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

FORM 10-Q

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

For the quarterly period ended March 31, 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 Number 001-37880

Novan, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**20-4427682**
(State or other jurisdiction of incorporation or organization	**(I.R.S. Employer Identification No.)**
4105 Hopson Road Morrisville, North Carolina	**27560**
(Address of principal executive offices)	**(zip code)**

(919) 485-8080
(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Sections 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes ☒ No ☐

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

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

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ☐ No ☒

As of May 10, 2017, there were 15,969,493 shares of the registrant's Common Stock outstanding.

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

NOVAN, INC.
Condensed Consolidated Balance Sheets
(in thousands, except share and per share amounts)

	March 31, 2017 (unaudited)	December 31, 2016
ASSETS		
Current assets:		
Cash and cash equivalents	$ 30,088	$ 34,611
Prepaid expenses and other current assets	1,029	958
Total current assets	31,117	35,569
Restricted cash	539	539
Intangible assets	75	75
Other assets	295	—
Property and equipment, net	16,546	16,290
Total assets	$ 48,572	$ 52,473
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 2,002	$ 3,130
Accrued compensation	1,608	2,305
Accrued outside research and development services	2,715	5,737
Accrued legal and professional fees	772	382
Other accrued expenses	1,992	1,813
Deferred revenue, current portion	2,403	—
Capital lease obligation, current portion	10	10
Total current liabilities	11,502	13,377
Deferred revenue, net of current portion	8,310	—
Capital lease obligation, net of current portion	30	32
Facility financing obligation	7,998	7,998
Total liabilities	27,840	21,407
Commitments and contingencies (Notes 2, 3 and 5)		
Stockholders' equity		
Preferred stock $0.0001 par value; 10,000,000 shares designated as of March 31, 2017 and December 31, 2016; 0 shares issued and outstanding as of March 31, 2017 and December 31, 2016	—	—
Common stock $0.0001 par value; 200,000,000 shares authorized as of March 31, 2017 and December 31, 2016; 15,978,993 and 15,949,492 shares issued as of March 31, 2017 and December 31, 2016; 15,969,493 and 15,939,992 shares outstanding as of March 31, 2017 and December 31, 2016	2	2
Additional paid-in-capital	155,525	154,252
Treasury stock at cost, 9,500 shares as of March 31, 2017 and December 31, 2016	(155)	(155)
Accumulated deficit	(134,640)	(123,033)
Total stockholders' equity	20,732	31,066
Total liabilities and stockholders' equity	$ 48,572	$ 52,473

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

NOVAN, INC.
Condensed Consolidated Statements of Operations and Comprehensive Loss
(unaudited)
(in thousands, except share and per share amounts)

	Three Months Ended March 31,	
	2017	2016
License and collaboration revenue	$ 100	$ —
Operating expenses:		
Research and development	6,946	7,905
General and administrative	4,531	3,367
Total operating expenses	11,477	11,272
Operating loss	(11,377)	(11,272)
Other (expense) income, net	(230)	12
Net loss and comprehensive loss	$ (11,607)	$ (11,260)
Net loss per share, basic and diluted	$ (0.73)	$ (4.60)
Weighted-average common shares outstanding, basic and diluted	15,967,882	2,445,351

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

NOVAN, INC.
Condensed Consolidated Statements of Cash Flows
(unaudited)
(in thousands)

	Three Months Ended March 31,	
	2017	2016
Cash flow from operating activities:		
Net loss	$ (11,607)	$ (11,260)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	299	186
Share-based compensation	1,252	227
Gain on disposal of property and equipment	—	(2)
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	(71)	(143)
Accounts payable	(1,022)	(795)
Accrued compensation	(697)	8
Accrued outside research and development services	(3,022)	1,724
Accrued legal and professional fees	390	53
Accrued expenses	96	791
Deferred revenue	10,713	—
Other	(295)	(8)
Net cash used in continuing operating activities	(3,964)	(9,219)
Net cash used in discontinued operating activities	—	(258)
Net cash used in operating activities	(3,964)	(9,477)
Cash flow from investing activities:		
Purchases of property and equipment	(578)	(497)
Purchase of intangible asset	—	(75)
Net cash used in investing activities	(578)	(572)
Cash flow from financing activities:		
Payments related to public offering costs	—	(959)
Proceeds from exercise of stock options	21	34
Payments on capital lease obligation	(2)	(2)
Net cash provided by (used in) financing activities	19	(927)
Net decrease in cash and cash equivalents	(4,523)	(10,976)
Cash and cash equivalents as of beginning of period	34,611	45,688
Cash and cash equivalents as of end of period	$ 30,088	$ 34,712
Supplemental disclosure of non-cash investing and financing activities:		
Purchases of equipment with accounts payable and accrued expenses	$ 397	$ 217
Non-cash addition to facility financing obligation	$ —	$ 3,223
Non-cash addition to deferred offering costs	$ —	$ 625

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

Note 1: Organization and Significant Accounting Policies

Business Description and Basis of Presentation

Novan, Inc. ("Novan" and together with its subsidiary, the "Company"), is a North Carolina-based late-stage pharmaceutical company focused on the development and commercialization of nitric oxide-based therapies in dermatology. Novan was incorporated in January 2006 under the state laws of Delaware and its subsidiaries were organized in 2015 under the state laws of North Carolina, including KNOW Bio, LLC ("KNOW Bio") organized in December 2015.

On December 30, 2015, the Company completed the distribution of 100% of the outstanding member interests of KNOW Bio to Novan's stockholders (the "Distribution"), pursuant to which KNOW Bio became an independent privately held company. Beginning in the fourth quarter of 2015, KNOW Bio's financial results for periods prior to the Distribution were reflected in the Company's consolidated financial statements, retrospectively, as discontinued operations. During the three months ended March 31, 2016, the Company made payments of accounts payable associated with the discontinued operations that were not assumed by KNOW Bio as part of the Distribution. These payments are classified as discontinued operating activities on the Condensed Consolidated Statement of Cash Flows for the three months ended March 31, 2016.

The Company does not own an equity interest in KNOW Bio and has no significant influence by contract or other means. The Company entered into a master development services and clinical supply agreement and a related statement of work with KNOW Bio in April and May of 2017 (see Note 9—Subsequent Events). Under the current statement of work, the Company will provide certain development services to KNOW Bio. In exchange for these services, KNOW Bio will pay service fees for actual time and materials incurred by the Company on a cost-plus basis. The master development services and clinical supply agreement and the related statement of work does not provide the Company with an ability to significantly influence KNOW Bio or its operations.

The accompanying condensed consolidated financial statements of the Company have been prepared in accordance with generally accepted accounting principles in the United States of America ("U.S. GAAP"). The year-end condensed balance sheet data was derived from audited financial statements but does not include all disclosures required by U.S. GAAP.

Liquidity and Ability to Continue as a Going Concern

The Company's condensed consolidated financial statements have been prepared assuming that the Company will continue as a going concern, which contemplates the realization of assets and the settlement of liabilities and commitments in the normal course of business. The accompanying condensed consolidated financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that may result from uncertainty related to the Company's ability to continue as a going concern.

The Company has evaluated principal conditions and events that may raise substantial doubt about its ability to continue as a going concern within one year from the date that these financial statements are issued. The Company identified the following conditions:

- The Company has reported a net loss in all fiscal periods since inception and, as of March 31, 2017, the Company had an accumulated deficit of $134,640.
- The Company's primary use of cash is to fund its operating expenses, which consist principally of research and development expenditures necessary to advance its product candidates. The Company has evaluated its expected, probable future cash flow needs and has determined that it expects to incur substantial losses in the future as it conducts planned operating activities. The Company expects that the amount of cash and cash equivalents on hand as of March 31, 2017 will not be sufficient to fund all planned operating activities within one year from the date that these financial statements are issued.

The Company has concluded that these conditions raise substantial doubt about the Company's ability to continue as a going concern within one year from the date that these financial statements are issued. To mitigate these conditions, the Company needs and intends to raise additional funds through equity or debt financings or generate revenues from collaborative partners prior to the commercialization of the Company's product candidates. There can be no assurance that the Company will be able to obtain additional debt or equity financing or generate revenues from collaborative partners, on terms acceptable to the Company, on a timely basis or at all. The failure of the Company to obtain sufficient funds on acceptable terms when needed could cause the Company to alter or

reduce its planned operating activities, including but not limited to delaying planned product candidate development activities, to conserve its cash and cash equivalents. Such actions could delay development timelines and have a material adverse effect on the Company's results of operations and financial condition. Additionally, there is no assurance that the Company can achieve its development milestones or that its intellectual property rights will not be challenged.

Basis of Consolidation

The accompanying condensed consolidated financial statements reflect the operations of the Company and its wholly owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amount of revenues and expenses during the reporting period. Actual results could differ from these estimates.

Unaudited Interim Condensed Consolidated Financial Statements

The accompanying interim condensed consolidated financial statements and the related footnote disclosures are unaudited. These unaudited interim condensed consolidated financial statements have been prepared in accordance with U.S. GAAP on the same basis as the audited consolidated financial statements and in the opinion of management, reflect all adjustments of a normal, recurring nature that are necessary for the fair statement of the Company's financial position as of March 31, 2017 and its results of operations and cash flows for the three months ended March 31, 2017 and 2016. The results for the three months ended March 31, 2017 are not necessarily indicative of the results expected for the full fiscal year or any future period. These interim financial statements should be read in conjunction with the financial statements and notes set forth in the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 20, 2017.

Leases

The Company leases office space and certain equipment under non-cancelable lease agreements. The leases are reviewed for classification as operating or capital leases. For operating leases, rent is recognized on a straight-line basis over the lease period. For capital leases, the Company records the leased asset with a corresponding liability and amortizes the asset over the lease term. Payments are recorded as reductions to the liability with an appropriate interest charge recorded based on the then-outstanding remaining liability.

The Company considers the nature of the renovations and the Company's involvement during the construction period of newly leased office space to determine if it is considered to be the owner of the construction project during the construction period. If the Company determines that it is the owner of the construction project, it is required to capitalize the fair value of the building as well as the construction costs incurred, including capitalized interest, on its consolidated balance sheet along with a corresponding financing liability ("build-to-suit accounting"). Upon completion of the construction of the facility under a build-to-suit lease, the Company assesses whether the circumstances qualify for sales recognition under the sale-leaseback accounting guidance. If the lease meets the sale-leaseback criteria, the Company will remove the asset and related financial obligation from the balance sheet and evaluate the lease for treatment as a capital or operating lease. If upon completion of construction, the project does not meet the sale-leaseback criteria, the leased property will be treated as an asset financing for financial reporting purposes. The portion of the facility financing obligation representing the principal that will be repaid in the next 12 months will be classified as a current liability in the consolidated balance sheets, with the remaining portion of the obligation classified as a noncurrent liability. See Note 5—Commitments and Contingencies for further discussion of the Company's application of this guidance related to the Company's primary facility lease.

Research and Development Expense Accruals

The Company is required to estimate its expenses resulting from its obligations under contracts with clinical research organizations, clinical site agreements, vendors, and consultants in connection with conducting clinical trials and preclinical development. The financial terms of these contracts are subject to negotiations which vary from contract to contract, and may result in payment flows

that do not match the periods over which materials or services are provided to the Company under such contracts. The Company's objective is to reflect the appropriate development and trial expenses in its financial statements by matching those expenses with the period in which the services and efforts are expended.

For clinical trials, the Company accounts for these expenses according to the progress of the trial as measured by actual hours expended by contract research organization (CRO) personnel, investigator performance or completion of specific tasks, patient progression, or timing of various aspects of the trial. During the course of a clinical trial, the Company adjusts its rate of clinical trial expense recognition if actual results differ from its estimates. The Company makes estimates of its accrued expenses as of each balance sheet date in its financial statements based on facts and circumstances known at that time. Although the Company does not expect its estimates to be materially different from amounts actually incurred, its understanding of status and timing of services performed relative to the actual status and timing of services performed may vary and may result in the Company reporting amounts that are too high or too low for any particular period. The Company's clinical trial accrual is partially dependent upon the timely and accurate reporting of fee billings and passthrough expenses from CROs and other outside service providers as well as the timely processing of any change orders from the contract research organizations.

For preclinical development services performed by outside service providers, the Company determines accrual estimates through financial models, taking into account development progress data received from outside service providers and discussions with applicable Company and service provider personnel.

During the first quarter of 2017, the Company obtained final trial activity data and reached an agreement on final trial costs with the CRO that conducted the Company's SB206 Phase 2 trial. As a result, the Company recorded a $442 reduction to the accrued trial cost estimate as of and for the quarter ended March 31, 2017.

Revenue Recognition—Licensing Arrangements

The Company recently entered into a licensing arrangement, and may enter into additional licensing arrangements in the future, in exchange for non-refundable upfront payments and potential future milestone and royalty payments. Such arrangements include multiple elements, including the sale of licenses and the provision of services. For arrangements that involve the delivery of more than one element, each product, service and/or right to use assets is evaluated to determine whether it qualifies as a separate unit of accounting. This determination is based on whether the deliverable has "stand-alone value" to the licensee. The consideration that is fixed or determinable is then allocated to each separate unit of accounting based on the relative selling prices of each deliverable. The consideration allocated to each unit of accounting is recognized as the related goods and services are delivered, limited to the consideration that is not contingent upon future deliverables. When an arrangement is accounted for as a single unit of accounting, we determine the period over which the performance obligations will be performed and revenue recognized. Management exercises significant judgment in the determination of (i) whether a deliverable has stand-alone value, (ii) whether the deliverable is considered to be a separate unit of accounting and (iii) the estimation of the relative fair value of each deliverable in the arrangement.

The Company recognizes a milestone payment when earned if it is substantive and the Company has no ongoing performance obligations related to the milestone. A milestone payment is considered substantive if it: (i) is commensurate with either the Company's performance to achieve the milestone or the enhanced value of the delivered item as a result of a specific outcome from the performance to achieve the milestone; (ii) relates solely to past performance; and (iii) is reasonable relative to all of the deliverables and payment terms, including other potential milestone consideration, within the arrangement.

Share-Based Compensation

Employees. The Company applies the fair value method of accounting for share-based compensation, which requires all such compensation to employees, including the grant of employee stock options, to be recognized in the statement of operations based on its fair value at the measurement date (generally the grant date). The expense associated with share-based compensation is recognized on a straight-line basis over the service period of each award. Share-based awards granted to non-employee directors as compensation for serving on the Company's Board of Directors are accounted for in the same manner as employee share-based compensation awards.

Non-employees. For share-based compensation granted to non-employees, other than non-employee directors, the measurement date is generally considered to be the date when all services have been rendered or the date that options are fully vested.

The fair value of each option grant is estimated using a Black-Scholes option-pricing model on the grant date using expected volatility, risk-free interest rate, expected life of options and fair value per share assumptions. Due to limited historical data, the Company estimates stock price volatility based on the actual volatility of comparable publicly traded companies over the expected life of the option. In evaluating similarity, the Company considered factors such as industry, stage of life cycle, financial leverage, size and risk profile.

The Company does not have sufficient history of exercise of stock options to estimate the expected term of employee stock options and thus continues to calculate expected life based on the mid-point between the vesting date and the contractual term, which is in accordance with the simplified method. The expected term for share-based compensation granted to non-employees is the contractual life. The risk-free rate is based on the U.S. Treasury yield curve during the expected life of the option.

Income Taxes

The Company did not record a federal or state income tax benefit for the three months ended March 31, 2017 and 2016 due to its conclusion that a full valuation allowance is required against the Company's deferred tax assets.

Deferred tax assets and liabilities are determined based on the temporary differences between the financial statement carrying amounts and the tax bases of assets and liabilities using the enacted tax rates in effect in the years in which the differences are expected to reverse. In estimating future tax consequences, all expected future events are considered other than enactment of changes in the tax law or rates.

The Company recognizes the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities based on the technical merits of the position.

The Company's policy for recording interest and penalties is to record them as a component of interest expense and general and administrative expenses. As of March 31, 2017 and December 31, 2016, the Company accrued no interest penalties related to uncertain tax positions.

Tax years that remain subject to examination by federal and state tax jurisdictions date back to the year ended December 31, 2008. The Company has not been informed by any tax authorities for any jurisdiction that any of its tax years are under examination.

The determination of recording or releasing a tax valuation allowance is made, in part, pursuant to an assessment performed by management regarding the likelihood that the Company will generate future taxable income against which benefits of its deferred tax assets may or may not be realized. This assessment requires management to exercise judgment and make estimates with respect to its ability to generate taxable income in future periods.

In accordance with Section 382 of the Internal Revenue Code of 1986, as amended, a change in equity ownership of greater than 50% within a three-year period results in an annual limitation on the Company's ability to utilize its net operating loss carryforwards created during the tax periods prior to the change in ownership. The Company has not determined whether ownership changes exceeding this threshold, including the Company's initial public offering ("IPO"), have occurred. If a change in equity ownership has occurred which exceeds the Section 382 threshold, a portion of the Company's net operating loss carryforwards may be limited.

Net Loss Per Share

Basic net loss per share is calculated by dividing net loss by the weighted average shares outstanding during the period, without consideration for common stock equivalents. Diluted net loss per share is calculated by adjusting weighted average shares outstanding for the dilutive effect of common stock equivalents outstanding for the period. Diluted net loss per share is the same as basic net loss per share, since the effects of potentially dilutive securities are antidilutive for all periods presented.

(dollar values in thousands, except per share data)

The following securities, presented on a common stock equivalent basis, have been excluded from the calculation of weighted average common shares outstanding for the three months ended March 31, 2017 and 2016 because the effect is anti-dilutive due to the net loss reported in each of those periods. All share amounts presented in the table below represent the total number outstanding as of the end of each period. Subsequent to the completion of the IPO in September 2016, the convertible preferred stock securities are no longer potentially dilutive, because upon completion of the IPO, all outstanding shares of the convertible preferred stock were converted into shares of common stock at their conversion prices.

	March 31,	
	2017	2016
Convertible preferred stock	—	8,776,269
Stock options outstanding	974,712	612,066

Segment Information

The Company has determined that it operates in one segment. The Company uses its nitric oxide-based technology to develop product candidates. The Chief Executive Officer, who is the Company's chief operating decision maker, reviews financial information on an aggregate basis for purposes of allocating resources and evaluating financial performance. The Company has only had limited revenue since its inception, but all of it was derived in the United States, and all of the Company's long-lived assets are maintained in the United States.

Recently Issued Accounting Standards

Accounting Pronouncements Adopted

In March 2016, the FASB issued ASU No. 2016-09, *Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*. The FASB issued ASU 2016-09 to simplify several aspects of the accounting for share-based payment transactions, including the income tax consequences. This ASU is effective for annual and interim periods beginning after December 15, 2016, with early adoption permitted. This standard was effective for the Company as of January 1, 2017. The adoption of this standard did not have a material impact on its financial statements.

In October 2016, the FASB issued ASU No. 2016-17, *Consolidation (Topic 810): Interests Held through Related Parties That Are under Common Control,* which amends the consolidation guidance on how a reporting entity that is a single decision maker of a variable interest entity should treat indirect interests in the entity held through related parties that are under common control. This guidance is effective for annual periods beginning after December 15, 2016, including interim periods within those annual periods, with early adoption permitted. This ASU was effective for the Company as of January 1, 2017. Adoption of this standard did not have a material impact on its financial statements.

Accounting Pronouncements Being Evaluated

In May 2014, the FASB and the International Accounting Standards Board issued a converged standard on the recognition of revenue from contracts with customers. The converged standard has been codified within Topic 606, *Revenue from Contracts with Customers* of the FASB Accounting Standard Codification (ASC). The objective of the new standard is to establish a single comprehensive revenue recognition model that is designed to create greater comparability of financial statements across industries and jurisdictions. Under the new standard, companies will recognize revenue to depict the transfer of goods or services to customers in amounts that reflect the consideration to which a company expects to be entitled in exchange for those goods or services. The new standard also will require expanded disclosures on revenue recognition and changes in assets and liabilities that result from contracts with customers. In July 2015, the FASB delayed the effective date of the new standard by one year. Early adoption as of January 1, 2017 is permitted. In March, April and May of 2016, the FASB issued additional ASUs to amend Topic 606 and to provide expanded or clarifying guidance associated with the application of certain principles within the revenue recognition model, including the areas of principle and agent, identification of performance obligations, licensing and other improvements and practical expedients.

The Company intends to adopt the Topic 606 guidance on January 1, 2018. The Company is currently evaluating the impact that Topic 606 will have on reported revenues in 2017 and in future periods associated with the Sato licensing agreement (Note 3—Collaboration Arrangements) and the recently executed master development services and clinical supply agreement and a related

statement of work with KNOW Bio (Note 9—Subsequent Events). The Company is also evaluating the impact that the adoption of Topic 606 will have on its recognition of costs related to obtaining contracts. The standard permits the use of either the full retrospective or modified retrospective transition method and the Company has not yet selected which transition method it will apply.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. This guidance revises the accounting related to leases by requiring lessees to recognize a lease liability and a right-of-use asset for all leases. The new lease guidance also simplifies the accounting for sale and leaseback transactions. This ASU is effective for annual reporting periods beginning after December 15, 2018 and early adoption is permitted. The Company is currently evaluating the impact of the adoption of this ASU on its financial statements.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments.* The FASB issued ASU 2016-09 to improve U.S. GAAP by providing guidance on the cash flow statement classification of eight specific areas where there is existing diversity in practice. The FASB expects that the guidance in this ASU will reduce the current and potential future diversity in practice in such areas. This ASU is effective for annual and interim periods beginning after December 15, 2017, with early adoption permitted. The Company is currently evaluating the impact of the adoption of this ASU on its financial statements.

In November 2016, the FASB issued ASU No. 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash,* to improve U.S. GAAP by providing guidance on how to classify and present changes in restricted cash or restricted cash equivalents occurring due to transfers between cash, cash equivalents and restricted cash. This ASU is effective for annual and interim periods beginning after December 15, 2017, with early adoption permitted. The Company plans to adopt this standard on January 1, 2018 and is currently evaluating the impact of the adoption of this ASU on its financial statements.

In January 2017, the FASB issues ASU No. 2017-01, *Business Combinations (Topic 805): Clarifying the Definition of a Business*, which clarifies the definition of a business to provide additional guidance with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. This ASU is effective for annual periods beginning after December 15, 2017, including interim periods within those periods. The Company plans to adopt this standard on January 1, 2018 and is currently evaluating the impact of the adoption of this ASU on its consolidated financial statements.

Note 2: Research and Development Licenses

The Company has entered into various licensing agreements with universities and other research institutions under which the Company receives the rights, and in some cases substantially all of the rights, of the inventors, assignees or co-assignees to produce and market technology protected by certain patents and patent applications. The Company's primary license agreement is with the University of North Carolina at Chapel Hill ("UNC") and has been described in further detail within the subsection below. The counterparties to the Company's various other licensing agreements are the University of Akron Research Foundation, Hospital for Special Surgery, Strakan International S.a.r.l., which is a licensee of the University of Aberdeen, and KIPAX AB. The Company is generally required to make milestone payments based on development milestones and will be required to make royalty payments based on a percentage of future sales of covered products or a percentage of sublicensing revenue. Costs to acquire rights under license agreements and pre-commercialization milestone payments are classified as research and development expenses in the condensed consolidated statements of operations. Research and development expense recognized in connection with the incurrence of such costs totaled $0 and $100 during the three months ended March 31, 2017 and 2016, respectively.

The Company is generally required by the various licensing agreements to reimburse the licensor for certain legal and other patent related costs. These costs are expensed as incurred and are classified as general and administrative expenses in the condensed consolidated statements of operations. General and administrative expense recognized in connection with the incurrence of such costs totaled $14 and $30 during the three months ended March 31, 2017 and 2016.

These license agreements could require the Company to make payments upon achievement of certain milestones by the Company. As future royalty payments are directly related to future revenues (either sales or sublicensing), future commitments cannot be determined. No accrual for future payments under these agreements has been recorded, as the Company cannot estimate if, when or in what amount payments may become due.

UNC License Agreement

The Amended, Restated and Consolidated License Agreement dated June 27, 2012, as amended, (the "UNC Agreement") provides the Company with an exclusive license to issued patents and pending applications directed to the Company's library of Nitricil compounds, including patents issued in the U.S., Japan and Australia, with claims intended to cover NVN1000, the new chemical entity ("NCE") for the Company's product candidates. The UNC Agreement requires the Company to pay UNC up to $425 in regulatory and commercial milestones on a licensed product by licensed product basis and a running royalty percentage in the low single digits on net sales of licensed products. Additionally, as described in Note 3—Collaboration Arrangements, the Company made a payment to UNC in February 2017 representing the portion of the upfront payment under the license agreement entered into with Sato Pharmaceutical Co., Ltd. ("Sato") that was estimated to be directly attributable to the UNC intellectual property rights included in the license to Sato.

Unless earlier terminated, the UNC Agreement remains in effect on a country by country and licensed product by licensed product basis until the expiration of the last to expire issued patent covering such licensed product in the applicable country. The projected date of expiration of the last to expire of the patents issued under the UNC Agreement is 2033.

In connection with the UNC Agreement, the Company issued 115,865 shares of non-voting common stock to UNC and paid an upfront cash payment of $5 to UNC. During 2009, an additional 75,187 shares of non-voting common stock were issued to UNC in relation to the anti-dilution provision contained in the UNC Agreement. Upon completion of the IPO in September 2016, all shares of UNC's non-voting common stock were converted to common stock.

Note 3: Collarboration Arrangements

KNOW Bio Technology Agreement

In connection with the Distribution, the Company entered into exclusive license agreements and sublicense agreements with KNOW Bio, as described below. The agreements will continue for so long as there is a valid patent claim under the respective agreement, unless earlier terminated, and upon expiration, will continue as perpetual non-exclusive licenses. KNOW Bio has the right to terminate each such agreement, for any reason upon 90 days advance written notice to the Company.

License of existing and potential future intellectual property to KNOW Bio. The Company granted to KNOW Bio exclusive licenses, with the right to sublicense, to certain U.S. and foreign patents and patent applications controlled by the Company as of December 29, 2015. The Company also granted to KNOW Bio a non-exclusive license, with the right to sublicense, to any patents and patent applications that may become controlled by the Company during the three years immediately following the agreement's effective date related to nitric oxide-releasing compositions and methods of manufacturing thereof, including methods of manufacturing and other nitric oxide-based therapeutics.

Sublicense of UNC and other third party intellectual property to KNOW Bio. The Company also granted to KNOW Bio exclusive sublicenses, with the ability to further sublicense, under certain of the U.S. and foreign patents and patent applications exclusively licensed to the Company from UNC and another third party directed towards nitric oxide-releasing compositions, to develop and commercialize products utilizing the licensed technology. Under the exclusive sublicense to the UNC patents and applications, KNOW Bio is subject to the terms and conditions under the UNC License Agreement, including milestone and diligence payment obligations. There were no milestone or royalty payments required during the three months ended March 31, 2017 and 2016.

The exclusive license agreements and sublicense agreements will continue for so long as there is a valid patent claim under the respective agreement, unless earlier terminated, and upon expiration, will continue as perpetual non-exclusive licenses. KNOW Bio has the right to terminate each such agreement, for any reason upon ninety days advance written notice to the Company.

Sato License Agreement

Significant Terms

On January 12, 2017, the Company entered into a license agreement, and related amendment, with Sato, relating to SB204, its lead drug candidate for the treatment of acne vulgaris in Japan (the "Sato Agreement"). Pursuant to the Sato Agreement, the Company granted to Sato an exclusive, royalty-bearing, non-transferable right and license under certain of the Company's intellectual property

rights, with the right to sublicense with the Company's prior written consent, to develop, use and sell products in Japan that incorporate SB204 in certain topical dosage forms for the treatment of acne vulgaris, and to make the finished form of such products. The rights granted to Sato do not include the right to manufacture the active pharmaceutical ingredient of SB204, which the Company, or it's designated contract manufacturer, will retain the rights to supply to Sato. The Company, or it's designated contract manufacturer, will also supply finished product to Sato for use in the development of SB204 in the licensed territory. During a specified time period, Sato has an exclusive option to negotiate the terms under which its license would be expanded to include certain additional territories within Asia, subject to Sato's payment of a specified option exercise fee. Under the terms of the Sato Agreement, the Company also has exclusive rights to certain intellectual property that may be developed by Sato in the future, which the Company could choose to use for its own development and commercialization of SB204 outside of Japan.

In exchange for the licenses granted to Sato under the Sato Agreement, Sato agreed to pay the Company an upfront payment, as well as additional milestone payments upon achievement of various future development, regulatory and commercial milestones. Pursuant to the terms of the Sato Agreement, Sato was required to pay the Company an upfront payment of 1.25 billion Japanese Yen ("JPY"), which the Company received in January 2017 in the amount of $10,813 when converted to U.S. Dollars. Sato is also required to pay the Company an aggregate of 2.75 billion JPY upon the achievement of various dev elopment and regulatory milestones. Under the Sato Agreement, Sato also agreed to pay the Company up to an aggregate of 0.9 billion JPY in milestone payments upon the achievement of various commercial milestones. Sato must also pay the Company a royalty equal to a mid-single digit percentage of net sales of licensed products in the licensed territory, subject to a reduction in the royalty payments in certain circumstances.

The term of the Sato Agreement and the period during which Sato must pay royalties under the Sato Agreement expires, on a licensed product-by-licensed product basis, on the tenth anniversary of the first commercial sale of a licensed product in the licensed field in the licensed territory. The term of the Sato Agreement may be renewed by mutual written agreement of the parties for additional two year periods following expiration of the initial term.

The Company, by itself or through its designated third party contract manufacturer, is obligated pursuant to the Sato Agreement to supply Sato with all quantities of licensed products required by Sato to develop the licensed products in the licensed field in the licensed territory. As part of the Sato Agreement, the Company and Sato have also agreed to negotiate a commercial supply agreement pursuant to which the Company, by itself or through its designated third party contract manufacturer, would be the exclusive supplier to Sato of the active pharmaceutical ingredient of licensed products for the manufacture of licensed products in the licensed territory.

Sato is responsible for funding the development and commercial costs for the program that are specific to Japan. The Company is obligated to perform certain oversight, review and supporting activities for Sato, including: (i) using commercially reasonable efforts to obtain marketing approval of SB204 in the U.S, (ii) sharing all future scientific information the Company may obtain during the term of the Sato Agreement pertaining to SB204, (iii) performing certain additional pre-clinical studies if such studies are deemed necessary by the Japanese regulatory authority, up to and not to exceed a total cost of $1,000 and (iv) participating in a joint committee that oversees, reviews and approves Sato's development and commercialization activities under the Sato Agreement. Additionally, the Company has granted Sato the option to use the Company's trademarks in connection with the commercialization of licensed products in the licensed territory for no additional consideration, subject to the Company's approval of such use.

The Sato Agreement may be terminated by (i) Sato without cause upon 120 days' advance written notice to the Company, (ii) either party in the event of the other party's uncured material breach upon 60 days' advance written notice, (iii) force majeure, (iv) either party in the event of the other party's dissolution, liquidation, bankruptcy or insolvency and (v) the Company immediately upon written notice if Sato challenges the validity, patentability, or enforceability of any of the Company's patents or patent applications licensed to Sato under the Sato Agreement. In the event of a termination, no portion of the upfront fee received from Sato in January 2017 is refundable.

Accounting Considerations and Revenue Recognition

The Company has identified the following four performance deliverables under the Sato Agreement: (i) the grant of the intellectual property license to Sato, (ii) the obligation to participate in a joint committee that oversees, reviews, and approves Sato's research and development activities and provides advisory support during Sato's development process, (iii) the obligation to manufacture and supply Sato with all quantities of licensed product required for development activities in Japan, and (iv) the grant of an optional right to use the Company's trademark. The Sato Agreement also contains an obligation to manufacture and supply all quantities of the active pharmaceutical ingredient contained in the licensed product manufactured by Sato for commercial sale in Japan. The Company

concluded this commercial supply obligation was a contingent deliverable because SB204 is not yet a commercially approved product and is currently subject to additional clinical studies prior to commercial approval in Japan. The Company considered the provisions of the multiple-elements arrangement guidance and determined that none of the deliverables have standalone value because Sato's ability to utilize the value of the licensed intellectual property rights is limited absent the delivery of the other elements of the arrangement. In particular, the Company has maintained control of the methods and expertise necessary to manufacture and supply the active pharmaceutical ingredient in the licensed product, which limits the utility and causes an interdependency of the remaining elements on the delivery of quantities of licensed product required for development activities in Japan. As a result, all deliverables have been combined into a single unit of accounting.

The Company evaluated the timing of delivery for each of the deliverables and concluded that its obligation to participate on the joint committee during Sato's development process would be the last delivered element under the arrangement and therefore would be the basis for revenue recognition for the combined unit of accounting. The total upfront consideration under this agreement is being recognized as license and collaboration revenue on a straight-line basis over the estimated performance period, from March 2017 through the third quarter of 2021.

The Company determined that the future contingent payments meet the definition of a milestone. The development and regulatory milestones are not considered to be substantive because they do not relate solely to past performance. Accordingly, revenue for the achievement of development milestones will be recognized over the performance period, assuming collectability is reasonably assured. The revenue for the achievement of regulatory milestones will be recognized over the ten year commercial term of the Sato Agreement. As of March 31, 2017, no amounts have been recognized as license and collaboration revenue for any of these potential future milestones and all the contingent payments remained eligible for achievement as of March 31, 2017.

During the quarter ended March 31, 2017, we recognized $100 in license and collaboration revenue under this agreement. The deferred revenue balance under the Sato Agreement as of March 31, 2017 was $10,713, including $2,403 and $8,310 in current and non-current deferred revenue, respectively.

Contract Acquisition Costs

The intellectual property rights granted to Sato under the Sato Agreement include certain intellectual property rights which the Company has licensed from UNC. Under the Company's license agreement with UNC described in Note 2—Research and Development Licenses, the Company is obligated to pay UNC a running royalty percentage in the low single digits on net sales of licensed products, including net sales that may be generated by Sato. Additionally, the Company made a payment to UNC in February 2017 representing the portion of the Sato upfront payment that was estimated to be directly attributable to the UNC intellectual property rights included in the license to Sato.

The Company also entered into an agreement with a third party to assist the Company in exploring the licensing opportunity which led to the execution of the Sato Agreement. The Company paid a fee of $216 to the third party upon execution of the Sato Agreement and is obligated to pay the third party a low-single-digit percentage of any future milestone payments the Company may receive from Sato under the Sato Agreement.

The fees associated with payments made to UNC and the third party have been capitalized as an other asset, including current and noncurrent portions, in the accompanying balance sheet and are being amortized as general and administrative expense on a straight-line basis over the same estimated period used to recognize revenue on the upfront payment received from Sato.

(dollar values in thousands, except per share data)

Note 4: Property and Equipment, Net

Property and equipment consisted of the following:

	March 31, 2017	December 31, 2016
Computer equipment	$ 508	$ 500
Furniture and fixtures	531	504
Laboratory equipment	5,971	5,723
Office equipment	165	106
Building related to facility lease obligation	10,557	10,557
Leasehold improvements	1,552	1,338
	19,284	18,728
Less: Accumulated depreciation and amortization	(2,738)	(2,438)
	$ 16,546	$ 16,290

Depreciation and amortization expense was $299 and $186 for the three months ended March 31, 2017 and 2016, respectively.

Note 5: Commitments and Contingencies

Lease Obligations

Operating Leases

The Company leases a facility under a non-cancelable operating lease with an expiration date of April 2017, following lease amendments made during the third and fourth quarters of 2016. Future minimum lease payments of $17 are due in April 2017. This leased facility housed a portion of the Company's research and development activities through April 2017.

Rent expense for operating leases totaled $158 and $85 for the three months ended March 31, 2017 and 2016.

Primary Facility Lease

In August 2015, the Company entered into a lease agreement for approximately 51,000 rentable square feet of facility space in Morrisville, North Carolina, commencing in April 2016. The initial term of the lease agreement extends through June 30, 2026. The Company has an option to extend the lease agreement by five years upon completion of the initial lease term. Current contractual base rent payments are $93 per month, subject to a three percent increase annually over the term of the lease agreement.

As a result of the nature of and the involvement in the renovations during the construction period of the leased space, the Company was the "deemed owner," for accounting purposes only, of the construction project and was required to capitalize the fair value of the building as well as the construction costs incurred by either the landlord or the Company on its condensed consolidated balance sheet pursuant to FASB ASC 840, *Leases*, and the accounting policy described in Note 1—Organization and Significant Accounting Policies. The Company determined that the facility was substantially complete as of December 31, 2016 because the Company began to utilize the facility for all intended purposes, including primary research, development and drug compound manufacturing operations, in addition to administrative and corporate headquarters activities. Following the determination that the facility was substantially complete, the Company assessed the facility for sale-leaseback criteria qualification, which could result in a de-recognition of the building asset and the related financing obligation. The Company concluded that the facility did not meet the sale-leaseback criteria due to the Company's continuing involvement in the leased facility. As a result, the facility is being accounted for as an asset financing, with the building asset and related facility financing obligation remaining on the Company's balance sheet. The building asset is being depreciated over a 25 year period and the facility financing obligation is being amortized so that the net carrying value of the building asset and the facility financing obligation are equivalent at the end of the initial term of the lease agreement. Monthly rental payments will be allocated between principal and interest expense associated with the facility financing obligation, as well as grounds rent expense of $8 per month.

The Company has recorded an asset related to the building and construction costs within property and equipment of $10,557 as of March 31, 2017. The non-current facility lease obligation on the Company's condensed consolidated balance sheet is $7,998 as of March 31, 2017 and December 31, 2016. During the three months ended March 31, 2017, the Company recognized interest expense of $261, including $13 of accrued interest included in other accrued expenses in the accompanying balance sheets.

Contingencies

From time to time, the Company may have certain contingent liabilities that arise in the ordinary course of business activities. 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. The Company is not subject to any current pending legal matters or claims.

The Company has entered into, and expects to continue to enter into, contracts in the normal course of business with various third parties who support its clinical trials, preclinical research studies and other services related to its development activities. The scope of the services under these agreements can generally be modified at any time, and these agreements can generally be terminated by either party after a period of notice and receipt of written notice. There have been no material contract terminations as of March 31, 2017.

Indemnification

In the ordinary course of business, the Company has entered into contractual arrangements under which it has agreed to provide indemnification of varying scope and terms to business partners and other parties with respect to certain matters, including, but not limited to, losses arising out of the Company's breach of such agreements and out of intellectual property infringement claims made by third parties. In these circumstances, payment may be conditional on the other party making a claim pursuant to the procedures specified in the particular contract.

The Company's obligations under these agreements may be limited in terms of time or amount, and in some instances, the Company may have recourse against third parties for certain payments. The terms of such obligations vary.

It is not possible to make a reasonable estimate of the maximum potential amount of future payments under these or similar agreements due to the conditional nature of the Company's obligations and the unique facts and circumstances involved in each particular agreement. No material indemnification liabilities were identified or accrued in the accompanying financial statements.

Note 6: Stockholders' Equity

Capital Structure

Authorized Shares. In conjunction with the completion of the IPO in September 2016, the Company amended its amended and restated certificate of incorporation and amended and restated bylaws. The amendment provides for 210,000,000 authorized shares of capital stock, of which 200,000,000 shares have been designated as $0.0001 par value common stock, and 10,000,000 shares have been designated as $0.0001 par value preferred stock.

Preferred Stock

The Company's amended and restated certificate of incorporation provides the Company's board of directors with the authority to issue $0.0001 par value preferred stock from time to time in one or more series by adopting a resolution and filing a certificate of designations. Voting powers, designations, preferences, dividend rights, conversion rights and liquidation preferences shall be stated and expressed in such resolutions. There were 10,000,000 shares designated as preferred stock and no shares outstanding as of March 31, 2017 and December 31, 2016.

(dollar values in thousands, except per share data)

Common Stock

Authorized, Issued and Outstanding Common Shares

The Company's common stock has a par value of $0.0001 per share and consists of 200,000,000 authorized shares as of March 31, 2017 and December 31, 2016. There were 15,969,493 and 15,939,992 shares of voting common stock outstanding as of March 31, 2017 and December 31, 2016, respectively. The following table summarizes common stock share activity for the three months ended March 31, 2017:

	Common Stock
Balance as of December 31, 2016	15,939,992
Exercise of stock options	29,501
Balance as of March 31, 2017	15,969,493

The Company had reserved shares of common stock for future issuance as follows:

	March 31, 2017	December 31, 2016
Outstanding stock options	974,712	825,130
For possible future issuance under 2008 Stock Plan (Note 7)	—	—
For possible future issuance under 2016 Stock Plan (Note 7)	398,483	615,207
	1,373,195	1,440,337

Note 7: Stock Option Plan

2008 Stock Plan

During 2008, the Company adopted the 2008 Stock Plan (the "2008 Plan"). As amended, a total of 1,416,666 shares of common stock were reserved for issuance under the 2008 Plan. Eligible plan participants included employees, directors, and consultants. The 2008 Plan permitted the granting of incentive stock options, nonqualified stock options, and other stock-based awards. As further described below, as of September 20, 2016, no additional awards will be granted under the 2008 Plan.

2016 Stock Plan

Effective September 20, 2016 (the "Effective Date"), the Company adopted the 2016 Incentive Award Plan (the "2016 Plan"). The 2016 Plan is the successor to the 2008 Plan. As of the Effective Date, no additional awards will be granted under the 2008 Plan, but all stock awards granted under the 2008 Plan prior to the Effective Date will remain subject to the terms of the 2008 Plan. Any shares associated with stock awards previously granted under the 2008 Plan that are forfeited subsequent to the Effective Date of the 2016 Plan are not eligible for future issuance under the 2016 Plan. All awards granted on and after the Effective Date will be subject to the terms of the 2016 Plan. The 2016 Plan provides for the grant of the following awards: (i) incentive stock options, (ii) nonstatutory stock options, (iii) stock appreciation rights, (iv) restricted stock awards, (v) restricted stock unit awards and (vi) other stock awards. Eligible plan participants include employees, directors, and consultants. An aggregate of 833,333 shares of the Company's common stock were initially available for issuance under awards granted pursuant to the 2016 Plan, which shares may be authorized but unissued shares, treasury shares, or shares purchased in the open market.

As of March 31, 2017, there were 398,483 shares available for future issuance under the 2016 Plan. See Note 9—Subsequent Events for certain events occurring after March 31, 2017, that affected the number of shares of common stock available for future issuance under the 2016 Plan.

Under both the 2008 Plan and the 2016 Plan, options to purchase the Company's common stock may be granted at a price no less than the fair value of a common stock share on the date of grant. The fair value shall be the closing sales price for a share as quoted on any established securities exchange for such grant date or the last preceding date for which such quotation exists. Vesting terms of options issued are determined by the board of directors or compensation committee of the board. The Company's stock options vest based on

(dollar values in thousands, except per share data)

terms in the stock option agreements, generally at a rate of one-third for each anniversary of the vesting commencement date for three years. Stock options have a maximum term of ten years.

Stock Compensation Expense

During the three months ended March 31, 2017 and 2016, the Company recorded employee share-based compensation expense of $1,252 and $227, respectively. Total share-based compensation expense included in the condensed consolidated statements of operations is as follows:

	Three Months Ended March 31,	
	2017	2016
Research and development	$ 396	$ 87
General and administrative	856	140
	$ 1,252	$ 227

Stock option activity for the three months ended March 31, 2017 is as follows:

	Shares Subject to Outstanding Options	Weighted-Average Exercise Price Per Share	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Options outstanding as of December 31, 2016	825,130	$ 11.27		
Options granted	218,347	6.71		
Options forfeited	(39,264)	11.84		
Options exercised	(29,501)	0.73		
Options outstanding as of March 31, 2017	974,712	$ 10.55	8.15	$ 793

Note 8: Related Party Transactions

Members of the Company's board of directors held 1,561,916 shares of the Company's common stock as of March 31, 2017 and December 31, 2016, respectively.

Note 9: Subsequent Events

Amendment to 2016 Incentive Award Plan

On April 7, 2017, the board of directors approved an amendment to the 2016 Plan, subject to stockholder approval at the Company's 2017 annual meeting of stockholders to be held on June 5, 2017, to increase the aggregate number of shares of common stock that may be issued pursuant to awards under the 2016 Plan by an additional 1,200,000 shares. All other material terms of the 2016 Plan otherwise remain unchanged.

Contract Development Services Agreement

In April and May 2017, the Company entered into a master development services and clinical supply agreement and related statement of work with KNOW Bio. Under the current statement of work, the Company will provide certain development services to KNOW Bio in exchange for service fees expected to total approximately $300.

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 in conjunction with our condensed consolidated financial statements and notes thereto included in this Quarterly Report on Form 10-Q and our audited financial statements and notes thereto for the year ended December 31, 2016 included in our Annual Report on Form 10-K filed with the Securities and Exchnage Commission, or SEC, on March 20, 2017.

In addition to historical information, this discussion and analysis contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. All statements other than statements of historical facts contained in this Quarterly Report on Form 10-Q are forward-looking statements. These statements are often identified by the use of words such as "may," "will," "expect," "believe," "anticipate," "intend," "could," "should," "potential," "predict," "project," "estimate," or "continue" and similar expressions or variations. These statements are based on the beliefs and assumptions of our management based on information currently available to management. Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Except as may be required by law, we undertake no obligation to update any forward-looking statements to reflect events or circumstances after the date of such statements.

These forward-looking statements are subject to numerous risks, including, without limitation, the following:

- *Clinical drug development involves a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results.*
- *Delay or termination of planned clinical trials for our product candidates could result in unplanned expenses or significantly adversely impact our commercial prospects with respect to, and ability to generate revenues from, such product candidates.*
- *The regulatory approval processes of the Food and Drug Administration, or FDA, are lengthy, time-consuming and inherently unpredictable, and if we are ultimately unable to obtain regulatory approval for our product candidates, our business will be substantially harmed.*
- *We specialize solely in developing nitric oxide-based dermatology therapeutics, and if we do not successfully achieve regulatory approval for any of our product candidates or successfully commercialize them, we may not be able to continue as a business.*
- *We will need substantial additional funding and as of March 31, 2017, we had an accumulated deficit of $134.6 million. If we are unable to raise capital when needed, we would be forced to delay, reduce, terminate or eliminate our product development programs, or our commercialization efforts.*
- *As a result of our operating losses and negative cash flows from operations, the report of our independent registered public accounting firm on our December 31, 2016 financial statements included an explanatory paragraph indicating that there is substantial doubt about our ability to continue as a going concern.*
- *We rely on third parties to conduct some of our preclinical studies and all of our clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may be unable to obtain regulatory approval for or commercialize any of our product candidates.*
- *We rely on third parties to manufacture clinical drug supplies for us and parties with which we contract, and we intend to rely on third parties to produce commercial supplies of any approved product candidate. Failure of those third parties to obtain approval of the FDA or comparable regulatory authorities, to provide us with sufficient quantities of drug product or to provide sufficient quantities of drug product at acceptable quality levels or prices could adversely impact our commercialization of any of our product candidates or result in our breaching our obligations to others.*
- *Unexpected delays in our ability to manufacture our NVN1000 active pharmaceutical ingredient, or any other Nitricil NCEs, in our facility, for support of our development activities could adversely affect our development and commercialization timelines and result in increased costs of our development programs.*
- *Our product candidates may pose safety issues, cause adverse events, have side effects or have other properties that could delay or prevent their regulatory approval, limit the commercial profile of an approved label or result in significant negative consequences following marketing approval, if any.*
- *Even if we obtain marketing approval for any product candidates, the products may become subject to unfavorable third-party coverage or reimbursement policies.*

- *Our product candidates, if approved, will face significant competition, and our failure to effectively compete may prevent us from achieving significant market penetration.*
- *If we are unable to obtain and maintain patent protection for our product candidates, or if the scope of the patent protection obtained is not sufficiently broad, our competitors could develop and commercialize technology and products similar or identical to ours, and our ability to successfully commercialize our technology and product candidates may be impaired.*

For a further discussion of risks that could cause or contribute to differences between actual results and those implied by forward-looking statements, see the "Risk Factors" section of the Annual Report on Form 10-K.

Novan® is a registered trademark of our company in the United States. This Quarterly Report on Form 10-Q also includes trademarks, trade names and service marks that are the property of other organizations. Solely for convenience, our trademarks and trade names referred to in this Quarterly Report on Form 10-Q appear without any "™" or "®" symbol, but those references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the rights of any applicable licensor, to these trademarks and trade names.

Overview

We are a late-stage pharmaceutical company focused on redefining the standard of care in dermatology through the development and commercialization of innovative therapies using our nitric oxide platform. Nitric oxide plays a vital role in the natural immune system response against microbial pathogens and is a critical regulator of inflammation. Our ability to harness nitric oxide and its multiple mechanisms of action has enabled us to create a platform with the potential to generate differentiated first-in-class product candidates. The two key components of our nitric oxide platform are our proprietary Nitricil technology, which drives the creation of new chemical entities, or NCEs, and our topical formulation science, both of which we use to tune our product candidates for specific indications. We believe that our ability to conveniently deploy nitric oxide on demand in topical formulations allows us the potential to significantly improve patient outcomes in a variety of skin diseases and positions us to be a commercially successful leader in dermatology.

We are advancing programs in five dermatological conditions with significant unmet medical need. These are some of the most prevalent diseases in dermatology and together represent a large market opportunity with a patient population surpassing 150 million Americans and 1.5 billion individuals globally.

Key Development Updates

The current activities, recent developments, and key milestones related to our clinical stage drug candidates are summarized below. We are in the process of evaluating our plans with respect to our current drug candidates and we may decide to revise our activities or the relevant timing depending on the availability of funding, partnership opportunities and our financial priorities.

- ***SB204 for the Treatment of Acne Vulgaris (Phase 3)***—We are developing our lead product candidate, SB204, as a once-daily, topical monotherapy for the treatment of acne vulgaris. In the first quarter of 2017, we reported top-line results from two identically designed Phase 3 pivotal clinical trials of SB204 conducted with a total of 2,639 patients with acne vulgaris. SB204 demonstrated statistical significance compared to vehicle on all three co-primary endpoints in one of the trials, but demonstrated statistical significance on only one of three co-primary endpoints in the other trial. We conducted an in-depth examination of the full data sets from these trials, including post hoc analyses, with extensive assistance from third-party expert consultants in biostatistics and regulatory affairs. Based on the results of this analysis, we intend to pursue a pre-submission meeting with the FDA to discuss the entirety of the SB204 development program in the third quarter of 2017. Our meeting with the FDA could lead to a new drug application, or NDA, in the first half of 2018.

  We expect that one additional Phase 3 trial may be necessary to support FDA approval of SB204. We are currently assessing trial design enhancements. We are also assessing cost, financial priorities and probabilities of success to determine if and when we will conduct this additional trial.

- ***SB206, a Topical Anti-viral for the Treatment of External Genital and Perianal Warts (Phase 2)***—Our second most advanced product candidate, SB206, represents a new approach to the treatment of human papillomavirus, or HPV, skin infections, such as genital warts. We initially evaluated SB206's antiviral activity in a Phase 2 randomized, double-blinded, vehicle-controlled clinical trial in 107 patients with genital warts caused by HPV. We announced top-line results from this Phase 2 clinical trial in the fourth quarter of 2016. Specific observations included statistically significant improvement in the incidence of complete clearance of all baseline warts compared to vehicle treatment after 12 weeks in both the intent-to-treat and per protocol analyses with the highest dose tested, SB206 12%, and, favorable cutaneous tolerability in the once-daily treatment arms, including the most effective dose, 12% once-daily.

  Based on the results of the Phase 2 clinical trial, we plan to seek regulatory input via an end-of-Phase 2 meeting with the FDA in the second quarter of 2017, and we expect to be in a position to proceed to Phase 3 development by the end of 2017. We are also exploring the possibility of conducting Phase 2 trials in patients infected with additional subtypes of HPV and other viruses that lead to skin manifestations.

- ***SB208, a Topical Anti-fungal for the Treatment of Athlete's Foot (Tinea Pedis) and Fungal Nail Infections (Onychomycosis) (Phase 2)***—We are developing SB208 as a topical broad-spectrum antifungal gel for the treatment of superficial cutaneous fungal infections of the skin and nails, including tinea pedis and onychomycosis. Both of these diseases are caused by the same dermatophyte, *Trichophyton rubrum*, or *T. rubrum*. We reported top-line results from a Phase 2 proof-of-concept trial in 222 patients with clinical signs and symptoms of tinea pedis in the second quarter of 2017. Our SB208 Gel, at both the 4% and 16% concentrations, demonstrated a statistically significant effect ($p<0.05$) compared to vehicle in the primary endpoint of achieving negative fungal culture at day 14. In the secondary endpoint, mycological cure was maintained at day 42 in both dose groups; 58.8% of patients treated with SB208 16% demonstrated a mycological cure compared to vehicle ($p<0.05$). Based on the data generated in this SB208 Phase 2 dose-ranging trial, we will evaluate late stage development opportunities in superficial cutaneous fungal infections, such as a Phase 2 trial in patients with onychomycosis, which could be initiated as early as the second half of 2017.
- ***SB414, a Topical Cream for the Treatment of Inflammatory Skin Diseases (Preclinical)*** – We are developing SB414, our cream-based product candidate currently in preclinical studies, for the topical treatment of inflammatory skin diseases such as psoriasis or atopic dermatitis. In preclinical studies to date, we observed that SB414 significantly ($p<0.05$) reduced composite psoriasis scores, which consist of erythema and plaque scores, and reduced pro-inflammatory cytokines, including IL-17, in a psoriasis mouse model. We have conducted toxicology studies for SB414 in support of the submission of an investigational new drug application, or IND, to the FDA, and based on the data generated in our preclinical in vivo study, we plan to initiate clinical development of SB414 in the second quarter of 2017 with the filing of an IND, followed by a Phase 2 proof-of-concept trial in patients with psoriasis. We are also contemplating Phase 2 trials in patients with other inflammatory skin diseases, such as atopic dermatitis.

Corporate Updates

- ***Executive Management Team***— We recently made adjustments to the executive management team to strengthen our clinical operations infrastructure and streamline the research and development group as we prepare to execute multiple late-stage development programs. The adjustments are as follows:
    - In March 2017, Paula Brown Stafford was appointed to the newly created position of Chief Development Officer, in which she is responsible for the tactical execution of clinical trials and the establishment of statistics and data management functions. Ms. Stafford has more than 30 years of experience in the biopharmaceutical services industry, including roles in project management, biostatistics, global clinical operations and executive leadership.
    - In March 2017, Stanley Hollenbach was promoted to Senior Vice President of Research and Development, leveraging his previous success at the Company in unlocking nitric oxide's therapeutic potential in numerous disease states. This new role will broaden his responsibilities at Novan to include leadership over all phases of pharmaceutical drug development other than clinical.
    - M. Joyce Rico, our former Chief Medical Officer, departed the Company effective May 5, 2017, and we entered into a separation and general release agreement with Dr. Rico that included termination benefits to Dr. Rico that are consistent with our obligations under Dr. Rico's employment agreement for "separation from service" by Dr. Rico for "good reason." The agreement provides for (i) cash severance payments equal to 12 months of base salary plus a pro rata portion of the 2017 target annual bonus, which will be paid over 12 months commencing with the first payroll period following the departure date; (ii) accelerated vesting of any options to purchase the Company's common stock held by Dr. Rico that would have vested during calendar year 2017 but for her departure; and (iii) provided for the continuation of certain medical, dental and life insurance benefits through November 5, 2018 (subject to reduction or discontinuation of benefits if Dr. Rico becomes covered by the plans of a subsequent employer).

Additionally, our board of directors appointed an interim chief financial officer upon the departure of Richard Peterson.

- William L. Hodges was appointed as Interim Chief Financial Officer and to serve as the principal financial and accounting officer of the Company effective March 24, 2017. Mr. Hodges has a long career in public company finance positions, including most recently serving as chief financial officer and senior vice president of finance and administration of POZEN, Inc. until its acquisition of Tribute Pharmaceuticals Canada Inc. to form Aralez Pharmaceuticals Inc. in 2016.

- Richard Peterson, our former Chief Financial Officer and principal financial and accounting officer, departed the Company effective March 23, 2017, and we entered into a separation and general release agreement with Mr. Peterson that included termination benefits to Mr. Peterson that are consistent with our obligations under Mr. Peterson's employment agreement for "separation from service" by Mr. Peterson for "good reason." The agreement provides for (i) cash severance payments equal to 12 months of base salary plus a pro rata portion of the 2017 target annual bonus, which will be paid over 12 months commencing with the first payroll period following the departure date; (ii) accelerated vesting of any options to purchase the Company's common stock held by Mr. Peterson that would have vested during calendar year 2017 but for his departure; and (iii) provided for the continuation of certain medical, dental and life insurance benefits through September 23, 2018 (subject to reduction or discontinuation of benefits if Mr. Peterson becomes covered by the plans of a subsequent employer). The resulting cash severance payment obligation totaled approximately $0.4 million as of March 31, 2017, which is included in accrued compensation in the accompanying balance sheet. We also recognized approximately $0.3 million in stock compensation expense during the quarter ended March 31, 2017 due to the accelerated vesting of 25,000 options, which have a weighted average exercise price of $12.99 per share.

Sato License Agreement

Significant Terms

On January 12, 2017, we entered into a license agreement, and a related amendment, with Sato Pharmaceutical Co., Ltd., or Sato, relating to SB204, our lead drug candidate for the treatment of acne vulgaris in Japan, or the Sato Agreement. Pursuant to the Sato Agreement, we granted to Sato an exclusive, royalty-bearing, non-transferable right and license under certain of our intellectual property rights, with the right to sublicense with our prior written consent, to develop, use and sell products in Japan that incorporate SB204 in certain topical dosage forms for the treatment of acne vulgaris, and to make the finished form of such products. The rights granted to Sato do not include the right to manufacture the active pharmaceutical ingredient of SB204, which we will retain the rights to supply to Sato. We will also supply finished product for use in development of SB204 in the licensed territory. During a specified time period, Sato has an exclusive option to negotiate the terms under which its license would be expanded to include certain additional territories within Asia, subject to Sato's payment of a specified option exercise fee. Under the terms of the Sato Agreement, we also have exclusive rights to certain intellectual property that may be developed by Sato in the future, which we may choose to use for our own development and commercialization of SB204 outside of Japan.

In exchange for the licenses granted to Sato under the Sato Agreement, Sato agreed to pay us an upfront payment, as well as additional milestone payments upon achievement of various future development, regulatory and commercial milestones. Pursuant to the terms of the Sato Agreement, Sato was required to pay us an upfront payment of 1.25 billion Japanese Yen, or JPY, which we received on January 19, 2017 in the amount of $10.8 million (when converted to U.S. Dollars on January 19, 2017). Sato is also required to pay us up to an aggregate of 2.75 billion JPY ($23.8 million based on the exchange rate as of January 19, 2017) upon the achievement of various development and regulatory milestones. Under the Sato Agreement, Sato also agreed to pay us up to an aggregate of 0.9 billion JPY ($7.8 million based on the exchange rate as of January 19, 2017) in milestone payments upon the achievement of various commercial milestones. Sato must also pay us a royalty equal to a mid-single digit percentage of net sales of licensed products in the licensed territory, subject to a reduction in the royalty payments under specified circumstances.

The term of the Sato Agreement and the period during which Sato must pay royalties expires, on a licensed product-by-licensed product basis, on the tenth anniversary of the first commercial sale of a licensed product in the licensed field in the licensed territory. The term of the Sato Agreement may be renewed by mutual written agreement of the parties for additional two-year periods following expiration of the initial term.

The Sato Agreement obligates us, or our third-party contract manufacturer, to supply Sato with all quantities of licensed products required by Sato for their development activities in Japan. As part of the Sato Agreement, we and Sato also agreed to negotiate a commercial supply agreement pursuant to which we would be the exclusive supplier to Sato of the active pharmaceutical ingredient of licensed products for the manufacture of licensed products in the licensed territory.

Sato is responsible for funding the development and commercial costs for the program that are specific to Japan. We have agreed to perform certain oversight, review and supporting activities for Sato, including: (i) using commercially reasonable efforts to obtain marketing approval of SB204 in the U.S, (ii) sharing all future scientific information we may obtain during the term of the Sato Agreement pertaining to SB204, (iii) performing certain additional pre-clinical studies if such studies are deemed necessary by the Japanese regulatory authority, up to and not to exceed a total cost of $1.0 million, and (iv) participating in a joint committee that oversees, reviews, and approves Sato's development and commercialization activities under the Sato Agreement. Additionally, we have granted Sato the option to use our trademarks in connection with the commercialization of licensed products in the licensed territory for no additional consideration, subject to our approval of such use.

The Sato Agreement may be terminated by (i) Sato without cause upon 120 days' advance written notice to us, (ii) either party in the event of the other party's uncured material breach upon 60 days' advance written notice, (iii) force majeure, (iv) either party in the event of the other party's dissolution, liquidation, bankruptcy or insolvency, and (v) us immediately upon written notice if Sato challenges the validity, patentability, or enforceability of any of our patents or patent applications licensed to Sato under the Sato Agreement. In the event of a termination, no portion of the upfront fee received from Sato in January 2017 is refundable.

Accounting Considerations and Revenue Recognition

We have identified four performance deliverables under the Sato Agreement including (i) the grant of the intellectual property license to Sato, (ii) the obligation to participate in a joint committee that oversees, reviews, and approves Sato's development activities and provides advisory support during Sato's development process, (iii) the obligation to manufacture and supply Sato with all quantities of licensed product required for development activities in Japan, and (iv) the grant of an optional right to use Novan's trademark. The Sato Agreement also contains an obligation to manufacture and supply all quantities of the active pharmaceutical ingredient contained in the licensed product manufactured by Sato for commercial sale in Japan. We concluded this commercial supply obligation was a contingent deliverable because SB204 is not yet a commercially approved product and is currently subject to additional clinical studies prior to commercial approval in Japan. We considered the provisions of the multiple-elements arrangement guidance and determined that none of the deliverables have standalone value because Sato's ability to utilize the value of the licensed intellectual property rights is limited absent the delivery of the other elements of the arrangement. In particular, we maintain control of the methods and expertise necessary to manufacture and supply the active pharmaceutical ingredient within the licensed product, which limits the utility and causes an interdependency of the remaining elements on the delivery of quantities of licensed product required for development activities in Japan. As a result, all deliverables have been combined into a single unit of accounting.

We evaluated the timing of delivery for each of the deliverables and concluded that our obligation to participate on the joint committee during Sato's development process would be the last delivered element under the arrangement and therefore would be the basis for revenue recognition for the combined unit of accounting. The total upfront consideration under this agreement is being recognized as license and collaboration revenue on a straight-line basis over the estimated performance period, from March 2017 through the third quarter of 2021.

We have determined that the future contingent payments meet the definition of a milestone. The development and regulatory milestones are not considered to be substantive because they are not associated only with past performance. Accordingly, revenue for the achievement of development milestones will be recognized over the performance period, assuming collectability is reasonably assured. The revenue for the achievement of regulatory milestones will be recognized over the ten-year commercial term of the Sato Agreement. As of March 31, 2017, no amounts had been recognized as license and collaboration revenue for any of these milestones and all the contingent payments remained eligible for achievement as of March 31, 2017.

During the quarter ended March 31, 2017, we recognized $0.1 million in license and collaboration revenue under this agreement. The deferred revenue balance under the Sato Agreement as of March 31, 2017 was $10.7 million, including $2.4 million and $8.3 million in current and non-current deferred revenue, respectively.

Contract Acquisition Costs

The intellectual property rights granted to Sato under the Sato Agreement include certain intellectual property rights which we have licensed from The University of North Carolina at Chapel Hill, or UNC. Under our license agreement with UNC, we are obligated to pay UNC a running royalty percentage in the low single digits on net sales of licensed products, including net sales that may be generated by Sato. Additionally, we made a payment to UNC in February 2017 representing the portion of the Sato upfront payment that was estimated to be directly attributable to the UNC intellectual property rights included in the license to Sato.

We also entered into an agreement with a third party to assist us in exploring the SB204 licensing opportunity that led to the execution of the Sato Agreement. We paid a fee of $0.2 million to the third party upon execution of the Sato Agreement and are obligated to pay the third party a low-single-digit percentage of any future milestone payments we may receive under the Sato Agreement.

The fees associated with payments made to UNC and the third party have been capitalized as an other asset, including current and noncurrent portions, in the accompanying balance sheet and are being amortized as general and administrative expense on a straight-line basis over the same estimated period used to recognize revenue on the upfront payment received from Sato.

Financial Overview

Since our inception, we have devoted substantially all of our efforts to developing our nitric oxide platform technology and resulting product candidates, including conducting preclinical and clinical trials and providing general and administrative support for these

operations. We conduct these activities in a single operating segment. We have not generated any revenue from product sales and, to date, have funded our operations primarily through the sale of common stock in our IPO, private placements of our convertible preferred stock, the issuance of convertible notes, proceeds from government research contracts and grants and collaboration revenue.

From inception through March 31, 2017, we have raised total equity and debt proceeds of $148.7 million to fund our operations, comprised of $44.6 million from net proceeds from the sale of common stock in our IPO, $99.7 million from the sale of preferred stock, $3.5 million from the issuance of convertible debt and $0.9 million from other issuances of common stock. Other historical forms of funding have included payments received from licensing and supply arrangements and government research contracts and grants. We received an upfront payment of approximately $10.8 million following the execution of a license agreement with Sato in the first quarter of 2017 for the exclusive right to develop, use and sell SB204 in certain topical dosage forms in Japan for the treatment of acne vulgaris. Since our inception, we also received a total of $11.8 million from government research contracts and grants, the majority of which was associated with our discontinued operations (see Note 1—Organization and Significant Accounting Policies).

We also recently entered into a master development services and clinical supply agreement and related statement of work with KNOW Bio, LLC ("KNOW Bio"). Under the current statement of work, we will provide certain development services to KNOW Bio in exchange for service fees expected to total approximately $0.3 million. We may also provide clinical stage manufacturing services to KNOW Bio under future statements of work. While we expect to provide services and recognize related services revenue under the current statement of work during the the second and third quarters of 2017, we do not expect any significant increase to our reported revenues or decrease in our operating losses in 2017. Further, we do not expect the fees received under this current statement of work to increase the period over which our cash and cash equivalents can fund our operating expenses**.**

We have never generated revenue from product sales and have incurred net losses in each year since inception. As of March 31, 2017, we had an accumulated deficit of $134.6 million. We incurred net losses of $11.6 million and $11.3 million in the three months ended March 31, 2017 and 2016, respectively. We expect to continue to incur substantial losses in the future as we conduct our planned operating activities. We do not expect to generate revenue from product sales unless and until we obtain regulatory approval from the FDA for our clinical-stage product candidates. If we obtain regulatory approval for SB204 or any of our product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution.

In addition, we expect that we will continue to incur substantial expenses as we continue clinical trials and preclinical studies for, and research and development of, our product candidates and maintain, expand and protect our intellectual property portfolio. As a result, we will need substantial additional funding to support our future operating activities. Adequate future funding may not be available to us on acceptable terms, or at all. The top-line results from our parallel pivotal SB204 Phase 3 trials, coupled with the recent decline in the market value of our common stock, may negatively impact our available funding options and the acceptability of funding terms. Our failure to obtain sufficient funds on acceptable terms as and when needed could cause us to alter or reduce our planned operating activities, including but not limited to delaying planned product candidate development activities, to conserve our cash and cash equivalents. Such actions could delay development timelines and have a material adverse effect on our business, results of operations and financial condition. As further discussed in our condensed consolidated financial statements and related footnotes included in this Quarterly Report on Form 10-Q, these matters raise substantial doubt about our ability to continue as a going concern.

Components of Our Results of Operations

Revenue

Revenue consists of the amortization of a non-refundable upfront payment received under the Sato Agreement. The material terms of the Sato Agreement are described in the "Overview—Sato License Agreement" section above and our revenue recognition policy is described within Note 1—Organization and Significant Accounting Policies to our unaudited interim financial statements included in this Form 10-Q.

Research and Development Expenses

Since our inception, we have focused our resources on our research and development activities, including conducting preclinical studies and clinical trials, manufacturing development efforts and activities related to regulatory filings for our product candidates. Research and development expenses, including those paid to third parties for which there is no alternative use, are expensed as they are incurred. Research and development expenses include:

- external research and development expenses incurred under agreements with contract research organizations, or CROs, investigative sites and consultants to conduct our clinical trials and preclinical and non-clinical studies;
- costs to acquire, develop and manufacture supplies for clinical trials and preclinical studies, including fees paid to contract manufacturing organizations, or CMOs;
- legal and other professional fees related to compliance with FDA requirements;
- licensing fees and milestone payments incurred under license agreements;
- salaries and related costs, including stock-based compensation and travel expenses, for personnel in our research and development functions; and
- facilities, depreciation and other allocated expenses, which include direct and allocated expenses for rent, maintenance of facilities, utilities, equipment and other supplies.

From inception through March 31, 2017, we have incurred approximately $95.6 million in research and development expenses to develop, expand or otherwise improve our nitric oxide platform and resulting product candidates. The table below sets forth our external research and development expenses incurred for current product candidates and unallocated internal research and development expenses for the three months ended March 31, 2017 and 2016. All research and development salaries and related personnel costs are included in unallocated internal research and development expenses.

	Three Months Ended March 31,	
	2017	2016
	(in thousands)	
External:		
SB204	$ 3,232	$ 4,690
SB206	(315)	982
SB208	206	144
Other programs	575	251
Unallocated internal research and development expenses	3,248	1,838
Total research and development expenses	$ 6,946	$ 7,905

We expect that for the foreseeable future, the substantial majority of our research and development efforts will be focused on our clinical programs, SB204, SB206 and SB208, as well as initiating and conducting clinical development of SB414, and on our future pipeline development.

- For SB204, we commenced Phase 3 clinical trials in the first quarter of 2016, continued to conduct these studies through the fourth quarter of 2016, and recently completed the trials and reported top-line results in the first quarter of 2017.
- For SB206, we completed a Phase 2 clinical trial and announced top-line results in the fourth quarter of 2016. The SB206 program expense credit in the first quarter of 2017 relates primarily to a $0.4 million favorable change in our accrued Phase 2 trial cost estimate recognized as we obtained final trial activity data and reached an agreement on final trial costs with the clinical research organization that conducted the trial.

- For SB208, we initiated a Phase 2 clinical development program in July 2016 and announced top-line results in April 2017.
- For SB414, we continued to conduct and complete preclinical development activities in support of the submission of an IND to the FDA. We are targeting initiation of clinical development of SB414 in the second quarter of 2017 with the filing of an IND followed by a Phase 2 proof-of-concept trial in patients with psoriasis. Historical costs associated with our SB414 program and other preclinical activities are included in "Other Programs" in the table above.

We expect to continue to incur substantial research and development expenses in the future as we develop our clinical product candidates. In particular, we expect to continue to incur substantial research and development expenses through the remainder of 2017 associated with the completion of our SB204 long-term safety trial and the initiation of SB414 clinical development activities associated with a Phase 2 proof-of-concept trial in patients with psoriasis. We are exploring the possibility of conducting additional Phase 2 trials in patients infected with additional subtypes of HPV, other viruses that lead to skin manifestations and other inflammatory skin diseases, such as atopic dermatitis. We are also evaluating our previously announced plans to initiate an additional SB204 clinical trial to support NDA approval and to initiate late-stage clinical development activities in our SB206 and SB208 programs. We may decide to revise our plans or the related timing, depending on the availability of funding, partnership opportunities and our financial priorities. Although we expect external research and development expenses associated with the previously described 2017 clinical development activities to be substantial, we expect such expenses to be lower in 2017 than external research and development expenses incurred in 2016.

The successful development of our product candidates is highly uncertain. At this time, we cannot reasonably estimate the nature, timing or costs required to complete the remaining development of SB204, SB206, SB208, SB414 or any future product candidates. This is due to the numerous risks and uncertainties associated with the development of product candidates. See the "Risk Factors" section in our Annual Report on Form 10-K filed with the SEC on March 20, 2017, for a discussion of the risks and uncertainties associated with our research and development projects.

General and Administrative Expenses

Our general and administrative expenses consist primarily of salaries and related costs, including stock-based compensation and travel expenses for personnel in our executive, finance, commercial, corporate development and other administrative functions. Other general and administrative expenses include depreciation and facility-related costs, legal costs of pursuing patent protection of our intellectual property, and professional services fees for auditing, tax and general legal services.

We expect to continue to incur substantial general and administrative expenses in 2017 as we conduct our product development operating activities and support our operations in a public company environment, including significant expenses related to legal, accounting, regulatory and tax-related services associated with maintaining compliance with exchange listing and SEC requirements, directors' and officers' liability insurance premiums and investor relations activities.

Other (Expense) Income, net

Other (expense) income, net consists primarily of (i) interest expense on our primary facility lease financing obligation, (ii) interest income earned on cash and cash equivalents and (iii) other miscellaneous expenses. We expect to continue to incur interest expense on our primary facility lease financing obligation during 2017 and throughout the remainder of the initial lease term that expires in 2026.

Results of Operations

Comparison of Three Months Ended March 31, 2017 and 2016

The following table sets forth our results of operations for the periods indicated:

	Three Months Ended March 31,			
	2017	2016	$ Change	% Change
	(in thousands, except percentages)			
License and collaboration revenue	$ 100	$ —	100	*
Operating expenses:				
Research and development	6,946	7,905	(959)	(12)%
General and administrative	4,531	3,367	1,164	35%
Total operating expenses	11,477	11,272	205	2%
Operating loss	(11,377)	(11,272)	(105)	(1)%
Other (expense) income, net	(230)	12	(242)	*
Net loss	$ (11,607)	$ (11,260)	$ (347)	(3)%
** Not Meaningful*				

Revenue

Revenue of $0.1 million for the three months ended March 31, 2017 was related to the amortization of a non-refundable upfront payment received under our Sato Agreement, which was executed in January 2017.

Research and development expenses

Research and development expenses were $6.9 million for the three months ended March 31, 2017, compared to $7.9 million for the three months ended March 31, 2016. The decrease of $1.0 million was primarily due to the recent completion of certain clinical trials in our active development programs, including the two parallel Phase 3 pivotal trials in the SB204 program in the first quarter of 2017, which resulted in a decrease of $1.5 million and the Phase 2 clinical trial for SB206 in the fourth quarter of 2016, which resulted in a decrease of $1.3 million. The SB206 Phase 2 trial cost decrease includes a downward change in our accrued trial cost estimate of $0.4 million which was recognized in the first quarter of 2017 as we obtained final trial activity data and reached an agreement on final trial costs with the clinical research organization that conducted the trial. These decreases were partially offset by a $0.1 million increase in the SB208 clinical program, a $0.3 million increase in the SB414 program related to continued pre-clinical activities in preparation for an IND submission in the second quarter of 2017 and increases in other unallocated internal research and development expenses of $1.4 million. The increase in our other unallocated internal research and development expenses was primarily the result of increased personnel and related costs that support and administer our active development programs.

General and administrative expenses

General and administrative expenses were $4.5 million for the three months ended March 31, 2017, compared to $3.4 million for the three months ended March 31, 2016. The increase of approximately $1.1 million was primarily due to a $0.9 million increase in general and administrative personnel and related costs and a $0.7 million increase in professional services, insurance, board compensation and other administrative costs necessary to support our operations as a public company. These increases were partially offset by a $0.5 million decrease in market research and related costs. The increase in general and administrative personnel and related costs is comprised of a discrete accrued cash severance expense charge of $0.4 million associated with the departure of our former Chief Financial Officer, a discrete non-cash stock compensation expense charge of $0.3 million associated with the accelerated vesting of option awards to our former Chief Financial Officer, and a $0.4 million increase in stock compensation expense associated with awards granted to our general and administrative personnel subsequent to the first quarter of 2016. These increases were partially offset by a $0.2 million reduction in other administrative personnel and related costs.

Other (expense) income, net

Other (expense) income, net was ($0.2) million for the three months ended March 31, 2017, compared to approximately $12,000 for the three months ended March 31, 2016. The net expense increase of approximately $0.2 million was primarily due to the recognition of approximately $0.3 million of interest expense on our primary facility lease financing obligation beginning in the first quarter of 2017, following the completion of the facility's build-out phase in December 2016. This interest expense incurred during the three months ended March 31, 2017 was partially offset by less than $0.1 million of interest income earned on cash and cash equivalents

Liquidity and Capital Resources

Since our inception through March 31, 2017, we have financed our operations primarily with $148.7 million in net proceeds from the issuance and sale of equity securities and convertible debt securities, including $44.6 million in net proceeds from the sale of common stock in our 2016 initial public offering, or our IPO. Other historical forms of funding have included payments received from licensing and supply arrangements and government research contracts and grants. We received an upfront payment of approximately $10.8 million following the execution of the Sato Agreement in the first quarter of 2017 for the exclusive right to develop, use and sell SB204 in certain topical dosage forms in Japan for the treatment of acne vulgaris. Since our inception, we also received a total of $11.8 million from government research contracts and grants, the majority of which was associated with our discontinued operations. See Note 1—Organization and Significant Accounting Policies to the condensed consolidated financial statements included in Item 1 of this Quarterly Report on Form 10-Q.

As of March 31, 2017, we had $30.1 million of cash and cash equivalents. Our cash and cash equivalents are held in a variety of interest-bearing instruments, including money market accounts. Cash in excess of immediate requirements is invested with a view toward liquidity and capital preservation, and we seek to minimize the potential effects of concentration and degrees of risk.

Facility Lease Financing

In 2016, we completed a construction project to build out a leased facility in Morrisville, North Carolina. The leased facility began to serve as our corporate headquarters and primary research, development and drug compound manufacturing facility during the fourth quarter of 2016. We are leasing the 51,000 square foot facility under a lease agreement entered into in August of 2015. We began to occupy and utilize the facility for administrative purposes in October 2016.

We have accounted for this lease as a capitalized asset and a corresponding facility financing obligation on our balance sheets. We began recognizing interest expense associated with this financing obligation in the first quarter of 2017, following the completion of the build-out phase in December 2016. See "Note 1—Organization and Significant Accounting Policies" and "Note 5—Commitments and Contingencies" to the condensed consolidated financial statements included in Item 1 of this Quarterly Report on Form 10-Q for further discussion of the accounting for this lease.

Cash Flows

The following table sets forth our cash flows for the periods indicated:

	Three Months Ended March 31,	
	2017	2016
	(in thousands)	
Net cash provided by (used in):		
Continuing operating activities	$ (3,964)	$ (9,219)
Continuing investing activities	(578)	(572)
Continuing financing activities	19	(927)
Net decrease in cash and cash equivalents – discontinued operations	—	(258)
Net decrease in cash and cash equivalents	$ (4,523)	$ (10,976)

Net Cash Used in Continuing Operating Activities

During the three months ended March 31, 2017, net cash used in operating activities was $4.0 million and consisted primarily of a net loss of $11.6 million, with adjustments for non-cash amounts related primarily to depreciation expense of $0.3 million, stock-based compensation expense of $1.3 million, and a $6.1 million favorable change in assets and liabilities. The favorable net change in assets and liabilities was primarily due to receipt of an upfront payment of $10.8 million following the execution of the Sato Agreement. This increase was partially offset by decreases in accounts payable and accrued expense balances associated with our outside research

and development activities during the period, including a $3.0 million decrease in accrued outside research and development services. The decrease in payables and accruals for these services was primarily related to the completion of two identically designed Phase 3 pivotal trials in our SB204 program and the Phase 2 clinical trial in our SB206 program.

During the three months ended March 31, 2016, net cash used in operating activities was $9.2 million and consisted primarily of a net loss of $11.3 million, which was the result of cash used in our research and development activities with adjustments for non-cash amounts related primarily to depreciation expense of $0.2 million, stock-based compensation expense of $0.2 million and $1.6 million in changes in assets and liabilities.

Net Cash Used in Continuing Investing Activities

During the three months ended March 31, 2017, net cash used in investing activities was $0.6 million, which related to purchases of property and equipment. The purchases of property and equipment are primarily associated with leasehold improvements and laboratory equipment needed to support our research, development and manufacturing capabilities at our facility in Morrisville, North Carolina. In addition, we have approximately $0.4 million of purchases of property and equipment in accounts payable and accrued expenses as of March 31, 2017, which we expect to settle through cash disbursements made during the second quarter of 2017.

During the three months ended March 31, 2016, net cash used in investing activities was $0.6 million, which represented purchases of property and equipment of $0.5 million and the purchase of intangible assets of $0.1 million.

Net Cash Provided by (Used in) Continuing Financing Activities

During the three months ended March 31, 2017, net cash provided by financing activities was $19,000, consisting primarily of proceeds from the exercise of stock options.

During the three months ended March 31, 2016, net cash used in financing activities was $0.9 million, consisting primarily of payments related to public offering costs.

Capital Requirements

To date, we have not generated any revenue from product sales. We do not know when, or if, we will generate any revenue from product sales. We do not expect to generate revenue from product sales unless and until we obtain regulatory approval of and commercialize one of our current or future product candidates. We anticipate that we will continue to generate losses for the foreseeable future, and we expect the losses to increase as we continue the development of, and seek regulatory approvals for, our product candidates and begin to commercialize any approved products. We are subject to all of the risks incident in the development of new pharmaceutical products, and we may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business, like the inconsistency between the top-line results from our two identically designed Phase 3 pivotal clinical trials of SB204.

Our primary use of cash is to fund our operating expenses, which consist principally of research and development expenditures necessary to advance our clinical-stage product candidates. Based upon our current operating plan, we anticipate we have sufficient cash and cash equivalents to operate at least through December 31, 2017. We anticipate that we will need substantial additional funding to continue our operating activities and make further advancements in each of our drug development programs. Specifically, we anticipate that additional funding will be required to advance SB204 through NDA submission and the related FDA review process, including the initiation and completion of an additional SB204 clinical trial, the completion of our planned Phase 2 proof-of-concept trial of SB414 in patients with psoriasis and the conduct of late-stage clinical trials in our SB206 and SB208 programs. Further, additional funding will be required to conduct any potential Phase 2 trials in patients infected with additional subtypes of HPV, other viruses that lead to skin manifestations and other inflammatory skin diseases, such as atopic dermatitis. We are in the process of evaluating our plans with respect to our current drug candidates, and we may decide to revise our activities or the relevant timing depending on the availability of funding, partnership opportunities and our financial priorities. We are currently reviewing various potential financing options to fund our operations, including non-dilutive partnership opportunities across our pipeline of product candidates and traditional private and public equity financings. We are also currently evaluating potential cost savings measures. As a result of all these factors, our anticipated expenditure levels may change if we make adjustments to our current operating plan. As of March 31, 2017, we had an accumulated deficit of $134.6 million and there is substantial doubt about our ability to continue as a going concern if we do not secure adequate additional financing.

We have based our projections of operating capital requirements on assumptions that may prove to be incorrect and we may use all of our available capital resources sooner than we expect. Because of the numerous risks and uncertainties associated with research, development and commercialization of pharmaceutical products, we are unable to estimate the exact amount of our operating capital requirements. Our future funding requirements will depend on many factors, including, but not limited to:

- the initiation, progress, timing, costs, results, and evaluation of results of trials for our clinical-stage product candidates, including SB204, SB206, SB208 and SB414;
- the progress, timing, costs and results of preclinical studies relating to other potential applications of our nitric oxide platform, including SB414;
- the number and characteristics of product candidates that we pursue;
- our success in scaling our manufacturing process;
- the outcome, timing and costs of seeking regulatory approvals;
- the occurrence and timing of potential development and regulatory milestones achieved by Sato, our licensee for SB204 in Japan;
- the terms and timing of any future collaborations, licensing, consulting or other arrangements that we may enter into;
- the amount and timing of any payments we may be required to make, or that we may receive, in connection with the licensing, filing, prosecution, defense and enforcement of any patents or other intellectual property rights;
- the costs of preparing, filing and prosecuting patent applications, maintaining and protecting our intellectual property rights;
- defending against intellectual property related claims;
- the extent to which we in-license or acquire other products and technologies; and
- subject to receipt of marketing approval, revenue received from commercial sales of our product candidates.

We also expect to incur capital expenditures as we continue to invest in information technology systems and equipment costs at our recently completed corporate headquarters and manufacturing facility in Morrisville, North Carolina.

Contractual Obligations and Contingent Liabilities

There were no material changes in our commitments under contractual obligations, as disclosed in "Management's Discussion and Analysis of Financial Condition and Results of Operations" contained in our Annual Report on Form 10-K filed with the SEC on March 20, 2017.

Off-Balance Sheet Arrangements

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

Jumpstart Our Business Startups Act of 2012 (JOBS Act)

In April 2012, the JOBS Act was signed into law. The JOBS Act contains provisions that, among other things, reduce certain reporting requirements for an "emerging growth company." As an "emerging growth company," we are electing not to take advantage of the extended transition period afforded by the JOBS Act for the implementation of new or revised accounting standards, and, as a result, we will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth public companies. Section 107 of the JOBS Act provides that our decision not to take advantage of the extended transition period is irrevocable. We have chosen to rely on the other exemptions and reduced reporting requirements provided by the JOBS Act. Subject to certain conditions set forth in the JOBS Act, as an "emerging growth company" we are not required to, among other things, (i) provide an auditor's attestation report on our system of internal controls over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act, (ii) provide all of the compensation disclosure that may be required of non-emerging growth public companies under the Dodd-Frank Act, (iii) comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements (auditor discussion and analysis) and (iv) disclose certain executive compensation-related items, such as the correlation between executive compensation and performance and comparisons of the chief executive officer's compensation to median employee compensation. We may remain an emerging growth company until the last day of the fiscal year following the fifth anniversary of the completion of our IPO. However, if certain events occur prior to the end of

such five-year period, including if we become a "large accelerated filer," our annual gross revenue equals or exceeds $1.07 billion or we issue more than $1.0 billion of non-convertible debt in any three-year period, we will cease to be an emerging growth company prior to the end of such five-year period.

Critical Accounting Policies and Use of Estimates

Our management's discussion and analysis of financial condition and results of operations is based on our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States, or 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 and expenses during the reporting periods. These items are monitored and analyzed by us for changes in facts and circumstances, and material changes in these estimates could occur in the future. We base our estimates on 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. Changes in estimates are reflected in reported results for the period in which they become known. Actual results may differ materially from these estimates under different assumptions or conditions. Our significant accounting policies are more fully described in "Note 1—Organization and Significant Accounting Policies" to the condensed consolidated financial statements included in this Quarterly Report on Form 10-Q and in "Note 1—Organization and Significant Accounting Policies" to our audited consolidated financial statements contained in our Annual Report on Form 10-K filed with the SEC on March 20, 2017. During the three months ended March 31, 2017, there were no material changes to our critical accounting policies.

Recent Accounting Pronouncements

Recently issued accounting pronouncements that we have adopted or are currently evaluating are described in detail within "Note 1—Organization and Significant Accounting Policies" to the accompanying unaudited condensed consolidated financial statements included in Item 1 of this Quarterly Report on Form 10-Q.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Our primary exposure to market risk is limited to our cash and cash equivalents, all of which have maturities of less than three months. The primary objectives of our investment activities are the preservation of principal and maintenance of liquidity for the purpose of funding operations and maximizing total return. The related interest income sensitivity is affected by changes in the general level of short-term U.S. interest rates. We place our cash and cash equivalents with high-credit quality financial institutions. Our investment policy prohibits us from holding corporate bonds, auction rate securities, asset-backed securities, municipal obligations, structured investment vehicles, extendable commercial paper or collateralized debt/loan obligations.

As of March 31, 2017, we had cash and cash equivalents of $30.1 million. We believe that an immediate one percentage point increase or decrease in interest rates would not materially affect the fair value of these cash equivalents. We do not believe that our cash and cash equivalents have significant risk of default or illiquidity and do not expect our operating results or cash flows to be affected significantly by a sudden change in market interest rates. While we believe our cash and cash equivalents do not contain excessive risk, we cannot provide absolute assurance that in the future our investments will not be subject to adverse changes in fair value. In addition, we maintain significant amounts of cash and cash equivalents at one or more financial institutions that are in excess of federally insured limits.

Following the execution of the Sato Agreement in January 2017, we have become exposed to some degree of foreign exchange risk as a result of entering into transactions denominated in a currency other than U.S. dollars, particularly in Japanese yen. All foreign transactions settle on the applicable spot exchange basis at the time such payments are made, and all monetary balances are translated to U.S. dollars using the period-end exchange rate. A hypothetical 10% change in the exchange rate between the Japanese yen and the U.S. dollar during any of the periods presented would not have had a significant impact on our financial statements.

Item 4. Controls and Procedures

(a) *Evaluation of Disclosure Controls and Procedures*

The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act, refers to controls and procedures that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that such information is accumulated and communicated to a company's management,

including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure.

In designing and evaluating our disclosure controls and procedures, management recognizes that disclosure controls and procedures, no matter how well conceived and operated, cannot provide absolute assurance that the objectives of the disclosure controls and procedures are met. Additionally, in designing disclosure controls and procedures, our management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible disclosure controls and procedures. Our disclosure controls and procedures are designed to provide reasonable assurance of achieving their objectives. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a control system, misstatements due to error or fraud may occur and not be detected.

Our management, with the participation of our Chief Executive Officer and our Interim Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2017, the end of the period covered by this Quarterly Report on Form 10-Q. Based upon such evaluation, our Chief Executive Officer and our Interim Chief Financial Officer have concluded that our disclosure controls and procedures were effective as of such date at the reasonable assurance level.

(b) *Changes in Internal Controls Over Financial Reporting*

There have not been any changes in our internal controls over financial reporting during our fiscal quarter ended March 31, 2017 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II— OTHER INFORMATION

Item 1. Legal Proceedings

From time to time, we may be subject to litigation and claims arising in the ordinary course of business. We are not currently a party to any material legal proceedings and we are not aware of any pending or threatened legal proceeding against us that we believe could have a material adverse effect on our business, operating results, cash flows or financial condition.

Item 1A. Risk Factors.

There have been no material changes to the risk factors disclosed in the Annual Report on Form 10-K filed with the SEC on March 20, 2017.

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

Unregistered Sales of Equity Securities

None.

Use of Proceeds from Initial Public Offering

On September 20, 2016, the SEC declared our Registration Statement on Form S-1 (File No. 333-213276) effective for our initial public offering, which closed on September 26, 2016, pursuant to which we sold an aggregate of 4,715,000 shares of our common stock, including the underwriters option to purchase 615,000 additional shares, at a price to the public of $11.00 per share for aggregate gross proceeds of $51.9 million. As a result, we received net proceeds of $44.6 million (after underwriters' discounts, commissions, and reimbursements totaling $4.1 million and additional offering related costs of $3.2 million). The managing underwriter of the offering was Piper Jaffray & Co.

The net proceeds of the IPO have been invested in accordance with our investment policy. There has been no material change in the planned use of proceeds from our initial public offering as described in our final prospectus dated September 20, 2016 and filed with the SEC on September 22, 2016.

Issuer Purchases of Equity Securities

None.

Item 3. Defaults Upon Senior Securities.

Not applicable.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

None.

Item 6. Exhibits

See the Exhibit Index which follows the signature page of this Quarterly Report on Form 10-Q, which is incorporated herein by reference.

SIGNATURES

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

Novan, Inc.

By: /s/ Nathan Stasko
Nathan Stasko
Chief Executive Officer
(Principal Executive Officer)

By: /s/ William Hodges
William Hodges
Interim Chief Financial Officer
(Principal Financial and Accounting Officer)

Date: May 12, 2017

INDEX TO EXHIBITS

EXHIBIT NO.		DESCRIPTION	FILED HEREWITH	INCORPORATED BY REFERENCE			
				FORM	FILE NO.	EXHIBIT	FILING DATE
10.1	†	License Agreement, dated January 12, 2017 between Novan, Inc. and Sato Pharmaceutical Co, Ltd.		10-K	001-37880	10.17	March 20, 2017
10.2	†	First Amendment, dated January 12, 2017 to the License Agreement, dated January 12, 2017, by and between Novan, Inc. and Sato Pharmaceutical Co. Ltd.		10-K	001-37880	10.18	March 20, 2017
10.3	#	Separation and General Release Agreement, dated March 24, 2017, by and between Novan, Inc. and Richard Peterson.	X				
10.4	#	Offer Letter dated March 21, 2017 between Novan, Inc. and William L. Hodges.		8-K	001-37880	10.1	March 22, 2017
10.5	#	Separation and General Release Agreement, dated May 6, 2017, by and between Novan, Inc. and M. Joyce Rico.	X				
31.1		Certification of Chief Executive Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	X				
31.2		Certification of Chief Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	X				
32.1		Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	X				
32.2		Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	X				
101.INS		XBRL Instance Document.	X				
101.SCH		XBRL Taxonomy Extension Schema Document.	X				
101.CAL		XBRL Taxonomy Extension Calculation Linkbase Document.	X				
101.DEF		XBRL Taxonomy Extension Definition Document.	X				

EXHIBIT NO.	DESCRIPTION	FILED HEREWITH	INCORPORATED BY REFERENCE			
			FORM	FILE NO.	EXHIBIT	FILING DATE
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.	X				
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.	X				

† Portions of this exhibit (indicated by asterisks) have been omitted pursuant to a request for confidential treatment pursuant to Rule 24b-2 under the Securities Exchange Act of 1934.

Indicates management contract or compensatory plan.

Exhibit 10.3

SEPARATION AND GENERAL RELEASE AGREEMENT

This Separation and General Release Agreement (the "Agreement") is made and entered into by and between Novan, Inc. (the "Company") and Richard Peterson (the "Employee"). Throughout the remainder of this Agreement, the Company and Employee may be collectively referred to as the "Parties" and individually referred to as a "Party."

WHEREAS, Employee is currently employed as Chief Financial Officer of the Company pursuant to an employment agreement between the Parties dated April 13, 2016 (the "Employment Agreement") and is subject to the terms of the Confidentiality and Assignment of Inventions Agreement, executed by Employee on October 2, 2015 and the Noncompetition Agreement, executed by Employee on October 21, 2016 (collectively the "Restrictive Covenants Agreements").

WHEREAS, due to a reorganization of the Company and changes in Employee's duties and responsibilities, Employee has notified the Company that grounds exist for Good Reason, as defined in Section 6(a)(vi) of the Employment Agreement, which have not been cured by the Company, and Employee plans to exercise his rights to separate from service and receive severance benefits under Section 6(b) thereunder.

WHEREAS, Employee's entitlement to certain compensation and benefits under the Employment Agreement upon termination of his employment for Good Reason is conditioned, in part, upon his execution and non-revocation of this Agreement.

WHEREAS, Employee represents that he has carefully read this entire Agreement, understands its consequences, and voluntarily enters into it.

NOW THEREFORE, in consideration of the above and the mutual promises set forth below, Employee and the Company agree as follows:

1. SEPARATION AND RESIGNATION FROM OFFICER POSITIONS . Employee's employment with the Company will terminate on **March 23, 2017** ("Separation Date"). Employee hereby resigns from all officer positions with the Company.

2. SEVERANCE BENEFITS. In consideration of the release of claims and other promises contained herein and on the condition that Employee fully complies with his obligations under this Agreement, and the Restrictive Covenants Agreements, the Company will provide Employee with the following:

(a) Pursuant to Section 6(b)(i) of the Employment Agreement, the Company shall pay to Employee the sum of: (i) Three Hundred Fifty Thousand Four Hundred and 00/100 Dollars ($350,400.00) (less all applicable withholdings), plus (ii) Thirty Five Thousand Four Hundred Twenty Four and 00/100 Dollars ($35,424.00) (less all applicable withholdings) (collectively "Severance Pay"), to be paid in substantially equal semi-monthly installment payments over the twelve (12) month period following the Separation Date (each installment being considered a separate payment for purposes of Section 409A of the Internal Revenue Code of

1986, as amended) in accordance with the Company's payroll schedule applicable to Employee immediately prior to the Separation Date and commencing on the first such pay day occurring after the sixtieth (60th) day following the Separation Date and ending on the twelve (12) month anniversary of the Separation Date (the "Severance Period"), provided that this Agreement has become effective under Section 11 of this Agreement;

(b) Pursuant to Section 6(b)(ii) of the Employment Agreement, accelerated vesting of any options Employee has to purchase the Company's common stock that would have vested during the calendar year 2017 but for Employee's termination, such options requiring exercise within ninety (90) days of the Separation Date and pursuant to the other terms and conditions of the applicable Company incentive award plan and individual award agreement;

(c) Pursuant to Section 6(b)(iii) of the Employment Agreement, conditioned on Employee's proper and timely election to continue his health insurance benefits under COBRA after the Separation Date, reimbursement of Employee's applicable COBRA premiums for the lesser of eighteen (18) months following the Separation Date or until Employee becomes eligible for insurance benefits from another employer; and

(d) Pursuant to Section 3(h) of the Employment Agreement, reimbursement of the premiums Employee pays for term life insurance pursuant to Section 3(h) of the Employment Agreement during the Severance Period, in the same schedule as Severance Pay is paid under Section 2(a) of this Agreement.

Any reimbursements provided hereunder shall be provided no later than December 31 of the year following the year in which the expense was incurred, the amount of expenses reimbursed in one year shall not affect the amount eligible for reimbursement in any subsequent year, and Employee's right to receive such reimbursements shall not be subject to liquidation or exchange for another benefit.

3. VACATION. Employee shall be paid for any accrued but unused vacation time, if any, in his final regular paycheck.

4. EMPLOYMENT AGREEMENT. Employee acknowledges and agrees that he is required to execute this Agreement as a condition of receiving the benefits set forth herein, including specifically the benefits provided in Section 2. Employee further acknowledges and agrees the Employment Agreement is hereby terminated, but that Employee shall continue to be fully bound by the terms of the Restrictive Covenants Agreements.

5. EMPLOYEE ACKNOWLEDGEMENTS. By signing this Agreement, Employee represents that (a) he has been properly paid for all time worked and received all salary, expense reimbursement, and all other amounts of any kind due to him from the Company with the exceptions of his final paycheck for work during his final payroll period which will be paid on the next regularly scheduled payroll date following the Separation Date, and the pay and benefits under this Agreement, and (b) that the payments set forth in Section 2 of this Agreement constitute all post-termination or severance payments or benefits to which Employee is entitled to receive under his Employment Agreement, and he is not entitled to any other compensation, payments or benefits of any nature as the result of the termination of his employment.

6. COMPANY PROPERTY. By signing this Agreement, Employee represents that: (i) he has delivered to the Company all records, memoranda, data, documents and other property of any description which refer or relate in any way to trade secrets or confidential information, including all copies thereof, which are in his possession, custody or control; (ii) he has delivered to the Company all Company property (including, but not limited to, keys, credit cards, computers, client files, contracts, proposals, work in process, manuals, forms, computer stored work in process and other computer data, research materials, other items of business information concerning any Company customer or client or potential prospect to purchase some or all of the Company's assets, or Company business or business methods, including all copies thereof) which is in his possession, custody or control, and; (iii) he will fully cooperate with the Company in winding up his work and transferring that work to other individuals designated by the Company.

7. ADEQUACY OF CONSIDERATION. Employee acknowledges that the benefits available to him under this Agreement are significant, are of greater value than the benefits to which he would be entitled to receive if he did not sign this Agreement, and constitute adequate consideration for the releases of claims, under Sections 8 and 9 of this Agreement.

8. RELEASE. In consideration of the benefits conferred by this AGREEMENT, EMPLOYEE (ON BEHALF OF HIMSELF, HIS FAMILY MEMBERS, HEIRS, ASSIGNS, EXECUTORS AND OTHER REPRESENTATIVES) RELEASES THE COMPANY AND ITS PAST, PRESENT AND FUTURE PARENTS, SUBSIDIARIES, AFFILIATES, AND ITS AND/OR THEIR PREDECESSORS, SUCCESSORS, ASSIGNS, AND ITS AND/OR THEIR PAST, PRESENT AND FUTURE OFFICERS, DIRECTORS, EMPLOYEES, OWNERS, INVESTORS, SHAREHOLDERS, ADMINISTRATORS, BUSINESS UNITS, EMPLOYEE BENEFIT PLANS (TOGETHER WITH ALL PLAN ADMINISTRATORS, TRUSTEES, FIDUCIARIES AND INSURERS) AND AGENTS ("RELEASEES") FROM ALL CLAIMS AND WAIVES ALL RIGHTS KNOWN OR UNKNOWN, HE MAY HAVE OR CLAIM TO HAVE IN EACH CASE RELATING TO HIS EMPLOYMENT WITH THE COMPANY, OR HIS SEPARATION THEREFROM arising before the execution of this Agreement by Employee, including but not limited to claims: (i) for discrimination, harassment or retaliation arising under any federal, state or local laws, or the equivalent applicable laws of a foreign country, prohibiting age (including but not limited to claims under the Age Discrimination in Employment Act of 1967 (ADEA), as amended, and the Older Worker Benefit Protection Act of 1990 (OWBPA)), sex, national origin, race, religion, disability, veteran status or other protected class discrimination, the Family and Medical Leave Act, as amended (FMLA), harassment or retaliation for protected activity; (ii) for compensation, commission payments, bonus payments and/or benefits including but not limited to claims under the Fair Labor Standards Act of 1938 (FLSA), as amended, the Employee Retirement Income Security Act of 1974, as amended (ERISA), the Family and Medical Leave Act, as amended (FMLA), and similar federal, state, and local laws; (iii) under federal, state or local law, of any nature whatsoever, including but not limited to constitutional, statutory; and common law; and (iv) for attorneys' fees. Employee specifically waives his right to bring or participate in any class or collective action against the Company. Provided, however, that this release does not apply to claims by Employee: (aa) for workers' compensation benefits or unemployment benefits filed with the applicable state agencies; (bb) for vested pension or retirement benefits including under the Company's 401(k) plan; (cc) to continuation coverage under COBRA, or equivalent applicable law; (dd) to rights he may have to indemnification by the Company pursuant to the Company's bylaws, articles of incorporation, insurance policies, or under

applicable law; (ee) to rights arising out of his ownership of stock or options in the Company or its affiliates; (ff) to rights that cannot lawfully be released by a private settlement agreement; (gg) to claims or rights that arise or accrue after Employee's execution of this Agreement; or (hh) to enforce, or for a breach of, this Agreement (the "Reserved Claims"). For the purpose of implementing a full and complete release and discharge, Employee expressly acknowledges that this Agreement is intended to include in its effect, without limitation, all claims which he does not know or suspect to exist in his favor at the time of execution hereof, and that this Agreement contemplated the extinguishment of any such claim or claims.

9. COVENANT NOT TO SUE. In consideration of the benefits offered to Employee, Employee will not sue Releasees on any of the released claims or on any matters relating to his employment arising before the execution of this Agreement other than with respect to the Reserved Claims, including but not limited to claims under the ADEA, or join as a party with others who may sue Releasees on any such claims; provided, however, this paragraph will not bar a challenge under the OWBPA to the enforceability of the waiver and release of ADEA claims set forth in this Agreement, the Reserved Claims, or where otherwise prohibited by law. If Employee does not abide by this paragraph, then (i) he will return all monies received under this Agreement and indemnify the Company for all expenses incurred in defending the action, and (ii) the Company will be relieved of its obligation hereunder.

10. RIGHT TO REVIEW. The Company delivering this Agreement, containing the release language set forth in Sections 8 and 9, to Employee by hand delivery on **March 20, 2017** (the "Notification Date"), and informed him that it desires that he have adequate time and opportunity to review and understand the consequences of entering into it. The Company advises Employee as follows:

- Employee should consult with his attorney prior to executing this Agreement; and
- Employee has 21 days from the Notification Date within which to consider this Agreement.

Employee must return an executed copy of this Agreement to the Company on or before the 22nd day following the Notification Date. Employee acknowledges and understands that he is not required to use the entire 21-day review period and may execute and return this Agreement at any time before the 22nd day following the Notification Date, ***but not before the Separation Date.*** If, however, Employee does not execute and return an executed copy of this Agreement on or before the 22nd day following the Notification Date, this Agreement shall become null and void. This executed Agreement shall be returned to: ***Jeff N. Hunter, Vice President of Technical Operations, Novan, Inc., 4105 Hopson Road, Morrisville, NC 27560.***

11. REVOCATION. Employee may revoke his executing of this Agreement during the seven (7) day period immediately following his execution of it. This Agreement will not become effective or enforceable until the revocation period has expired. To revoke this General Release Agreement, a written notice of revocation must be delivered to: ***Jeff N. Hunter, Vice President of Technical Operations, Novan, Inc., 4105 Hopson Road, Morrisville, NC 27560.***

12. AGENCY CHARGES/INVESTIGATIONS. Employee understands and acknowledges that nothing contained in this Agreement limits Employee's ability to file a charge or complaint with the Equal Employment Opportunity Commission, 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"). Employee further understands that this Agreement does not limit Employee's 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. This Agreement does not limit Employee's right to receive an award for information provided to any Government Agencies.

13. NONDISPARAGEMENT. Both Parties warrant that going forward neither Party, nor any of its respective agents, directors or officers, will make disparaging, defaming or derogatory remarks about the other or their respective services, business practices, directors, officers, managers, or executives, as applicable, to anyone; provided, however, that nothing in this Agreement shall prohibit any Party from testifying truthfully under oath or responding truthfully to any governmental inquiry, or to restrict or impede Employee from exercising protected rights to the extent that such rights cannot be waived by agreement.

14. DISCLAIMER OF LIABILITY. Nothing in this Agreement is to be construed as either an admission of liability or admission of wrongdoing on the part of either Party, each of which denies any liabilities or wrongdoing on its part.

15. GOVERNING LAW. This Agreement shall be governed by the laws of North Carolina, without regard to its conflict of laws provisions and the applicable provisions of federal law, including, but not limited to, the ADEA and OWBPA.

16. ENTIRE AGREEMENT. Except for the Restrictive Covenant Agreements and as expressly provided herein, this Agreement: (i) supersedes and cancels all other understandings and agreements, oral or written, with respect to Employee's employment with the Company; (ii) supersedes all other understandings and agreements, oral or written, between the Parties with respect to the subject matter of this Agreement; and (iii) constitutes the sole agreement between the Parties with respect to this subject matter. Each Party acknowledges that: (i) no representations, inducements, promises or agreements, oral or written, have been made by any Party or by anyone acting on behalf of any Party, which are not embodied in this Agreement; and (ii) no agreement, statement or promise not contained in this Agreement shall be valid. No change or modification of this Agreement shall be valid or binding upon the Parties unless such change or modification is in writing and is signed by the Parties.

17. SEVERABILITY. If any portion, provision, or part of this Agreement is held, determined, or adjudicated by any court of competent jurisdiction to be invalid, unenforceable, void, or voidable for any reason whatsoever, each such portion, provision, or part shall be severed from the remaining portions, provisions, or parts of this Agreement, and such determination or adjudication shall not affect the validity or enforceability of such remaining portions, provisions, or parts.

18. COUNTERPARTS. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, and all of which taken together shall constitute one and the same instrument. Any Party hereto may execute this Agreement by signing any such counterpart.

19. WAIVER OF BREACH. A waiver of any breach of this Agreement shall not constitute a waiver of any other provision of this Agreement or any subsequent breach of this Agreement.

20. SECTION 409A OF THE INTERNAL REVENUE CODE.

(a) Parties' Intent. The Parties intend that no payments or benefits hereunder shall constitute non-qualified deferred compensation within the meaning of Section 409A of the Internal Revenue Code of 1986, as amended (the "Code"), and the regulations thereunder (collectively, "Section 409A") and all provisions of this Agreement shall be construed in a manner consistent with such intention. If any provision of this Agreement (or of any award of compensation, including equity compensation or benefits) would cause Employee to incur any additional tax or interest under Section 409A, the Company shall, upon the specific request of Employee, use its reasonable business efforts to in good faith reform such provision to be exempt from, or comply with, Code Section 409A; provided, that to the maximum extent practicable, the original intent and economic benefit to Employee and the Company of the applicable provision shall be maintained, and the Company shall have no obligation to make any changes that could create any material additional economic cost or loss of material benefit to the Company. The Company shall timely use its reasonable business efforts to amend any plan or program in which Employee participates to bring it under an exemption from, or in compliance with, Section 409A. Notwithstanding the foregoing, the Company shall have no liability with regard to any failure to comply with Section 409A so long as it has acted in good faith with regard to compliance therewith.

(b) Separation from Service. A termination of employment or separation from service shall not be deemed to have occurred for purposes of any provision of this Agreement providing for the payment of any amounts or benefits that constitute nonqualified deferred compensation within the meaning of Section 409A upon or following a termination of employment or separation from service unless such termination also constitutes a "Separation from Service" within the meaning of Section 409A and, for purposes of any such provision of this Agreement, references to a "termination," "termination of employment," "separation from service" or like terms shall mean Separation from Service.

(c) Separate Payments. Each installment payment required under this Agreement shall be considered a separate payment for purposes of Section 409A.

(d) Delayed Distribution to Specified Employees. If the Company determines in accordance with Sections 409A and 416(i) of the Code and the regulations promulgated thereunder, in the Company's sole discretion, that Employee is a Specified Employee of the Company on the date he experiences a separation from service with the Company and that a delay in benefits provided under this Agreement is necessary to comply with Code Section 409A(A)(2)(B)(i), then any post separation payments and any continuation of benefits or

reimbursement of benefit costs provided by this Agreement, and not otherwise exempt from Section 409A, shall be delayed for a period of six (6) months following the date of Employee's separation from service (the "409A Delay Period"). In such event, any post separation payments and the cost of any continuation of benefits provided under this Agreement that would otherwise be due and payable to Employee during the 409A Delay Period shall be paid to Employee in a lump sum cash amount in the month following the end of the 409A Delay Period. For purposes of this Agreement, "Specified" shall mean an employee who, on an Identification Date ("Identification Date" shall mean each December 31) is a key employee as defined in Section 416(i) of the Code without regard to paragraph (5) thereof. If Employee is identified as a Specified Employee on an Identification Date, then Employee shall be considered a Specified Employee for purposes of this Agreement during the period beginning on March 24, 2017 following the Identification Date and ending on the following March 23, 2018.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have entered into this Agreement as of the day and year written below.

RICHARD PETERSON

/s/ Richard Peterson 03/24/2017
Date

NOVAN, INC.

By: /s/ Nathan Stasko
Nathan Stasko
Title: President and CEO

Exhibit 10.5

SEPARATION AND GENERAL RELEASE AGREEMENT

This Separation and General Release Agreement (the "Agreement") is made and entered into by and between Novan, Inc. (the "Company") and M. Joyce Rico (the "Employee"). Throughout the remainder of this Agreement, the Company and Employee may be collectively referred to as the "Parties" and individually referred to as a "Party."

WHEREAS, Employee is currently employed as Chief Medical Officer of the Company pursuant to an employment agreement between the Parties dated August 25, 2016 (the "Employment Agreement") and is subject to the terms of the Confidentiality and Assignment of Inventions Agreement, executed by Employee on July 19, 2012, and the Noncompetition Agreement, executed by Employee on July 19, 2012 (collectively the "Restrictive Covenants Agreements").

WHEREAS, the Parties entered into an Indemnification Agreement dated September 26, 2016 (the "Indemnification Agreement").

WHEREAS, due to a reorganization of the Company and changes in Employee's duties and responsibilities, Employee has notified the Company that grounds exist for Good Reason, as defined in Section 6(a)(vi) of the Employment Agreement, which have not been cured by the Company, and Employee plans to exercise her rights to separate from service and receive severance benefits under Section 6(b) thereunder.

WHEREAS, Employee's entitlement to certain compensation and benefits under the Employment Agreement upon termination of her employment for Good Reason is conditioned, in part, upon her execution and non-revocation of this Agreement.

WHEREAS, Employee represents that she has carefully read this entire Agreement, understands its consequences, and voluntarily enters into it.

NOW THEREFORE, in consideration of the above and the mutual promises set forth below, Employee and the Company agree as follows:

1. SEPARATION AND RESIGNATION FROM OFFICER POSITIONS . Employee's employment with the Company will terminate on May 5, 2017 ("Separation Date"). Employee hereby resigns from all officer positions with the Company.

2. SEVERANCE BENEFITS. In consideration of the release of claims and other promises contained herein and on the condition that Employee fully complies with her obligations under this Agreement, and the Restrictive Covenants Agreements, the Company will provide Employee with the following:

(a) Pursuant to Section 6(b)(i) of the Employment Agreement, the Company shall pay to Employee an amount equal to Three Hundred Seventy-Five Thousand and 00/100 Dollars ($375,000.00) (less all applicable withholdings) ("Severance Pay"), to be paid in substantially equal semi-monthly installment payments over the twelve (12) month period following the Separation Date (each installment being considered a separate payment for purposes of Section 409A of the Internal Revenue Code of 1986, as amended) in accordance with the

Company's payroll schedule applicable to Employee immediately prior to the Separation Date and commencing on the first such pay day occurring after the sixtieth (60th) day following the Separation Date and ending on the twelve (12) month anniversary of the Separation Date (the "Severance Period"), provided that this Agreement has become effective under Section 11 of this Agreement;

(b) Pursuant to Section 6(b)(ii) of the Employment Agreement, accelerated vesting of any options Employee has to purchase the Company's common stock that would have vested during the calendar year 2017 but for Employee's termination, such options requiring exercise within ninety (90) days of the Separation Date and pursuant to the other terms and conditions of the applicable Company incentive award plan and individual award agreement;

(c) Pursuant to Section 6(b)(iii) of the Employment Agreement, conditioned on Employee's proper and timely election to continue her health insurance benefits under COBRA after the Separation Date, reimbursement of Employee's applicable COBRA premiums for the lesser of eighteen (18) months following the Separation Date or until Employee becomes eligible for insurance benefits from another employer; and

(d) Pursuant to Section 3(i) of the Employment Agreement, reimbursement of the prorata premiums Employee pays for term life insurance pursuant to Section 3(i) of the Employment Agreement to cover the Severance Period; provided that such reimbursement shall be provided within 30 days of Employee submitting documentation of such payment.

Any reimbursements provided hereunder shall be provided no later than December 31 of the year following the year in which the expense was incurred, the amount of expenses reimbursed in one year shall not affect the amount eligible for reimbursement in any subsequent year, and Employee's right to receive such reimbursements shall not be subject to liquidation or exchange for another benefit.

3. VACATION. Employee shall be paid for any accrued but unused vacation time, if any, in her final regular paycheck.

4. EMPLOYMENT AGREEMENT. Employee acknowledges and agrees that she is required to execute this Agreement as a condition of receiving the benefits set forth herein, including specifically the benefits provided in Section 2. Employee further acknowledges and agrees the Employment Agreement is hereby terminated, but that Employee shall continue to be fully bound by the terms of the Restrictive Covenants Agreements.

5. EMPLOYEE ACKNOWLEDGEMENTS. By signing this Agreement, Employee represents that (a) she has been properly paid for all time worked and received all salary, expense reimbursement, and all other amounts of any kind due to her from the Company with the exceptions of her final paycheck for work during her final payroll period which will be paid on the next regularly scheduled payroll date following the Separation Date, and the pay and benefits under this Agreement, and (b) that the payments set forth in Section 2 of this Agreement constitute all post-termination or severance payments or benefits to which Employee is entitled to receive

under her Employment Agreement, and that she is not entitled to any other compensation, salary, bonuses, or other payments of any nature as the result of the termination of her employment.

6. COMPANY PROPERTY. By signing this Agreement, Employee represents that: (i) she has delivered to the Company all records, memoranda, data, documents and other property of any description which refer or relate in any way to trade secrets or confidential information, including all copies thereof, which are in her possession, custody or control; (ii) she has delivered to the Company all Company property (including, but not limited to, keys, credit cards, computers, client files, contracts, proposals, work in process, manuals, forms, computer stored work in process and other computer data, research materials, other items of business information concerning any Company customer or client or potential prospect to purchase some or all of the Company's assets, or Company business or business methods, including all copies thereof) which is in her possession, custody or control; and (iii) she will fully cooperate with the Company through the Separation Date.

7. ADEQUACY OF CONSIDERATION. Employee acknowledges that the benefits available to her under this Agreement are significant, are of greater value than the benefits to which she would be entitled to receive if she did not sign this Agreement, and constitute adequate consideration for the releases of claims, under Sections 8 and 9 of this Agreement.

8. RELEASE. In consideration of the benefits conferred by this AGREEMENT, EMPLOYEE (ON BEHALF OF HERSELF, HER FAMILY MEMBERS, HEIRS, ASSIGNS, EXECUTORS AND OTHER REPRESENTATIVES) RELEASES THE COMPANY AND ITS PAST, PRESENT AND FUTURE PARENTS, SUBSIDIARIES, AFFILIATES, AND ITS AND/OR THEIR PREDECESSORS, SUCCESSORS, ASSIGNS, AND ITS AND/OR THEIR PAST, PRESENT AND FUTURE OFFICERS, DIRECTORS, EMPLOYEES, OWNERS, INVESTORS, SHAREHOLDERS, ADMINISTRATORS, BUSINESS UNITS, EMPLOYEE BENEFIT PLANS (TOGETHER WITH ALL PLAN ADMINISTRATORS, TRUSTEES, FIDUCIARIES AND INSURERS) AND AGENTS ("RELEASEES") FROM ALL CLAIMS AND WAIVES ALL RIGHTS KNOWN OR UNKNOWN, SHE MAY HAVE OR CLAIM TO HAVE IN EACH CASE RELATING TO HER EMPLOYMENT WITH THE COMPANY, OR HER SEPARATION THEREFROM arising before the execution of this Agreement by Employee, including but not limited to claims: (i) for discrimination, harassment or retaliation arising under any federal, state or local laws, or the equivalent applicable laws of a foreign country, prohibiting age (including but not limited to claims under the Age Discrimination in Employment Act of 1967 (ADEA), as amended, and the Older Worker Benefit Protection Act of 1990 (OWBPA)), sex, national origin, race, religion, disability, veteran status or other protected class discrimination, the Family and Medical Leave Act, as amended (FMLA), harassment or retaliation for protected activity; (ii) for compensation, commission payments, bonus payments and/or benefits including but not limited to claims under the Fair Labor Standards Act of 1938 (FLSA), as amended, the Employee Retirement Income Security Act of 1974, as amended (ERISA), the Family and Medical Leave Act, as amended (FMLA), and similar federal, state, and local laws; (iii) under federal, state or local law, of any nature whatsoever, including but not limited to constitutional, statutory; and common law; and (iv) for attorneys' fees. Employee specifically waives her right to bring or participate in any class or collective action against the Company. Provided, however, that this release does not apply to claims by Employee: (aa) for workers' compensation benefits or unemployment benefits filed with the applicable state agencies; (bb) for vested pension or

retirement benefits including under the Company's 401(k) plan; (cc) to continuation coverage under COBRA, or equivalent applicable law; (dd) to rights she may have to indemnification by the Company pursuant to the Indemnification Agreement, this Agreement, the Company's bylaws, articles of incorporation, insurance policies, or under applicable law; (ee) to rights arising out of her ownership of stock or options in the Company or its affiliates; (ff) to rights that cannot lawfully be released by a private settlement agreement; (gg) to claims or rights that arise or accrue after Employee's execution of this Agreement; or (hh) to enforce, or for a breach of, this Agreement (the "Reserved Claims"). For the purpose of implementing a full and complete release and discharge, Employee expressly acknowledges that this Agreement is intended to include in its effect, without limitation, all claims which she does not know or suspect to exist in her favor at the time of execution hereof, and that this Agreement contemplated the extinguishment of any such claim or claims.

9. COVENANT NOT TO SUE. In consideration of the benefits offered to Employee, Employee will not sue Releasees on any of the released claims or on any matters relating to her employment arising before the execution of this Agreement other than with respect to the Reserved Claims, including but not limited to claims under the ADEA, or join as a party with others who may sue Releasees on any such claims; provided, however, this paragraph will not bar a challenge under the OWBPA to the enforceability of the waiver and release of ADEA claims set forth in this Agreement, the Reserved Claims, or where otherwise prohibited by law. If Employee does not abide by this paragraph, then (i) she will return all monies received under this Agreement and indemnify the Company for all expenses incurred in defending the action, and (ii) the Company will be relieved of its obligation hereunder.

10. RIGHT TO REVIEW. The Company delivering this Agreement, containing the release language set forth in Sections 8 and 9, to Employee, hereby informs Employee that it desires that she have adequate time and opportunity to review and understand the consequences of entering into it. The Company advises Employee as follows: Employee should consult with her attorney prior to executing this Agreement; and Employee has 21 days from the Notification Date within which to consider this Agreement. Employee must return an executed copy of this Agreement to the Company on or before the 22nd day following the Notification Date. Employee acknowledges and understands that she is not required to use the entire 21-day review period and may execute and return this Agreement at any time before the 22nd day following the Notification Date, ***but not before the Separation Date***. If, however, Employee does not execute and return an executed copy of this Agreement on or before the 22nd day following the Notification Date, this Agreement shall become null and void. This executed Agreement shall be returned to: ***Jeff N. Hunter, Vice President of Technical Operations, Novan, Inc., 4105 Hopson Road, Morrisville, NC 27560.***

11. REVOCATION. Employee may revoke her executing of this Agreement during the seven (7) day period immediately following her execution of it. This Agreement will not become effective or enforceable until the revocation period has expired. To revoke this General Release Agreement, a written notice of revocation must be delivered to: ***Jeff N. Hunter, Vice President of Technical Operations, Novan, Inc., 4105 Hopson Road, Morrisville, NC 27560.***

12. AGENCY CHARGES/INVESTIGATIONS. Employee understands and acknowledges that nothing contained in this Agreement limits Employee's ability to file a charge

or complaint with the Equal Employment Opportunity Commission, 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"). Employee further understands that this Agreement does not limit Employee's 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. This Agreement does not limit Employee's right to receive an award for information provided to any Government Agencies.

13. NONDISPARAGEMENT. Both Parties warrant that going forward neither Party, nor any of its respective agents, directors or officers, will make disparaging, defaming or derogatory remarks about the other or their respective services, business practices, directors, officers, managers, or executives, as applicable, to anyone; provided, however, that nothing in this Agreement shall prohibit any Party from testifying truthfully under oath or responding truthfully to any governmental inquiry, or to restrict or impede Employee from exercising protected rights to the extent that such rights cannot be waived by agreement.

14. DISCLAIMER OF LIABILITY. Nothing in this Agreement is to be construed as either an admission of liability or admission of wrongdoing on the part of either Party, each of which denies any liabilities or wrongdoing on its part.

15. GOVERNING LAW. This Agreement shall be governed by the laws of North Carolina, without regard to its conflict of laws provisions and the applicable provisions of federal law, including, but not limited to, the ADEA and OWBPA.

16. ENTIRE AGREEMENT. Except for the Restrictive Covenant Agreements, the Indemnification Agreement and as expressly provided herein, this Agreement: (i) supersedes and cancels all other understandings and agreements, oral or written, with respect to Employee's employment with the Company; (ii) supersedes all other understandings and agreements, oral or written, between the Parties with respect to the subject matter of this Agreement; and (iii) constitutes the sole agreement between the Parties with respect to this subject matter. Each Party acknowledges that: (i) no representations, inducements, promises or agreements, oral or written, have been made by any Party or by anyone acting on behalf of any Party, which are not embodied in this Agreement; and (ii) no agreement, statement or promise not contained in this Agreement shall be valid. No change or modification of this Agreement shall be valid or binding upon the Parties unless such change or modification is in writing and is signed by the Parties.

17. SEVERABILITY. If any portion, provision, or part of this Agreement is held, determined, or adjudicated by any court of competent jurisdiction to be invalid, unenforceable, void, or voidable for any reason whatsoever, each such portion, provision, or part shall be severed from the remaining portions, provisions, or parts of this Agreement, and such determination or adjudication shall not affect the validity or enforceability of such remaining portions, provisions, or parts.

18. COUNTERPARTS. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, and all of which taken together shall

constitute one and the same instrument. Any Party hereto may execute this Agreement by signing any such counterpart.

19. WAIVER OF BREACH. A waiver of any breach of this Agreement shall not constitute a waiver of any other provision of this Agreement or any subsequent breach of this Agreement.

20. SECTION 409A OF THE INTERNAL REVENUE CODE.

(a) Parties' Intent. The Parties intend that no payments or benefits hereunder shall constitute non-qualified deferred compensation within the meaning of Section 409A of the Internal Revenue Code of 1986, as amended (the "Code"), and the regulations thereunder (collectively, "Section 409A") and all provisions of this Agreement shall be construed in a manner consistent with such intention. If any provision of this Agreement (or of any award of compensation, including equity compensation or benefits) would cause Employee to incur any additional tax or interest under Section 409A, the Company shall, upon the specific request of Employee, use its reasonable business efforts to in good faith reform such provision to be exempt from, or comply with, Code Section 409A; provided, that to the maximum extent practicable, the original intent and economic benefit to Employee and the Company of the applicable provision shall be maintained, and the Company shall have no obligation to make any changes that could create any material additional economic cost or loss of material benefit to the Company. The Company shall timely use its reasonable business efforts to amend any plan or program in which Employee participates to bring it under an exemption from, or in compliance with, Section 409A. Notwithstanding the foregoing, the Company shall have no liability with regard to any failure to comply with Section 409A so long as it has acted in good faith with regard to compliance therewith.

(b) Separation from Service. A termination of employment or separation from service shall not be deemed to have occurred for purposes of any provision of this Agreement providing for the payment of any amounts or benefits that constitute nonqualified deferred compensation within the meaning of Section 409A upon or following a termination of employment or separation from service unless such termination also constitutes a "Separation from Service" within the meaning of Section 409A and, for purposes of any such provision of this Agreement, references to a "termination," "termination of employment," "separation from service" or like terms shall mean Separation from Service.

(c) Separate Payments. Each installment payment required under this Agreement shall be considered a separate payment for purposes of Section 409A.

(d) Delayed Distribution to Specified Employees. If the Company determines in accordance with Sections 409A and 416(i) of the Code and the regulations promulgated thereunder, in the Company's sole discretion, that Employee is a Specified Employee of the Company on the date she experiences a separation from service with the Company and that a delay in benefits provided under this Agreement is necessary to comply with Code Section 409A(A)(2)(B)(i), then any post separation payments and any continuation of benefits or reimbursement of benefit costs provided by this Agreement, and not otherwise exempt from Section 409A, shall be delayed for a period of six (6) months following the date of Employee's

separation from service (the "409A Delay Period"). In such event, any post separation payments and the cost of any continuation of benefits provided under this Agreement that would otherwise be due and payable to Employee during the 409A Delay Period shall be paid to Employee in a lump sum cash amount in the month following the end of the 409A Delay Period. For purposes of this Agreement, "Specified" shall mean an employee who, on an Identification Date ("Identification Date" shall mean each December 31) is a key employee as defined in Section 416(i) of the Code without regard to paragraph (5) thereof. If Employee is identified as a Specified Employee on an Identification Date, then Employee shall be considered a Specified Employee for purposes of this Agreement during the period beginning on the first April 1 following the Identification Date and ending on the following March 31.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have entered into this Agreement as of the day and year written below.

M. JOYCE RICO

/s/ M. Joyce Rico_____ 05/06/2017__

Date

NOVAN, INC.

By: /s/ Nathan Stasko_____

Nathan Stasko

Title: President and CEO

Exhibit 31.1

CERTIFICATION OF PERIODIC REPORT UNDER SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Nathan Stasko, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Novan, Inc. (the "registrant");

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)) 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) 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

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

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

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

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

Date: May 12, 2017

/s/ Nathan Stasko
Nathan Stasko
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PERIODIC REPORT UNDER SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, William L. Hodges, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Novan, Inc. (the "registrant");

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)) 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) 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

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

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

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

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

Date: May 12, 2017

/s/ William L. Hodges
William L. Hodges
Interim Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

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

I, Nathan Stasko, President and Chief Executive Officer of Novan, Inc. (the "Company"), do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(1) the Quarterly Report on Form 10-Q of the Company for the quarter ended March 31, 2017 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company for the periods presented therein.

Date: May 12, 2017

/s/ Nathan Stasko
Nathan Stasko
President and Chief Executive Officer
(Principal Executive Officer)

This certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and shall not be deemed "filed" by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and shall not be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Report, irrespective of any general incorporation language contained in such filing.

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.2

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

I, William L. Hodges, Interim Chief Financial Officer of Novan, Inc. (the "Company"), do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(1) the Quarterly Report on Form 10-Q of the Company for the quarter ended March 31, 2017 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company for the periods presented therein.

Date: May 12, 2017

/s/ William L. Hodges
William L. Hodges
Interim Chief Financial Officer
(Principal Financial Officer)

This certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and shall not be deemed "filed" by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and shall not be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Report, irrespective of any general incorporation language contained in such filing.

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.