following the receipt of a Marketing Authorization in any country, Borrower agrees to use Commercially Reasonable and Diligent Efforts, itself or through one or more Affiliates, licensees or other agents, to Commercialize ADS-5102 in each such country.

Section 8.15 **Inventory/Second Supplier** . On the Closing Date, Borrower shall have sufficient inventory of active pharmaceutical ingredient for ADS-5102 to support reasonably anticipated requirements for such active pharmaceutical ingredient through [*]. Not later than December 31, 2018, Borrower shall have entered into an agreement with each of a primary and a back-up qualified, FDA-approved manufacturer for the supply of active pharmaceutical ingredient for ADS-5102, which in the case of the back-up manufacturer with the commitment to supply of active pharmaceutical ingredient for ADS-5102 not later than [*], and shall maintain such arrangements with such manufacturers, or replacements therefor, so long as any Obligations are outstanding to the Lender.

Article IX.
NEGATIVE COVENANTS

Borrower covenants and agrees with Lender that, until Payment in Full:

Section 9.01 **Activities of Borrower**. (a) Borrower shall not amend, modify, waive or terminate (other than expiration in accordance with its terms) any provision of, or permit or agree to the amendment, modification, waiver or termination (other than expiration in accordance with its terms) of any provision of, any of the Transaction Documents or the License Agreement, such consent not to be unreasonably withheld or delayed. Borrower shall comply with all terms and conditions of and fulfill all obligations under each Material Contract to which it is a party, and shall use Commercially Reasonable and Diligent Efforts to seek to enforce its rights and remedies thereunder in effecting any amendment, modification, waiver or termination thereof, except as would not reasonably be expected to result in a Material Adverse Effect. Borrower shall not establish or acquire any Subsidiaries except in the exercise of Commercially Reasonable and Diligent Efforts to Commercialize ADS-5102.

(b) Borrower shall not:

(i) fail to hold itself out to the public and all other persons as a legal entity separate from the owners of its Capital Stock and from any other person;

(ii) commingle its assets with assets of any other Person except in connection with, and for the limited purposes of, operation of the Blocked Account;

(iii) fail to conduct its business only in its own name, nor fail to comply with all organizational formalities necessary to maintain its separate existence;

(iv) fail to maintain separate financial statements, showing its assets and liabilities separate and apart from those of any other person nor have its assets listed on any financial statement of any other person; provided, however, that Borrower's assets may be included in a consolidated financial statement of its Affiliates in conformity with applicable provisions of GAAP (provided that such assets shall also be listed on Borrower's own separate balance sheet);

(v) fail to pay its own liabilities and expenses only out of its own funds; provided that the foregoing shall not prohibit the payment of any liabilities and expenses by the Company on behalf of Borrower so long as such payments are subject to reimbursement or are otherwise recorded as capital contributions or intercompany loans;

(vi) enter into any transaction with an Affiliate except transactions that are at prices and on terms and conditions that could be obtained on an arm's-length basis from unrelated Third Parties;

(vii) fail to correct any known misunderstanding regarding its separate identity and not identify itself as a department or division of any other Person;

(viii) fail to maintain adequate capital in light of its contemplated business purpose, transactions and liabilities; provided, however, that the foregoing shall not require the holders of its Capital Stock to make additional capital contributions to Borrower;

(ix) fail to cause the representatives of Borrower to act at all times with respect to Borrower consistently and in furtherance of the foregoing and in the best interests of Borrower;

(x) make any payment or distribution of assets with respect to any obligation of any other person other than as required under trade or commercial agreements entered into in the ordinary course of business; or

(xi) engage in any business activity other than the Exploitation (including Commercialization) of ADS-5102, the License Agreement, any New Arrangement that is implemented hereunder and the borrowing, payment and repayment of amounts provided for hereunder and under the other Loan Documents and any activities ancillary or related thereto.

Section 9.02 **Merger; Sale of Assets** .

(a) Borrower shall not merge or consolidate with or into (whether or not Borrower is the Surviving Person) any other Person and Borrower will not sell, convey, assign, transfer, lease, sublease, license, sublicense or otherwise dispose of all or substantially all of Borrower's assets to any Person in a single transaction or series of related transactions; provided that nothing in this Section 9.02(a) shall prohibit a Change of Control.

(b) Borrower shall not sell, assign, convey, transfer, lease, sublease, license, sublicense or otherwise dispose of (including by way of merger or consolidation) any right, title or interest in or to, the License Agreement or the Included Product Payments, other than pursuant to Permitted Liens, or pursuant to a Change of Control.

(c) Notwithstanding clauses (a) and (b) above, in the event the Subsequent Tranche Loan has not been made on or prior to the Subsequent Tranche Commitment Termination Date, Borrower shall be permitted to sell, assign, convey, transfer, lease, sublease, license, sublicense or otherwise dispose of the Transferred Assets relating to the Commercialization and Exploitation of ADS-5102 (" 5102 Assets ") to a bona-fide Third Party, provided that the Borrower shall apply the proceeds of such disposition of 5102 Assets to prepay the Loans, together with accrued and unpaid interest thereon, in accordance with Section 3.02(b) and shall pay an additional amount equal to the amount by which $70,000,000 exceeds all payments of principal, interest and premium (if any) made in respect of the Loans, provided that if such proceeds and funds otherwise available to the Borrower are insufficient to pay such amounts to Lender, all payments received in respect of the Royalty Interest (without limitation thereof to the Included Royalty Interest), prior to disbursement of any amounts therefrom to Borrower or its assigns (other than the Lender) under Article IV, shall be applied to the payment of such amounts to Lender until payment thereof in full.

Section 9.03 **Liens**. Borrower shall not create or suffer to exist any Lien on or with respect to Collateral, except for Permitted Liens.

Section 9.04 **Investment Company Act**. Neither Borrower nor any of its Subsidiaries shall be or become an investment company subject to registration under the Investment Company Act of 1940.

Section 9.05 **Limitation on Additional Indebtedness**. Borrower shall not, directly or indirectly, incur or suffer to exist any Indebtedness; provided that Borrower may incur:

(a) Indebtedness under this Agreement;

(b) unsecured Indebtedness owed to the Company;

(c) Indebtedness representing obligations for the payment of money incurred in the ordinary course of business for goods or services rendered, unsecured, not overdue (unless subject to a good faith dispute);

(d) Indebtedness secured by Liens of any of the types described under clauses (d), (h) and (m) of the definition of Permitted Liens;

(e) Indebtedness in respect of Permitted Financings in connection with which Borrower may grant to the Permitted Financing Creditors a first priority security lien in Borrower's right, title and interest in, to and under, any cash payment interest under the License Agreement that is in excess of Included Royalty Interest and the proceeds thereof, so long as (i) Lender's security Interests in the relevant Collateral are *pari passu* with those granted to the Permitted Financing Creditors (provided that any proceeds released to Lender from the Disbursement Account shall be free and clear of any such security interest), and (ii) the applicable Permitted Financing Creditor (or agent thereof) shall enter into a reasonably acceptable intercreditor agreement or similar agreement with Lender (it being agreed that an intercreditor agreement incorporating the terms set forth on Exhibit E shall be deemed reasonably acceptable); and

(f) Indebtedness consisting of (i) the financing of insurance premiums with the providers of such insurance or their affiliates or (ii) take-or-pay obligations contained in supply agreements, in each case, in the ordinary course of business.

Section 9.06 **Limitation on Transactions with Controlled Affiliates**. Borrower shall not, directly or indirectly, enter into any transaction or series of related transactions or participate in any arrangement (including any purchase, sale, lease or exchange of assets or the rendering of any service) with any Controlled Affiliate other than the Transaction Documents or in the ordinary course of business of Borrower upon fair and reasonable terms no less favorable to Borrower than it would obtain in a comparable arm's-length transaction with a non-Controlled Affiliate.

Section 9.07 **ERISA**.

(a) Borrower shall not sponsor, maintain or contribute to, or agree to sponsor, maintain or contribute to, any employee benefit plan (as defined in Section 3(3) of ERISA) whether or not subject to ERISA, that could, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(b) Borrower shall not engage in a non-exempt prohibited transaction under Section 406 of ERISA or Section 4975 of the Code or in any transaction that, assuming that no assets of Lender are or are deemed to be Plan Assets, would cause any obligation or action taken or to be taken hereunder (or the exercise by the Lender of any of its rights under the Notes, this Agreement or the other Loan Documents) to be a non-exempt prohibited transaction under such provisions.

(c) Borrower shall not incur any liability with respect to any obligation to provide medical benefits with respect to any person beyond their retirement or other termination of service, other than coverage mandated by law, that could, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

Section 9.08 **Dividends and Distributions**. Borrower will not, directly or indirectly, make any dividends or other distributions to holders of Capital Stock (i) except as permitted under Borrower's Organizational Documents and the Stock Pledge Agreement or (ii) while an Event of Default or Prepayment Trigger has occurred and is continuing.

Section 9.09 **Adverse Effect**. Notwithstanding anything to the contrary in the Loan Documents, Borrower shall not take any action or abstain from taking any action, directly or indirectly, which action or abstinence could have the effect of altering the terms and conditions of the Loan Documents or the License Agreement in a manner that is adverse to Lender.

Article X.
EVENTS OF DEFAULT

Section 10.01 **Events of Default**. If one or more of Events of Default occurs and is continuing, the Lender shall be entitled to the remedies set forth in Section 10.02.

Section 10.02 **Default Remedies**. If any Event of Default shall occur and be continuing, the Lender may, by Notice to Borrower, (a) exercise all rights and remedies available to the Lender hereunder and under the other Loan Documents and applicable law (which exercise may be determined in its sole discretion and which such exercise shall not

constitute an election of remedies), including enforcement of the security interests created thereby, (b) declare the Loans, all interest thereon and all other Obligations to be immediately due and payable, whereupon all such amounts shall become immediately due and payable, all without diligence, presentment, demand of payment, protest or further notice of any kind, which are expressly waived by Borrower and (c) declare the obligations of the Lender hereunder to be terminated, whereupon such obligations shall terminate; provided , however , that if any event of any kind referred to in clause (i) of the definition of "Event of Default" herein occurs, the obligations of the Lender hereunder shall immediately terminate, all amounts payable hereunder by Borrower shall become immediately due and payable and the Lender shall be entitled to exercise rights and remedies under the Loan Documents and applicable law without diligence, presentment, demand of payment, protest or notice of any kind (including any notice by the Lender of a declaration requiring prepayment of the Loans under Section 3.02(a), should Lender so elect), all of which are hereby expressly waived by Borrower. Each Notice delivered pursuant to this Section 10.02 shall be effective when sent.

Section 10.03 **Right of Set-off; Sharing of Set-off** .

(a) If any amount payable hereunder is not paid as and when due, Borrower irrevocably authorizes the Lender (i) to proceed, to the fullest extent permitted by Applicable Law, without prior notice, by right of set-off, bankers' lien, counterclaim or otherwise, against any assets of Borrower in any currency that may at any time be in the possession of the Lender or any Affiliate of Lender, to the full extent of all amounts payable to the Lender hereunder or (ii) to charge to Borrower's account with Lender or any Affiliate of the Lender the full extent of all amounts payable by Borrower to the Lender hereunder; provided , however , that the Lender shall notify Borrower of the exercise of such right promptly following such exercise.

(b) If any Lender shall, by exercising any right of setoff or counterclaim or otherwise, obtain payment in respect of any principal of or interest on the Loan or other obligations owed to such Lender resulting in such Lender's receiving payment of a proportion of the aggregate amount of the Loan and accrued interest thereon or other obligations owed to such Lender greater than its pro rata share thereof as provided herein, then the Lender receiving such greater proportion shall (a) notify the other Lenders of such fact, and (b) purchase (for cash at face value) participations in the Loans and such other obligations of the other Lenders, or make such other adjustments as shall be equitable, so that the benefit of all such payments shall be shared by the Lenders ratably in accordance with the aggregate amount of principal of and accrued interest on their respective Loans and other amounts owing them; provided that the provisions of this Section 10.03(b) shall (x) not be construed to apply to (A) any payment made by Borrower pursuant to and in accordance with the express terms of this Agreement or (B) any payment obtained by a Lender as consideration for the assignment of or sale of a participation in the Loan to any assignee and (y) only be applicable if there is more than one Lender.

Section 10.04 **Rights Not Exclusive**. The rights provided for herein are cumulative and are not exclusive of any other rights, powers, privileges or remedies provided by Law.

Article XI.
INDEMNIFICATION

Section 11.01 **Funding Losses**. If Borrower fails to borrow the Subsequent Tranche Loan on the Subsequent Funding Date, as the case may be, after the applicable Notice of Borrowing has been given to the Lender in accordance herewith and the conditions set forth in Section 6.02, as the case may be, have been satisfied or waived, Borrower shall reimburse the Lender within five (5) Business Days after demand for any resulting loss or expense incurred by the Lender including any loss incurred in obtaining, liquidating or redeploying deposits or other funding from third parties; provided that the Lender shall have delivered to Borrower a certificate as to and documentation of the amount of such loss or expense.

Section 11.02 **Other Losses**.

(a) Borrower agrees to defend (subject to Indemnitees' selection of counsel), indemnify, pay and hold harmless, each Indemnitee from and against any and all Indemnified Liabilities, in all cases, arising, in whole or in part, out of or relating to any claim, notice, suit or proceeding commenced or threatened in writing (including, without limitation, by electronic means) by any Person (including any Governmental Authority) other than Borrower, the Company or any of Lender's Affiliates; provided Borrower shall not have any obligation to any Indemnitee hereunder with respect to any Indemnified Liabilities to the extent such Indemnified Liabilities arise from the gross negligence or willful misconduct of such Indemnitee or the breach by Lender of its obligations to make the Initial Tranche Loan or the Subsequent Tranche Loan hereunder. To the extent that the undertakings to defend, indemnify, pay and hold harmless set forth in this Section 11.02 may be unenforceable in whole or in part because they violate of any law or public policy, Borrower shall contribute the maximum portion that it is permitted to pay and satisfy under applicable law to the payment and satisfaction of all Indemnified Liabilities incurred by Indemnitees or any of them. This Section 11.02 shall not apply with respect to Taxes other than any Taxes that represent losses, claims, damages, etc. arising from any non-Tax claim.

(b) To the extent permitted by applicable law, no Party shall assert, and each Party hereby waives, any claim against each other Party and such Party's Affiliates, directors, employees, attorneys or agents, on any theory of liability, for special, indirect, consequential or punitive damages (as opposed to direct or actual damages) (whether or not the claim therefor is based on contract, tort or duty imposed by any applicable legal requirement) arising out of, in connection with, as a result of, or in any way related to, this Agreement or any Loan Document or any agreement or instrument contemplated hereby or thereby or referred to herein or therein, the transactions contemplated hereby or thereby, the Loan or the use of the proceeds thereof or any act or omission or event occurring in connection therewith, and each Party hereby waives, releases and agrees not to sue upon any such claim or any such damages, whether or not accrued and whether or not known or suspected to exist in its favor.

Section 11.03 **Assumption of Defense; Settlements**. If the Lender is entitled to indemnification under this Article XI with respect to any action or proceeding brought by a third party that is also brought against Borrower, Borrower shall be entitled to assume the defense of any such action or proceeding with counsel reasonably satisfactory to the Lender. Upon assumption by Borrower of the defense of any such action or proceeding, Lender shall have the right to participate in such action or proceeding and to retain its own counsel but Borrower shall not be liable for any legal expenses of other counsel subsequently incurred by the Lender in connection with the defense thereof unless (i) Borrower has otherwise agreed to pay such fees and expenses, (ii) Borrower shall have failed to employ counsel reasonably satisfactory to the Lender in a timely manner or (iii) the Lender shall have been advised by counsel that there are actual or potential conflicting interests between Borrower and the Lender, including situations in which there are one or more legal defenses available to the Lender that are different from or additional to those available to Borrower; provided, however, that Borrower shall not, in connection with any one such action or proceeding or separate but substantially similar actions or proceedings arising out of the same general allegations, be liable for the fees and expenses of more than one separate firm of attorneys at any time for the Lender, except to the extent that local counsel, in addition to its regular counsel, is required in order to effectively defend against such action or proceeding. Borrower shall not consent to the terms of any compromise or settlement of any action defended by Borrower in accordance with the foregoing without the prior written consent of the Lender unless such compromise or settlement (x) includes an unconditional release of the Lender from all liability arising out of such action and (y) does not include a statement as to or an admission of fault, culpability or a failure to act, by or on behalf of the Lender. Borrower shall not be required to indemnify the Lender for any amount paid or payable by the Lender in the settlement of any action, proceeding or investigation without the written consent of Borrower, which consent shall not be unreasonably withheld, conditioned or delayed.

Article XII.
MISCELLANEOUS

Section 12.01 **Assignments**.

(a) Borrower shall not be permitted to assign this Agreement without the prior written consent of the Lender (in the event such assignment is to be to an Affiliate of Borrower, such consent not to be unreasonably withheld) and any purported assignment in violation of this Section 12.01 shall be null and void.

(b) Lender may at any time assign its rights and obligations hereunder, in whole or in part, to an Assignee and Lender may at any time pledge its rights and obligations hereunder to an Assignee.

(c) The parties to each assignment shall execute and deliver to Borrower an Assignment and Acceptance. Upon the effectiveness of a permitted assignment hereunder, (i) each reference in this Agreement to "Lender" shall be deemed to be a reference to the assignor and the assignee to the extent of their respective interests, (ii) such assignee shall be a Lender party to this Agreement and shall have all the rights and obligations of a Lender and (iii) the

assignor shall be released from its obligations hereunder to a corresponding extent of the assignment, and no further consent or action by any party shall be required.

(d) In the event there are multiple Lenders, all payments of principal, interest, fees and any other amounts payable pursuant to the Loan Documents shall be allocated on a *pro rata* basis among the Lenders according to their proportionate interests in the Loan.

(e) Borrower and the Lender shall, from time to time at the request of the other party hereto, execute and deliver any documents that are necessary to give full force and effect to an assignment permitted hereunder, including a new Note in exchange for the Note held by the Lender.

Section 12.02 **Successors and Assigns**. This Agreement shall be binding upon and inure to the benefit of the Parties and their respective successors and permitted assigns.

Section 12.03 **Notices**. All Notices authorized or required to be given pursuant to this Agreement shall be given in writing and either personally delivered to the Party to whom it is given or delivered by an established delivery service by which receipts are given or mailed by registered or certified mail, postage prepaid, or sent by electronic mail with a copy sent on the following Business Day by one of the other methods of giving notice described herein, addressed to the Party at its address listed below:

(a) If to Borrower:

c/o Adamas Pharmaceuticals, Inc.
1900 Powell Street
Emeryville, California 94608
Attention: General Counsel
Email: [*]

with a copy (which shall not constitute notice) to:

Cooley LLP
3175 Hannover Street
Palo Alto, CA 94304-1133
Attention: Glen Sato
Email: gsato@cooley.com

(b) If to the Lender:

HealthCare Royalty Partners III, L.P.
300 Atlantic Street, Suite 600
Stamford, CT 06901
Attention: Clarke B. Futch
Founding Managing Partner
Email: Clarke.Futch@hcroyalty.com

with a copy (which shall not constitute notice) to:

HealthCare Royalty Partners III, L.P.
300 Atlantic Street, Suite 600
Stamford, CT 06901
Attention: Chief Legal Officer
Email: royalty-legal@hcroyalty.com

with a copy (which shall not constitute notice) to:

Cadwalader, Wickersham & Taft LLP
200 Liberty Street
New York, New York 10281
Attn: Ira J. Schacter
E-mail: ira.schacter@cwt.com

Any Party may change its address for the receipt of Notices at any time by giving Notice thereof to the other Party. Except as otherwise provided herein, any Notice authorized or required to be given by this Agreement shall be effective when received.

Section 12.04 **Entire Agreement**. This Agreement, together with the Exhibits and Schedules hereto (which are incorporated herein by reference), and the other Loan Documents constitute the entire agreement between the Parties with respect to the subject matter hereof and supersede all prior agreements (including the Confidentiality Agreement), understandings and negotiations, both written and oral, between the Parties with respect to the subject matter of this Agreement.

Section 12.05 **Modification**. No Loan Document or provision thereof may be waived, amended or modified except, in the case of this Agreement, by an agreement or agreements in writing executed by Borrower and the Lender or, in the case of any other Loan Document, by an agreement or agreements in writing entered into by the parties thereto with the prior written consent of the Lender.

Section 12.06 **No Delay; Waivers; etc.** No delay on the part of the Lender in exercising any power or right hereunder shall operate as a waiver thereof nor shall any single or partial exercise of any power or right hereunder preclude other or further exercise thereof or the exercise of any other power or right. The Lender shall not be deemed to have waived any rights hereunder unless such waiver shall be in writing and signed by the Lender.

Section 12.07 **Severability**. If any provision of this Agreement is held to be invalid or unenforceable, the remaining provisions shall nevertheless be given full force and effect. Any provision of this Agreement held invalid or unenforceable only in part or degree by a court of competent jurisdiction shall remain in full force and effect to the extent not held invalid or unenforceable.

Section 12.08 **Determinations**. Each determination or calculation by the Lender hereunder shall, in the absence of manifest error, be conclusive and binding on the Parties.

Section 12.09 **Replacement of Note**. Upon the loss, theft, destruction, or mutilation of any Note and (a) in the case of loss, theft or destruction, upon receipt by Borrower of indemnity or security reasonably satisfactory to it (except that if the holder of such Note is the Lender or any other financial institution of recognized responsibility, the holder's own agreement of indemnity shall be deemed to be satisfactory) or (b) in the case of mutilation, upon surrender to Borrower of any mutilated Note, Borrower shall execute and deliver in lieu thereof a new Note, dated the Closing Date, in the same principal amount.

Section 12.10 **Governing Law**. **THIS AGREEMENT AND EACH NOTE SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK, INCLUDING GENERAL OBLIGATIONS LAW SECTIONS 5-1401 AND 5-1402 BUT OTHERWISE WITHOUT GIVING EFFECT TO LAWS CONCERNING CONFLICT OF LAWS OR CHOICE OF FORUM THAT WOULD REQUIRE APPLICATION OF THE LAWS OF ANOTHER JURISDICTION.**

Section 12.11 **Jurisdiction**. Each of Borrower and the Lender irrevocably submits to the jurisdiction of the courts of the State of New York and of the United States sitting in the State of New York, and of the courts of its own corporate domicile with respect to any and all Proceedings. Each of Borrower and the Lender irrevocably waives, to the

fullest extent permitted by law, any objection which it may now or hereafter have to the laying of venue of any Proceeding and any claim that any Proceeding has been brought in an inconvenient forum. Any process or summons for purposes of any Proceeding may be served on Borrower by mailing a copy thereof by registered mail, or a form of mail substantially equivalent thereto, addressed to it at its address as provided for Notices hereunder.

Section 12.12 **Waiver of Jury Trial**. **EACH PARTY HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY ACTION, PROCEEDING, CLAIM OR COUNTERCLAIM ARISING OUT OF OR RELATING TO ANY TRANSACTION DOCUMENT OR THE TRANSACTIONS CONTEMPLATED**

UNDER ANY TRANSACTION DOCUMENT (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY). THIS WAIVER SHALL APPLY TO ANY SUBSEQUENT AMENDMENTS, RENEWALS, SUPPLEMENTS OR MODIFICATIONS TO ANY TRANSACTION DOCUMENT. EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF THE OTHER PARTY HERETO HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT THE OTHER PARTY HERETO WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT IT AND THE OTHER PARTY HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 12.12.

Section 12.13 **Waiver of Immunity**. To the extent that Borrower has or hereafter may be entitled to claim or may acquire, for itself or any of its assets, any immunity from suit, jurisdiction of any court or from any legal process (whether through service or notice, attachment prior to judgment, attachment in aid of execution, or otherwise) with respect to itself or any of its property, Borrower hereby irrevocably waives such immunity in respect of its obligations hereunder and under the Notes to the fullest extent permitted by law.

Section 12.14 **Counterparts; Delivery**. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but all of which shall constitute one and the same instrument. Delivery of an executed counterpart of a signature page of this Agreement in Portable Document Format (PDF) or by facsimile transmission shall be effective as delivery of a manually executed original counterpart of this Agreement.

Section 12.15 **Limitation on Rights of Others**. Except for the Indemnitees referred to in Section 11.02, no Person other than a Party shall have any legal or equitable right, remedy or claim under or in respect of this Agreement.

Section 12.16 **Survival**. The obligations of Borrower contained in Sections 4.05, 4.06, 4.07, Article V, Article XI and this Section 12.16 shall survive the repayment of the Loans and the cancellation of the Note and the termination of the other obligations of Borrower hereunder.

Section 12.17 **Confidentiality**.

(a) Until the payment of all amounts required pursuant to Section 3.01 , and for a period of three (3) years thereafter, each Party shall maintain in strict confidence all Confidential Information and materials disclosed or provided to it by the other Party, except as approved in writing in advance by the disclosing Party, and shall not use or reproduce the disclosing Party's Confidential Information for any purpose other than as required to carry out its obligations and exercise its rights pursuant to this Agreement (the " Purpose "). Specifically, a Party shall have the right to disclose Confidential Information: (i) on a "need to know basis" to its employees, consultants and Affiliates as well as any actual or potential acquirers, merger partners, licensees, permitted assignees, collaborators (including licensees), subcontractors, investment bankers, investors, limited partners, partners, lenders, or other financial partners, and its and their respective directors, employees, contractors and agents, on a confidential basis to the extent requested by an authorized representative of a U.S. or foreign tax authority, or (d) discloses Confidential Information in response to a routine audit or examination by, or a blanket document request from, a Governmental Authority. A Party receiving any such Confidential Information hereunder agrees to institute measures to protect the Confidential Information in a manner consistent with the measures it uses to protect its own most sensitive proprietary and confidential information, which in any event must not be less than a reasonable standard of care. Each Party shall be responsible for the breach of this Section 12.17 by its employees, consultants or Third Parties to whom such disclosure is made pursuant to this Section 12.17. Each Party shall immediately notify the other Party upon discovery of any loss or unauthorized disclosure of the other Party's Confidential Information.

(b) The obligations of confidentiality and non-use set forth in Section 12.17(a) shall not apply to the extent that the receiving Party or its Affiliates is required to disclose Confidential Information pursuant to: (i) an order of a court of competent jurisdiction; (ii) Applicable Laws; (iii) regulations or rules of a securities exchange; or (iv) requirement of a Governmental Authority.

(c) This Agreement supersedes the Confidentiality Agreement and the Confidentiality Agreement shall cease to be of any force and effect as of the Closing Date; provided, however, that all information falling within the definition of "Confidential Information" set forth in the Confidentiality Agreement shall also be deemed Confidential Information disclosed pursuant to this Agreement and subject to the provisions of Section 12.17 .

Section 12.18 **Patriot Act Notification** . Lender hereby notifies Borrower that, consistent with the Patriot Act, regulations promulgated thereunder and under other Applicable Law, the Lender's procedures and customer due diligence standards may require it to obtain, verify and record information that identifies Borrower, including among other things name, address, information regarding Persons with authority or control over Borrower, and other information regarding Borrower, its operations and transactions with the Lender. Borrower agrees to provide such information and take such actions as are reasonably requested by the Lender in order to assist the Lender in maintaining compliance with its procedures, the Patriot Act and any other Applicable Laws.

IN WITNESS WHEREOF, the Parties have duly executed this Agreement as of the day and year first above written.

HEALTHCARE ROYALTY PARTNERS III, L.P.,
as Lender

By: HealthCare Royalty GP III, LLC,
its general partner

By: /s/ Clarke B. Futch
Name: Clarke B. Futch
Title: Founding Managing Partner

ADAMAS PHARMA, LLC,

as Borrower

By: Adamas Pharmaceuticals, Inc., its manager
By: /s/ Gregory T. Went
Name: Gregory T. Went, Ph.D.
Title: Chief Executive Officer

[*] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

EXHIBIT A

FORM OF

NOTICE OF PREPAYMENT

Date: [●], 20[●]

HealthCare Royalty Partners III, L.P.
300 Atlantic Street, Suite 600
Stamford, CT 06901
Attention: Clarke B. Futch
Founding Managing Partner
Email: Clarke.Futch@hcroyalty.com

Dear Sirs:

Adamas Pharma, LLC, a Delaware limited liability company (the "Borrower"), pursuant to Section 3.02(d) of the Loan Agreement, dated as of May [_], 2017, between Borrower and HealthCare Royalty Partners III, L.P. (the "Lender") does hereby give the Lender notice that on [●], 20[●] (the " Prepayment Date "), Borrower shall prepay all amounts outstanding with respect to the Loans under the Loan Agreement, in cash, including all accrued but unpaid interest and any premium payable under the Loan Agreement, as required pursuant to Section 3.02[(b)][(c)] of the Loan Agreement. The amount to be prepaid, and all other amounts payable in connection therewith under Section 3.02 of the Loan Agreement, is calculated and determined as set forth in detail on Exhibit A hereto.

Pursuant to Section 4.02(f) of the Loan Agreement, Borrower shall make the prepayment specified above by [wire transfer] [Automated Clearing House transfer] to the Lender Account.

This Notice of Prepayment is irrevocable. [1]

1 This Notice of Prepayment may state that such notice is conditioned upon the effectiveness of any credit facilities or one or more other events specified therein (including the occurrence of a Change of Control), in which case such notice may be revoked by Borrower (by notice to the Lender on or prior to the specified effective date) if such condition is not satisfied.

ADAMAS PHARMA, LLC

By: _____

Name

Title

CC:

HealthCare Royalty Partners III, L.P.
300 Atlantic Street, Suite 600
Stamford, CT 06901
Attention: Chief Legal Officer
Email: royalty-legal@hcroyalty.com

Cadwalader, Wickersham & Taft LLP
200 Liberty Street
New York, New York 10281
Attn: Ira J. Schacter
E-mail: ira.schacter@cwt.com

EXHIBIT A
TO
NOTICE OF PREPAYMENT

[*] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

EXHIBIT B

FORM OF SECURITY AGREEMENT

[*] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

EXHIBIT C-1

FORM OF INITIAL TRANCHE NOTE

[*] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

EXHIBIT C-2

FORM OF SUBSEQUENT TRANCHE NOTE

[*] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

EXHIBIT D-1

FORM OF

NOTICE OF INITIAL TRANCHE BORROWING

Date: May [8], 2017

HealthCare Royalty Partners III, L.P.
300 Atlantic Street, Suite 600
Stamford, CT 06901
Attention: Clarke B. Futch
Founding Managing Partner
Email: Clarke.Futch@hcroyalty.com

Dear Sirs:

Adamas Pharma, LLC, a Delaware limited liability company (the "Borrower"), pursuant to Section 2.02(a) of the Loan Agreement, dated as of May [_], 2017, between Borrower and HealthCare Royalty Partners III, L.P. (the "Lender") does hereby give the Lender notice that on May [_], 2017 Borrower will borrow the amount of $35,000,000.00 under and pursuant to the Loan Agreement and the other Loan Documents.

ADAMAS PHARMA, LLC

By: _____
Name
Title

CC:

HealthCare Royalty Partners III, L.P.
300 Atlantic Street, Suite 600
Stamford, CT 06901
Attention: Chief Legal Officer
Email: royalty-legal@hcroyalty.com

Cadwalader, Wickersham & Taft LLP
200 Liberty Street
New York, New York 10281
Attn: Ira J. Schacter
E-mail: ira.schacter@cwt.com

EXHIBIT D-2

FORM OF

NOTICE OF SUBSEQUENT TRANCHE BORROWING

Date: [●], 201[●]

HealthCare Royalty Partners III, L.P.
300 Atlantic Street, Suite 600
Stamford, CT 06901
Attention: Clarke B. Futch
Founding Managing Partner
Email: Clarke.Futch@hcroyalty.com

Dear Sirs:

Adamas Pharma, LLC, a Delaware limited liability company (the "Borrower"), pursuant to Section 2.02(b) of the Loan Agreement, dated as of May [_] by give the Lender notice that the conditions set forth in Section 6.02 have been satisfied, and Borrower shall borrow the Subsequent Tranche Loan in the amount of the Subsequent Tranche Loan Commitment on [●], 201[●] under and pursuant to the Loan Agreement and the other Loan Documents.

ADAMAS PHARMA, LLC

By: _____
Name
Title

CC:
HealthCare Royalty Partners III, L.P.
300 Atlantic Street, Suite 600
Stamford, CT 06901
Attention: Chief Legal Officer
Email: royalty-legal@hcroyalty.com

EXHIBIT E

BASIC TERMS FOR
INTERCREDITOR AGREEMENT

EXHIBIT F

FORM OF CONTRIBUTION AGREEMENT

EXHIBIT G

FORM OF STOCK PLEDGE AGREEMENT

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EXHIBIT H

FORM OF

ASSIGNMENT AND ACCEPTANCE

Reference is made to that certain Loan Agreement, dated as of May [_], 2017 (as amended, supplemented or otherwise modified from time to time, the " **Loan Agreement** ") between HealthCare Royalty Partners III, L.P., a Delaware limited partnership (" **Lender** ") and Adamas Pharma, LLC, a Delaware limited liability company (" **Borrower** "), and the Notes and other Loan Documents related thereto. Terms defined in the Loan Agreement and not otherwise defined herein are used herein with the same meaning.

The Assignor and the Assignee referred to on Schedule 1 attached hereto agree as follows:

1. The Assignor hereby sells and assigns to the Assignee, and the Assignee hereby purchases from the Assignor, [all] [a [●] percent] interest in the Assignor's rights and obligations under the Loan Agreement and the other Loan Documents, and Assignee hereby accepts such assignment and assumes [all] [such proportion] of the Assignor's obligations thereunder, in each case, to the extent first arising on or after the date hereof. After giving effect to such sale and assignment, the amount of the Loans owing to the Assignee will be as set forth on Schedule 1 attached hereto.

2. The Assignor (i) represents and warrants that it is the sole legal and beneficial owner of the entire Loan that is the subject of the assignment hereunder; (ii) makes no representation or warranty and assumes no responsibility with respect to any statements, warranties or representations made in or in connection with the Loan Documents, or the execution, legality, validity, enforceability, genuineness, sufficiency or value of, or the perfection or priority of any lien or security interest created or purported to be created under or in connection with the Loan Documents or any other instrument or document furnished pursuant thereto; (iii) makes no representation or warranty and assumes no responsibility with respect to the financial condition of Borrower or the performance or observance by Borrower of any of its obligations under any Loan Document or any other instrument or document furnished pursuant thereto; and (iv) requests that Borrower record in the Register the assignment of such Note or Notes in an amount equal to the principal amount of the Loan assigned to the Assignee pursuant hereto, as specified on Schedule 1 attached hereto, and if requested by the Assignor, Borrower shall issue to the Assignee a new Note or Notes representing the principal amount of the Loan assigned to the Assignee and return a new Note or Notes representing the principal amount of the Loan retained

by the Assignor, if any, upon which issuances the Note or Notes attached hereto shall be cancelled.

3. The Assignee (i) confirms that it has received a copy of the Loan Agreement, the Note or Notes and the other Loan Documents, together with such documents and information as it has deemed appropriate to make its own credit analysis and decision to enter into this Assignment and Acceptance; (ii) agrees that it will, independently and without reliance upon Lender or the Assignor based on such documents and information as it shall deem appropriate at the time, continue to make its own credit decisions in taking or not taking action under the Loan Agreement or the Note or Notes and the other Loan Documents; and (iii) agrees that it will perform in accordance with their terms all of the obligations first arising on or after the date hereof that by the terms of the Loan Agreement and the other Loan Documents are required to be performed by it as an assignee of an interest therein, to the extent of the interest assigned to it by Assignor.

4. The effective date for this Assignment and Acceptance (the " **Effective Date** ") shall be the date set forth on Schedule 1 attached hereto.

5. As of the Effective Date, (i) the Assignee shall be a party to (or the holder of) the Loan Agreement, the Note or Notes and the other Loan Documents (or the portion thereof assigned to the Assignee) and have the rights and, to the extent provided in this Assignment and Acceptance, obligations of an assignee thereof, to the extent of the portion thereof assigned to Assignee by Assignor, and (ii) the Assignor shall relinquish its rights and, to the extent provided in the Loan Agreement and this Assignment and Acceptance, be released from its obligations under the Loan Agreement and the Note (or the portion thereof assigned by Assignor to Assignee).

6. From and after the Effective Date, Borrower shall continue to make or cause to be made all payments under the Loan Agreement, the Note or Notes and all other Loan Documents in respect of the interest assigned hereby (including, without limitation, all payments of principal, interest and any other fees or expenses due from time to time thereunder with respect thereto) in accordance with Articles 3, 4 and 5 of the Agreement. The Assignor and Assignee shall make all appropriate adjustments in payments under the Loan Agreement, the Note or Notes and the other Loan Documents for all periods from and after the Effective Date directly between themselves.

7. This Assignment and Acceptance shall be governed by, and construed in accordance with, the laws of the State of New York, including but not limited to General Obligations Law Section 5-1401 but otherwise without regard to any laws of such jurisdiction concerning conflicts or choice of law.

8. This Assignment and Acceptance may be executed in any number of counterparts and by different parties hereto in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. Delivery of an executed counterpart of this Assignment and Acceptance and of Schedule 1 hereto by telecopier shall be effective as delivery of a manually executed counterpart of this Assignment and Acceptance.

* * *

IN WITNESS WHEREOF, the Assignor and the Assignee have caused this Assignment and Acceptance and Schedule 1 to this Assignment and Acceptance to be executed by their officers thereunto duly authorized as of the date specified on Schedule 1.

ASSIGNOR:

ASSIGNEE:

SCHEDULE 1 TO
ASSIGNMENT AND ACCEPTANCE

As to the Loan which is being assigned:

Aggregate outstanding principal amount of the Loan assigned:

Principal amount of Loan payable to Assignee:

Effective Date: [●], 20[●]

ASSIGNOR:

ASSIGNEE:

EXHIBIT I

FORM OF

BLOCKED ACCOUNT CONTROL AGREEMENT
("LENDING CONTROL")

[IF ACCOUNTS NOT COMPLETE AT CLOSING,
TO BE INSERTED POST-CLOSING]

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EXHIBIT J

FORM OF

OFFICER'S CERTIFICATE

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EXHIBIT K-1

FORM OF U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Lenders That Are Not Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Credit Agreement dated as of [·] (as amended, supplemented or otherwise modified from time to time, the " Credit Agreement "), among HealthCare Royalty Partners III, L.P., as lender (" Lender "), and Adamas Pharma, LLC, a Delaware limited liability company, as borrower (" Borrower ").

Pursuant to the provisions of Section 5.01 of the Credit Agreement, the undersigned hereby certifies that (i) it is the sole record and beneficial owner of the Loan(s) (as well as any Note(s) evidencing such Loan(s)) in respect of which it is providing this certificate, (ii) it is not a bank within the meaning of Section 881(c)(3)(A) of the Code, (iii) it is not a ten percent shareholder of the Borrower within the meaning of Section 871(h)(3)(B) of the Code and (iv) it is not a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished the Borrower with a certificate of its non-U.S. Person status on IRS Form W-8BEN or IRS Form W-8BEN-E. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform the Borrower, and (2) the undersigned shall have at all times furnished the Borrower with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Credit Agreement and used herein shall have the meanings given to them in the Credit Agreement.

By: _____

Name:

Title:

Date: _____ __, 20[ ]

[*] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

EXHIBIT K-2

FORM OF U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Participants That Are Not Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Credit Agreement dated as of [·] (as amended, supplemented or otherwise modified from time to time, the " Credit Agreement "), among HealthCare Royalty Partners III, L.P., as lender (" Lender "), and Adamas Pharma, LLC, a Delaware limited liability company, as borrower (" Borrower ").

Pursuant to the provisions of Section 5.1 of the Credit Agreement, the undersigned hereby certifies that (i) it is the sole record and beneficial owner of the participation in respect of which it is providing this certificate, (ii) it is not a bank within the meaning of Section 881(c)(3)(A) of the Code, (iii) it is not a ten percent shareholder of the Borrower within the meaning of Section 871(h)(3)(B) of the Code, and (iv) it is not a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished its participating Lender with a certificate of its non-U.S. Person status on IRS Form W-8BEN or IRS Form W-8BEN-E. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform such Lender in writing, and (2) the undersigned shall have at all times furnished such Lender with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Credit Agreement and used herein shall have the meanings given to them in the Credit Agreement.

By: _____

Name:

Title:

Date: _____ __, 20[ ]

EXHIBIT K-3

FORM OF U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Participants That Are Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Credit Agreement dated as of [·] (as amended, supplemented or otherwise modified from time to time, the " Credit Agreement "), among HealthCare Royalty Partners III, L.P., as lender (" Lender "), and Adamas Pharma, LLC, a Delaware limited liability company, as borrower (" Borrower ").

Pursuant to the provisions of Section 5.1 of the Credit Agreement, the undersigned hereby certifies that (i) it is the sole record owner of the participation in respect of which it is providing this certificate, (ii) its direct or indirect partners/members are the sole beneficial owners of such participation, (iii) with respect such participation, neither the undersigned nor any of its direct or indirect partners/members is a bank extending credit pursuant to a loan agreement entered into in the ordinary course of its trade or business within the meaning of Section 881(c)(3)(A) of the Code, (iv) none of its direct or indirect partners/members is a ten percent shareholder of the Borrower within the meaning of Section 871(h)(3)(B) of the Code and (v) none of its direct or indirect partners/members is a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished its participating Lender with IRS Form W-8IMY accompanied by one of the following forms from each of its partners/members that is claiming the portfolio interest exemption: (i) an IRS Form W-8BEN or IRS Form W-8BEN-E or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN or IRS Form W-8BEN-E from each of such partner's/member's beneficial owners that is claiming the portfolio interest exemption. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform such Lender and (2) the undersigned shall have at all times furnished such Lender with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Credit Agreement and used herein shall have the meanings given to them in the Credit Agreement.

By: _____

Name:

Title:

Date: _____ __, 20[ ]

EXHIBIT K-4

FORM OF U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Lenders That Are Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Credit Agreement dated as of [·] (as amended, supplemented or otherwise modified from time to time, the " Credit Agreement "), among HealthCare Royalty Partners III, L.P., as lender (" Lender "), and Adamas Pharma, LLC, a Delaware limited liability company, as borrower (" Borrower ").

Pursuant to the provisions of Section 5.1 of the Credit Agreement, the undersigned hereby certifies that (i) it is the sole record owner of the Loan(s) (as well as any Note(s) evidencing such Loan(s)) in respect of which it is providing this certificate, (ii) its direct or indirect partners/members are the sole beneficial owners of such Loan(s) (as well as any Note(s) evidencing such Loan(s)), (iii) with respect to the extension of credit pursuant to this Credit Agreement or any other Loan Document, neither the undersigned nor any of its direct or indirect partners/members is a bank extending credit pursuant to a loan agreement entered into in the ordinary course of its trade or business within the meaning of Section 881(c)(3)(A) of the Code, (iv) none of its direct or indirect partners/members is a ten percent shareholder of the Borrower within the meaning of Section 871(h)(3)(B) of the Code and (v) none of its direct or indirect partners/members is a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished the Borrower with IRS Form W-8IMY accompanied by one of the following forms from each of its partners/members that is claiming the portfolio interest exemption: (i) an IRS Form W-8BEN or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN from each of such partner's/member's beneficial owners that is claiming the portfolio interest exemption. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform the Borrower, and (2) the undersigned shall have at all times furnished the Borrower with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Credit Agreement and used herein shall have the meanings given to them in the Credit Agreement.

By: _____

Name:

Title:

Date: _____ __, 20[ ]

SCHEDULE 7.01

PATENTS

[*]

SCHEDULE 7.01(k)

COMMISSIONS OR BROKERS FEES

None.

SCHEDULE 7.01(p)

MATERIAL CONTRACTS – BORROWER

[*]

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SCHEDULE 7.01(n)(7)

CERTAIN CLAIMS

1. In January 2016, the United States District Court for the District of Delaware issued a claim construction (Markman) ruling in the Namenda XR ® litigation that includes findings of indefiniteness as to certain claim terms of U.S. Patent Nos. 8,168,209; 8,173,708; 8,283,379; 8,329,752; 8,362,085; and 8,598,233. On July 26, 2016, the District Court issued a final judgment of invalidity on those patents based upon the Markman ruling. The Company and Forest appealed that final judgment to the United States Court of Appeals for the Federal Circuit (Nos. 2016-2550, 2016-2553), which is ongoing.
2. [*].
3. [*].
4. On April 20, 2017, European Patent Attorney Dr. Gabriele Ahrens filed with the European Patent Office an Opposition against EP 2 506 709 B1 (Application No. 10 835 150.3).

SCHEDULE 7.02(j)

COMMISSIONS OR BROKER'S FEES - COMPANY

Consulting fee payable to [*] in an amount equal to [*], net of any payments made to date.

SCHEDULE 7.02(n)

MATERIAL CONTRACTS – COMPANY OR SUBSIDIARIES

License Agreement dated as of November 13, 2012 between Forest Laboratories Holdings Limited and Adamas Pharmaceuticals, Inc. (the " ***Company*** ").
[*]
[*]
[*]
[*]
[*]

[*] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

SCHEDULE 7.02(aa)

Scheduled Indebtedness and Liabilities

None.

SCHEDULE 7.02(bb)

FILING OFFICE

The Secretary of State of the State of Delaware.

Exhibit 10.4

EXECUTION

SECURED PROMISSORY NOTE
(Initial Tranche Loan)

THIS NOTE AND THE OBLIGATIONS REPRESENTED HEREBY MAY NOT BE TRANSFERRED EXCEPT IN COMPLIANCE WITH THE TERMS AND PROVISIONS OF THE LOAN AGREEMENT REFERRED TO BELOW. TRANSFERS OF THIS NOTE AND THE OBLIGATIONS REPRESENTED HEREBY MUST BE RECORDED IN THE REGISTER MAINTAINED BY THE BORROWER PURSUANT TO THE TERMS OF THE LOAN AGREEMENT. IN ADDITION, THIS NOTE MAY NOT BE OFFERED, SOLD, PLEDGED, HEDGED OR OTHERWISE TRANSFERRED WITHOUT THE PRIOR WRITTEN CONSENT OF THE BORROWER, WHICH CONSENT SHALL, FOR PURPOSES OF THIS SENTENCE, BE DEEMED TO HAVE BEEN GIVEN UPON THE REQUEST OF THE HOLDER HEREOF.

New York, New York

$35,000,000.00 Dated: May 11, 2017

FOR VALUE RECEIVED, the undersigned, Adamas Pharma, LLC, a Delaware limited liability company, with offices located at 1900 Powell Street, Emeryville, California 94608 (" **Borrower** ") HEREBY PROMISES TO PAY to the order of HEALTHCARE ROYALTY PARTNERS III, L.P. (" **Lender** ") the principal amount of THIRTY FIVE MILLION DOLLARS ($35,000,000.00) or such lesser amount as shall equal the outstanding principal balance of the Initial Tranche Loan made to Borrower by Lender, plus interest on the aggregate unpaid principal amount of such Initial Tranche Loan, at the rates and in accordance with the terms of the Loan Agreement, dated as of May 11, 2017 by and between Borrower and Lender (as amended, restated, supplemented or otherwise modified from time to time, the "Loan Agreement"). If not sooner paid, the entire principal amount and all accrued and unpaid interest hereunder shall be due and payable on the Maturity Date as set forth in the Loan Agreement. Any capitalized term not otherwise defined herein shall have the meaning attributed to such term in the Loan Agreement.

Principal, interest, and all other amounts (including but not limited to additional amounts, if any, payable under Section 3.02 of the Loan Agreement) due with respect to the Initial Tranche Loan under the Loan Agreement or the other Loan Documents, are payable in lawful money of the United States of America to Lender as set forth in the Loan Agreement and this Secured Promissory Note (this " **Note** "). The principal amount of this Note and the interest rate applicable thereto, and all payments made with respect thereto, shall be recorded by Lender and, prior to any transfer hereof, endorsed on the grid attached hereto which is part of this Note.

This Note is a Loan Document, is entitled to the benefits of the Loan Documents, is subject to the Loan Agreement and evidences the Indebtedness incurred thereunder.

The Loan Agreement, among other things, (a) provides for the making of an Initial Tranche Loan by Lender to Borrower, and (b) contains provisions for acceleration of the maturity hereof upon the happening of certain stated events and also for prepayments on account of the principal hereof, together with interest and other amounts, upon the terms and conditions specified therein.

This Note may not be prepaid except as set forth in Section 3.02 of the Loan Agreement.

This Note and the obligation of Borrower to repay the unpaid principal amount of the Initial Tranche Loan, interest on the Initial Tranche Loan and all other amounts due Lender under the Loan Agreement and other Loan Documents, is secured under the Security Agreement and by the pledge under the Stock Pledge Agreement.

Presentment for payment, demand, notice of protest and all other demands and notices of any kind in connection with the execution, delivery, performance and enforcement of this Note are hereby waived.

This Note is a registered obligation, transferable only upon notation in the Register, and no assignment hereof shall be effective until recorded therein in accordance with Section 5.05 of the Loan Agreement.

THIS NOTE SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK, INCLUDING GENERAL OBLIGATIONS LAW SECTIONS 5-1401 AND 5-1402 BUT OTHERWISE WITHOUT GIVING EFFECT TO LAWS CONCERNING CONFLICTS OF LAWS OR CHOICE OF FORUM THAT WOULD REQUIRE APPLICATION OF THE LAWS OF ANOTHER JURISDICTION.

Sections 1.02 (Rules of Construction), 4.03 (Interest on Late Payments), 4.05 (Administration and Enforcement Expenses), 8.10 (Waiver of Stay, Extension or Usury Laws), 12.11 (Jurisdiction), 12.12 (Waiver of Jury Trial) and 12.13 (Waiver of Immunity) of the Loan Agreement shall be deemed incorporated herein *mutatis mutandis* .

The ownership of an interest in this Note shall be registered on a record of ownership maintained by Borrower or its agent. Notwithstanding anything else in this Note to the contrary, the right to the principal of, and stated interest on, this Note may be transferred only if the transfer is registered on such record of ownership and the transferee is identified as the owner of an interest in the obligation. Borrower shall be entitled to treat the registered holder of this Note (as recorded on such record of ownership) as the owner in fact thereof for all purposes and shall not be bound to recognize any equitable or other claim to or interest in this Note on the part of any other person or entity.

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IN WITNESS WHEREOF, Borrower has caused this Note to be duly executed by one of its officers thereunto duly authorized on the date hereof.

BORROWER:

ADAMAS PHARMA, LLC
By: ADAMAS PHARMACEUTICALS, INC.,
its manager

By: /s/ Gregory T. Went
Name: Gregory T. Went, Ph.D.
Title: Chief Executive Officer and Chairman

LOAN INTEREST AND PAYMENTS OF PRINCIPAL
INITIAL TRANCHE LOAN

Date	Principal Amount	Interest	Payment Amount	Notation By

Exhibit 31.1

CERTIFICATION OF THE CHIEF EXECUTIVE OFFICER
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Gregory T. Went, Ph.D., hereby certify that:

1. I have reviewed this quarterly report on Form 10-Q of Adamas Pharmaceuticals, Inc.;

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

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

4. The registrant's other certifying officer 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 registrant's most recent fiscal quarter (the registrant's fourth 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.

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 registrant's board of directors (or persons performing the equivalent functions):

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

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

Date: August 8, 2017

/s/ Gregory T. Went, Ph.D.

Gregory T. Went, Ph.D.
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF THE CHIEF FINANCIAL OFFICER
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Alfred G. Merriweather, hereby certify that:

1. I have reviewed this quarterly report on Form 10-Q of Adamas Pharmaceuticals, Inc.;

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

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

4. The registrant's other certifying officer 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 registrant's most recent fiscal quarter (the registrant's fourth 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.

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 registrant's board of directors (or persons performing the equivalent functions):

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

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

Date: August 8, 2017

/s/ Alfred G. Merriweather

Alfred G. Merriweather
Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 32.1

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

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, (the "Exchange Act") and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), Gregory T. Went, Ph.D., Chief Executive Officer of Adamas Pharmaceuticals, Inc. (the "Company"), and Alfred G. Merriweather, Chief Financial Officer of the Company, each hereby certifies that, to the best of his knowledge:

1. The Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2017 , to which this Certification is attached as Exhibit 32.1 (the "Periodic Report"), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and

2. The information contained in the Annual Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

IN WITNESS WHEREOF , the undersigned have set their hands hereto as of the 8th day of August, 2017 .

/s/ Gregory T. Went, Ph.D.	/s/ Alfred G. Merriweather
Gregory T. Went, Ph.D.	Alfred G. Merriweather
Chief Executive Officer	Chief Financial Officer
(Principal Executive Officer)	(Principal Financial and Accounting Officer)

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 the Registrant 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.