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 September 30, 2020

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)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbol(s)	Name of Each Exchange on Which Registered
Common Stock, $0.0001 par value	NOVN	The Nasdaq Stock Market LLC

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 x No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted 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 such files). Yes x 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	☒	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 x

As of October 26, 2020, there were 141,513,791 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
(unaudited)
(in thousands, except share and per share amounts)

	September 30, 2020	December 31, 2019
ASSETS		
Current assets:		
Cash and cash equivalents	$ 43,072	$ 13,711
Contracts and grants receivable	157	419
Deferred offering costs	58	49
Prepaid expenses and other current assets	998	1,545
Assets held for sale	470	—
Total current assets	44,755	15,724
Restricted cash	—	540
Intangible assets	75	75
Other assets	330	419
Property and equipment, net	1,410	10,506
Right-of-use lease assets	—	1,833
Total assets	$ 46,570	$ 29,097
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)		
Current liabilities:		
Accounts payable	$ 172	$ 1,602
Accrued compensation	783	437
Accrued outside research and development services	1,052	1,013
Accrued legal and professional fees	319	616
Other accrued expenses	601	553
Deferred revenue, current portion	4,401	4,428
Paycheck Protection Program loan, current portion	119	—
Research and development service obligation liability, current portion	602	3,088
Lease liabilities, current portion	—	1,162
Total current liabilities	8,049	12,899
Deferred revenue, net of current portion	3,760	7,076
Paycheck Protection Program loan, net of current portion	837	—
Lease liabilities, net of current portion	—	5,100
Research and development service obligation liability, net of current portion	1,047	727
Research and development funding arrangement liability, related party	25,000	25,000
Other long-term liabilities	424	578
Total liabilities	39,117	51,380
Commitments and contingencies (Note 8)		
Stockholders' equity (deficit)		
Common stock $0.0001 par value; 200,000,000 shares authorized as of September 30, 2020 and December 31, 2019; 141,523,291 and 26,744,300 shares issued as of September 30, 2020 and December 31, 2019, respectively; 141,513,791 and 26,734,800 shares outstanding as of September 30, 2020 and December 31, 2019, respectively	14	3
Additional paid-in capital	250,236	197,853
Treasury stock at cost, 9,500 shares as of September 30, 2020 and December 31, 2019	(155)	(155)
Accumulated deficit	(242,642)	(219,984)
Total stockholders' equity (deficit)	7,453	(22,283)
Total liabilities and stockholders' equity (deficit)	$ 46,570	$ 29,097

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 September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
License and collaboration revenue	$ 1,100	$ 1,100	$ 3,224	$ 3,301
Government research contracts and grants revenue	217	216	627	216
Total revenue	1,317	1,316	3,851	3,517
Operating expenses:				
Research and development	4,836	8,598	13,513	19,614
General and administrative	3,108	2,290	8,847	8,595
Impairment loss on long-lived assets	—	—	2,421	—
Loss on facility asset group disposition	1,772	—	1,772	—
Total operating expenses	9,716	10,888	26,553	28,209
Operating loss	(8,399)	(9,572)	(22,702)	(24,692)
Other (expense) income, net:				
Interest income	2	53	47	149
Interest expense	—	—	—	(1)
Other (expense) income	(8)	23	(3)	115
Total other (expense) income, net	(6)	76	44	263
Net loss and comprehensive loss	$ (8,405)	$ (9,496)	$ (22,658)	$ (24,429)
Net loss per share, basic and diluted	$ (0.06)	$ (0.36)	$ (0.27)	$ (0.94)
Weighted-average common shares outstanding, basic and diluted	133,689,645	26,189,454	83,961,052	26,108,870

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

NOVAN, INC.
Condensed Consolidated Statements of Stockholders' Equity (Deficit)
(unaudited)
(in thousands, except share amounts)

	Nine Months Ended September 30, 2020										
	Common Stock			Additional Paid-In Capital		Treasury Stock		Accumulated Deficit		Total	
	Shares		Amount								
Balance as of December 31, 2019	26,734,800	$	3	$	197,853	$	(155)	$	(219,984)	$	(22,283)
Share-based compensation	—		—		385		—		—		385
Common stock and pre-funded warrants issued pursuant to public offering, net	15,498,602		2		5,156		—		—		5,158
Exercise of pre-funded warrants related to public offering	4,333,334		—		—		—		—		—
Common stock and pre-funded warrants issued pursuant to registered direct offering, net	10,550,000		1		7,224		—		—		7,225
Exercise of pre-funded warrants related to registered direct offering	4,602,326		—		—		—		—		—
Exercise of common stock warrants	9,600,000		1		2,879		—		—		2,880
Common stock issued pursuant to common stock purchase agreement	700,000		—		442		—		—		442
Net loss	—		—		—		—		(6,167)		(6,167)
Balance as of March 31, 2020	72,019,062	$	7	$	213,939	$	(155)	$	(226,151)	$	(12,360)
Share-based compensation	—		—		335		—		—		335
Exercise of pre-funded warrants related to registered direct offering	3,452,326		—		—		—		—		—
Exercise of common stock warrants	8,610,667		1		2,582		—		—		2,583
Common stock issued pursuant to common stock purchase agreements	35,339,992		4		17,487		—		—		17,491
Net loss	—		—		—		—		(8,086)		(8,086)
Balance as of June 30, 2020	119,422,047	$	12	$	234,343	$	(155)	$	(234,237)	$	(37)
Share-based compensation	—		—		147		—		—		147
Exercise of common stock warrants	248,500		—		75		—		—		75
Exercise of stock options	11,500		—		5		—		—		5
Common stock issued pursuant to common stock purchase agreement	21,831,744		2		15,666		—		—		15,668
Net loss	—		—		—		—		(8,405)		(8,405)
Balance as of September 30, 2020	141,513,791	$	14	$	250,236	$	(155)	$	(242,642)	$	7,453

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

NOVAN, INC.
Condensed Consolidated Statements of Stockholders' Equity (Deficit) continued
(unaudited)
(in thousands, except share amounts)

	Nine Months Ended September 30, 2019					
	Common Stock		Additional Paid-In Capital	Treasury Stock	Accumulated Deficit	Total
	Shares	Amount				
Balance as of December 31, 2018	26,056,735	$ 3	$ 195,483	$ (155)	$ (188,893)	$ 6,438
Share-based compensation	—	—	168	—	—	168
Exercise of stock options	12,999	—	10	—	—	10
Net loss	—	—	—	—	(6,637)	(6,637)
Adoption of new accounting standards	—	—	—	—	(714)	(714)
Balance as of March 31, 2019	26,069,734	$ 3	$ 195,661	$ (155)	$ (196,244)	$ (735)
Share-based compensation	—	—	245	—	—	245
Net loss	—	—	—	—	(8,296)	(8,296)
Balance as of June 30, 2019	26,069,734	$ 3	$ 195,906	$ (155)	$ (204,540)	$ (8,786)
Share-based compensation	—	—	320	—	—	320
Liability-based awards reclassified to additional paid-in capital	—	—	366	—	—	366
Common stock issued pursuant to common stock purchase agreement	445,622	—	261	—	—	261
Net loss	—	—	—	—	(9,496)	(9,496)
Balance as of September 30, 2019	26,515,356	$ 3	$ 196,853	$ (155)	$ (214,036)	$ (17,335)

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

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

	Nine Months Ended September 30,	
	2020	2019
Cash flow from operating activities:		
Net loss	$ (22,658)	$ (24,429)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	1,107	1,531
Impairment loss on long-lived assets	2,421	—
Non-cash loss on facility asset group disposition	767	—
Share-based compensation	832	2,444
Non-cash cost of shares issued to Aspire Capital as commitment fee	1,695	—
Loss on disposal and write-offs of property and equipment	66	36
Changes in operating assets and liabilities:		
Contracts and grants receivable	262	(216)
Prepaid expenses and other current assets	744	125
Accounts payable	(1,441)	1,245
Accrued compensation	346	40
Accrued outside research and development services	39	819
Accrued legal and professional fees	(297)	(289)
Other accrued expenses	82	(17)
Deferred revenue	(3,343)	1,159
Advanced payment for research and development service obligation	—	12,000
Research and development service obligation liabilities	(2,166)	(5,543)
Other long-term assets and liabilities	(324)	(326)
Net cash used in operating activities	(21,868)	(11,421)
Cash flow from investing activities:		
Purchases of property and equipment	(415)	(38)
Proceeds from the sale of property and equipment	325	—
Net cash used in investing activities	(90)	(38)
Cash flow from financing activities:		
Proceeds from issuance of common stock and pre-funded warrants, net of underwriting fees and commissions	12,577	—
Proceeds from exercise of common stock warrants	5,538	—
Proceeds from Paycheck Protection Program loan	956	—
Proceeds from issuance of common stock under common stock purchase agreement	31,906	261
Payments related to public offering costs	(178)	—
Payments of offering costs related to new registration statement	(25)	—
Proceeds from exercise of stock options	5	10
Proceeds from research and development funding arrangement	—	25,000
Net cash provided by financing activities	50,779	25,271
Net increase in cash, cash equivalents and restricted cash	28,821	13,812
Cash, cash equivalents and restricted cash as of beginning of period	14,251	8,733
Cash, cash equivalents and restricted cash as of end of period	$ 43,072	$ 22,545
Supplemental disclosure of non-cash investing and financing activities:		
Deferred offering costs reclassified to additional paid-in capital	$ 16	$ —
Purchases of property and equipment with accounts payable and accrued expenses	$ 56	$ 24
Liability-based awards reclassified to additional paid-in capital	$ —	$ 366
Common stock issued for payment of commitment fee	$ —	$ 750
Reconciliation to condensed consolidated balance sheets:		
Cash and cash equivalents	$ 43,072	$ 15,549
Restricted cash included in current assets	—	5,651
Restricted cash included in noncurrent assets	—	1,345
Total cash, cash equivalents and restricted cash shown in the statement of cash flows	$ 43,072	$ 22,545

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

NOVAN, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(unaudited)
(dollar values in thousands, except per share data)

Note 1: Organization and Significant Accounting Policies

Business Description and Basis of Presentation

Novan, Inc. ("Novan" and together with its subsidiaries, the "Company"), is a North Carolina-based clinical development-stage biotechnology company focused on leveraging nitric oxide's naturally occurring anti-viral, anti-bacterial, anti-fungal and immunomodulatory mechanisms of action to treat a range of diseases with significant unmet needs. Novan was incorporated in January 2006 under the state laws of Delaware. Its wholly-owned subsidiary, Novan Therapeutics, LLC was organized in 2015 under the state laws of North Carolina. On March 14, 2019, the Company completed registration of a wholly-owned Ireland-based subsidiary, Novan Therapeutics, Limited.

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 December 31, 2019 year-end condensed consolidated balance sheet data was derived from audited financial statements but does not include all disclosures required by U.S. GAAP. Additionally, the Company's independent registered public accounting firm report for the December 31, 2019 financial statements included an explanatory paragraph indicating that there is substantial doubt about the Company's ability to continue as a going concern.

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.

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, in the aggregate, 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 September 30, 2020, the Company had an accumulated deficit of $242,642.

- As of September 30, 2020, the Company had a total cash and cash equivalents balance of $43,072.

- As described in Note 10—Stockholders' Equity (Deficit), in July 2020 the Company entered into a common stock purchase agreement (the "July 2020 Aspire CSPA") with Aspire Capital Fund, LLC ("Aspire Capital"). The July 2020 Aspire CSPA replaced the prior common stock purchase agreement, dated as of June 15, 2020, between the Company and Aspire Capital (the "June 2020 Aspire CSPA"), which had replaced the prior common stock purchase agreement, dated as of August 30, 2019, between the Company and Aspire Capital (the "2019 Aspire CSPA"). During the nine months ended September 30, 2020, the Company received aggregate net proceeds of $31,906 from the 2019 Aspire CSPA, the June 2020 Aspire CSPA and the July 2020 Aspire CSPA.

- As described in Note 10—Stockholders' Equity (Deficit), in early March 2020 the Company completed a public offering of its common stock (or pre-funded warrants to purchase common stock in lieu thereof) and common warrants to purchase common stock pursuant to the Company's then effective shelf registration statement (the "March 2020 Public Offering"). Net proceeds from the offering were approximately $5,158 after deducting underwriting discounts and commissions and offering expenses of approximately $791. The Company has also received proceeds from the exercise of common warrants issued in the March 2020 Public Offering of approximately $5,538 through September 30, 2020.

- As described in Note 10—Stockholders' Equity (Deficit), in late March 2020 the Company completed a registered direct offering of its common stock (or pre-funded warrants to purchase common stock in lieu thereof) pursuant to the Company's then effective shelf registration statement (the "March 2020 Registered Direct Offering"). Net proceeds from the offering were approximately $7,225 after deducting fees and commissions and offering expenses of approximately $774.

The evaluation is also based on other relevant conditions that are known or reasonably knowable at the date that the financial statements are issued, including ongoing liquidity risks faced by the Company, the Company's conditional and unconditional obligations due or anticipated within one year, the funds necessary to maintain the Company's operations considering its current financial condition, obligations, and other expected cash flows, and other conditions and events that, when considered in conjunction with the above, may adversely affect the Company's ability to meet its obligations. Based on the assessment of management's plan, the Company has concluded that there are no conditions or events, in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for a period of at least one year from the date the financial statements are issued. The Company will continue to evaluate this going concern assessment in connection with the preparation of its quarterly and annual financial statements based upon relevant facts and circumstances, including but not limited to, its cash and cash equivalents balance and its operating forecast and related cash projection.

The Company believes that its existing cash and cash equivalents balance as of September 30, 2020, and expected contractual payments to be received in connection with existing licensing agreements, will provide it with adequate liquidity to fund its operating needs through the fourth quarter of 2021. This operating forecast and related cash projection includes the expected costs associated with a pivotal Phase 3 trial for SB206 as a treatment for molluscum (the "B-SIMPLE4 trial"), and development activities in certain priority therapeutic areas, but excludes any potential costs associated with other late-stage clinical development programs and proceeds from any potential future sales of common stock under the July 2020 Aspire CSPA. Further advancement of the SB206 molluscum program beyond the conduct and completion of the B-SIMPLE4 trial, or advancement of any other late-stage clinical development program across the Company's platform, is subject to securing significant additional funding or strategic partnering, and has been and may be further impacted by the COVID-19 pandemic.

The Company will need significant additional funding to continue its operating activities and make further advancements in its product development programs beyond those currently included in its operating forecast and related cash projection. The Company does not currently have sufficient funds to complete development and commercialization of any of its product candidates. The inability of the Company to obtain significant additional funding on acceptable terms, including through the utilization of the remaining amount available under the July 2020 Aspire CSPA, could have a material adverse effect on the Company's business and cause the Company to alter or reduce its planned operating activities, including but not limited to delaying, reducing, terminating or eliminating planned product candidate development activities, to conserve its cash and cash equivalents. The Company needs and intends to pursue additional capital through equity or debt financings, including potential sales under the July 2020 Aspire CSPA, or from non-dilutive sources, including partnerships, collaborations, licensing, grants or other strategic relationships. The Company's recent equity issuances during the nine months ended September 30, 2020, have resulted in significant dilution to its existing stockholders. Any future additional issuances of equity, or debt that could be convertible into equity, would result in further significant dilution to the Company's existing stockholders. Alternatively, the Company may seek to engage in one or more potential transactions, such as the sale of the Company, or sale or divestiture of some of its assets, such as a sale of its dermatology platform assets, but there can be no assurance that the Company will be able to enter into such a transaction or transactions on a timely basis or at all on terms that are favorable to the Company. Under these circumstances, the Company could instead determine to dissolve and liquidate its assets or seek protection under the bankruptcy laws. If the Company decides to dissolve and liquidate its assets or to seek protection under the bankruptcy laws, it is unclear to what extent the Company will be able to pay its obligations, and, accordingly, it is further unclear whether and to what extent any resources will be available for distributions to stockholders.

COVID-19

In December 2019, the novel strain of a virus named SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2), which causes novel coronavirus disease 2019 ("COVID-19") was reported in China, and in March 2020, the World Health Organization declared it a pandemic. The extent to which COVID-19 and global efforts to contain its spread will impact the Company's business including its operations, preclinical studies, clinical trials, and financial condition will depend on future developments, which are highly uncertain and cannot be predicted at this time, and include the duration, severity and scope of the pandemic and the actions taken by other parties, such as governmental authorities, to contain and treat COVID-19. The timetable for development of the Company's product candidates has been impacted and may face further disruption and the Company's business could be further adversely affected by the outbreak of COVID-19. In particular, COVID-19 impacted the timing of trial initiation of the Company's B-SIMPLE4 Phase 3 trial for SB206, and while the Company enrolled and dosed the first patient in the trial in September 2020, the Company is continuing to assess any further impact of COVID-19 on the B-SIMPLE4 Phase 3 trial for SB206, including any potential delay, postponement or other impact to the trial. Despite disruptions to the Company's business operations and the business operations of third parties on which the Company relies, the COVID-19 pandemic has not significantly impacted the Company's operating results and financial condition to date. However, at this time, the extent to which COVID-19 may impact the Company's financial condition or results of operations in the future is uncertain.

Classification of Warrants Issued in Connection with Offerings of Common Stock

The Company accounts for common stock warrants as either equity-classified or liability-classified instruments based on an assessment of the warrant's specific terms and applicable authoritative guidance in Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 480, *Distinguishing Liabilities from Equity* ("ASC 480") and ASC 815, *Derivatives and Hedging* ("ASC 815"). The assessment considers whether the warrants are freestanding financial instruments pursuant to ASC 480, whether the warrants meet the definition of a liability pursuant to ASC 480, and whether the warrants meet all of the requirements for equity classification under ASC 815, including whether the warrants are indexed to the Company's own common stock and whether the warrant holders could potentially require "net cash settlement" in a circumstance outside of the Company's control, among other conditions for equity classification. This assessment, which requires the use of professional judgment, is conducted at the time of warrant issuance and as of each subsequent quarterly period end date while the warrants are outstanding.

For issued or modified warrants that meet all of the criteria for equity classification, the warrants are required to be recorded as a component of additional paid-in capital at the time of issuance. For issued or modified warrants that do not meet all the criteria for equity classification, the warrants are required to be recorded at their initial fair value on the date of issuance, and remeasured each balance sheet date thereafter. Changes in the estimated fair value of liability-classified warrants are recognized as a non-cash gain or loss on the consolidated statements of operations and comprehensive loss.

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 condensed consolidated financial statements have been prepared in accordance with U.S. GAAP and applicable rules and regulations of the Securities and Exchange Commission's ("SEC") Rule 10-01 of Regulation S-X for interim financial information. The condensed consolidated financial statements were prepared on the same basis as the audited consolidated financial statements and in the opinion of management, reflect all adjustments (consisting of adjustments of a normal, recurring nature and the impact of the Company's restatement of its consolidated financial statements for the Affected Periods (as defined below)) that are necessary for the fair statement of the Company's financial position and its results of operations and cash flows. The results of operations for interim periods 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 consolidated financial statements and notes for the year ended December 31, 2019 set forth in the Company's Annual Report on Form 10-K for the year ended December 31, 2019, as amended, filed with the SEC as discussed below.

Restatement of Previously Issued Financial Statements

On May 14, 2020, the Company revised its prior position on accounting for warrants and concluded that its previously issued consolidated financial statements for the year ended December 31, 2018, and all quarterly periods of 2019 and 2018 (the "Affected Periods") should not be relied upon because of a misapplication in the guidance on warrant accounting. On May 20, 2020, the Company restated its consolidated financial statements for all Affected Periods in its Annual Report on Form 10-K/A (Amendment No. 1) for the fiscal year ended December 31, 2019. As such, the comparative information provided for the three and nine months ended September 30, 2019 contained in the preceding condensed consolidated financial statements and the accompanying footnotes reflect these previously restated amounts.

Restricted Cash

Restricted cash as of December 31, 2019 included funds maintained in a separate deposit account to secure a letter of credit for the benefit of the lessor of facility space leased by the Company. As described in Note 8—Commitments and Contingencies, in conjunction with the Company's early termination of such facility space in July 2020, the $539 security deposit was applied as a partial payment of a $600 lease termination fee. Therefore, there was no restricted cash as of September 30, 2020.

Assets Held for Sale

The Company generally considers assets to be held for sale when (i) the Company commits to a plan to sell the assets, (ii) the assets are available for immediate sale in their present condition, (iii) the Company has initiated an active program to locate a buyer and other actions required to complete the plan to sell the assets, (iv) consummation of the planned sale transaction is probable, (v) the assets are being actively marketed for sale at a price that is reasonable in relation to their current fair value, (vi) the transaction is expected to qualify for recognition as a completed sale, within one year, and (vii) significant changes to or withdrawal of the plan is unlikely. Following the classification of any depreciable assets within a disposal group as held for sale, the Company discontinues depreciating the asset and writes down the asset to the lower of carrying value or fair market value less cost to sell, if needed.

See Note 14—Assets Held for Sale, Impairment Charges for a discussion of the Company's application of this accounting policy.

Impairment of Long-Lived Assets

Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized for an amount by which the carrying amount of the asset exceeds the fair value of the asset.

As described in Note 8—Commitments and Contingencies, on July 16, 2020, the Company entered into a lease termination agreement, which provided for the early termination of the existing lease for the Company's corporate headquarters and sole research, development and manufacturing facility. In contemplation of this transaction, during June 2020, the Company decommissioned the areas within the Facility (as defined below), as well as the associated equipment, that supported the Company's large scale cGMP drug manufacturing capability in preparation for execution of the lease termination agreement. The performance of decommissioning activities as noted above was considered to be a triggering event that caused the Company to evaluate its long-lived assets for impairment as of June 29, 2020, principally its right of use lease asset and its property, plant and equipment, including leasehold improvements. See Note 14—Assets Held for Sale, Impairment Charges for a discussion of the Company's evaluation of its long-lived assets for impairment. The Company also recorded an additional loss based upon Company-specific facts and circumstances associated with the July 2020 lease termination transaction during the three months ended September 30, 2020. See Note 15—Asset Group Disposition for additional detail regarding the loss on the Company's facility asset group disposition.

Net Loss Per Share

Basic net loss per share attributable to common stockholders is computed by dividing the net loss attributable to common stockholders by the weighted average number of shares of common stock outstanding for the period.

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 anti-dilutive for all periods presented.

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 and nine months ended September 30, 2020 and September 30, 2019 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.

	September 30,	
	2020	2019
Warrants to purchase common stock associated with January 2018 public offering (Note 10)	10,000,000	10,000,000
Warrants to purchase common stock associated with March 2020 public offering (Note 10)	3,219,125	—
Warrants to purchase common stock associated with March 2020 registered direct offering (Note 10)	558,140	—
Stock options outstanding under the 2008 and 2016 Plans (Note 11)	1,995,283	1,806,502
Stock appreciation rights outstanding under the 2016 Plan (Note 11)	610,000	1,000,000
Inducement stock options outstanding (Note 11)	91,834	125,500

Segment and Geographic 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 substantially all revenue was derived from licensing agreements originating in the United States. All of the Company's long-lived assets are maintained in the United States.

Although all operations are based in the United States, the Company generated revenue from its licensing partner in Japan of $1,100, or approximately 84% of total revenue, and $3,224, or approximately 84% of total revenue, during the three and nine months ended September 30, 2020, respectively. During the three and nine months ended September 30, 2019, the Company generated revenue from its licensing partner in Japan of $1,100, or approximately 84% of total revenue, and $3,301 or approximately 94% of total revenue.

Recently Issued Accounting Standards

Accounting Pronouncements Adopted

In August 2018, the FASB issued Accounting Standards Update ("ASU") No. 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement.* This guidance is intended to improve the effectiveness of disclosure requirements on fair value measurements in Topic 820. The new standard modifies certain disclosure requirements and is effective for annual reporting periods beginning after December 15, 2019. This ASU was effective for the Company as of January 1, 2020. The adoption of this new accounting guidance did not have a material impact on the Company's condensed consolidated financial statements.

In October 2018, the FASB issued ASU No. 2018-17, *Consolidation (Topic 810): Targeted Improvements to Related Party Guidance for Variable Interest Entities.* This guidance is intended to improve the accounting for variable interest entities and whether the entity should be consolidated. This guidance is effective for annual reporting periods beginning after December 15, 2019, including interim reporting periods within those annual reporting periods, with early adoption permitted. This ASU was effective for the Company as of January 1, 2020. The adoption of this new accounting guidance did not have a material impact on the Company's condensed consolidated financial statements.

In November 2018, the FASB issued ASU No. 2018-18, *Collaborative Arrangements (Topic 808): Clarifying the Interaction between Topic 808 and Topic 606*. This guidance is intended to reduce diversity in practice and clarify the interaction between Topic 808, *Collaborative Arrangements*, and Topic 606, *Revenue from Contracts with Customers*. This ASU provided guidance on whether certain transactions between collaborative arrangement participants should be accounted for with revenue under Topic 606. This guidance is effective for annual reporting periods beginning after December 15, 2019, including interim reporting periods within those annual reporting periods, with early adoption permitted. This ASU was effective for the Company as of January 1, 2020. The adoption of this new accounting guidance did not have a material impact on the Company's condensed consolidated financial statements.

Accounting Pronouncements Being Evaluated

In December 2019, the FASB issued ASU No. 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*. This guidance is intended to improve consistent application and simplify the accounting for income taxes. This ASU removes certain exceptions to the general principles in Topic 740 and clarifies and amends existing guidance. This standard is effective for annual reporting periods beginning after December 15, 2020, including interim reporting periods within those annual reporting periods, with early adoption permitted. The Company is currently evaluating the impact of adoption of this ASU and does not expect the adoption of this new standard to have a material impact on its consolidated financial statements.

Note 2: KNOW Bio, LLC

On December 30, 2015, the Company completed the distribution of 100% of the outstanding member interests of KNOW Bio, LLC ("KNOW Bio"), a former wholly owned subsidiary of the Company, to Novan's stockholders (the "Distribution"), pursuant to which KNOW Bio became an independent privately held company.

KNOW Bio is an independent, privately held company with a portfolio of operating subsidiaries that are advancing nitric oxide-based therapies using technology that is proprietary and/or in fields where they have exclusive intellectual property rights. The Company does not own any equity interest in KNOW Bio, has no common management or board representation at KNOW Bio, and the contractual arrangements between the two entities do not provide the Company with decision-making authority or power to influence KNOW Bio's drug and medical device development activities.

The Company conducted an initial assessment of KNOW Bio under the variable interest consolidation model pursuant to FASB ASC 810, *Consolidation*, at the time of the Distribution in 2015 and has monitored KNOW Bio during each subsequent reporting period, including two required ASC 810 reassessments performed during 2017. The Company has consistently determined that KNOW Bio should not be consolidated in its consolidated financial statements. In the fourth quarter of 2018, KNOW Bio and its operating subsidiaries received significant additional equity investments that enable progression of their technology. These events required the Company to conduct another reassessment of variable interest entity characteristics, pursuant to FASB ASC 810-10, *Consolidation*, in which it determined that KNOW Bio should not be consolidated in its consolidated financial statements.

KNOW Bio Technology Agreements

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 and KNOW Bio entered into an exclusive license agreement dated December 29, 2015 (the "KNOW Bio License Agreement"). Pursuant to the terms of the KNOW Bio License Agreement, the Company granted to KNOW Bio exclusive licenses, with the right to sublicense, under certain United States and foreign patents and patent applications that were controlled by the Company as of December 29, 2015 or that became controlled by the Company between that date and December 29, 2018, directed towards nitric-oxide releasing compositions and methods of manufacturing thereof, including methods of manufacturing Nitricil compounds and other nitric oxide-based therapeutics.

Sublicense of UNC and other third party intellectual property to KNOW Bio. The Company and KNOW Bio also entered into sublicense agreements dated December 29, 2015 (the "KNOW Bio Sublicense Agreements" and together with the KNOW Bio License Agreement, the "Original KNOW Bio Agreements"). Pursuant to the terms of the KNOW Bio Sublicense Agreements, the Company granted to KNOW Bio exclusive sublicenses, with the ability to further sublicense, under certain of the United States and foreign patents and patent applications exclusively licensed to the Company from the University of North Carolina at Chapel Hill ("UNC") under the Amended, Restated and Consolidated License Agreement dated June 27, 2012, as amended (the "UNC License Agreement"), 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 (the "UNC Sublicense Agreement"), KNOW Bio is subject to the terms and conditions under the UNC License Agreement, including milestone and diligence payment obligations. However, pursuant to the terms of the UNC License Agreement, the Company is directly obligated to pay UNC any future milestones or royalties, including those resulting from actions conducted by the Company's sublicensees, including KNOW Bio. Therefore, in the event of KNOW Bio non-performance with respect to its obligations under the UNC Sublicense Agreement, the Company would be obligated to make such payments to UNC. KNOW Bio would then become obligated to repay the Company pursuant to the UNC Sublicense Agreement, otherwise KNOW Bio would be in breach of its agreements with the Company and intellectual property rights would revert back to the Company. There were no milestone or royalty payments required during the nine months ended September 30, 2020 and 2019.

Amendments to License and Sublicense Agreements with KNOW Bio

On October 13, 2017, the Company and KNOW Bio entered into certain amendments to the Original KNOW Bio Agreements (the "KNOW Bio Amendments"). Pursuant to the terms of the KNOW Bio Amendments, the Company re-acquired from KNOW Bio exclusive, worldwide rights under certain United States and foreign patents and patent applications controlled by the Company as of December 29, 2015, and that became controlled by the Company between December 29, 2015 and December 29, 2018, directed towards nitric oxide-releasing compositions and methods of manufacturing thereof, including methods of manufacturing Nitricil compounds, and other nitric oxide-based therapeutics, to develop and commercialize products for all diagnostic, therapeutic, prophylactic and palliative uses for any disease, condition or disorder caused by certain oncoviruses (the "Oncovirus Field").

KNOW Bio also granted to the Company an exclusive license, with the right to sublicense, under any patents and patent applications which became controlled by KNOW Bio during the three-year period between December 29, 2015 and December 29, 2018 and directed towards nitric oxide-releasing compositions and methods of manufacturing thereof, including methods of manufacturing Nitricil compounds, and other nitric oxide-based therapeutics, but not towards medical devices, to develop and commercialize products for use in the Oncovirus Field.

Upon execution of the KNOW Bio Amendments, in exchange for the Oncovirus Field rights, the Company paid a non-refundable upfront payment of $250. Products the Company develops in the Oncovirus Field based on Nitricil will not be subject to any further milestones, royalties or sublicensing payment obligations to KNOW Bio under the KNOW Bio Amendments. However, if the Company develops products in the Oncovirus Field that incorporate a certain nitric oxide-releasing composition specified in the KNOW Bio Amendments and (i) are covered by KNOW Bio patents; or (ii) materially use or incorporate know-how of KNOW Bio or the Company related to such composition that was created between December 29, 2015 and December 29, 2018, the Company would be obligated to make the certain contingent milestone and royalty payments to KNOW Bio under the KNOW Bio Amendments.

The rights granted to the Company in the Oncovirus Field in the KNOW Bio Amendments continue for so long as there is a valid patent claim under the Original KNOW Bio Agreements, and upon expiration continue on a perpetual non-exclusive basis, and are subject to the termination rights of KNOW Bio and the Company that are set forth in the Original KNOW Bio Agreements. In addition, under the KNOW Bio Amendments, KNOW Bio may terminate the rights granted to the Company in the Oncovirus Field without terminating the Original KNOW Bio Agreements.

The KNOW Bio Amendments also provide a mechanism whereby either party can cause a new chemical entity ("NCE") covered by the Original KNOW Bio Agreements to become exclusive to such party by filing an IND on the NCE. An NCE that becomes exclusive to a party under this provision may not be commercialized by the other party until the later of expiration of patents covering the NCE or regulatory exclusivity covering the NCE. A party who obtains exclusivity for an NCE must advance development of the NCE pursuant to terms of the KNOW Bio Amendments in order to maintain such exclusivity; otherwise, such exclusivity will expire.

The terms of the KNOW Bio Amendments were negotiated at arms-length and do not provide the Company with an ability to significantly influence KNOW Bio or its operations.

Note 3: 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 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, KIPAX AB and KNOW Bio.

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. 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 UNC License 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 United States, Japan and Australia, with claims intended to cover NVN1000, the NCE for the Company's current product candidates. The UNC License 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. Licensed products include any products being developed by the Company or by its sublicensees.

Unless earlier terminated by the Company at its election, or if the Company materially breaches the agreement or becomes bankrupt, the UNC License 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 License Agreement is 2033.

Note 4: Licensing Arrangements

Sato License Agreement

Significant Terms

On January 12, 2017, the Company entered into a license agreement, and related first amendment, with Sato Pharmaceutical Co., Ltd. ("Sato"), relating to SB204, its 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.

On October 5, 2018, the Company and Sato entered into the second amendment (the "Sato Amendment") to the Sato Agreement (collectively, the "Amended Sato Agreement"). The Sato Amendment expanded the Sato Agreement to include SB206, the Company's drug candidate for the treatment of viral skin infections. Pursuant to the Amended Sato Agreement, the Company granted to Sato an exclusive, royalty-bearing, non-transferable license under certain of its 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 or SB206 in certain topical dosage forms for the treatment of acne vulgaris or viral skin infections, respectively, and to make the finished form of such products. The Company or its designated contract manufacturer will supply finished product to Sato for use in the development of SB204 and SB206 in the licensed territory. The rights granted to Sato do not include the right to manufacture the active pharmaceutical ingredient ("API") of SB204 or SB206; rather, the parties agreed to negotiate a commercial supply agreement pursuant to which the Company or its designated contract manufacturer would be the exclusive supplier to Sato of the API for the commercial manufacture of licensed products in the licensed territory. Under the terms of the Amended 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 or SB206 outside of Japan.

Under the Amended Sato Agreement, in exchange for the SB204 and SB206 license rights granted to Sato, Sato agreed to pay the Company the following:

- An upfront payment of 1.25 billion Japanese Yen ("JPY") payable in installments of 0.25 billion JPY, 0.5 billion JPY and 0.5 billion JPY on October 5, 2018, February 14, 2019 and September 13, 2019, respectively. This was in addition to the 1.25 billion JPY (approximately $10,813 USD) paid on January 19, 2017 following the execution of the Sato Agreement on January 12, 2017. On October 23, 2018, the Company received the first installment from the Amended Sato Agreement of 0.25 billion JPY (approximately $2,224 USD). On March 14, 2019, the Company received the second installment payment related to the Amended Sato Agreement of 0.5 billion JPY (approximately $4,460 USD). On November 7, 2019, the Company received the third installment payment related to the Amended Sato Agreement of 0.5 billion JPY (approximately $4,554 USD).
- Up to an aggregate of 1.75 billion JPY (adjusted from 2.75 billion JPY in the Sato Agreement) upon the achievement of various development and regulatory milestones, including (i) a 0.25 billion JPY (approximately $2,162 USD) milestone payment received during the fourth quarter of 2018 following Sato's initiation of a Phase 1 trial in Japan; and (ii) an aggregate of 1.0 billion JPY that becomes payable upon the earlier occurrence of specified fixed future dates or the achievement of milestone events.
- Up to an aggregate of 3.9 billion JPY (adjusted from 0.9 billion JPY in the Sato Agreement) upon the achievement of various commercial milestones.
- A tiered royalty ranging from a mid-single digit to a low-double digit percentage (adjusted from a mid-single digit percentage in the Sato Agreement) 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 Amended Sato Agreement (and the period during which Sato must pay royalties under the amended license agreement) expires on the twentieth anniversary of the first commercial sale of a licensed product in the licensed field in the licensed territory (adjusted from the tenth anniversary of the first commercial sale in the Sato Agreement). The term of the Amended Sato Agreement may be renewed with respect to a licensed product by mutual written agreement of the parties for additional two-year periods following expiration of the initial term. All other material terms of the Sato Agreement remain unchanged by the Sato Amendment.

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 and SB206 in the United States; (ii) sharing all future scientific information the Company may obtain during the term of the Amended Sato Agreement pertaining to SB204 and SB206; (iii) performing certain additional preclinical 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 Amended 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 Amended 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 Amended Sato Agreement. In the event of a termination, no portion of the upfront fees received from Sato are refundable.

Note 5: Revenue Recognition

Sato Agreement

The Company assessed the Sato Agreement in accordance with Topic 606 and concluded that the contract counterparty, Sato, is a customer within the scope of Topic 606. The Company identified the following promises 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 stand-ready obligation to perform any necessary repeat preclinical studies, up to $1,000 in cost. The Company determined that these promises were not individually distinct because Sato can only benefit from these licensed intellectual property rights and services when bundled together; they do not have individual benefit or utility to Sato. As a result, all promises have been combined into a single performance obligation.

The Sato Agreement also provides that the two parties agree to negotiate in good faith the terms of a commercial supply agreement pursuant to which the Company or a third-party manufacturer would be the exclusive supplier to Sato of the API for the commercial manufacture of licensed products in the licensed territory. The Company concluded this obligation to negotiate the terms of a commercial supply agreement does not create (i) a legally enforceable obligation under which the Company may have to perform and supply Sato with API for commercial manufacturing; or (ii) a material right because the incremental commercial supply fee consideration framework in the Sato Agreement is representative of a stand-alone selling price for the supply of API and does not represent a discount. Therefore, this contract provision is not considered to be a promise to deliver goods or services and is not a performance obligation or part of the combined single performance obligation described above.

Amended Sato Agreement

On October 5, 2018, the Company and Sato entered into the Amended Sato Agreement. The Sato Amendment expanded the Sato Agreement to include SB206, the Company's drug candidate for the treatment of viral skin infections. The Company assessed the Amended Sato Agreement in accordance with Topic 606 and concluded the contract modification should incorporate the additional goods and services provided for in the Amendment into the existing, partially satisfied single bundled performance obligation that will continue to be delivered to Sato over the remaining development period. This contract modification accounting is concluded to be appropriate as the additional goods and services conveyed under the Sato Amendment were determined to not be distinct from the single performance obligation, and the additional consideration provided did not reflect the standalone selling price of those additional goods and services. As such, the Company recorded a cumulative adjustment as of the amendment execution date to reflect revenue that would have been recognized cumulatively for the partially completed bundled performance obligation.

The Company concluded that the following consideration would be included in the transaction price as they were (i) received prior to September 30, 2020; or (ii) payable upon specified fixed dates in the future and are not contingent upon clinical or regulatory success in Japan:

- The 1.25 billion JPY (approximately $10,813 USD) original upfront payment received on January 19, 2017 following the execution of the Sato Agreement on January 12, 2017.
- A milestone payment of 0.25 billion JPY (approximately $2,162 USD) received during the fourth quarter of 2018 following Sato's initiation of a Phase 1 trial in Japan.
- The Sato Amendment upfront payment of 1.25 billion JPY, payable in installments of 0.25 billion JPY, 0.5 billion JPY and 0.5 billion JPY on October 5, 2018, February 14, 2019 and September 13, 2019, respectively. On October 23, 2018, the Company received the first installment from the Amended Sato Agreement of 0.25 billion JPY (approximately $2,224 USD). On March 14, 2019, the Company received the second installment payment related to the Amended Sato Agreement of 0.5 billion JPY (approximately $4,460 USD). On November 7, 2019, the Company received the third installment payment related to the Amended Sato Agreement of 0.5 billion JPY (approximately $4,554 USD).
- An aggregate of 1.0 billion JPY in non-contingent milestone payments that become payable upon the earlier occurrence of specified fixed dates in the future or the achievement of specified milestone events.

The following table presents the Company's contract assets and contract liabilities balances for the periods indicated.

	Contract Asset	Contract Liability	Net Deferred Revenue
December 31, 2019	$ 8,974	$ 20,478	$ 11,504
September 30, 2020	$ 8,895	$ 17,056	$ 8,161

	Short-term Deferred Revenue	Long-term Deferred Revenue	Net Deferred Revenue
December 31, 2019	$ 4,428	$ 7,076	$ 11,504
September 30, 2020	$ 4,401	$ 3,760	$ 8,161

The Company has recorded the Sato Agreement and Amended Sato Agreement transaction price, including the upfront payments received and the unconstrained variable consideration, as deferred revenue (comprised of (i) a contract liability; net of (ii) a contract asset). The change in the net deferred revenue balance during the three and nine months ended September 30, 2020 was associated with the recognition of license and collaboration revenue associated with the Company's performance during the period (continued amortization of deferred revenue). During the three and nine months ended September 30, 2020, the Company recognized $1,100 and $3,224, respectively, in license and collaboration revenue under this agreement. During the three and nine months ended September 30, 2019, Company recognized $1,100 and $3,301, respectively, in license and collaboration revenue under this agreement.

The Company has concluded that the above consideration is probable of not resulting in a significant revenue reversal and therefore included in the transaction price and is allocated to the single performance obligation. No other variable consideration under the Amended Sato Agreement is probable of not resulting in a significant revenue reversal as of September 30, 2020 and therefore, is currently fully constrained and excluded from the transaction price.

The Company evaluated the timing of delivery for each of the obligations and concluded that a time-based input method is most appropriate because Sato is accessing and benefiting from the intellectual property and technology (the predominant items of the combined performance obligation) ratably over the duration of Sato's estimated development period in Japan. Although the Company concluded that the intellectual property is functional rather than symbolic, the services provided under the performance obligation are provided over time. Therefore, the allocated transaction price will be recognized using a time-based input method that results in straight-line recognition over the Company's performance period.

Prior to the Sato Amendment, the Company estimated the Sato Agreement development timeline for the SB204 product candidate to be approximately 5 years, starting in February 2017 and completing in the first quarter of 2022. With the Amended Sato Agreement, the Company and Sato are now developing both the SB204 and SB206 product candidates for the Japan territory.

The parties continue to work collaboratively to reach agreement, but have not yet reached agreement, with respect to the combined SB204 and SB206 development plan for the Japan territory, including a corresponding timeline and estimated duration for the combined development program. The Company's current estimated timeline is 7.5 years, starting in February 2017 and completing in the third quarter of 2024.

The Company monitors and reassesses the estimated performance period for purposes of revenue recognition during each reporting period. During the third quarter of 2020, Sato prepared and the Company reviewed an SB206 Japan development program timeline that was supportive of the 7.5 year performance period estimate. However, the SB204 asset's Japan development plan and program timeline remains under evaluation by the Company and Sato. This combined SB204 and SB206 development program timeline in Japan may potentially be affected by various factors, including (i) the results from the Company's SB206 Phase 3 trials in the United States, including but not limited to top-line efficacy results announced in January 2020 and the results of the ongoing B-SIMPLE4 trial, (ii) the Company's remaining timeline for the ongoing B-SIMPLE4 trial in the United States, which has been and may be further impacted by the COVID-19 pandemic, and (iii) the Company's in-house drug manufacturing capabilities and the progression of the Company's manufacturing technology transfer projects with third-party contract manufacturing organizations.

If the duration of the combined SB204 and SB206 development program timeline is affected by the establishment or subsequent adjustments, as applicable, to the mutually agreed upon SB204 and SB206 development plan in the Japan territory, the Company will adjust its estimated performance period for revenue recognition purposes accordingly, as needed.

In future periods, the Company will lift the variable consideration constraint from each contingent payment when there is no longer a probable likelihood of significant revenue reversal. When the constraint is lifted from a milestone payment, the Company will recognize the incremental transaction price using the same time-based input method that is being used to recognize the revenue, which results in straight-line recognition over the performance period. If the Company's performance is not yet completed at the time that the constraint is lifted, a cumulative catch-up adjustment will be recognized in the period. If no other performance is required by the Company at the time the constraint is lifted, the Company expects to recognize all revenue associated with such milestone payments at the time that the constraint is lifted.

Contract Costs—Sato Agreement

The Company has incurred certain fees and costs in the process of obtaining the Amended Sato Agreement that were payable upon contract execution and, therefore, have been recognized as other assets and amortized as general and administrative expense on a straight-line basis over the same estimated performance period being used to recognize the associated revenue. These fees are associated with the following two arrangements and are described as follows:

- The Company 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 is obligated to pay the third party a low-single-digit percentage of all upfront and milestone payments the Company receives from Sato under the Amended Sato Agreement.

- 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 UNC License Agreement described in Note 3—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 is obligated to make payments to UNC that represent the portion of the Sato upfront and milestone payments that were estimated to be directly attributable to the UNC intellectual property rights included in the license to Sato.

Performance Obligations under the Sato Agreement

The net amount of existing performance obligations under long-term contracts unsatisfied as of September 30, 2020 was $8,161. The Company expects to recognize approximately 26% of the remaining performance obligations as revenue over the next 12 months, and the balance thereafter. The Company applied the practical expedient and does not disclose information about variable consideration related to sales-based or usage-based royalties promised in exchange for a license of intellectual property. This expedient specifically applied to the sales-based milestone payments that are present in the Amended Sato Agreement (3.9 billion JPY), as well as percentage-based royalty payments in the Amended Sato Agreement that are contingent upon future sales.

Government Contracts and Grant Revenue

The Company assessed the following federal grants in accordance with Topic 958 and concluded that both represent conditional non-exchange transactions.

In August 2019, the Company received a Phase 1 federal grant of approximately $223 (the “NIH Phase 1 Grant”) from the National Institutes of Health (the “NIH”). The funds are to be used to advance formulation development of a nitric oxide-containing intravaginal gel (WH602) designed to treat high-risk human papilloma virus (“HPV”) infections that can lead to cervical intraepithelial neoplasia (“CIN”). The specific focus is to ensure the nitric oxide delivery from the gel replicates doses of nitric oxide previously demonstrated to be effective against HPV in the Company’s clinical and in vitro studies. Revenue recognized under the NIH Phase 1 Grant was $0 and $29 during the three and nine months ended September 30, 2020, respectively. Revenue recognized under this grant was $26 during the three and nine months ended September 30, 2019.

In February 2020, following the successful progression of the NIH Phase 1 Grant, the Company was awarded a Phase 2 federal grant of approximately $997 from the NIH (the “NIH Phase 2 Grant”) that will enable the conduct of IND-enabling toxicology and pharmacology studies and other preclinical activity with respect to WH602. The NIH Phase 2 Grant funds will be received by the Company in the form of periodic cost reimbursements as the underlying research and development activities are performed. The Company may be eligible to receive additional funding as part of the NIH Phase 2 Grant, subject to availability of NIH funds and satisfactory progress of the project during the initial 12-month term. Revenue recognized under the NIH Phase 2 Grant was $104 during the three and nine months ended September 30, 2020.

In September 2019, the Company received a grant from the United States Department of Defense’s Congressionally Directed Medical Research Programs of approximately $1,113 as part of its Peer Reviewed Cancer Research Program. The grant will support the development of a non-gel formulation product candidate (WH504) designed to treat high-risk HPV infections that can lead to CIN, with well-characterized physical chemical properties suitable for intravaginal administration. In addition, the grant will support the evaluation of the effect of varying concentrations and treatment durations of berdazimer sodium (NVN1000) against HPV-18 in human raft cell culture in vitro studies. Revenue recognized under this grant was $113 and $494 during the three and nine months ended September 30, 2020, respectively. Revenue recognized under this grant was $190 during the three and nine months ended September 30, 2019.

Note 6: Research and Development Arrangements

Royalty and Milestone Payments Purchase Agreement with Reedy Creek Investments LLC

On April 29, 2019, the Company entered into a royalty and milestone payments purchase agreement (the "Purchase Agreement") with Reedy Creek Investments LLC ("Reedy Creek"), pursuant to which Reedy Creek provided funding to the Company in an initial amount of $25,000, for the Company to use primarily to pursue the development, regulatory approval and commercialization (including through out-license agreements and other third-party arrangements) activities for SB206, a topical anti-viral gel being developed for the treatment of molluscum contagiosum, and advancing programmatically such activities with respect to SB204, a once-daily, topical monotherapy being developed for the treatment of acne vulgaris, and SB414, a topical cream-based product candidate being developed for the treatment of atopic dermatitis. Reedy Creek was to provide additional funding to the Company of $10,000 contingent upon the achievement by the Company of SB206 clinical trial success, defined as (i) the achievement, no later than March 31, 2020, of statistically significant rates of complete clearance of lesions for molluscum contagiosum in humans at week 12 in each of the two Phase 3 clinical trials or any other primary endpoint required or accepted by the FDA for the SB206 product; or (ii) equivalent achievement (as agreed upon by the parties).

On January 2, 2020, the Company announced top-line results from two pivotal Phase 3 clinical trials of SB206 for the treatment of molluscum contagiosum. SB206 did not achieve statistically significant results in the primary endpoint in both trials, which was the complete clearance of all molluscum lesions at Week 12. Based on such results, the Company understands that Reedy Creek will not be paying the Company the contingent $10,000 of additional funding.

Pursuant to the Purchase Agreement, the Company will pay Reedy Creek ongoing quarterly payments, calculated based on an applicable percentage per product of any upfront fees, milestone payments, royalty payments or equivalent payments received by the Company pursuant to any out-license agreement for SB204, SB206 or SB414 in the United States, Mexico or Canada, net of any upfront fees, milestone payments, royalty payments or equivalent payments paid by the Company to third parties pursuant to any agreements under which the Company has in-licensed intellectual property with respect to such products in the United States, Mexico or Canada. The applicable percentage used for determining the ongoing quarterly payments, applied to amounts received directly by the Company pursuant to any out-license agreement for each product, ranges from 10% for SB206 to 20% for SB204 and SB414. However, the agreement provides that the applicable percentage for each product will be 25% for fees or milestone payments received by the Company (but not royalty payments received by the Company) until Reedy Creek has received payments under the Purchase Agreement equal to the total funding amount provided by Reedy Creek under the Purchase Agreement. If the Company decides to commercialize any product on its own following regulatory approval, as opposed to commercializing through an out-license agreement or other third-party arrangement, the Company will be obligated to pay Reedy Creek a low single digits royalty on net sales of such products.

The Company determined that the Reedy Creek Purchase Agreement is within the scope of ASC 730-20, *Research and Development Arrangements*. The Company concluded that there has not been a substantive and genuine transfer of risk related to the Purchase Agreement as (i) Reedy Creek has the opportunity to recover its investment regardless of the outcome of the research and development programs within the scope of the agreement (prior to commercialization of any in scope assets through potential out-licensing agreements and related potential future milestone payments); and (ii) there is a presumption that the Company is obligated to pay Reedy Creek amounts equal to its investment based on the related party relationship at the time the parties entered into the Purchase Agreement. The Purchase Agreement is a broad funding arrangement, due to (i) the multi-asset, or portfolio approach including three developmental assets that are within the scope of the arrangement; and (ii) Reedy Creek's approximate 5% ownership of the outstanding shares of common stock of the Company at the time of entry into the Purchase Agreement.

As such, the Company determined that the appropriate accounting treatment under ASC 730-20 was to record the initial proceeds of $25,000 as cash and cash equivalents, as the Company had the ability to direct the usage of funds, and a long-term liability within its classified balance sheet. The long-term liability will remain until the Company receives future milestones from other potential third parties, as defined within the Purchase Agreement, of which 25% will be contractually owed to Reedy Creek. If potential future milestones are received by the Company, and become partly due to Reedy Creek, the corresponding partial repayment to Reedy Creek will result in a ratable reduction of the total long-term obligation to repay the initial purchase price.

Development Funding and Royalties Agreement with Ligand Pharmaceuticals Incorporated

On May 4, 2019, the Company entered into a development funding and royalties agreement (the "Funding Agreement") with Ligand Pharmaceuticals Incorporated ("Ligand"), pursuant to which Ligand provided funding to the Company of $12,000, for the Company to use to pursue the development and regulatory approval of SB206, a topical anti-viral gel being developed for the treatment of molluscum contagiosum.

Pursuant to the Funding Agreement, the Company will pay Ligand up to $20,000 in milestone payments upon the achievement by the Company of certain regulatory and commercial milestones associated with SB206 or any product that incorporates or uses NVN1000, the active pharmaceutical ingredient for the Company's clinical stage product candidates, for the treatment of molluscum contagiosum. In addition to the milestone payments, the Company will pay Ligand tiered royalties ranging from 7% to 10% based on annual aggregate net sales of such products in the United States, Mexico or Canada.

The Company determined that the Ligand transaction is within the scope of ASC 730-20 as it represents an obligation to perform contractual services for the development of SB206 using commercially reasonable efforts. In addition, the Funding Agreement also states that if all development of SB206 is ceased prior to the first regulatory approval, the Company must pay to Ligand an amount equal to the purchase price less the amount spent in accordance with the development budget on development activities conducted prior to such cessation.

As such, the Company concluded that the appropriate accounting treatment under ASC 730-20 was to record the initial proceeds of $12,000, as a liability and as restricted cash on its consolidated balance sheet, as the funds could only be used for the progression of SB206.

The Company amortizes the liability ratably during each reporting period, based on the Ligand funding as a percentage of the total direct costs incurred by the Company during the reporting period related to the estimated total cost to progress the SB206 program to a regulatory approval in the United States. The ratable Ligand funding is presented within the consolidated statement of operations as an offset to research and development expenses associated with the SB206 program. During the three months ended June 30, 2020, the Company completed a reassessment of the estimated total cost to progress the SB206 program to a potential United States regulatory approval, including consideration of how such estimated costs may potentially be affected by various regulatory, clinical development, and drug manufacturing and supply factors. During this reassessment, the Company concluded that the incremental costs associated with the conduct of the additional B-SIMPLE4 clinical trial would be excluded from the total cost basis used to amortize the liability because they were not contemplated within the Ligand Funding Agreement. The reassessment also concluded that the other projected costs to progress SB206 to a planned regulatory approval in the United States, most of which are regulatory costs associated with the NDA submission process, did not materially change and did not have a material effect on the amortization of the liability.

The initial restricted cash balance was also reduced ratably during interim reporting periods in 2019 in a manner consistent with the amortization method for the Ligand funding liability balance. As of December 31, 2019, the aggregate amount spent in accordance with the SB206 development budget on SB206 development activities had exceeded the $12,000 purchase price, causing the aforementioned repayment provision provided for in the Funding Agreement to no longer be enforceable. Therefore, the Company reported no restricted cash balance related to the Funding Agreement, as of December 31, 2019 or September 30, 2020 in its accompanying condensed consolidated balance sheets.

For the three and nine months ended September 30, 2020, the Company recorded $284 and $2,166, respectively, as contra-research and development expense related to the SB206 developmental program, funded by Ligand. For the three and nine months ended September 30, 2019, the Company recorded $3,350 and $5,543, respectively, as contra-research and development expense related to the SB206 developmental program, funded by Ligand.

Note 7: Property and Equipment, Net

Property and equipment consisted of the following:

	September 30, 2020	December 31, 2019
Computer equipment	$ 67	$ 575
Furniture and fixtures	34	305
Laboratory equipment	2,337	7,898
Office equipment	72	339
Leasehold improvements	101	7,068
Property and equipment, gross	2,611	16,185
Less: Accumulated depreciation and amortization	(1,201)	(5,679)
Property and equipment, net of accumulated depreciation and amortization	$ 1,410	$ 10,506

Depreciation and amortization expense was $120 and $1,107 for the three and nine months ended September 30, 2020, respectively, and $510 and $1,531 for the three and nine months ended September 30, 2019, respectively.

As described in Note 14—Assets Held for Sale, Impairment Charges, during the second quarter of 2020, the Company met the relevant criteria for reporting certain property and equipment as held for sale on June 29, 2020, and as a result, the Company stopped recording depreciation expense on that date, assessed the property and equipment assets for impairment pursuant to FASB Topic 360, *Property, Plant, and Equipment*, and reclassified the remaining carrying value of the assets held for sale as current assets in its condensed consolidated balance sheets as of June 30, 2020. Also during the second quarter of 2020, the Company assessed its remaining property and equipment held for use for potential impairment as of June 29, 2020, as described in Note 14—Assets Held for Sale, Impairment Charges.

As described in Note 15—Asset Group Disposition, certain events and transactions occurred during the three months ended September 30, 2020 that resulted in the disposition of assets and liabilities within the Company's various disposal and asset groups, including the disposition of all assets and liabilities within the Company's facility asset group on July 16, 2020 in conjunction with the lease termination transaction described in Note 8—Commitments and Contingencies.

As of September 30, 2020, the Company had $470 of disposal group carrying value remaining, which continues to be classified as assets held for sale in the accompanying condensed consolidated balance sheets.

The following table summarizes the activity of the Company's property and equipment, net, including the impairment and disposal of certain property and equipment, net, during the nine months ended September 30, 2020:

	Property and Equipment, net
December 31, 2019	$ 10,506
Additions	392
Depreciation	(1,107)
Impairment charges	(2,421)
Reclassification to assets held for sale	(977)
Facility asset group disposition	(4,902)
Other disposals	(81)
September 30, 2020	$ 1,410

Note 8: Commitments and Contingencies

Lease Obligations

The Company leases office space and certain equipment under non-cancelable lease agreements.

Pursuant to the Company's accounting policy and applicable guidance in ASC 842, *Leases,* the Company assesses all arrangements that convey the right to control the use of property, plant and equipment, at inception, to determine if each such arrangement is, or contains, a lease based on the unique facts and circumstances present in that arrangement. For those leases identified, the Company determines the lease classification, recognition, and measurement at the lease commencement date. For arrangements that contain a lease the Company: (i) identifies lease and non-lease components; (ii) determines the consideration in the contract; (iii) determines whether the lease is an operating or financing lease; and (iv) recognizes lease Right of Use ("ROU") assets and corresponding lease liabilities. Lease liabilities are recorded based on the present value of lease payments over the expected lease term. The corresponding ROU asset is measured from the initial lease liability, adjusted by (i) accrued or prepaid rents; (ii) remaining unamortized initial direct costs and lease incentives; and (iii) any impairments of the ROU asset.

The Company separates lease components (fixed rent payments) from non-lease components (common-area maintenance costs) on its real estate assets. Fixed lease payments on operating leases are recognized over the expected term of the lease on a straight-line basis. Variable lease expenses that are not considered fixed are expensed as incurred. Fixed and variable lease expense on operating leases is recognized within operating expenses within the Company's condensed consolidated statements of operations. The Company does not recognize an ROU asset or corresponding liability for lease arrangements with an original term of 12 months or less.

The interest rate implicit in the Company's lease contracts is typically not readily determinable and as such, the Company uses its incremental borrowing rate based on the information available at the lease commencement date, which represents an internally developed rate that would be incurred to borrow, on a collateralized basis, over a similar term, an amount equal to the lease payments in a similar economic environment.

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 "Primary Facility Lease"). The initial term of the Primary Facility Lease extended through June 30, 2026. The Company had an option to extend the Primary Facility Lease by five years upon completion of the initial lease term; however, the renewal period was not included in the calculation of the lease obligation. As of June 30, 2020, the Company had approximately $7,900 in remaining minimum lease payments under the Primary Facility Lease.

On July 16, 2020, the Company entered into a Lease Termination Agreement (the "Termination Agreement") with Durham Hopson, LLC (as successor-in-interest to Durham Hopson Road, LLC) (the "Landlord"), which provided for the early termination of the Primary Facility Lease, subject to certain conditions. Pursuant to the terms of the Termination Agreement, the Primary Facility Lease was terminated in connection with the Landlord entering into a lease with an unrelated third party (the "New Tenant") for the premises in the building covered by the Primary Facility Lease (the "New Tenant Lease"), which commenced on July 16, 2020.

As consideration for the early termination of the Primary Facility Lease pursuant to the Termination Agreement, the Company paid $600 to the Landlord, $539 of which was remitted through the Company's existing security deposit under the Primary Facility Lease to the Landlord, and $61 of which was paid in cash. In addition, pursuant to the terms of a separate and stand-alone agreement between the Company and its real estate broker, the Company incurred a broker fee of $405 upon execution of the Termination Agreement. These costs directly associated with the execution of the Termination Agreement, which totaled $1,005 in aggregate, were included as part of the loss on disposition of the Company's facility asset group, as described in Note 14—Assets Held for Sale, Impairment Charges.

In connection with the termination of the Primary Facility Lease pursuant to the Termination Agreement, the Company entered into a sublease agreement, which was effective upon the termination of the Primary Facility Lease and the commencement of the New Tenant Lease, through which the Company began to sublease from the New Tenant approximately 12,000 square feet (reduced to approximately 10,000 square feet after August 31, 2020) in the building that was covered by the Primary Facility Lease (the "Sublease"). The New Tenant and the Landlord entering into the New Tenant Lease was a condition precedent to the effectiveness of the termination of the Primary Facility Lease pursuant to the Termination Agreement, and, in connection with the termination of the Primary Facility Lease, the Landlord consented to the Sublease. The Sublease will expire on March 31, 2021, if not earlier terminated, and is terminable, in part or in whole, by the Company upon 30 days' written notice with no penalty.

The Company currently expects to operate its corporate headquarters, research and development laboratories and pilot scale cGMP manufacturing activities within the Facility pursuant to the Sublease, however, the Company decommissioned the areas within the Facility, as well as the associated equipment, that supported the Company's large scale cGMP drug manufacturing capability in preparation for execution of the Termination Agreement. The Company incurred an aggregate of approximately $300 during the nine months ended September 30, 2020 for these decommissioning, environmental remediation and other preparatory services to ready the Facility for the execution of the Termination Agreement. These costs were included within research and development expenses in the accompanying condensed consolidated statements of operations.

Rent expense, including both short-term and variable lease components associated with the primary facility lease, was $53 and $448 for the three and nine months ended September 30, 2020, and $225 and $655 for the three and nine months ended September 30, 2019, respectively.

In connection with the execution of the Termination Agreement and the associated performance of decommissioning activities mentioned above, the Company evaluated its long-lived assets for impairment, principally its right of use lease asset and its property, plant and equipment, including leasehold improvements. See Note 14—Assets Held for Sale, Impairment Charges for a discussion of the Company's evaluation of its long-lived assets and the resulting impairment charges recorded during the nine months ended September 30, 2020. The Company also recorded an additional loss based upon Company-specific facts and circumstances associated with the July 2020 lease termination transaction during the three months ended September 30, 2020. See Note 15—Asset Group Disposition for additional detail regarding the loss on the Company's facility asset group disposition.

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. See *Legal Proceedings* below for further discussion of pending legal 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 September 30, 2020.

See Note 3—Research and Development Licenses regarding the Company's research and development license agreements.

See Note 6—Research and Development Arrangements regarding the Purchase Agreement with Reedy Creek and the Funding Agreement with Ligand.

See Note 10—Stockholders' Equity (Deficit) regarding outstanding warrants relating to the January 2018 Public Offering, the March 2020 Public Offering and the March 2020 Registered Direct Offering.

Legal Proceedings

The Company is not currently a party to any material legal proceedings and is not aware of any claims or actions pending or threatened against the Company that the Company believes could have a material adverse effect on the Company's business, operating results, cash flows or financial statements. In the future, the Company might from time to time become involved in litigation relating to claims arising from its ordinary course of business.

Compensatory Obligations

In conjunction with the departures of two former Company officers in 2019, the Company entered into separation and general release agreements that included separation benefits consistent with the Company's obligations under their previously existing employment agreements for "separation from service" for "good reason." The Company recognized related severance expense of $0 and $878, during the nine months ended September 30, 2020 and 2019, respectively. The accrued severance obligation in respect of the two former officers was $33 as of December 31, 2019 and was fully paid in the first quarter of 2020.

As part of a strategic objective to reduce the Company's costs related to internal resources, facilities, and infrastructure capabilities, the Company took actions in February 2020 to reduce the Company's internal resources. Employee severance costs associated with this action were $59, which were expensed during the first quarter of 2020. As of September 30, 2020, there were no severance costs accrued in the accompanying condensed consolidated balance sheets.

See Note 11—Share-Based Compensation regarding the Stock Appreciation Rights granted in January 2020.

See Note 12—Tangible Stockholder Return Plan regarding the Tangible Stockholder Return Plan adopted in August 2018.

Note 9: Paycheck Protection Program

On April 22, 2020, the Company entered into a promissory note, which was subsequently amended (the "Note"), evidencing an unsecured loan in the amount of approximately $956 made to the Company (the "Loan") under the Paycheck Protection Program (the "PPP"). The PPP was established under the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") and is administered by the United States Small Business Administration (the "SBA"). The Loan to the Company was made through PNC Bank, National Association. Subject to the terms of the Note, the Loan bears interest at a fixed rate of one percent (1%) per annum. Principal and interest on unforgiven amounts are payable monthly commencing on the fifteenth day of the month following the First Payment Date, as defined within the Note. The Note provides that the Loan may be prepaid by the Company at any time prior to the April 22, 2022 maturity date without penalty.

The Company has not yet applied for forgiveness and has presented a portion of the loan within current liabilities in the accompanying condensed consolidated balance sheets. The short-term portion was estimated using the maximum Deferral Expiration Date, as defined within the Note, based on the related latest potential timing of payments with regards to any unforgiven amounts. The Company intends to apply for forgiveness and based on the ultimate determination of what may or may not be forgiven, the overall timing of payments with respect to the amounts of principal and interest due could change.

Under the terms of the CARES Act, PPP loan recipients can apply for and be granted forgiveness for all or a portion of loans granted under the PPP, with such forgiveness to be determined, subject to limitations, based on the use of loan proceeds for payment of permitted and program-eligible expenses. Interest payable on the Note may be forgiven only if the SBA agrees to pay such interest on the forgiven principal amount of the Note. No assurance is provided that the Company will obtain forgiveness of the Loan in whole or in part. The Company will be obligated to repay any portion of the principal amount of the Note that is not forgiven, together with interest accrued and accruing thereon at the rate set forth above, until such unforgiven portion is paid in full.

Note 10: Stockholders' Equity (Deficit)

Capital Structure

In conjunction with the completion of the Company's initial public offering in September 2016, the Company further amended its amended and restated certificate of incorporation and amended and restated its 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.

March 2020 Public Offering

On February 27, 2020, the Company entered into an underwriting agreement with H.C. Wainwright, as underwriter, relating to the offering, issuance and sale of 14,000,000 shares of common stock, pre-funded warrants to purchase 4,333,334 shares of common stock (the "CMPO Pre-Funded Warrants"), and accompanying common warrants to purchase up to an aggregate of 18,333,334 shares of common stock (the "firm warrants"). The Company also granted H.C. Wainwright, as underwriter, a 30-day option to purchase up to 2,750,000 additional shares of common stock and/or common warrants to purchase up to an aggregate of 2,750,000 shares of common stock, which H.C. Wainwright partially exercised on March 2, 2020 to purchase 1,498,602 shares of common stock and common warrants to purchase 2,750,000 shares of common stock (the "option warrants," and together with the firm warrants, the "CMPO Common Warrants"). The combined price to the public in this offering for each share of common stock and accompanying common warrants was $0.30, and the combined price to the public in this offering for each pre-funded warrant and accompanying common warrant was $0.2999. The March 2020 Public Offering closed on March 3, 2020. At closing, the Company also issued to designees of H.C. Wainwright, as underwriter, warrants to purchase an aggregate of up to 594,958 shares of common stock (the "CMPO UW Warrants") representing 3.0% of the aggregate number of shares of common stock sold and shares of common stock underlying the pre-funded warrants sold in the March 2020 Public Offering.

The CMPO Pre-Funded Warrants have an exercise price of $0.0001 per share and continue in effect until such warrants are exercised in full. The CMPO Common Warrants have an exercise price of $0.30 per share and expire five years from the date of issuance. The CMPO UW Warrants have an exercise price of $0.375 per share and expire five years from the date of issuance.

Through September 30, 2020, warrant holders exercised a total of 4,333,334 CMPO Pre-Funded Warrants and 18,459,167 CMPO Common Warrants. As of September 30, 2020, there were 2,624,167 CMPO Common Warrants and 594,958 CMPO UW Warrants outstanding. As of September 30, 2020, all of the CMPO Pre-Funded Warrants had been exercised in full, such that there were no more CMPO Pre-Funded Warrants outstanding as of such date. Net proceeds from the offering were approximately $5,158 after deducting underwriting discounts and commissions and offering expenses of approximately $791. Offering costs were netted against the offering proceeds and recorded to additional paid-in capital. In addition, proceeds from the exercise of CMPO Common Warrants were approximately $5,538 through September 30, 2020.

Common warrants and underwriter warrants. The CMPO Common Warrants and CMPO UW Warrants include certain provisions that establish warrant holder settlement rights that take effect upon the occurrence of certain fundamental transactions. The CMPO Common Warrants and the CMPO UW Warrants define a fundamental transaction to generally include any consolidation, merger or other transaction whereby another entity acquires more than 50% of the Company's outstanding common stock or the sale of all or substantially all of the Company's assets. The fundamental transaction provision provides the warrant holders with the option to settle any unexercised warrants for cash in the event of certain fundamental transactions that are within the control of the Company. For any fundamental transaction that is not within the control of the Company, including a fundamental transaction not approved by the Company's board of directors, the warrant holder will only be entitled to receive from the Company or any successor entity the same type or form of consideration (and in the same proportion) that is being offered and paid to the stockholders of the Company in connection with the fundamental transaction, whether that consideration be in the form of cash, stock or any combination thereof. In the event of any fundamental transaction, and regardless of whether it is within the control of the Company, the settlement amount of the CMPO Common Warrants and the CMPO UW Warrants (whether in cash, stock or a combination thereof) is determined based upon a Black-Scholes value that is calculated using inputs as specified in the CMPO Common Warrants and the CMPO UW Warrants, including a defined volatility input equal to the greater of the Company's 100-day historical volatility or 100%.

The CMPO Common Warrants and CMPO UW Warrants also include a separate provision whereby the exercisability of such warrants may be limited if, upon exercise, the warrant holder or any of its affiliates would beneficially own more than 4.99% (or an amount up to 9.99% if the holder so elects) of the Company's common stock.

The Company has assessed the CMPO Common Warrants and the CMPO UW Warrants for appropriate equity or liability classification pursuant to the Company's accounting policy described in Note 1—Organization and Significant Accounting Policies. During this assessment, the Company determined (i) the CMPO Common Warrants and the CMPO UW Warrants do not constitute a liability under ASC 480; (ii) the CMPO Common Warrants and the CMPO UW Warrants meet the definition of a derivative under ASC 815; (iii) the warrant holder's option to receive a net cash settlement payment under the CMPO Common Warrants and the CMPO UW Warrants only becomes exercisable upon the occurrence of certain specified fundamental transactions that are within the control of the Company; (iv) upon the occurrence of a fundamental transaction that is not within the control of the Company, the warrant holder would receive the same type or form of consideration offered and paid to common stockholders; (v) the CMPO Common Warrants and the CMPO UW Warrants are indexed to the Company's common stock; and (vi) the CMPO Common Warrants and the CMPO UW Warrants meet all other conditions for equity classification under ASC 480 and ASC 815. Based on the results of this assessment, the Company concluded that the CMPO Common Warrants and the CMPO UW Warrants are freestanding equity-linked derivative instruments that meet the criteria for the own-equity scope exception to derivative accounting under ASC 815. Accordingly, the CMPO Common Warrants and the CMPO UW Warrants are classified as equity and are accounted for as a component of additional paid-in capital at the time of issuance.

Pre-funded warrants. The CMPO Pre-Funded Warrants' fundamental transaction provision does not provide the warrant holders with the option to settle any unexercised warrants for cash in the event of any fundamental transactions; rather, in all fundamental transaction scenarios, the warrant holder will only be entitled to receive from the Company or any successor entity the same type or form of consideration (and in the same proportion) that is being offered and paid to the stockholders of the Company in connection with the fundamental transaction, whether that consideration be in the form of cash, stock or any combination thereof. The CMPO Pre-Funded Warrants also include a separate provision whereby the exercisability of the warrants may be limited if, upon exercise, the warrant holder or any of its affiliates would beneficially own more than 4.99% (or an amount up to 9.99% if the holder so elects) of the Company's common stock.

The Company has assessed the CMPO Pre-Funded Warrants for appropriate equity or liability classification pursuant to the Company's accounting policy described in Note 1—Organization and Significant Accounting Policies. During this assessment, the Company determined the CMPO Pre-Funded Warrants are freestanding instruments that do not meet the definition of a liability pursuant to ASC 480 and do not meet the definition of a derivative pursuant to ASC 815. The CMPO Pre-Funded Warrants are indexed to the Company's common stock and meet all other conditions for equity classification under ASC 480 and ASC 815. Based on the results of this assessment, the Company concluded that the CMPO Pre-Funded Warrants are freestanding equity-linked financial instruments that meet the criteria for equity classification under ASC 480 and ASC 815. Accordingly, the CMPO Pre-Funded Warrants are classified as equity and are accounted for as a component of additional paid-in capital at the time of issuance.

March 2020 Registered Direct Offering

On March 24, 2020, the Company entered into a securities purchase agreement with several institutional and accredited investors, pursuant to which the Company agreed to sell and issue, in a registered direct offering priced at the market, an aggregate of 10,550,000 shares of the Company's common stock and pre-funded warrants to purchase 8,054,652 shares of common stock (the "RDO Pre-Funded Warrants"). The purchase price for each share of common stock was $0.43, and the price for each pre-funded warrant was $0.4299. The March 2020 Registered Direct Offering closed on March 26, 2020. At closing, the Company also issued to designees of H.C. Wainwright, as placement agent, warrants to purchase an aggregate of up to 558,140 shares of common stock (the "RDO PA Warrants") representing 3.0% of the aggregate number of shares of common stock sold and shares of common stock underlying the pre-funded warrants sold in the March 2020 Registered Direct Offering. Net proceeds from the offering were approximately $7,225 after deducting fees and commissions and offering expenses of approximately $774. Offering costs were netted against the offering proceeds and recorded to additional paid-in capital.

The RDO Pre-Funded Warrants have an exercise price of $0.0001 per share and continue in effect until such warrants are exercised in full. The RDO PA Warrants have an exercise price of $0.5375 per share and expire five years from the date of issuance.

Through September 30, 2020, warrant holders exercised all of the 8,054,652 RDO Pre-Funded Warrants that were issued. As of September 30, 2020, there were no RDO Pre-Funded Warrants and 558,140 RDO PA Warrants outstanding.

Placement agent warrants. The RDO PA Warrants contain substantially similar terms as the CMPO UW Warrants, including fundamental transaction settlement provisions. The Company conducted an assessment of the RDO PA Warrants for appropriate equity or liability classification pursuant to the Company's accounting policy described in Note 1—Organization and Significant Accounting Policies. The Company reached the same determinations as described above for the CMPO UW Warrants, and the Company concluded that the RDO PA Warrants are freestanding equity-linked derivative instruments that meet the criteria for the own-equity scope exception to derivative accounting under ASC 815. Accordingly, the RDO PA Warrants are classified as equity and are accounted for as a component of additional paid-in capital at the time of issuance.

Pre-funded warrants. The RDO Pre-Funded Warrants contain substantially similar terms as the CMPO Pre-Funded Warrants, including fundamental transaction settlement provisions that do not provide the warrant holders with the option to settle any unexercised warrants for cash in the event of any fundamental transactions; rather, in all fundamental transaction scenarios, the warrant holder will only be entitled to receive from the Company or any successor entity the same type or form of consideration (and in the same proportion) that is being offered and paid to the stockholders of the Company in connection with the fundamental transaction, whether that consideration be in the form of cash, stock or any combination thereof. The Company conducted an assessment of the RDO Pre-Funded Warrants for appropriate equity or liability classification pursuant to the Company's accounting policy described in Note 1—Organization and Significant Accounting Policies. The Company reached the same determinations as described above for the CMPO Pre-Funded Warrants, and the Company concluded that the RDO Pre-Funded Warrants are freestanding equity-linked financial instruments that meet the criteria for equity classification under ASC 480 and ASC 815. Accordingly, the RDO Pre-Funded Warrants are classified as equity and are accounted for as a component of additional paid-in capital at the time of issuance.

January 2018 Offering

On January 9, 2018, the Company completed a public offering of its common stock and warrants pursuant to the Company's effective shelf registration statement (the "January 2018 Offering"). The Company sold an aggregate of 10,000,000 shares of common stock and warrants to purchase up to 10,000,000 shares of the Company's common stock at a public offering price of $3.80 per share of common stock and accompanying warrant. The warrant exercise price is $4.66 per share and will expire four years from the date of issuance. Net proceeds from the offering were approximately $35,194 after deducting underwriting discounts and commissions and offering expenses of approximately $2,806. The warrants issued in connection with the January 2018 Offering are freestanding equity-linked derivative instruments that meet the criteria for the own-equity scope exception to derivative accounting under ASC 815. Accordingly, such warrants have been classified as equity and accounted for as a component of additional paid-in capital at the time of issuance. Offering costs were netted against the offering proceeds and recorded to additional paid-in capital.

Aspire Common Stock Purchase Agreements

July 2020 Aspire Common Stock Purchase Agreement

On July 21, 2020, the Company entered into the July 2020 Aspire CSPA, which provides that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital is committed to purchase up to an aggregate of $30,000 of shares of the Company's common stock at the Company's request from time to time during the 30-month term of the July 2020 Aspire CSPA. Upon execution of the July 2020 Aspire CSPA, the Company agreed to sell to Aspire Capital 5,555,555 shares of common stock at $0.90 per share for proceeds of $5,000. In consideration for entering into the July 2020 Aspire CSPA, upon satisfaction of certain conditions under the July 2020 Aspire CSPA, the Company issued to Aspire Capital 1,000,000 shares of the Company's common stock (the "July 2020 Commitment Shares"). These July 2020 Commitment Shares valued at approximately $847 were recorded in July 2020 as non-cash costs of equity financing and included within general and administrative expenses in the accompanying condensed consolidated statements of operations. The July 2020 Aspire CSPA replaced the June 2020 Aspire CSPA, which was terminated under the terms of the July 2020 Aspire CSPA. See below for the terms of the June 2020 Aspire CSPA.

Concurrently with entering into the July 2020 Aspire CSPA, the Company also entered into a registration rights agreement with Aspire Capital, in which the Company agreed to file with the SEC one or more registration statements, as necessary, and to the extent permissible and subject to certain exceptions, to register under the Securities Act of 1933, as amended (the "Securities Act"), the sale of the shares of the Company's common stock that may be issued to Aspire Capital under the July 2020 Aspire CSPA. On July 23, 2020, the Company filed with the SEC a prospectus supplement to the Company's effective shelf Registration Statement on Form S-3 (File No. 333-236583) registering all of the shares of common stock that may be offered to Aspire Capital from time to time.

Under the terms of the July 2020 Aspire CSPA, on any trading day selected by the Company, the Company has the right, in its sole discretion, to present Aspire Capital with a purchase notice (each, a "July 2020 Purchase Notice"), directing Aspire Capital (as principal) to purchase up to 300,000 shares of the Company's common stock per business day, up to an aggregate of $30,000 (including the initial purchase shares) of the Company's common stock in the aggregate at a per share price (the "July 2020 Purchase Price") equal to the lesser of (i) the lowest sale price of the Company's common stock on the purchase date; or (ii) the arithmetic average of the three (3) lowest closing sale prices for the Company's common stock during the ten (10) consecutive trading days ending on the trading day immediately preceding the purchase date. The aggregate purchase price payable by Aspire Capital on any one purchase date may not exceed $500, unless otherwise mutually agreed. The parties may mutually agree to increase the number of shares of the Company's common stock that may be purchased per trading day pursuant to the terms of the July 2020 Aspire CSPA to up to 2,000,000 shares.

In addition, on any date on which the Company submits a July 2020 Purchase Notice to Aspire Capital in an amount equal to 300,000 shares, the Company also has the right, in its sole discretion, to present Aspire Capital with a volume-weighted average price purchase notice (each, a "July 2020 VWAP Purchase Notice") directing Aspire Capital to purchase an amount of stock equal to up to 30% of the aggregate shares of the Company's common stock traded on its principal market on the next trading day (the "July 2020 VWAP Purchase Date"), subject to a maximum number of shares the Company may determine. The purchase price per share pursuant to such July 2020 VWAP Purchase Notice is generally 97% of the volume-weighted average price for the Company's common stock traded on its principal market on the July 2020 VWAP Purchase Date.

The July 2020 Purchase Price will be adjusted for any reorganization, recapitalization, non-cash dividend, stock split, or other similar transaction occurring during the period(s) used to compute the July 2020 Purchase Price. The Company may deliver multiple July 2020 Purchase Notices and July 2020 VWAP Purchase Notices to Aspire Capital from time to time during the term of the July 2020 Aspire CSPA, so long as the most recent purchase has been completed.

The July 2020 Aspire CSPA provides that the Company and Aspire Capital shall not effect any sales under the July 2020 Aspire CSPA on any purchase date where the closing sale price of the Company's common stock is less than $0.15. There are no trading volume requirements or restrictions under the July 2020 Aspire CSPA, and the Company will control the timing and amount of sales of the Company's common stock to Aspire Capital. Aspire Capital has no right to require any sales by the

Company, but is obligated to make purchases from the Company as directed by the Company in accordance with the July 2020 Aspire CSPA. There are no limitations on use of proceeds, financial or business covenants, restrictions on future financing transactions, rights of first refusal, participation rights, penalties or liquidated damages in the July 2020 Aspire CSPA. The July 2020 Aspire CSPA may be terminated by the Company at any time, at its discretion, without any penalty or additional cost to the Company. Aspire Capital has agreed that neither it nor any of its agents, representatives and affiliates shall engage in any direct or indirect short-selling or hedging of the Company's common stock during any time prior to the termination of the July 2020 Aspire CSPA. Any proceeds the Company receives under the July 2020 Aspire CSPA are expected to be used for working capital and general corporate purposes.

The July 2020 Aspire CSPA provides that the number of shares that may be sold pursuant to the July 2020 Aspire CSPA will be limited to 25,433,642 shares (the "July 2020 Exchange Cap"), which represents 19.99% of the Company's outstanding shares of common stock on July 21, 2020, unless stockholder approval or an exception pursuant to the rules of the Nasdaq Global Market is obtained to issue more than 19.99%. This limitation will not apply if, at any time the July 2020 Exchange Cap is reached and at all times thereafter, the average price paid for all shares issued under the July 2020 Aspire CSPA is equal to or greater than $0.5907, which is the arithmetic average of the five closing sale prices of the Company's common stock immediately preceding the execution of the July 2020 Aspire CSPA. The Company is not required or permitted to issue any shares of common stock under the July 2020 Aspire CSPA if such issuance would breach its obligations under the rules or regulations of the Nasdaq Global Market. The Company may, in its sole discretion, determine whether to obtain stockholder approval to issue more than 19.99% of its outstanding shares of Common Stock hereunder if such issuance would require stockholder approval under the rules or regulations of the Nasdaq Global Market.

As of September 30, 2020, the Company has sold 13,092,464 shares of common stock at an average price of $0.74 per share under the July 2020 Aspire CSPA, including 5,555,555 shares of common stock at $0.90 which the Company agreed to sell to Aspire Capital upon execution of the July 2020 Aspire CSPA, for total proceeds of $9,626. As of September 30, 2020, the Company had $20,374 in remaining availability for sales of its common stock under the July 2020 Aspire CSPA.

June 2020 Aspire Common Stock Purchase Agreement

On June 15, 2020, the Company entered into the June 2020 Aspire CSPA, which provided that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital was committed to purchase up to an aggregate of $20,000 of shares of the Company's common stock at the Company's request from time to time during the 30-month term of the Purchase Agreement. The June 2020 Aspire CSPA replaced the 2019 Aspire CSPA, which was terminated under the terms of the June 2020 Aspire CSPA. See below for terms of the 2019 Aspire CSPA.

Concurrently with entering into the June 2020 Aspire CSPA, the Company also entered into a registration rights agreement with Aspire Capital, in which the Company agreed to file one or more registration statements, as permissible and necessary to register under the Securities Act, registering the sale of the shares of the Company's common stock that have been issued to Aspire Capital under the June 2020 Aspire CSPA. On June 17, 2020, the Company filed with the SEC, a prospectus supplement to the Company's effective shelf Registration Statement on Form S-3 (File No. 333-236583) registering all of the shares of common stock that were issued to Aspire Capital under the June 2020 Aspire CSPA.

Under the terms of the June 2020 Aspire CSPA, on any trading day selected by the Company, the Company had the right, in its sole discretion, to present Aspire Capital with a purchase notice (each, a "June 2020 Purchase Notice"), directing Aspire Capital (as principal) to purchase up to 300,000 shares of the Company's common stock per business day, up to an aggregate of $20,000 of the Company's common stock, at a per share price (the "June 2020 Purchase Price") equal to the lesser of (i) the lowest sale price of the Company's common stock on the purchase date; or (ii) the arithmetic average of the three (3) lowest closing sale prices for the Company's common stock during the ten (10) consecutive trading days ending on the trading day immediately preceding the purchase date. The aggregate purchase price payable by Aspire Capital on any one purchase date could not exceed $500, unless otherwise mutually agreed. The parties could mutually agree to increase the number of shares of the Company's common stock that may be purchased per trading day pursuant to the terms of the June 2020 Aspire CSPA to up to 2,000,000 shares.

In addition, on any date on which the Company submitted a June 2020 Purchase Notice to Aspire Capital in an amount equal to 300,000 shares, the Company also had the right, in its sole discretion, to present Aspire Capital with a volume-weighted average price purchase notice (each, a "June 2020 VWAP Purchase Notice") directing Aspire Capital to purchase an amount of stock equal to up to 30% of the aggregate shares of the Company's common stock traded on its principal market on the next trading day (the "June 2020 VWAP Purchase Date"), subject to a maximum number of shares the Company may determine. The purchase price per share pursuant to such June 2020 VWAP Purchase Notice was generally 97% of the volume-weighted average price for the Company's common stock traded on its principal market on the June 2020 VWAP Purchase Date.

The June 2020 Purchase Price would have been adjusted for any reorganization, recapitalization, non-cash dividend, stock split, or other similar transaction occurring during the period(s) used to compute the June 2020 Purchase Price. The Company could deliver multiple June 2020 Purchase Notices and June 2020 VWAP Purchase Notices to Aspire Capital from time to time during the term of the June 2020 Aspire CSPA, so long as the most recent purchase has been completed.

The June 2020 Aspire CSPA provided that the Company and Aspire Capital would not effect any sales under the June 2020 Aspire CSPA on any purchase date where the closing sale price of the Company's common stock was less than $0.15. There were no trading volume requirements or restrictions under the June 2020 Aspire CSPA, and the Company controlled the timing and amount of sales of the Company's common stock to Aspire Capital. Aspire Capital had no right to require any sales by the Company, but was obligated to make purchases from the Company as directed by the Company in accordance with the June 2020 Aspire CSPA. There were no limitations on use of proceeds, financial or business covenants, restrictions on future financing transactions, rights of first refusal, participation rights, penalties or liquidated damages in the June 2020 Aspire CSPA. The June 2020 Aspire CSPA could be terminated by the Company at any time, at its discretion, without any penalty or additional cost to the Company. Aspire Capital agreed that neither it nor any of its agents, representatives and affiliates would engage in any direct or indirect short-selling or hedging of the Company's common stock during any time prior to the termination of the June 2020 Aspire CSPA.

The June 2020 Aspire CSPA provided that the number of shares that could be sold pursuant to the June 2020 Aspire CSPA would be limited to 15,859,487 shares (the "June 2020 Exchange Cap"), which represented 19.99% of the Company's outstanding shares of common stock on June 15, 2020, unless stockholder approval or an exception pursuant to the rules of the Nasdaq Global Market was obtained to issue more than 19.99%. This limitation would not apply if, at any time the June 2020 Exchange Cap was reached and at all times thereafter, the average price paid for all shares issued under the June 2020 Aspire CSPA was equal to or greater than $0.414, which is the price equal to the closing sale price of the Company's common stock immediately preceding the execution of the June 2020 Aspire CSPA. The Company was not required or permitted to issue any shares of common stock under the June 2020 Aspire CSPA if such issuance would breach its obligations under the rules or regulations of the Nasdaq Global Market. The Company could, in its sole discretion, determine whether to obtain stockholder approval to issue more than 19.99% of its outstanding shares of Common Stock hereunder if such issuance would require stockholder approval under the rules or regulations of the Nasdaq Global Market.

In consideration for entering into the June 2020 Aspire CSPA, upon satisfaction of certain conditions under the June 2020 Aspire CSPA, the Company issued to Aspire Capital 1,449,275 shares of the Company's common stock (the "June 2020 Commitment Shares"). These June 2020 Commitment Shares valued at approximately $848 were recorded in June 2020 as non-cash costs of equity financing and included within general and administrative expenses in the accompanying condensed consolidated statements of operations.

As of September 30, 2020, the Company had sold 37,764,280 shares of common stock at an average price of $0.53 per share under the June 2020 Aspire CSPA, for total proceeds of $20,000. There was no remaining availability for sales of its common stock under the June 2020 Aspire CSPA when it was replaced by the July 2020 Aspire CSPA.

2019 Aspire Common Stock Purchase Agreement

On August 30, 2019, the Company entered into the 2019 Aspire CSPA, which provided that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital was committed to purchase up to an aggregate of $25,000 of shares of the Company's common stock at the Company's request from time to time during the 30-month term of the Purchase Agreement. Concurrently with entering into the 2019 Aspire CSPA, the Company also entered into a registration rights agreement with Aspire Capital, in which the Company agreed to file one or more registration statements, as permissible and necessary to register under the Securities Act, registering the sale of the shares of the Company's common stock that have been issued to Aspire Capital under the 2019 Aspire CSPA. On September 16, 2019, the Company filed with the SEC, a prospectus to the effective Registration Statement on Form S-1 (File No. 333-233632) registering 7,032,630 shares of common stock that were issued to Aspire Capital under the 2019 Aspire CSPA.

Under the terms of the 2019 Aspire CSPA, on any trading day selected by the Company, the Company had the right, in its sole discretion, to present Aspire Capital with a purchase notice (each, a "2019 Purchase Notice"), directing Aspire Capital (as principal) to purchase up to 100,000 shares of the Company's common stock per business day, up to $25,000 of the Company's common stock in the aggregate at a per share price (the "2019 Purchase Price") equal to the lesser of (i) the lowest sale price of the Company's common stock on the purchase date, or (ii) the arithmetic average of the three (3) lowest closing sale prices for the Company's common stock during the ten (10) consecutive trading days ending on the trading day immediately preceding the purchase date. The aggregate purchase price payable by Aspire Capital on any one purchase date could not exceed $500.

In addition, on any date on which the Company submitted a 2019 Purchase Notice to Aspire Capital in an amount equal to 100,000 shares, the Company also had the right, in its sole discretion, to present Aspire Capital with a volume-weighted average price purchase notice (each, a "2019 VWAP Purchase Notice") directing Aspire Capital to purchase an amount of stock equal to up to 30% of the aggregate shares of the Company's common stock traded on its principal market on the next trading day (the "2019 VWAP Purchase Date"), subject to a maximum number of shares the Company may determine. The purchase price per share pursuant to such VWAP Purchase Notice was generally 97% of the volume-weighted average price for the Company's common stock traded on its principal market on the VWAP Purchase Date.

The 2019 Purchase Price would have been adjusted for any reorganization, recapitalization, non-cash dividend, stock split, or other similar transaction occurring during the period(s) used to compute the 2019 Purchase Price. The Company could deliver multiple 2019 Purchase Notices and 2019 VWAP Purchase Notices to Aspire Capital from time to time during the term of the 2019 Aspire CSPA, so long as the most recent purchase has been completed.

The 2019 Aspire CSPA provided that the Company and Aspire Capital would not effect any sales under the 2019 Aspire CSPA on any purchase date where the closing sale price of the Company's common stock was less than $0.25. There were no trading volume requirements or restrictions under the 2019 Aspire CSPA, and the Company controlled the timing and amount of sales of the Company's common stock to Aspire Capital. Aspire Capital had no right to require any sales by the Company, but was obligated to make purchases from the Company as directed by the Company in accordance with the 2019 Aspire CSPA. There were no limitations on use of proceeds, financial or business covenants, restrictions on future financing transactions, rights of first refusal, participation rights, penalties or liquidated damages in the 2019 Aspire CSPA. The 2019 Aspire CSPA could be terminated by the Company at any time, at its discretion, without any penalty or additional cost to the Company. Aspire Capital agreed that neither it nor any of its agents, representatives and affiliates would engage in any direct or indirect short-selling or hedging of the Company's common stock during any time prior to the termination of the 2019 Aspire CSPA.

The 2019 Aspire CSPA provided that the number of shares that may be sold pursuant to the 2019 Aspire CSPA would be limited to 5,211,339 shares (the "2019 Exchange Cap"), which represented 19.99% of the Company's outstanding shares of common stock on August 30, 2019, unless stockholder approval or an exception pursuant to the rules of the Nasdaq Global Market was obtained to issue more than 19.99%. This limitation did not apply if, at any time the 2019 Exchange Cap was reached and at all times thereafter, the average price paid for all shares issued under the 2019 Aspire CSPA was equal to or greater than $2.17, which was the closing sale price of the Company's common stock immediately preceding the execution of the 2019 Aspire CSPA. The Company was not required or permitted to issue any shares of common stock under the 2019 Aspire CSPA if such issuance would breach its obligations under the rules or regulations of the Nasdaq Global Market. The Company may, in its sole discretion, determine whether to obtain stockholder approval to issue more than 19.99% of its outstanding shares of Common Stock hereunder if such issuance would require stockholder approval under the rules or regulations of the Nasdaq Global Market.

In consideration for entering into the 2019 Aspire CSPA, concurrently with the execution of the 2019 Aspire CSPA, the Company issued to Aspire Capital 345,622 shares of the Company's common stock (the "Commitment Shares"). These Commitment Shares valued at $750 were recorded in 2019 as non-cash costs of equity financing.

In addition to the limitations noted above, pursuant to the securities purchase agreement relating to the March 26, 2020 Registered Direct Offering, the Company was prohibited from issuing additional securities in any variable rate transaction (as defined in the securities purchase agreement), including under the 2019 Aspire CSPA for a period of one year, unless, following the 60th day of the date of the securities purchase agreement, the VWAP (as defined in the securities purchase agreement) was greater than the per share purchase price of the March 2020 Registered Direct Offering for five (5) consecutive trading days. In early June 2020, the Company's stock price achieved a VWAP greater than the per share purchase price of the March 2020 Registered Direct Offering for five consecutive trading days. As such, in early June 2020, the prohibition related to issuing additional securities in any variable rate transaction, including the 2019 Aspire CSPA, was no longer applicable.

During the nine months ended September 30, 2020, the Company sold an aggregate of 4,565,717 shares of common stock at an average price of $0.50 per share under the 2019 Aspire CSPA, for total proceeds of $2,280. From the inception of the 2019 Aspire CSPA through the termination of the 2019 Aspire CSPA on June 15, 2020 in connection with the Company entering into the June 2020 Aspire CSPA, the Company sold a total of 4,865,717 shares of common stock at an average price of $0.62 per share under the 2019 Aspire CSPA, for total proceeds of $3,026. There was no remaining availability for sales of its common stock under the 2019 Aspire CSPA when it was replaced by the June 2020 Aspire CSPA.

Common Stock

The Company's common stock has a par value of $0.0001 per share and consists of 200,000,000 authorized shares as of September 30, 2020 and December 31, 2019. There were 141,513,791 and 26,734,800 shares of voting common stock outstanding as of September 30, 2020 and December 31, 2019, respectively.

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

	September 30, 2020	December 31, 2019
Outstanding stock options (Note 11)	2,087,117	1,789,303
Warrants to purchase common stock issued in January 2018 Offering (Note 10)	10,000,000	10,000,000
Warrants to purchase common stock issued in March 2020 Public Offering (Note 10)	3,219,125	—
Warrants to purchase common stock issued in March 2020 Registered Direct Offering (Note 10)	558,140	—
Outstanding stock appreciation rights (Note 11)	610,000	1,000,000
For possible future issuance under 2016 Stock Plan (Note 11)	432,983	388,463
	16,907,365	13,177,766

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 September 30, 2020 and December 31, 2019.

Note 11: Share-Based Compensation

2016 Stock Plan

During the nine months ended September 30, 2020, the Company continued to administer and grant awards under the 2016 Incentive Award Plan (the "2016 Plan"), the Company's only active equity incentive plan. Certain of the Company's outstanding and exercisable stock options remain subject to the terms of the Company's 2008 Stock Plan (the "2008 Plan"), which is the predecessor to the 2016 Plan and became inactive upon adoption of the 2016 Plan effective September 20, 2016.

On July 31, 2019, the Company's stockholders approved an amendment to the 2016 Plan ("the 2016 Plan Amendment"), to increase the number of shares reserved under the 2016 Plan by 1,000,000 and to increase the award limit on the maximum aggregate number of shares of the Company's common stock that may be granted to any one person during any calendar year from 250,000 to 1,000,000 shares of the Company's common stock. All other material terms of the 2016 Plan otherwise remain unchanged.

Stock Appreciation Rights

On August 8, 2018, the Company entered into an employment agreement with G. Kelly Martin (the "Martin Employment Agreement"). The Employment Agreement provided for 1,000,000 stock appreciation rights ("SARs") (the "Martin SAR Award") granted on a contingent basis that would have been irrevocably forfeited and voided in full if the Company had failed to obtain stockholder approval for the 2016 Plan Amendment. If such approval had not been obtained, the Company would have been required to pay Mr. Martin the cash equivalent of the value of the Martin SAR Award. Following stockholder approval of the 2016 Plan Amendment, the Martin SAR Award was no longer considered to be granted on a contingent basis.

The Martin SAR Award entitled Mr. Martin to a payment (in cash, shares of common stock or a combination of both) equal to the fair market value of one share of the Company's common stock on the date of exercise less the exercise price of $3.80 per share. The SARs were to be deemed automatically exercised and settled as of February 1, 2020, provided Mr. Martin remained continuously employed with the Company through such date unless vesting was otherwise expressly accelerated pursuant to the Martin SAR Award. The Martin SAR Award vested in full on February 1, 2020. On February 1, 2020, the fair market value of the Company's common stock was $0.52 per share, and as such, the Martin SAR Award expired unexercised and 1,000,000 shares became available to be granted under the 2016 Plan.

Effective December 17, 2019, the Company entered into an amended and restated employment agreement with Paula Brown Stafford (the "Amended and Restated Stafford Employment Agreement"). On January 6, 2020, following the release of top-line results of the Company's Phase 3 molluscum clinical program as provided in the Amended and Restated Stafford Employment Agreement, 600,000 SARs were granted to Ms. Stafford with an exercise price of $0.82 per share (the fair market value of the Company's common stock on the grant date) and with a ten year term (the "Stafford SAR Award"). The Stafford SAR Award was granted on a contingent basis and would have been considered irrevocably forfeited and voided in full if sufficient shares of the Company's common stock were not available under the 2016 Plan or if the Company failed to obtain stockholder approval for amendments to the 2016 Plan at the next annual stockholders' meeting to provide sufficient shares for the Stafford SAR Award. Such shares became available under the 2016 Plan on February 1, 2020, and the Stafford SAR Award was no longer considered granted on a contingent basis.

During the three and nine months ended September 30, 2020, the Company granted 10,000 SARs to a consultant of the Company with an exercise price of $0.53 per share (the fair market value of the Company's common stock on the grant date) with a ten year term.

During the three and nine months ended September 30, 2020, the Company recorded employee share-based compensation expense related to SARs, of $31 and $122, respectively. During the three months ended September 30, 2019, the Company recorded a reduction to employee share-based compensation expense, including fair value adjustments related to the Martin SAR Award, of $3. During the nine months ended September 30, 2019, the Company recorded employee share-based compensation expense of $413 related to the Martin SAR Award.

As of September 30, 2020, there were a total of 610,000 SARs outstanding.

Inducement Grants

During the years ended 2019 and 2018, the Company awarded nonstatutory stock options to purchase shares of common stock to newly-hired employees, as inducements material to the individuals' entering into employment with the Company within the meaning of Nasdaq Listing Rule 5635(c)(4) (the "Inducement Grants"). On May 31, 2018, the Company awarded 100,500 Inducement Grants with an exercise price of $3.15 per share, and on September 6, 2019, the Company awarded 25,000 Inducement Grants with an exercise price of $2.62 per share. The Inducement Grants were awarded outside of the Company's 2016 Plan, pursuant to Nasdaq Listing Rule 5635(c)(4), but have terms and conditions generally consistent with the Company's 2016 Plan and vest over three years, subject to the employee's continued service as an employee or consultant through the vesting period.

During the first quarter of 2020, the 25,000 Inducement Grants related to the September 6, 2019 award were forfeited in their entirety. During the third quarter of 2020, 2,166 Inducement Grants granted in 2018 were forfeited.

As of September 30, 2020, there were a total of 91,834 Inducement Grants outstanding.

Stock Compensation Expense

During the three and nine months ended September 30, 2020, the Company recorded employee share-based compensation expense of $141 and $832, respectively. During the three and nine months ended September 30, 2019, the Company recorded employee share-based compensation expense of $690 and $2,444, respectively. Total share-based compensation expense included in the accompanying condensed consolidated statements of operations and comprehensive loss is as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Research and development	$ 74	$ 376	$ 585	$ 957
General and administrative	67	314	247	1,487
	$ 141	$ 690	$ 832	$ 2,444

Stock option activity for the nine months ended September 30, 2020 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, 2019	1,789,303	$ 3.89		
Options granted	557,000	0.52		
Options forfeited	(247,686)	3.54		
Options exercised	(11,500)	0.47		
Options outstanding as of September 30, 2020	2,087,117	$ 3.05	7.66	$ 10

On February 13, 2020, the Company issued 383,000 stock options from the 2016 Plan, (the "Retention Grants"). These Retention Grants were issued to certain employees, vest quarterly and will be fully vested on December 31, 2020, provided that the grantee remains an employee or consultant to the Company as of each vesting date.

As of September 30, 2020, there were a total of 2,087,117 stock options outstanding, including 91,834 inducement grants. In addition, there were 432,983 shares available for future issuance under the 2016 Plan as of September 30, 2020.

Note 12: Tangible Stockholder Return Plan

Performance Plan

On August 2, 2018, the Company's board of directors approved and established the Tangible Stockholder Return Plan, which is a performance-based long-term incentive plan (the "Performance Plan"). The Performance Plan was effective immediately upon approval and expires on March 1, 2022. The Performance Plan covers all employees, including the Company's executive officers, consultants and other persons deemed eligible by the Company's compensation committee. The core underlying metric of the Performance Plan is the achievement of two share price goals for the Company's common stock, which if achieved, would represent measurable increases in stockholder value.

The Performance Plan is tiered, with two separate tranches, each of which has a distinct share price target (measured as the average publicly traded share price of the Company's common stock on the Nasdaq stock exchange for a 30 consecutive trading day period) that will, if achieved, trigger a distinct fixed bonus pool. The share price target for the first tranche and related bonus pool are $11.17 per share and $25,000, respectively. The share price target for the second tranche and related bonus pool are $25.45 per share and $50,000, respectively. The compensation committee has discretion to distribute the bonus pool related to each tranche among eligible participants by establishing individual minimum bonus amounts before, as well as by distributing the remainder of the applicable pool after, the achievement of each tranche specific share price target. Otherwise, if the Company does not achieve one or both related share price targets, as defined, no portion of the bonus pools will be paid.

The Performance Plan provides for the distinct fixed bonus pools to be paid in the form of cash. However, the compensation committee has discretion to pay any bonus due under the Performance Plan in the form of cash, shares of the Company's common stock or a combination thereof, provided that the Company's stockholders have approved the reservation of shares of the Company's common stock for such payment.

The Performance Plan permits the compensation committee to make bonus awards subject to varying payment terms, including awards that vest and are payable immediately upon achieving an applicable share price target as well as awards that pay over an extended period (either with or without ongoing employment requirements). The Performance Plan contemplates that no bonus award payments will be delayed beyond 24 months for named executive officers or more than 12 months for all other participants.

For purposes of determining whether a share price target has been met, the share price targets will be adjusted in the event of any stock splits, cash dividends, stock dividends, combinations, reorganizations, reclassifications or similar events. In the event of a change in control, as defined in the Performance Plan, during the term of the Performance Plan, a performance bonus pool will become due and payable to participants on a pro-rata basis, as calculated and determined by the compensation committee based on the Company's progress toward the share price target as of the date of the change in control and subject to adjustment by the compensation committee as permitted under the Performance Plan.

The Company has concluded that the Performance Plan is within the scope of ASC 718*, Compensation—Stock Compensation* as the underlying plan obligations are based on the potential attainment of certain market share price targets of the Company's common stock. Any awards under the Performance Plan would be payable, at the discretion of the Company's compensation committee following the achievement of the applicable share price target, in cash, shares of the Company's common stock, or a combination thereof, provided that, prior to any payment in common stock, the Company's stockholders have approved the reservation of shares of the Company's common stock for such payment.

ASC 718 requires that a liability-based award should be classified as a liability on the Company's accompanying condensed consolidated balance sheets and the amount of compensation cost recognized should be based on the fair value of the liability. When a liability-based award includes both a service and market condition, the market condition is taken into account when determining the appropriate method to estimate fair value and the compensation cost is amortized over the estimated service period. Therefore, the liability associated with the Performance Plan obligation is recorded within other long-term liabilities on the Company's accompanying condensed consolidated balance sheets at the estimated fair value on the date of issuance and is re-valued each subsequent reporting period end. The Company recognizes share-based compensation expense within operating expenses in the accompanying condensed consolidated statements of operations, including adjustments to the fair value of the liability-based award, on a straight-line basis over the requisite service period.

The fair value of obligations under the Performance Plan are estimated using a Monte Carlo simulation approach. The Company's common stock price is simulated under the Geometric Brownian Motion framework under each simulation path. The other assumptions for the Monte Carlo simulation include the risk-free interest rate, estimated volatility and the expected term. Expected stock price volatility is based on the Company's actual historical volatility over a historical period equal to the expected remaining life of the plan. The fair value of the underlying common stock is the published closing market price on the Nasdaq Global Market as of each reporting date, as adjusted for significant results, as necessary (if applicable). The risk-free interest rate is based on the U.S. Treasury yield curve in effect on the date of valuation equal to the remaining expected life of the plan. The dividend yield percentage is zero because the Company does not currently pay dividends, nor does it intend to do so during the expected term of the plan. The expected life of bonus awards under the Performance Plan is assumed to be equivalent to the remaining contractual term based on the estimated service period including the service inception date of the plan participants and the contractual end of the Performance Plan.

During the three and nine months ended September 30, 2020, the Company recorded adjustments to the fair value of the Performance Plan obligation in share-based compensation expense of a reduction of $6 and $35, respectively. During the three and nine months ended September 30, 2019, the Company recorded employee share-based compensation expense related to the Performance Plan obligation of $429 and $1,353, respectively.

Note 13: Related Party Transactions

Members of the Company's board of directors held 1,104,776 and 1,002,776 shares of the Company's common stock as of September 30, 2020 and December 31, 2019, respectively.

Health Decisions

On October 25, 2018, the Company announced the formation of a dedicated women's health business unit as well as a foundational collaboration with Health Decisions, Inc. ("Health Decisions"). Health Decisions is a full-service contract research organization specializing in clinical studies of therapeutics for women's health indications. The Company's Chairman, President and Chief Executive Officer, Paula Brown Stafford, is also a shareholder and serves on the board of directors of Health Decisions.

Reedy Creek

Reedy Creek previously beneficially owned greater than 5% of the Company's outstanding common stock and still holds approximately 3.9 million warrants, all of which was acquired during the Company's January 2018 Offering. Accordingly, Reedy Creek was a related party of the Company at the time the Company entered into the purchase agreement with Reedy Creek described in Note 6—Research and Development Arrangements. The purchase agreement with Reedy Creek was evaluated and approved pursuant to the Company's existing related party transactions policy.

2020 Registered Direct Offering

Sabby Volatility Warrant Master Fund, Ltd. ("Sabby"), a greater than 5% stockholder, purchased 6,200,000 shares of common stock and pre-funded warrants to purchase up to 2,602,326 shares of common stock for approximately $3,800 in the March

2020 Registered Direct Offering described in Note 10—Stockholders' Equity (Deficit). Sabby's participation in the March 2020 Registered Direct Offering was evaluated and approved pursuant to the Company's existing related party transactions policy.

Joseph Moglia, a greater than 5% stockholder, purchased 1,000,000 shares of common stock for $430 in the March 2020 Registered Direct Offering described in Note 10—Stockholders' Equity (Deficit). Mr. Moglia's participation in the March 2020 Registered Direct Offering was evaluated and approved pursuant to the Company's existing related party transactions policy.

Note 14: Assets Held for Sale, Impairment Charges

The Company has pursued a broader strategic plan since 2019 to shift its operating cost structure characteristics from fixed to variable, including efforts to reduce or offset its remaining fixed Primary Facility Lease obligation. The Morrisville, North Carolina facility underlying the Primary Facility Lease (the "Facility") served as the Company's corporate headquarters and its sole research, development and manufacturing facility. The Company conducted certain activities and engaged in certain transactions during the second and third quarters of 2020 that ultimately achieved relief from the remaining fixed Primary Facility Lease obligation. These activities and transactions had various accounting implications, which are described in detail within this Note and Note 15—Asset Group Disposition.

Following the completion of a large scale manufacturing campaign that produced clinical trial materials for the Company's B-SIMPLE4 Phase 3 trial for SB206 in May 2020, and in contemplation of the lease termination transaction described in Note 8—Commitments and Contingencies, the Company initiated decommissioning of the Facility in June 2020, and on June 29, 2020, the physical removal of the primary components of the large scale manufacturing process equipment from the Facility was deemed substantially complete. As a result of these decommissioning actions, the Company determined that as of June 29, 2020, the Company had fundamentally changed its intended use of the Facility and certain related assets, including (i) the removal of the Company's large scale cGMP drug manufacturing capability and (ii) the conditioning of the Facility to facilitate a transaction that reduces or offsets the Company's remaining fixed Primary Facility Lease obligation. This fundamental change in the intended use of certain assets required the Company to reassess its historical asset groupings, which resulted in a change from a single, entity-level asset group to multiple asset groups based on the lowest level of separately identifiable cash flows. The multiple new asset groups identified during the reassessment are described in detail below.

As of June 29, 2020, the Company evaluated all of its long-lived assets for potential held for sale classification pursuant to policies described in Note 1—Organization and Significant Accounting Policies. The Company identified the following two disposal groups that met the criteria to be classified as held for sale within its condensed consolidated balance sheets as of June 30, 2020:

- The first disposal group consisted of furniture and equipment to be sold to the New Tenant pursuant to a bill of sale executed on July 16, 2020. The disposal group's carrying value of $454 was compared to its estimated fair value less costs to sell of $265, resulting in an impairment charge of $189 recorded during the three months ended June 30, 2020. The selling price expected to be paid by the New Tenant to acquire the furniture and equipment disposal group was the best estimate of fair value, which the Company concluded was a Level 2 input within the fair value measurement hierarchy in FASB ASC 820, *Fair Value Measurements*.
- The second disposal group consisted of certain manufacturing and laboratory equipment associated with the Company's large scale drug manufacturing capability that the Company intends to sell through a consignment seller. The disposal group's carrying value of $1,510 was compared to its estimated fair value less costs to sell of $712, resulting in an impairment charge of $798 recorded during the three months ended June 30, 2020. The estimated selling prices provided by the consignment seller were determined to be the best estimate of fair value, which the Company concluded were Level 3 inputs within the fair value measurement hierarchy.

The Company assessed its remaining long-lived assets classified as held and used for potential impairment as of June 29, 2020 pursuant to the Company's policy described in Note 1—Organization and Significant Accounting Policies, including those long-lived assets in the following two asset groups:

- *Right-of-use asset, leasehold improvements and other property affixed to the Facility.* This asset group, which had an aggregate carrying value of $8,227 as of June 29, 2020, consisted of a right-of-use asset associated with the Primary Facility Lease of $1,816, leasehold improvements and other property affixed to the Facility of $5,872, and restricted cash that secured a letter of credit associated with the Primary Facility Lease of $539. Due to actions taken as of June 29, 2020, the Company committed to no longer use the asset group to support the Company's future revenue-producing drug development operations. This significant change in the intended use of this asset group was considered an indicator of impairment that resulted in the performance of a recoverability test. The Company concluded that the asset group was not recoverable because the asset group's carrying value exceeded its expected future undiscounted net cash flows, which were based on Company-specific facts and circumstances and included the economics of and costs associated with the lease termination transaction described in Note 8—Commitments and Contingencies, and thus, the Company identified a potential impairment. The Company then estimated the fair value of the asset group, which was based on fair value principles in FASB ASC 820, *Fair Value Measurements* and generally focuses on the value that a market participant would be willing to pay for the highest and best use of the asset group. The Company determined that the lease terms established in the New Tenant's prime lease of the Facility were representative of the asset group's highest and best use and were consistent with market terms; therefore, such terms were considered to be the best available valuation inputs for the fair value estimate. Using a market average borrowing rate to discount the New Tenant's prime lease payments, the Company estimated the fair value of the asset group to be $7,298 and, as a result, measured and recorded an impairment charge of $929 during the three months ended June 30, 2020. The inputs to the fair value estimate of this asset group were determined to be Level 3 inputs within the fair value measurement hierarchy.

The Company determined that the June 30, 2020 carrying value of this asset group, as adjusted for the aforementioned impairment charge, was representative of its value to a market participant for its highest and best use, as required under the ASC 820 fair value model.

- *Other assets held and used.* This asset group, which had an aggregate carrying value of $505 as of June 29, 2020, consisted of equipment and other property that was not directly associated with the Company's continuing research, development and pilot scale drug manufacturing capabilities. The Company tested this asset group for recoverability because the Company intends to dispose of these assets significantly before the end of their previously estimated useful life, which is an impairment indicator. However, this asset group had not met the criteria to be classified as held for sale because the Company has not yet established a plan to sell these assets and is uncertain whether it will do so within the next twelve months. During the recoverability test, the Company determined this asset group was unlikely to generate any material future cash flows for the Company. The Company further determined that a market participant was unlikely to pay any material value for such assets and therefore concluded the fair value of this asset group was zero. As a result, the Company measured and recorded an impairment charge of $505 during the three months ended June 30, 2020. The inputs to the fair value estimate of this asset group were determined to be Level 3 inputs within the fair value measurement hierarchy.

The Company's remaining long-lived assets, which include retained manufacturing and laboratory equipment with a carrying value of $744 that will continue to support and enable the Company's continuing research, development and pilot scale drug manufacturing capabilities, had no change to their intended use, no impairment indicators were identified, and no further assessment of recoverability was required.

As noted above, during the nine months ended September 30, 2020, the Company recognized within its condensed consolidated statements of operations an impairment loss on long-lived assets totaling $2,421. See Note 15—Asset Group Disposition for the additional loss recorded by the Company, which was based upon Company-specific facts and circumstances associated with the July 2020 lease termination transaction during the three months ended September 30, 2020, rather than the market participant valuation model that was required to be used during the impairment assessment as of June 29, 2020.

Note 15: Asset Group Disposition

The Company conducted certain activities and engaged in certain transactions during the second and third quarters of 2020 that ultimately achieved relief from the remaining fixed Primary Facility Lease obligation. These activities and transactions had various accounting implications, which are described in detail within this Note and Note 14—Assets Held for Sale, Impairment Charges.

On July 16, 2020, the Company entered into the lease termination transaction as described in Note 8—Commitments and Contingencies. Subsequent to July 16, 2020, the Company has continued to utilize its sublet premises within the Facility as its corporate headquarters, research and development laboratories and pilot scale cGMP manufacturing activities, and intends to continue to do so through March 31, 2021, pursuant to the Sublease between the Company and New Tenant.

The following events and transactions occurred during the three months ended September 30, 2020 for the Company's various disposal and asset groups, as described in Note 14—Assets Held for Sale, Impairment Charges:

- *Disposal groups classified as assets held for sale.*
  - The first disposal group, which consisted of furniture and equipment, was sold to the New Tenant pursuant to a bill of sale executed on July 16, 2020. The disposal group's carrying value, net of an impairment charge recognized in the quarterly period ended June 30, 2020, was equal to the amount of proceeds received; therefore, no gain or loss was recognized on the disposition.
  - The second disposal group, which consists of certain manufacturing and laboratory equipment associated with the Company's large scale drug manufacturing capability, is being sold over time through a consignment seller. During the three months ended September 30, 2020, the Company received or expects to receive aggregate net proceeds of $242 from the sale of certain assets within this disposal group, with no gain or loss recognized. As of September 30, 2020, the Company had $470 of disposal group carrying value remaining, which continues to be classified as assets held for sale in the accompanying condensed consolidated balance sheets.

- *Long-lived asset groups classified as held and used.*
  - *Right-of-use asset, leasehold improvements and other property affixed to the Facility, restricted cash and lease liabilities associated with the Primary Facility Lease*. In conjunction with the lease termination transaction as described in Note 8—Commitments and Contingencies, all assets and liabilities within this asset group were disposed of on July 16, 2020. As of the disposition date, the aggregate carrying value of the assets was $7,257 and the aggregate carrying value of the associated lease liabilities was $5,951. The $1,306 net charge resulting from the write-off of these assets and liabilities was combined with $466 of other direct costs incurred in connection with the lease termination transaction to result in a $1,772 total loss on disposition. This loss, which is in addition to the impairment loss recognized during the quarterly period ended June 30, 2020 and described in Note 14—Assets Held for Sale, Impairment Charges, was based upon Company-specific facts and circumstances associated with the July 2020 lease termination transaction, rather than the market participant valuation model that was required to be used during the impairment assessment as of June 29, 2020.
  - *Remaining long-lived property and equipment assets.* The Company's remaining long-lived assets, which include retained manufacturing and laboratory equipment, continue to support and enable the Company's continuing research, development and pilot scale drug manufacturing capabilities. The Company continued to account for these assets pursuant to its existing accounting policies, including recognition of additions and disposals occurring in the normal course and the continued depreciation based on estimated useful lives.

The following table summarizes the loss on facility asset group disposition as presented within the accompanying condensed consolidated statements of operations during the three and nine months ended September 30, 2020:

Property and Equipment, net	$	4,902
Restricted cash (security deposit)		539
Right-of-use assets		1,816
Total facility group assets		7,257
Lease liabilities, current portion		(1,169)
Lease liabilities, net of current portion		(4,782)
Total facility group liabilities		(5,951)
Net carrying value of facility asset group	$	1,306
Other direct disposal costs		466
Loss on facility asset group disposition	$	1,772

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, 2019 included in our Annual Report on Form 10-K filed with the Securities and Exchange Commission, or SEC, on February 24, 2020, as amended by our Annual Report (Amendment No. 1) on Form 10-K/A filed with the SEC on May 20, 2020 (referred to herein as our Annual Report).

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 "believe," "contemplate," "continue," "due," "goal," "objective," "plan," "seek," "target," "expect," "believe," "anticipate," "intend," "may," "will," "would," "could," "should," "potential," "predict," "project," or "estimate," and similar expressions or variations. These statements are based on the beliefs and assumptions of 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:

- *We will need significant additional funding to continue our operating activities and make further advancements in certain of our late-stage clinical development programs or develop additional product candidates. As of September 30, 2020, we had an accumulated deficit of $242.6 million. If we are unable to raise capital when needed, we would be forced to delay, reduce, terminate or eliminate our clinical development programs, or eventual commercialization efforts, and/or limit our operations.*
- *We have entered into and rely on, and may enter into and rely on other, strategic relationships for the further development and commercialization of our product candidates and if we are unable to enter into such relationships on favorable terms or at all, or if such relationships are unsuccessful, if disputes arise between us and our strategic partners or if we fail to trigger contingent payments under such strategic relationships, we may be unable to realize the potential economic benefit of those product candidates.*
- *Ongoing or future product development activities, including preclinical studies, may not prove successful in demonstrating proof-of concept, or may show adverse toxicological findings, and even if successful may not necessarily predict that subsequent clinical trials will show the requisite safety and efficacy of our product candidates.*
- *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, including as a result of disruptions caused by the COVID-19 pandemic, could result in unplanned expenses or significantly adversely impact our remaining developmental activities and potential commercial prospects with respect to, and ability to generate potential revenues from, such product candidates.*
- *We may not be able to achieve the objectives described in the sections entitled "Priority Development Pipeline," "Pipeline Expansion Opportunities," "Business Updates" and "Corporate Updates" below. The results of any further development activities may not be sufficient to support a new drug application, or NDA, submission for any of our product candidates, or regulatory approval of our product candidates.*
- *The regulatory approval processes of the Food and Drug Administration, or FDA, are lengthy, time-consuming and inherently unpredictable and may be disrupted by the COVID-19 pandemic, 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 therapeutics to treat a range of diseases with significant unmet needs, 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.*

- *The issuance of shares in additional equity financings or upon exercise of our outstanding warrants and options may cause substantial dilution to our existing stockholders and reduce the trading price of our common stock.*
- *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, 2019 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 our clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, or are adversely impacted by the COVID-19 pandemic, we may be unable to obtain regulatory approval for or commercialize any of our product candidates.*
- *We have historically manufactured clinical trial materials internally and we intend to utilize third parties, including Orion Corporation, or Orion, to manufacture components of our clinical trial materials and, potentially, commercial supplies of any approved product candidates. If we do not have sufficient quantities of clinical trial materials at acceptable quality levels and within established timelines, it could adversely impact our development and potential future 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 API, or the associated drug product in a deliverable form, whether on a pilot scale in our facility or at a third-party manufacturer for support of our development and/or commercialization activities could adversely affect our development and commercialization timelines and result in increased costs of our development programs.*
- *We intend to rely on third parties to manufacture raw materials, including our NVN1000 API, and drug product components utilized in clinical trial materials for us and parties with which we contract. Failure to transfer technology and processes to third parties, including any NVN1000 API contract manufacturer and Orion, effectively or failure of those third parties to obtain approval of and maintain compliance with the FDA or comparable regulatory authorities, to provide us with sufficient quantities of raw materials, including API, and drug product components or to provide such raw materials or drug product components at acceptable quality levels or prices could adversely impact our development and potential future commercialization of any of our product candidates or result in our breaching our obligations to others.*
- *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.*
- *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.*
- *If we are unable to establish sales, marketing and distribution capabilities for our product candidates or any future product candidate that receives regulatory approval, either through a commercial partner or internally, we may not be successful in commercializing and generating potential revenues from those product candidates, if approved.*
- *Changes to our leadership team or operational resources could prove disruptive to our operations and have adverse consequences for our business and operating results.*
- *We recently broadened the focus of our product development strategy, and there can be no guarantee that these areas of our platform will be successful or profitable.*

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 our Annual Report and of this Quarterly Report on Form 10-Q.

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 clinical development-stage biotechnology company focused on leveraging nitric oxide's naturally occurring anti-viral, anti-bacterial, anti-fungal and immunomodulatory mechanisms of action and our proprietary nitric oxide-based technology platform, Nitricil, to generate macromolecular new chemical entities, or NCEs, to treat a range of diseases with significant unmet needs. 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 product candidates.

The two key components of our nitric oxide platform are our proprietary Nitricil technology, which drives the creation of NCEs, and our formulation science, both of which we use to tune our product candidates for specific indications. Our ability to deploy nitric oxide in a solid form, on demand and in localized formulations allows us the potential to improve patient outcomes in a variety of diseases.

We have advanced strategic development programs in the field of dermatology, while also further expanding the platform into infectious diseases, companion animal health, men's and women's health and gastroenterological, or GI, therapeutic areas. We have clinical-stage dermatology drug candidates with multi-factorial (SB204), anti-viral (SB206), anti-fungal (SB208) and anti-inflammatory (SB414) mechanisms of action. We recently introduced SB207 as a possible product candidate for additional anti-viral programs. We are also conducting preclinical work on NCEs, including berdazimer sodium, and formulations for the potential treatment of (i) coronaviral infections, including SARS-CoV-2, the virus that causes COVID-19; (ii) antimicrobial indications for the adjacent companion animal health market; (iii) cervical intraepithelial neoplasia, or CIN, caused by high-risk human papilloma virus, or HPV, in the men's and women's health field (WH504 and WH602); (iv) inflammatory disorders and (v) diseases in the GI field.

During the first nine months of 2020, our primary programmatic focus was on our molluscum contagiosum (SB206) program, and for the remainder of 2020, we intend to focus our clinical-stage development efforts on that program. Following the receipt of verbal and minuted feedback from the Type-C meeting with FDA on April 1, 2020, we sent the proposed protocol to the FDA, manufactured the clinical trial materials at our facility in Morrisville, North Carolina and began the planning and start-up phase for B-SIMPLE4, a pivotal Phase 3 trial for SB206 as a treatment for molluscum. We initiated the B-SIMPLE4 trial in August 2020, and the first patient was enrolled and dosed in September 2020. Completion of patient enrollment is targeted for the first quarter of 2021, and, if the trial is not further impacted by the COVID-19 pandemic, top-line efficacy results would be targeted for the second quarter of 2021.

Further advancement of the molluscum contagiosum (SB206) program beyond the conduct and completion of the B-SIMPLE4 trial, or advancement of any other late-stage clinical program across our platform, is subject to our ability to secure additional capital, and has been and may be further impacted by the COVID-19 pandemic. Additional capital may potentially include (i) equity or debt financings, including through potential sales under the July 2020 Aspire CSPA; or (ii) non-dilutive sources, such as partnerships, collaborations, licensing, grants or other strategic relationships. Any issuance of equity or debt that could be convertible into equity would result in significant dilution to our existing stockholders.

On April 20, 2020, we announced that we engaged H.C. Wainwright & Co., LLC, or H.C. Wainwright, as a strategic and financial advisor to assist in conducting a comprehensive evaluation of financial and strategic alternatives, intended to maximize stockholder value. Among the strategic and financial alternatives that we have continued to evaluate are strategic transactions and relationships that center on our late-stage assets, our broader dermatology platform and underlying Nitricil technology, as well as evaluating potential sources of financing and other strategic alternatives.

As of September 30, 2020, we had a total cash and cash equivalents balance of $43.1 million and positive working capital of $36.7 million. We believe that our existing cash and cash equivalents balance as of September 30, 2020, and expected contractual payments to be received in connection with existing licensing agreements, will provide us with adequate liquidity to fund our operating needs through the fourth quarter of 2021. This operating forecast and related cash projection includes the expected costs associated with a pivotal Phase 3 trial for SB206 as a treatment for molluscum, the B-SIMPLE4 trial, and development activities in certain priority therapeutic areas, but excludes any potential costs associated with other late-stage clinical development programs.

We will need significant additional funding to continue our operating activities and make further advancements in our product development programs beyond those currently included in our operating forecast and related cash projection. Please refer to "Liquidity and Capital Resources" for further discussion of our current liquidity and our future funding needs.

COVID-19 Overview

In December 2019, the novel strain of a virus named SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2), which causes novel coronavirus disease 2019, or COVID-19, was reported in China, and in March 2020, the World Health Organization declared it a pandemic. To date, COVID-19 has surfaced in nearly all regions around the world and resulted in federal, state and local governments around the world implementing measures to help control the spread of the virus, including quarantines, "shelter in place" and "stay at home" orders, travel restrictions or bans, business curtailments, school closures, and other protective measures. Such orders, restrictions and recommendations, and the perception that additional orders, restrictions or recommendations could occur, resulted and may result in additional closures of businesses, work stoppages, slowdowns and delays, work-from-home policies and travel restrictions, among other effects.

We continue to closely monitor and rapidly respond to the ongoing impact of COVID-19 on our employees, our community and our business operations. We have worked to continue our critical business functions, including continued operation of our clinical development efforts, and we have adopted a series of precautionary measures and will continue to do so as the circumstances warrant, including increased sanitization of our facilities, use of personal protective equipment and physical distancing practices to help protect our employees' health and safety as they continue to advance important research related to our product candidates.

The timetable for development of our product candidates has been impacted and may face further disruption and our business could be further adversely affected by the outbreak of COVID-19. In particular, COVID-19 impacted the timing of trial initiation of our B-SIMPLE4 Phase 3 trial for SB206, although we enrolled and dosed the first patient in the trial in September 2020. We continue to assess any further impact of COVID-19 on the B-SIMPLE4 Phase 3 trial for SB206, including any potential delay, postponement or other impact to the trial.

Despite disruptions to our business operations and the business operations of third parties on which we rely, the COVID-19 pandemic has not significantly impacted our operating results and financial condition to date. These items are discussed in greater detail later in the "Results of Operations" section in this "Management's Discussion and Analysis of Financial Condition and Results of Operations" contained in this Form 10-Q. At this time, the full extent to which COVID-19 may impact our financial condition or results of operations in the future is uncertain. Due to numerous uncertainties surrounding the COVID-19 pandemic, we are unable to predict the nature and extent of the future impacts that the pandemic will have on our financial condition and operating results. These uncertainties include, among other things, the ultimate severity and duration of the pandemic, including the timing and availability of a treatment or vaccine for COVID -19; governmental, business or other actions that have been, or will be, taken in response to the pandemic, including continued restrictions on travel and mobility, business closures and operating restrictions and imposition of social distancing measures; impacts of the pandemic on the conduct of our clinical trials, including with respect to enrollment rates, availability of investigators and clinical trial sites, and monitoring of data; impacts of the pandemic on regulatory authorities; and impacts of the pandemic on the United States and global economies more broadly. For additional information about risks and uncertainties related to the COVID-19 pandemic that may impact our business, our financial condition or our results of operations, see the "Risk Factors" section in this Form 10-Q.

Priority Development Pipeline

SB206, a Topical Anti-viral Treatment for Viral Skin Infections (Molluscum Contagiosum)

We are developing SB206 as a topical anti-viral gel for the treatment of viral skin infections, with a current focus on molluscum contagiosum. Molluscum is a contagious skin infection caused by the molluscipoxvirus. Molluscum affects up to six million people in the United States annually. The greatest incidence is in children aged one to 14 years. The average time to resolution is 13 months, however, 13% of children experience lesions that may not resolve in 24 months. There is no FDA-approved treatment for molluscum. More than half of patients diagnosed with the infection are untreated. The majority of patients in the United States that receive treatment are treated with painful procedures and the remaining are often prescribed products indicated for the treatment of external genital warts.

In 2017, based on our observational learnings from an in-licensed topical nitric oxide technology study showing clinically meaningful complete clearance rates of baseline molluscum lesions, and combined with our SB206 program knowledge, we believed that there was a logical pathway for SB206 development in the molluscum indication. As such, we submitted an investigational new drug application, or IND, to the FDA in December 2017 and initiated a Phase 2 clinical trial utilizing SB206 for the treatment of molluscum in the first quarter of 2018. The Phase 2 multi-center, randomized, double-blind, vehicle-controlled, ascending dose clinical trial evaluated the efficacy, safety and tolerability of SB206 in 256 patients, ages 2 and above, with molluscum. Patients were treated with one of three concentrations of SB206 or vehicle for up to 12 weeks. The primary endpoint was the proportion of patients achieving complete clearance of all molluscum lesions at Week 12. We announced top-line results from this Phase 2 clinical trial in the fourth quarter of 2018. SB206 demonstrated statistically significant results in the clearance of all molluscum lesions at Week 12, with signs of efficacy evident as early as Week 2 with the 12% once-daily dose. The safety and tolerability profiles were favorable overall with no serious adverse events reported, including the most effective dose, SB206 12% once-daily.

With the full results from this Phase 2 trial available, we held an end-of-Phase 2 (Type B) meeting with the FDA in early March 2019. Based on this meeting and the written minutes received, we commenced the Phase 3 development program for molluscum, primarily comprised of two pivotal clinical trials, in the second quarter of 2019 with SB206 12% once-daily as the active treatment arm. The “B-SIMPLE” (Berdazimer Sodium In Molluscum Patients with Lesions) Phase 3 pivotal trials consisted of two (B-SIMPLE1 and B-SIMPLE2) multi-center, randomized, double-blind, vehicle-controlled studies to evaluate the efficacy and safety of SB206 12% once-daily in 707 patients total (2:1 active:vehicle randomization), ages 6 months and above, with molluscum. Patients were treated once-daily with SB206 12% or Vehicle Gel once daily for a minimum of 4 weeks and up to 12 weeks to all treatable lesions (baseline and new). There were visits at Screening/Baseline, Week 2, Week 4, Week 8, Week 12 and a safety follow-up at Week 24. The primary endpoint was the proportion of patients achieving complete clearance of all molluscum lesions at Week 12. Both Phase 3 pivotal trials began dosing patients in June 2019 and completed patient recruitment in August 2019. Top-line efficacy results from the Phase 3 trials were announced in January 2020 with additional efficacy and safety analyses through Week 12 announced in February 2020. SB206 did not achieve statistically significant results in the primary endpoint in either trial, which was the complete clearance of all molluscum lesions at Week 12. In B-SIMPLE2, SB206 was near statistical significance for the primary endpoint ($p=0.062$), and was statistically significant for the secondary endpoint, the complete clearance of all lesions at Week 8 ($p=0.028$), and multiple pre-specified sensitivity analyses. We believe this confirms the robustness of the data in the B-SIMPLE2 trial. While the B-SIMPLE1 trial was not statistically significant for the primary endpoint ($p=0.375$) nor the secondary endpoint ($p=0.202$), all other pre-specified analyses trended in the same direction of improved treatment effect as the B-SIMPLE2 results.

In addition, the results of a statistical test of heterogeneity support that the two pivotal trials are not different from each other. Across both studies, the primary analysis odds ratio and standard error point estimates were similar and in a consistent direction with overlapping 95% confidence intervals. These statistical results are supported by an integrated analysis of the two pivotal trials, which demonstrated statistically significant complete clearance rate at Week 12 for SB206 ($p=0.038$). These additional analyses do not change the outcome of either B-SIMPLE trial, and the FDA may disagree with our conclusions from these analyses. P-value is a conventional statistical method for measuring the statistical significance of clinical results. A p-value of less than 0.050 is generally considered to represent statistical significance, meaning that there is a less than five percent likelihood that the observed results occurred by chance.

The last subject completed their final visit as part of the ongoing safety evaluation through Week 24 in February 2020 and full efficacy and safety data, including data from the safety evaluation through Week 24, were available in March 2020. The safety and tolerability profiles were favorable overall with no related serious adverse events reported. Execution of remaining Phase 3 pivotal development program activities for SB206 in molluscum continued in 2020 with the completion of ancillary trials, including human factor studies, occurring during the second quarter of 2020.

Enrollment was completed in the fourth quarter of 2019 for NI-MC101 (B-SIMPLE3), a Phase 1 open label study assessing the safety, tolerability, and pharmacokinetics of SB206 12% under maximal use conditions in the once daily treatment of molluscum. All patients completed visits for B-SIMPLE3 in the first quarter of 2020. In this open label study, 34 patients with molluscum enrolled, 31 (91%) patients completed the pharmacokinetic assessment phase, and 29 patients (85%) went on to continue study participation for the full 12 weeks of treatment. There were no discontinuations of study drug due to treatment related adverse events and there were no reports of serious adverse events. The final study report was completed in the third quarter of 2020.

Based on the results of the Phase 3 pivotal trials, discussed above, we held a Type C meeting with the FDA on April 1, 2020 seeking feedback on our proposal to conduct one additional, well-controlled pivotal study of SB206 to support a future NDA. Based on feedback during this meeting and the written minutes received following the meeting, the FDA provided guidance indicating that the FDA would consider one additional pivotal trial, or B-SIMPLE4, that, if successful, can be supported by the previously completed B-SIMPLE2 trial for a future NDA submission. In addition, the FDA provided guidance with regard to both the study design for B-SIMPLE4 and expectations for a future NDA submission.

Our current trial design characteristics of B-SIMPLE4 consist of a multi-center, randomized, double-blind, vehicle-controlled study to evaluate the efficacy and safety of SB206 12% once-daily in approximately 850 total patients (1:1 active:vehicle randomization), ages 6 months and above, with molluscum. Patients will be treated once-daily with SB206 12% or Vehicle Gel for a minimum of 4 weeks and up to 12 weeks to all treatable lesions (baseline and new). There will be visits at Screening/Baseline, Week 2, Week 4, Week 8, Week 12 and a safety follow-up at Week 24, with the implementation of additional patient and caregiver training and patient engagement efforts and decentralized visit capabilities for conducting those visits during the COVID-19 pandemic. The primary endpoint will be the proportion of patients achieving complete clearance of all treatable molluscum lesions at Week 12.

We provided the proposed protocol to the FDA and began the planning and start-up phase for B-SIMPLE4 in the second quarter of 2020. We initiated the B-SIMPLE4 trial in August 2020 and the first patient was enrolled and dosed in September 2020. The trial is currently progressing and we continue to target completion of patient enrollment during the first quarter of 2021, and if the trial is not further impacted by the COVID-19 pandemic, top-line efficacy results would be targeted for the second quarter of 2021.

In April 2020, our Japanese development and commercialization partner, Sato Pharmaceutical Co., Ltd., or Sato, informed us of its intention to progress the SB206 development program in Japan with a Phase 1 clinical trial given the observed treatment benefit and favorable safety profile in the B-SIMPLE program. Based upon updates received from the most recent meeting of the committee that oversees the development activities under our agreement with Sato, Sato continues to evaluate the timing and anticipated progression of a Phase 1 clinical program in Japan.

Infectious Disease, Coronaviridae (COVID-19)

We are exploring the use of our proprietary Nitricil technology to potentially progress a likely topical oral or nasal treatment option for COVID-19, targeting the reduction of viral shedding and transmission. Nitric oxide has generally demonstrated the ability to inhibit viral replication of viruses within the *Coronaviridae* family, and we have an extensive body of *in vitro* and *in vivo* data demonstrating the efficacy of our proprietary technology for other anti-viral indications.

We recently announced positive *in vitro* results showing the potential efficacy of our Nitricil platform technology, berdazimer sodium (NVN1000,) as an anti-viral against SARS-CoV-2, the virus that causes COVID-19. To evaluate the ability of our Nitricil platform technology as a potential nasal treatment option for COVID-19, we initiated *in vitro* assessments targeting the reduction of viral burden in differentiated normal human bronchial epithelial cells. The studies were conducted at the Institute for Antiviral Research at Utah State University, and these results demonstrate the first instance of an anti-viral effect from a nitric oxide-based medicine in a 3-D tissue model that has similar structure to the human airway epithelium. The results from the *in vitro* assessment of concentrations as low as 0.75 mg/mL demonstrated that berdazimer sodium reduced 90% of virus after repeat dosing, once daily.

Based on the scientific literature and data available to-date related to berdazimer sodium and SB206, we believe that nitric oxide may inhibit viral replication by disrupting protein function critical for viral replication and infection through generation of reactive intermediates.

We are planning to initiate chemistry, manufacturing, and controls, or CMC, work with a global leader in providing integrated services, superior delivery technologies and manufacturing solutions to develop an intranasal formulation of berdazimer sodium for use in our COVID-19 program. The next step is to advance our program into preclinical IND-enabling studies and we are in the process of finalizing arrangements with a global leader in drug development to assist in our development activities as we work toward a potential IND filing targeted in 2021. We are also exploring the potential for federal grants to support these efforts.

Companion Animal Health

We have initiated exploratory work to evaluate our new chemical entity, NVN4100, as a potential product candidate for antimicrobial indications in companion animal health. We have engaged animal health experts to assess technical feasibility and market potential. We currently intend to seek a potential strategic partner or collaborator to advance development in this area following initial proof-of-concept work.

Pipeline Expansion Opportunities

SB204, for the Treatment of Acne Vulgaris

In the second quarter of 2018, we conducted a Type C meeting to further discuss the path forward for our SB204 product candidate and possible Phase 3 programs for the treatment of acne vulgaris with the FDA, and the potential for proceeding with a more narrowly defined patient segmentation. In that meeting, our focus was centered specifically on the severe patient population. In the third quarter of 2018, the FDA provided feedback in their minutes on two paths forward for the acne indication, confirming the need for one additional pivotal trial for moderate-to-severe acne patients prior to a NDA submission or, as an alternative, additional preliminary trials for a severe-only patient population.

Following receipt of FDA feedback via written minutes, we have determined that the most pragmatic development pathway for us will be to conduct one additional pivotal Phase 3 trial in moderate-to-severe acne patients. We have completed our clinical development plan for this additional trial, and further advancement of this program is subject to obtaining additional financing or strategic partnering.

SB208, for the Treatment of Athlete's Foot (Tinea Pedis) and Fungal Nail Infections (Onychomycosis)

SB208 is a topical broad-spectrum anti-fungal gel for the treatment of fungal infections of the skin and nails, including athlete's foot (tinea pedis) and fungal nail infections (onychomycosis).

We conducted a Phase 2 proof-of-concept trial in patients with clinical signs and symptoms of tinea pedis and announced top-line results in the second quarter of 2017. SB208 demonstrated a statistically significant effect compared to vehicle in (i) the primary endpoint of achieving negative fungal culture at day 14 and (ii) the secondary endpoint of achieving mycological cure at day 14 (mycological cure is defined by having a negative laboratory culture and negative fungal clinical diagnosis). At the end of a 4-week post treatment follow-up period, mycological cure was maintained at day 42 in both dose groups.

We conducted a Phase 1, single-center, double-blinded, randomized clinical trial in 32 adult females to evaluate the rate of fingernail growth associated with SB208 16% and the local tolerability of the gel when used over the course of 29 days. SB208 16% demonstrated a statistically significant greater mean daily nail growth rate for the treatment period when compared to the same patient's own growth rate in the run-in period and was well tolerated by patients.

The SB208 program is currently on hold with further advancement subject to obtaining additional financing or strategic partnering.

SB414, for the Treatment of Inflammatory Skin Diseases

In 2018, we completed two complementary Phase 1b clinical trials with SB414 in patients with atopic dermatitis and psoriasis. The design of these complementary trials was to evaluate the safety, tolerability and pharmacokinetics of SB414. The trials were also designed to assess overall and specific target engagement through a reduction of key inflammatory biomarkers, also known as pharmacodynamic assessment.

Atopic Dermatitis

We initiated a Phase 1b trial with SB414 in adults with mild-to-moderate atopic dermatitis in December 2017. In the Phase 1b trial, 48 adults with mild-to-moderate atopic dermatitis with up to 30% body surface area at baseline, were randomized to receive one of 2% SB414 cream, 6% SB414 cream, or vehicle, twice daily for two weeks. In the complementary Phase 1b trial for mild-to-moderate chronic plaque psoriasis, 36 adults received SB414 6% cream or vehicle twice daily for four weeks.

We received and analyzed the preliminary top line results from the Phase 1b clinical trials during the second and third quarters of 2018. In the atopic dermatitis trial, biomarkers from the Th2, Th17 and Th22 inflammatory pathways known to be highly relevant and indicative of atopic dermatitis, including Interleukin-13, or IL-13, IL-4R, IL-5, IL-17A and IL-22, were downregulated after two weeks of treatment with SB414 2%. The changes in Th2 and Th22 biomarkers and clinical efficacy assessed as the percent change in Eczema Area Severity Index scores were highly correlated in the SB414 2% group.

Additionally, the proportion of patients achieving a greater than or equal to 3-point improvement on the pruritus (itch) numeric rating scale after two weeks of treatment was greater for patients treated with SB414 2% compared to patients treated with vehicle.

The 2% or 6% doses of SB414 in the trial did not result in any serious adverse events, and SB414 2% was more tolerable with no patients discontinuing treatment in the trial due to application site reactions. SB414 at the 6% dose was not consistently effective in reducing biomarkers across both the atopic dermatitis and psoriasis trials. This lack of consistent biomarker movement could potentially be explained by the increased irritation score experienced by patients treated with SB414 6%. Additionally, SB414 6% showed detectable systemic exposure in a subset of patients, which cleared in nearly all affected patients within 12 hours, in both the atopic dermatitis and psoriasis trials. Given the successful downregulation of key biomarkers, favorable tolerability and lack of systemic exposure with SB414 2%, we conducted non-clinical studies and completed our Phase 2 clinical development plan during 2019 to support a potential future Phase 2 clinical program launch. The SB414 program is currently on hold with further advancement subject to obtaining additional financing or strategic partnering.

Psoriasis

We initiated clinical development of SB414, our first use of our nitric oxide platform in the field of immunology by dosing the first patient in October 2017 in a Phase 1b clinical trial to evaluate SB414 in a cream for the treatment of psoriasis. Earlier in 2017, we presented mechanistic evidence for SB414, demonstrating a statistically significant reduction in composite psoriasis scores and an inhibition of IL-17A and IL-17F in an animal model.

In the Phase 1b trial for mild-to-moderate chronic plaque psoriasis, 36 adults received SB414 6% cream or vehicle twice daily for four weeks. We received and analyzed the preliminary top line results from this Phase 1b clinical trial during the second and third quarters of 2018. SB414 at the 6% dose did not result in any serious adverse events, but SB414 at the 6% dose was not consistently effective in reducing biomarkers across the trial. This lack of consistent biomarker movement could potentially be explained by the increased irritation score experienced by patients treated with SB414 6%. Additionally, SB414 6% showed detectable systemic exposure in a subset of patients, which cleared in nearly all affected patients within 12 hours. Based on the results of the Phase 1b trial in psoriasis, we will potentially explore the use of lower doses of SB414 in psoriasis, subject to obtaining additional financing or strategic partnering.

SB207, a Topical Anti-viral Product Candidate

In response to our identification of targeted viral opportunities of high unmet need where we believe our nitric oxide releasing technology could provide clinical benefit to patients, we developed SB207, a new anti-viral product candidate. The SB207 product candidate incorporates our existing drug substance, berdazimer sodium (NVN1000), with a new formulation specifically engineered for a number of anti-viral programs. In December 2019, we received written responses in response to a pre-IND meeting request with the FDA and, based on such FDA responses, have determined that further advancement of SB207 is subject to further evaluation of clinical plans and securing additional financing or strategic partnering.

Advancement in Men's and Women's Health

In February 2020, following the successful progression of a Phase 1 grant received in August 2019, we were awarded a Phase 2 federal grant of approximately $1.0 million from the National Institute of Health, or NIH, that will enable the conduct of IND-enabling toxicology and pharmacology studies and other preclinical activity of a nitric oxide containing intravaginal gel (WH602) designed to treat high-risk HPV infections that can lead to CIN. We may be eligible to receive an additional $0.5 million in funding as part of this Phase 2 grant, subject to availability of NIH funds and satisfactory progress of the project during the initial 12-month term. Under the terms of the aforementioned NIH grant, we are entitled to receive the grant funds in the form of periodic reimbursements of our allowable direct expenses, allocated overhead, general and administrative expenses and payment of other specified amounts.

This product candidate, in addition to a non-gel formulation product candidate (WH504) supported by a federal grant from the U.S. Department of Defense's, or DoD, Congressionally Directed Medical Research Programs, or CDMRP, currently in development, together represent the core of our Men's and Women's Health business unit. This unit has continued to be supported through a collaboration with Health Decisions, Inc., or Health Decisions.

Advancement in GI Disorders

In January 2019, we announced the addition of GI diseases as a therapeutic focus area as part of our overall science and business strategy. This decision was based on the connection between the multi-factorial pathologies of GI diseases and the demonstrable anti-microbial and anti-inflammatory properties of Novan's nitric oxide technology. Nitric oxide produced in the GI tract regulates many of its functions including the secretion of mucous for protection against physical, chemical, and microbial injury, perfusion of blood through the GI tissue, mitigation of white blood cell adherence to GI tissue to protect from injury and the healing and repair of ulcers. We believe that our initial expansion into GI will require minimal investment due to our ability to leverage current technology, experience and assets.

In the fourth quarter of 2019, we received results from our contract research organization, or CRO, partner demonstrating statistically significant improvements in disease activity (i.e., reduced disease activity index scores) with berdazimer sodium (NVN1000) as compared to vehicle in a dextran sulfate sodium (DSS)-induced acute colitis mouse model. We intend to generate additional data through preclinical activity, focused on efficacy and mechanisms of action, while also performing additional work to advance oral formulation development upon securing funding.

Business Updates

Purchase Agreements and Registration Rights Agreements with Aspire Capital

July 2020 Aspire CSPA

On July 21, 2020, we entered into a common stock purchase agreement with Aspire Capital, or the July 2020 Aspire CSPA, which provides that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital committed to purchase up to an aggregate of $30.0 million of shares of our common stock at our request from time to time during the 30-month term of the July 2020 Aspire CSPA. Upon execution of the July 2020 Aspire CSPA, we agreed to sell to Aspire Capital 5,555,555 shares of common stock at $0.90 per share for proceeds of $5.0 million. The July 2020 Aspire CSPA replaced the prior common stock purchase agreement, dated as of June 15, 2020, between us and Aspire Capital, or the June 2020 Aspire CSPA, which was terminated under the terms of the July 2020 Aspire CSPA.

Concurrently with entering into the July 2020 Aspire CSPA, we also entered into a registration rights agreement with Aspire Capital, in which we agreed to file one or more registration statements, as permissible and necessary to register under the Securities Act of 1933, as amended, or the Securities Act, registering the sale of the shares of our common stock that have been and may be issued to Aspire Capital under the July 2020 Aspire CSPA. On July 23, 2020, we filed with the Securities and Exchange Commission, or the SEC, a prospectus supplement to our effective shelf Registration Statement on Form S-3 (File No. 333-236583) registering all of the shares of common stock that may be offered to Aspire Capital from time to time pursuant to the July 2020 Aspire CSPA.

The July 2020 Aspire CSPA has substantially similar terms to the June 2020 Aspire CSPA. There are no trading volume requirements or restrictions under the July 2020 Aspire CSPA, and we control the timing and amount of sales of our common stock to Aspire Capital. Aspire Capital has no right to require any sales by us, but is obligated to make purchases from us as we may direct in accordance with the July 2020 Aspire CSPA. There are no limitations on use of proceeds, financial or business covenants, restrictions on future financing transactions, rights of first refusal, participation rights, penalties or liquidated damages in the July 2020 Aspire CSPA. The July 2020 Aspire CSPA may be terminated by us at any time, at our discretion, without any penalty or additional cost to us. Any proceeds we receive under the July 2020 Aspire CSPA are expected to be used for the advancement of our research and development programs and for general corporate purposes, capital expenditures and working capital. As of September 30, 2020, we have sold 13,092,464 shares of common stock at an average price of $0.74 per share under the July 2020 Aspire CSPA, and there was $20.4 million of remaining availability for sales of common stock under the July 2020 Aspire CSPA.

Please refer to "Liquidity and Capital Resources" for further discussion of the July 2020 Aspire CSPA.

June 2020 Aspire CSPA

On June 15, 2020, we entered into a common stock purchase agreement with Aspire Capital, or the June 2020 Aspire CSPA, which provided that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital committed to purchase up to an aggregate of $20.0 million of shares of our common stock at our request from time to time during the 30-month term of the June 2020 Aspire CSPA. The June 2020 Aspire CSPA replaced the prior common stock purchase agreement, dated as of August 30, 2019, between us and Aspire Capital, which was terminated under the terms of the June 2020 Aspire CSPA.

Concurrently with entering into the June 2020 Aspire CSPA, we also entered into a registration rights agreement with Aspire Capital, in which we agreed to file one or more registration statements, as permissible and necessary to register under the Securities Act of 1933, as amended, or the Securities Act, registering the sale of the shares of our common stock that have been issued to Aspire Capital under the June 2020 Aspire CSPA. On June 17, 2020, we filed with the Securities and Exchange Commission, or the SEC, a prospectus supplement to our effective shelf Registration Statement on Form S-3 (File No. 333-236583) registering all of the shares of common stock that were issued to Aspire Capital pursuant to the June 2020 Aspire CSPA.

As of September 30, 2020, we sold 37,764,280 shares of common stock at an average price of $0.53 per share under the June 2020 Aspire CSPA, and there was no remaining availability for sales of common stock under the June 2020 Aspire CSPA, which was fully utilized prior to entry into the July 2020 Aspire CSPA noted above. Please refer to “Liquidity and Capital Resources” for further discussion of the June 2020 Aspire CSPA.

March 2020 Registered Direct Offering

On March 24, 2020, we entered into a securities purchase agreement with several institutional and accredited investors, pursuant to which we agreed to sell and issue in a registered direct offering priced at-the-market under Nasdaq rules, an aggregate of 10,550,000 shares of our common stock and pre-funded warrants to purchase 8,054,652 shares of common stock. The March 2020 Registered Direct Offering closed on March 26, 2020. At closing, we also issued to H.C. Wainwright, as placement agent, warrants to purchase an aggregate of up to 558,140 shares of common stock representing 3.0% of the aggregate number of shares of common stock and shares of common stock underlying the pre-funded warrants sold in this offering.

Net proceeds from the March 2020 Registered Direct Offering were approximately $7.2 million after deducting the fees and commissions and offering expenses of approximately $0.8 million.

March 2020 Public Offering

On February 27, 2020, we entered into an underwriting agreement with H.C. Wainwright relating to the offering, issuance and sale of 14,000,000 shares of common stock, pre-funded warrants to purchase 4,333,334 shares of common stock, and accompanying common warrants to purchase up to an aggregate of 18,333,334 shares of common stock. We also granted H.C. Wainwright, as underwriter, a 30-day option to purchase up to 2,750,000 additional shares of common stock and/or common warrants to purchase up to an aggregate of 2,750,000 shares of common stock, which H.C. Wainwright partially exercised on March 2, 2020 to purchase 1,498,602 shares of common stock and common warrants to purchase 2,750,000 shares of common stock. The March 2020 Public Offering closed on March 3, 2020. At closing, we also issued to designees of H.C. Wainwright, as underwriter, warrants to purchase an aggregate of up to 594,958 shares of common stock representing 3.0% of the aggregate number of shares of common stock sold and shares of common stock underlying the pre-funded warrants sold in this offering.

Net proceeds from the March 2020 Public Offering were approximately $5.2 million after deducting underwriting discounts and commissions and offering expenses of approximately $0.8 million. As of September 30, 2020, 18,459,167 common warrants issued as part of the March 2020 Public Offering have been exercised for an additional $5.5 million of proceeds associated with this offering.

Drug Substance and Drug Product Arrangements; Operational Actions

We have worked to progress relationships with third-party manufacturers, which are integral to the advancement of our dermatological platform, including our SB206 molluscum program, by us or through partnerships, collaborations, licensing or other strategic relationships. This strategy includes an increased utilization of and reliance upon third-party vendors and strategic partners for the performance of activities, processes and services that (i) do not result in the generation of significant new intellectual property; and (ii) can leverage existing robust infrastructure, systems, and facilities as well as associated subject matter expertise. A parallel and inter-related strategic objective has been to reduce our own internal resources, large scale manufacturing facilities, and infrastructure capabilities that have historically performed such activities, processes and services.

On October 15, 2018, we established a strategic alliance with Orion, a Finnish full-scale pharmaceutical company with broad experience in drug manufacturing. The alliance enables Orion to manufacture our topical nitric oxide-releasing product candidates on our behalf and on the behalf of our global strategic partners. We have executed a master contract manufacturing agreement to enable technology transfer and manufacturing of clinical trial materials for future clinical trials with our topical product candidates. We are engaged in the transfer of technology for the manufacture of both SB204 and SB206, and upon its completion intend for Orion to be able to manufacture the drug product, or the finished dosage form of the gel, in accordance with our established manufacturing processes, in compliance with applicable regulatory guidelines, as appropriate for clinical trials. A completed manufacturing technology transfer to Orion will enable the manufacture of multiple assets for clinical trial materials and, potentially, commercial quantities. Importantly, this alliance is being structured to support major global markets in which we and our partners pursue regulatory approvals for our product candidates and complements our present internal capability.

In June 2019, we established an operating and business relationship with a full-scale API manufacturer, with the goal for this manufacturer to become the primary external supplier of our proprietary berdazimer sodium (NVN1000) drug substance. We have executed a master contract manufacturing agreement, which includes the process and analytical method transfer necessary to advance the production of our berdazimer sodium (NVN1000) drug substance for future clinical trials and importantly, upon approval of any of our drug product candidates, for commercial purposes on a global basis. We are engaged in the process of transferring the NVN1000 manufacturing technology. We were able to manufacture the API necessary for our B-SIMPLE4 trial for SB206 through our internal manufacturing capabilities and believe we have sufficient quantities to complete our B-SIMPLE4 trial. Upon completion of the required technology transfer, we intend for this API manufacturer and/or another third-party API manufacturer to be able to manufacture NVN1000 in accordance with our established manufacturing processes, in compliance with applicable regulatory guidelines, as appropriate for clinical trials.

We believe this broad strategy of increasing utilization of and reliance upon third-party vendors and strategic partners for the performance of activities, processes and services can ultimately provide enhanced capabilities and operating efficiencies for us or any potential partnerships, collaborations, licensing or other strategic relationships we may enter. At our request, during the first quarter of 2020, the third-party manufacturers reduced certain near-term activities and extended certain timelines in an effort to reduce our near-term cash utilization. We resumed technical transfer efforts with the API manufacturer in April 2020 and resumed activities at Orion during the third quarter of 2020. We expect to incur certain incremental and discrete costs to effect this strategy, including our ongoing efforts to complete the required technology transfer of manufacturing processes and analytical methods for API development and commercial manufacturing under cGMP guidelines and regulations, and upon resumption of certain of the manufacturers' transfer and potential production activities.

As we increase our reliance upon third-party vendors and strategic partners pursuant to the aforementioned strategy, we have continued to take corresponding steps to reduce or realign our own internal resources, facilities, and infrastructure capabilities. These corresponding steps have continued and we expect will continue to result in certain incremental and discrete costs.

As part of our strategic objective to reduce our own internal resources, facilities, and infrastructure capabilities, we took actions in February 2020 that reduced our internal resources, including personnel headcount. As a part of this action, we have reduced personnel headcount from a total of 42 employees as of December 31, 2019 to a total of 24 full-time and 2 part-time employees as of September 30, 2020. In addition, in July of 2020, we (i) entered into a lease termination agreement with our landlord which provided for the early termination of the lease for the 51,350 square foot facility that we leased for our corporate headquarters and sole research, development and manufacturing facility, and (ii) entered into a sublease agreement effective July 16, 2020, whereby we will sublease approximately 12,000 square feet (which was reduced to approximately 10,000 square feet after August 31, 2020) in the building that was covered by our original lease, all as described further below in "Corporate Updates—Primary Facility Lease Transaction".

We will need significant additional funding to continue our operating activities, including these technical transfer projects and internal cost structure changes, and to make further advancements in our product development programs, as described below in "Liquidity and Capital Resources".

Corporate Updates

Primary Facility Lease Transaction

As part of our broader strategic plan to shift our operating cost structure characteristics from fixed to variable and to reduce or offset our remaining fixed lease obligation, we entered into a lease termination agreement with our former landlord on July 16, 2020, which provided for the early termination of the lease for the 51,350 square foot facility that we leased for our corporate headquarters and sole research, development and manufacturing facility. The lease was scheduled to expire in 2026, and as of June 30, 2020, we had approximately $7.9 million in remaining minimum lease payments under the lease agreement. The lease was terminated in connection with our landlord entering into a lease with a new tenant, which commenced on July 16, 2020.

In connection with the termination of the lease with our landlord, we entered into a sublease agreement effective July 16, 2020, whereby we will sublease from the new tenant approximately 12,000 square feet (which was reduced to approximately 10,000 square feet after August 31, 2020) in the building that was covered by our original lease. The sublease will expire on March 31, 2021, if not earlier terminated, and we are able to terminate the sublease, in part or in whole, upon 30 days' written notice with no penalty.

We currently expect to operate our corporate headquarters, research and development laboratories and pilot scale cGMP manufacturing activities within the facility pursuant to the sublease, however we decommissioned the areas within the facility, as well as the associated equipment, that supported our large scale cGMP drug manufacturing capability in preparation for execution of the lease termination agreement.

We incurred certain costs in connection with the termination of our lease, including (i) lease termination costs of approximately $0.6 million payable to the landlord pursuant to the lease termination agreement, (ii) broker commissions of approximately $0.4 million and (iii) facility decommissioning and environmental remediation costs of approximately $0.3 million. These costs resulted in approximately $1.3 million in cash expenditures, of which approximately $0.8 million was paid from our existing cash and cash equivalents and approximately $0.5 million was remitted through the security deposit that had been classified as restricted cash on our balance sheets. As a partial offset to these cash expenditures, we received approximately $0.3 million from the new tenant pursuant to a bill of sale executed in conjunction with the termination agreement and sublease. All of the decommissioning activities described herein were completed prior to the end of the quarterly period ended September 30, 2020.

The costs described above do not include non-cash impairment losses totaling $2.4 million for the three months ended June 30, 2020, which we recognized following an evaluation of all our long-lived assets for potential held for sale classification and an impairment assessment of our remaining long-lived assets classified as held and used. This evaluation and assessment was triggered by the previously described decommissioning of our large scale drug manufacturing capability and by the planned lease termination transaction that was executed in July 2020. Following the recognition of the aforementioned impairment charges during the second quarter of 2020, the resulting carrying values of the affected long-lived assets are representative of their fair value to a market participant for their highest and best use, as required under the FASB ASC 820 fair value model. We incurred an additional loss during the three months ended September 30, 2020 of $1.8 million related to the disposal of the asset group containing the right of use lease asset and other property affixed to the facility, as well as the associated right of use lease liability, in connection with the occurrence of the July 2020 lease termination transaction. This loss on lease termination was based upon Company-specific facts and circumstances associated with the July 2020 lease termination transaction, rather than the market participant valuation model that was required to be used during the impairment assessment conducted during the second quarter of 2020.

Further, we are exploring other facilities within the Research Triangle area in North Carolina to support our operations going forward upon the March 2021 expiration or earlier termination of the sublease described above. Such a new location, which we are targeting to be approximately the same square footage as our existing sublet space, would serve as our corporate headquarters and support our research and development laboratories and pilot scale cGMP manufacturing capabilities.

We have engaged a commercial real estate broker and continue to evaluate new locations. As we continue to consider potential new locations, we are evaluating a variety of designs and related capabilities for the pilot scale cGMP site. These evaluations include the ability to support various cGMP activities, including research and development, clinical trial material production and possibly a supportive component of the potential future commercial supply chain. We expect to incur certain incremental and discrete costs as we upfit and then operate a facility that meets such capability requirements.

Strategic Advisor

In April 2020, we announced that we engaged H.C. Wainwright to assist us in evaluating a range of strategic and financial alternatives, intended to maximize stockholder value. The scope of the review is comprehensive and includes evaluation of strategic and financial alternatives that can be utilized to advance SB206 for molluscum, the remainder of the dermatology platform and the business as a whole. We have not stated a definitive timeline for completion of this process, and there can be no assurance that this process will result in us pursuing any strategic or financial alternatives, or that pursuit of a strategic of financial alternative, if any, would be completed successfully or at all. We do not intend to discuss or disclose developments with respect to this process until the evaluation process has been completed, or our board of directors has concluded that disclosure is appropriate or required.

We believe that our clinical and preclinical data, technology platform and market potential provide for a range of opportunities in order to maximize stockholder value.

Nasdaq Listing Matters

As previously disclosed, on February 19, 2020, we received written notice from the staff of the Listing Qualifications Department of The Nasdaq Stock Market, or Nasdaq, indicating that we were not in compliance with Nasdaq Listing Rule 5450(a)(1) because the closing bid price for our common stock had closed below $1.00 per share for the previous 30 consecutive business days, or the Minimum Bid Price Requirement.

On April 17, 2020, we received a letter from Nasdaq indicating that, due to extraordinary market conditions, Nasdaq tolled the compliance period for the Minimum Bid Price Requirement through June 30, 2020, or the tolling period, and that on April 16, 2020, Nasdaq filed an immediately effective rule change with the SEC to implement the tolling period. The new notice indicated that upon expiration of the tolling period and beginning on July 1, 2020, we will receive the balance of days remaining under its currently pending compliance period in effect at the rule change date. Accordingly, we have 123 calendar days from July 1, 2020, or until November 2, 2020, to regain compliance with the Minimum Bid Price Requirement. To regain compliance, the closing bid price of our common stock must meet or exceed $1.00 per share for a minimum of 10 consecutive business days prior to November 2, 2020.

If we are unable to regain compliance by November 2, 2020, we may be eligible to transfer to the Nasdaq Capital Market and apply for an additional 180 calendar day compliance period to demonstrate compliance with the Minimum Bid Price Requirement. To qualify, we will be required to meet the continued listing requirement for market value of publicly held shares and all other initial listing standards for the Nasdaq Capital Market, with the exception of the Minimum Bid Price Requirement, and will need to provide written notice to Nasdaq of our intention to cure the deficiency during the second compliance period. If we do not qualify for the second compliance period or fail to regain compliance during the second 180 calendar day period, Nasdaq will notify us of its determination to delist the Common Stock, at which point we would have an opportunity to appeal the delisting determination to a Nasdaq Listing Qualifications Panel, or the Panel, but there can be no assurance that the Panel would grant our request for continued listing.

As also previously disclosed, on February 19, 2020 we received notice from the staff of Nasdaq notifying us that, for the previous 30 consecutive business days, the market value of our listed securities had been below the minimum $50.0 million requirement for continued inclusion on the Nasdaq Global Market pursuant to Nasdaq Listing Rule 5450(b)(2)(A), or the MVLS Requirement. We were provided until August 16, 2020 to regain compliance with the MVLS Requirement. On July 9, 2020 we received notification from Nasdaq that we had regained compliance with the MVLS Requirement.

Paycheck Protection Program

On April 22, 2020, we entered into a promissory note, which was subsequently amended, or the Note, for an unsecured loan in the amount of approximately $1.0 million, or the Loan, under the Paycheck Protection Program, or the PPP. The PPP was established under the Coronavirus Aid, Relief, and Economic Security Act, or the CARES Act, and is administered by the U.S. Small Business Administration, or the SBA. The Loan was made through PNC Bank, National Association.

See "Liquidity and Capital Resources" for further information regarding the Loan, the Note, the CARES Act and the PPP.

Board of Directors

On September 23, 2020, our board of directors voted to increase the size of our board of directors from six to seven directors and appointed James L. Bierman to our board of directors to fill the resulting vacancy, effective immediately, and to serve as a Class II director until our 2021 annual meeting of stockholders and until his successor is elected and qualified or until his earlier death, resignation or removal. Mr. Bierman was also appointed to serve as a member of our Nominating and Corporate Governance Committee. We believe that Mr. Bierman strengthens our board of directors by contributing his extensive strategic financial expertise, including in the areas of financial and operational strategies, mergers and acquisitions, strategic alliances, enterprise risk management and investor relations.

On July 28, 2020, Paula Brown Stafford, our President and Chief Executive Officer, was appointed as Chairman of our board of directors. Concurrently, Robert Ingram retired as Executive Chairman although he will continue to serve as a member of our board of directors. These changes were effective as of July 28, 2020. W. Kent Geer will continue to act as Lead Independent Director on our board of directors, with significant responsibilities that are described in our Corporate Governance Guidelines.

Chief Financial Officer

On September 23, 2020, John M. Gay was appointed as our Chief Financial Officer after previously serving as our Vice President, Finance and Corporate Controller. Mr. Gay will continue to serve as our Secretary and principal financial officer. We entered into an employment agreement with Mr. Gay, or the Employment Agreement, in connection with his appointment as our Chief Financial Officer. Pursuant to the Employment Agreement, Mr. Gay receives an annual base salary of $315,000 and is entitled to reimbursement of certain expenses. The Employment Agreement also provides Mr. Gay with severance payments in the event of termination of his employment pursuant to the terms of the Employment Agreement and eligibility to participate in our incentive award plans and our standard benefit plans.

Financial Overview

Since our inception in 2006, 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 through a variety of sources described in further detail within the "Liquidity and Capital Resources" section below. From inception through September 30, 2020, we have raised total equity and debt proceeds of $235.8 million to fund our operations, including (i) $5.2 million in net proceeds from the sale of common stock (or pre-funded warrants in lieu thereof) and accompanying common warrants in the March 2020 Public Offering, (ii) $7.2 million in net proceeds from the sale of common stock (or pre-funded warrants in lieu thereof) in the March 2020 Registered Direct Offering, (iii) an additional $5.5 million of proceeds associated with exercises through September 30, 2020 of common warrants issued as part of the March 2020 Public Offering, and (iv) $32.7 million in proceeds from the sale of common stock under our August 2019, June 2020 and July 2020 common stock purchase agreements with Aspire Capital. In addition, through September 30, 2020, we have also generated additional liquidity and capital through other sources including: (i) governmental research contracts and grants totaling $12.7 million; (ii) our licensing and supply arrangements with Sato, totaling $24.2 million; and (iii) $25.0 million and $12.0 million in proceeds from two funding transactions during the second quarter of 2019 with Reedy Creek Investments LLC, or Reedy Creek, and Ligand Pharmaceuticals Incorporated, or Ligand, respectively.

We have never generated revenue from product sales and have incurred net losses in each year since inception. As of September 30, 2020, we had an accumulated deficit of $242.6 million. We incurred net losses of $8.4 million and $22.7 million during the three and nine months ended September 30, 2020, respectively, and $9.5 million and $24.4 million for the three and nine months ended September 30, 2019, 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 any of our product candidates, we and/or our commercial partners would expect to incur significant expenses related to product sales, marketing, manufacturing and distribution.

We believe that our existing cash and cash equivalents balance as of September 30, 2020, plus expected contractual payments to be received in connection with existing licensing agreements, will provide us with adequate liquidity to fund our operating needs through the fourth quarter of 2021. This operating forecast and related cash projection includes the expected costs associated with a pivotal Phase 3 trial for SB206 as a treatment for molluscum, the B-SIMPLE4 trial, and development activities in certain priority therapeutic areas, but excludes any potential costs associated with other late-stage clinical development programs. Further advancement of the molluscum contagiosum (SB206) program beyond the conduct and completion of the B-SIMPLE4 trial, or advancement of any other late-stage clinical program across our platform, is subject to our ability to secure additional capital, and has been and may be further impacted by the COVID-19 pandemic. We will need significant additional funding to make further advancements in our product development programs beyond those currently included in our operating forecast and related cash projection. Please refer to “Liquidity and Capital Resources” for further discussion of our current liquidity and our future funding needs.

With our existing cash on hand, we have incurred and expect to continue to incur substantial research and development expenses in 2020 to: (i) advance our SB206 molluscum Phase 3 program, including the conduct of the B-SIMPLE4 trial, including supporting activities, in addition to completing the B-SIMPLE1, B-SIMPLE2 and B-SIMPLE3 studies; (ii) conduct drug manufacturing capability transfer activities to our external third-party contract manufacturing organizations, or CMOs; and (iii) conduct additional development activities in certain priority therapeutic areas. We also expect to incur substantial costs in 2020 associated with our research and development personnel, certain facility infrastructure and drug manufacturing capabilities to support preclinical and clinical development activities, including costs associated with the primary facility lease transaction as described in “Corporate Updates.”

We have engaged H.C. Wainwright as a strategic and financial advisor to assist in our comprehensive review of strategic and financial alternatives, which include evaluating potential sources of financing and strategic alternatives. We may seek to engage in one or more potential transactions, such as the sale of the Company, or sale, divestiture or licensing of some of our assets, such as a sale of our dermatology platform assets, but there can be no assurance that we will be able to enter into such a transaction or transactions on a timely basis or at all or on terms that are favorable to us.

Please refer to “Liquidity and Capital Resources” for further discussion of our current liquidity and our future funding needs.

Components of our Results of Operations

Revenue

License and collaboration revenue consists of the amortization of certain fixed and variable consideration under the Sato license agreement that was entered into during the first quarter of 2017, as amended in October 2018, or the Amended Sato Agreement, that (i) has been received to date in the form of upfront and milestone payments; or (ii) are future, non-contingent milestone payments that become payable upon the earlier occurrence of specified fixed dates in the future or the achievement of specified milestone events. This consideration is being recognized on a straight-line basis over the estimated performance period of approximately 7.5 years, from February 2017 through the third quarter of 2024. We monitor and reassess the estimated performance period for purposes of revenue recognition during each reporting period. During the third quarter of 2020, Sato prepared and we reviewed a SB206 Japan development program timeline that was supportive of the 7.5 year performance period estimate. However, the SB204 asset’s Japan development plan and program timeline remains under evaluation by us and Sato. This combined SB204 and SB206 development program timeline in Japan may potentially be affected by various factors, including (i) the results from our SB206 Phase 3 trials conducted to date in the United States, including but not limited to top-line efficacy results announced in January 2020 and the results of the ongoing B-SIMPLE4 trial, (ii) our remaining timeline for the ongoing B-SIMPLE4 trial in the United States, which has been and may be further impacted by the COVID-19 pandemic, and (iii) our drug manufacturing capabilities and the progression of our manufacturing technology transfer projects with third-party CMOs. Therefore, if the duration of the combined SB204 and SB206 development program timeline is affected by the establishment or subsequent adjustments, as applicable, to the mutually agreed upon SB204 and SB206 development plan in the Japan territory, we will adjust our estimated performance period for revenue recognition purposes accordingly, as needed.

The material terms of the Amended Sato Agreement and related revenue recognition are described within “Note 4—Licensing Arrangements” and “Note 5—Revenue Recognition” to the accompanying condensed consolidated financial statements.

Government Contracts and Grants Revenue

Government research contracts and grant revenue relates to the research and development of our nitric oxide platform for preclinical advancement of NCEs and formulations related to potential treatments for illnesses in the women’s health field. Revenue related to conditional government contracts and grants is recognized when the qualifying expenses are incurred.

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 CROs, investigative sites and consultants to conduct our clinical trials and preclinical studies;
- costs to acquire, develop and manufacture supplies for clinical trials and preclinical studies at our facilities;
- costs to establish drug substance and drug product manufacturing capabilities with external contract manufacturing organizations and to enhance drug delivery device technologies through partnerships with technology manufacturing vendors;
- 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 share-based compensation, 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 September 30, 2020, we have incurred approximately $175.6 million in research and development expenses to develop, expand or otherwise improve our nitric oxide platform and resulting product candidates. This amount is net of $10.4 million of aggregate contra-research and development expense, including $0.3 million and $2.2 million of contra-research and development expense recorded for the three and nine months ended September 30, 2020, respectively, representing amortization of the liability related to the $12.0 million of funding received from Ligand to pursue the development and regulatory approval of SB206. For a description of methodology and assumptions used to recognize the ratable amortization of this liability, as well as other information about the Funding Agreement with Ligand, please see “Note 6—Research and Development Arrangements” to the accompanying condensed consolidated financial statements.

The table below sets forth our research and development expenses incurred for external clinical programs and the related product candidates, and other research and development expenses for the three and nine months ended September 30, 2020 and 2019.

Other research and development expenses include: (i) all preclinical program and development costs, including development activities in certain priority therapeutic areas, (ii) manufacturing capability and campaign costs, (iii) external costs to establish drug substance and drug product manufacturing capabilities at third-party CMOs, (iv) facility and infrastructure costs, and (v) costs related to all research and development salaries and related personnel costs.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
	(in thousands)		(in thousands)	
External clinical programs:				
SB204	$ —	$ 19	$ 16	$ 194
SB206	2,737 (1)	3,440	4,282 (1)	5,968
SB208	—	—	—	7
SB414	21 (2)	720	265 (2)	1,055
Other research and development	2,078	4,419	8,950	12,390
Total research and development expenses	$ 4,836	$ 8,598	$ 13,513	$ 19,614

(1) Amount shown net of $0.3 million and $2.2 million of contra-research and development expense recorded for the three and nine months ended September 30, 2020, respectively, and $3.4 million and $5.5 million of contra-research and development expense recorded for the three and nine months ended September 30, 2019, respectively, related to the Funding Agreement with Ligand described in “Note 6—Research and Development Arrangements” to the accompanying condensed consolidated financial statements.

(2) Amounts relate to the completion of Phase 2-enabling non-clinical studies and wind-down costs associated with the Phase 2 trial that we placed on indefinite hold in January 2020.

During the first nine months of 2020, our major clinical development activities were primarily associated with the continued conduct of our current SB206 Phase 3 clinical program activities. Our plan and timelines for further clinical development of SB206, which have been informed by verbal feedback during and meeting minutes received from the FDA following the Type C meeting on April 1, 2020, have been and may be further impacted by the COVID-19 pandemic. We expect that for the foreseeable future, the substantial majority of our research and development efforts will be focused on: (i) the SB206 molluscum program, including the conduct of the B-SIMPLE4 trial, including supporting activities; (ii) conducting drug manufacturing capability transfer activities to our external third-party CMOs; and (iii) conducting additional development activities in certain priority therapeutic areas. We also expect to incur substantial costs in 2020 associated with our research and development personnel, and certain facility infrastructure and drug manufacturing capabilities to support preclinical and clinical development activities, including costs associated with the primary facility lease transaction as described in "Corporate Updates."

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 our current product candidates 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 and in this Quarterly Report on Form 10-Q, 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 share-based compensation expenses for personnel in our executive, finance, corporate development and other administrative functions. Other general and administrative expenses include allocated depreciation and facility-related costs, legal costs of pursuing patent protection of our intellectual property, insurance coverage and professional services fees for auditing, tax, general legal, business development, litigation defense and other corporate and administrative services.

We expect to continue to incur substantial general and administrative expenses in 2020 in support of our operating activities and as necessary to operate in a public company environment. Significant general and administrative expenses associated with operations in a public company environment include 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.

Impairment loss on long-lived assets

As of June 29, 2020, we evaluated all of our long-lived assets for potential held for sale classification, and assessed our remaining long-lived assets classified as held and used for potential impairment pursuant to accounting policies described in "Note 1—Organization and Significant Accounting Policies". This evaluation and assessment was triggered by the decommissioning of our large scale drug manufacturing capability at our former Morrisville, North Carolina facility and by preparatory actions taken in connection with the planned lease termination transaction for the facility that was executed in July 2020. In connection with this evaluation and impairment assessment, which is described in "Note 14—Assets Held for Sale, Impairment Charges" to the accompanying condensed consolidated financial statements, we recognized an impairment loss on long-lived assets that represent the carrying value in excess of fair value of assets held and used or the carrying value in excess of fair value less cost to sell for assets held for sale.

Loss on facility asset group disposition

In conjunction with the lease termination transaction executed in July 2020, all assets and liabilities within the related facility asset group were disposed of on July 16, 2020. As of the disposition date, the net aggregate carrying value of the assets and liabilities was written off, combined with certain other direct costs incurred in connection with the lease termination transaction, which resulted in a loss on disposition, which is described in "Note 15—Asset Group Disposition" to the accompanying condensed consolidated financial statements.

Other Income (Expense), net

Other income (expense), net consists primarily of (i) interest income earned on cash and cash equivalents and (ii) other miscellaneous income and expenses.

Results of Operations

Comparison of Three Months Ended September 30, 2020 and 2019

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

	Three Months Ended September 30,			
	2020	2019	$ Change	% Change
	(in thousands, except percentages)			
License and collaboration revenue	$ 1,100	$ 1,100	$ —	— %
Government research contracts and grants revenue	217	216	1	— %
Total revenue	1,317	1,316	1	— %
Operating expenses:				
Research and development	4,836	8,598	(3,762)	(44)%
General and administrative	3,108	2,290	818	36 %
Loss on facility asset group disposition	1,772	—	1,772	100 %
Total operating expenses	9,716	10,888	(1,172)	(11)%
Operating loss	(8,399)	(9,572)	1,173	(12)%
Other (expense) income, net:				
Interest income	2	53	(51)	(96)%
Other (expense) income	(8)	23	(31)	(135)%
Total other (expense) income, net	(6)	76	(82)	(108)%
Net loss and comprehensive loss	$ (8,405)	$ (9,496)	$ 1,091	(11)%

Revenue

License and collaboration revenue of $1.1 million for the three months ended September 30, 2020 and 2019, was associated with our performance during the period and the related amortization of the non-refundable upfront and expected milestone payments under the Amended Sato Agreement.

Government research contracts and grants revenue of $0.2 million for the three months ended September 30, 2020 includes $0.1 million of revenue recognized related to the $1.1 million grant we received in September 2019 from the DoD's CDMRP as part of its Peer Reviewed Cancer Research Program, and $0.1 million of revenue recognized related to the $1.0 million grant we received in February 2020 from the NIH.

For additional information regarding our accounting for revenue-generating contracts and agreements, see "Note 5—Revenue Recognition" to the accompanying condensed consolidated financial statements.

Research and development expenses

Research and development expenses were $4.8 million for the three months ended September 30, 2020, compared to $8.6 million for the three months ended September 30, 2019. The net decrease of $3.8 million, or 44%, was primarily related to (i) a $0.7 million net decrease in the SB206 program, (ii) a $0.7 million decrease in our SB414 program, and (iii) a $2.3 million decrease in other research and development expenses.

In the SB206 program, we experienced a $3.8 million decrease in gross costs incurred due to the relative timing of the B-SIMPLE4 trial's enrollment initiation, which occurred in late third quarter of 2020, compared to enrollment initiations for the previous Phase 3 trials (B-SIMPLE1 and B-SIMPLE2), which occurred in late second quarter of 2019. As a result of this enrollment timing, we incurred substantially more gross costs during the comparative period in 2019. This gross decrease was primarily offset by a $3.1 million corresponding decrease in contra-research and development expense from the ratable amortization of the Ligand Funding Agreement liability, which represents Ligand's contribution to the clinical development and regulatory approval of SB206 for the treatment of molluscum.

The $2.3 million decrease in other research and development expenses was primarily driven by (i) a $0.9 million net decrease in research and development personnel costs, (ii) a $1.4 million decrease in costs associated with our manufacturing technology transfer projects to third-party manufacturers and (iii) a $0.3 million decrease in depreciation expense, partially offset by (iv) $0.1 million of discrete Morrisville, North Carolina facility decommissioning costs incurred during the third quarter of 2020,

(v) a $0.1 million increase in other preclinical development costs and (vi) a $0.1 million increase in other laboratory support costs at our Morrisville, North Carolina facility.

The $0.9 million net decrease in research and development personnel costs is primarily due to (i) a $0.4 million decrease in recurring salary and benefits costs due to a reduced number of research and development personnel between the two comparative periods, (ii) a $0.2 million decrease in salary, accrued bonuses and benefits costs associated with personnel who changed roles between the comparative periods and, as a result, changed from research and development expenses to general and administrative expenses between the comparative periods and (iii) a $0.3 million decrease in non-cash compensation expense associated with share-based incentive compensation expense and the change in the fair value of our Performance Plan liability.

General and administrative expenses

General and administrative expenses were $3.1 million for the three months ended September 30, 2020, compared to $2.3 million for the three months ended September 30, 2019. The net change in general and administrative expenses for the three months ended September 30, 2020 was primarily due to (i) a $0.8 million discrete non-cash charge recognized in the third quarter of 2020 related to the issuance of commitment shares in consideration for entering into the July 2020 Aspire CSPA and (ii) a $0.2 million net increase in other administrative expenses, partially offset by (iii) a $0.2 million decrease in general and administrative personnel and related costs.

The $0.2 million decrease in general and administrative personnel and related costs is primarily due to a decrease in non-cash compensation expenses associated with share-based incentive compensation expense and the change in the fair value of our Performance Plan liability. Cash-based compensation expenses were unchanged on a net basis between the comparative periods, but included (i) a $0.2 million decrease in recurring salary and benefits costs due to a reduced number of general and administrative personnel between the two comparative periods, offset by (ii) a $0.2 million increase in salary, accrued bonuses and benefits costs associated with personnel who changed roles between the comparative periods and, as a result, changed from research and development expenses to general and administrative expenses between the comparative periods.

Loss on facility asset group disposition

In conjunction with the lease termination transaction as described in “Note 8—Commitments and Contingencies”, to the accompanying condensed consolidated financial statements, all assets and liabilities within the facility asset group were disposed of on July 16, 2020. As of the disposition date, the aggregate carrying value of the assets was $7.3 million and the aggregate carrying value of the associated lease liabilities was $6.0 million. The $1.3 million net charge resulting from the write-off of these assets and liabilities was combined with $0.5 million of other direct costs incurred in connection with the lease termination transaction to result in a $1.8 million total loss on disposition. This loss, which is in addition to the impairment loss recognized during the quarterly period ended June 30, 2020 and described in “Note 14—Assets Held for Sale, Impairment Charges” to the accompanying condensed consolidated financial statements, was based upon Company-specific facts and circumstances associated with the July 2020 termination transaction, rather than the market participant valuation model that was required to be used during the impairment assessment as of June 29, 2020.

For additional information regarding our facility asset group disposition see “Note 15—Asset Group Disposition” to the accompanying condensed consolidated financial statements.

Other (expense) income, net

Other (expense) income, net was negligible for the three months ended September 30, 2020, compared to $0.1 million income for the three months ended September 30, 2019.

Comparison of Nine Months Ended September 30, 2020 and 2019

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

	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019	$ Change	% Change
	(in thousands, except percentages)			
License and collaboration revenue	$ 3,224	$ 3,301	$ (77)	(2)%
Government research contracts and grants revenue	627	216	411	190 %
Total revenue	3,851	3,517	334	9 %
Operating expenses:				
Research and development	13,513	19,614	(6,101)	(31)%
General and administrative	8,847	8,595	252	3 %
Impairment loss on long-lived assets	2,421	—	2,421	100 %
Loss on facility asset group disposition	1,772	—	1,772	100 %
Total operating expenses	26,553	28,209	(1,656)	(6)%
Operating loss	(22,702)	(24,692)	1,990	(8)%
Other income (expense), net:				
Interest income	47	149	(102)	(68)%
Interest expense	—	(1)	1	(100)%
Other (expense) income	(3)	115	(118)	(103)%
Total other income (expense), net	44	263	(219)	(83)%
Net loss	$ (22,658)	$ (24,429)	$ 1,771	(7)%

Revenue

License and collaboration revenue of $3.2 million and $3.3 million for the nine months ended September 30, 2020 and 2019, respectively, was associated with our performance during the period and the related amortization of the non-refundable upfront and expected milestone payments under the Amended Sato Agreement.

Government research contracts and grants revenue of $0.6 million for the nine months ended September 30, 2020 primarily includes $0.5 million of revenue recognized related to the $1.1 million grant we received in September 2019 from the DoD's CDMRP as part of its Peer Reviewed Cancer Research Program and $0.1 million revenue recognized related to the $1.0 million grant we received in February 2020 from the NIH.

For additional information regarding our accounting for revenue-generating contracts and agreements, see "Note 5—Revenue Recognition" to the accompanying condensed consolidated financial statements.

Research and development expenses

Research and development expenses were $13.5 million for the nine months ended September 30, 2020, compared to $19.6 million for the nine months ended September 30, 2019. The net decrease of $6.1 million, or 31%, was primarily related to (i) a $1.7 million net decrease in the SB206 program, (ii) a $3.4 million decrease in other research and development expenses, (iii) a $0.8 million decrease in our SB414 program and (iv) a $0.2 million decrease in our SB204 program.

In the SB206 program, we experienced a $5.1 million decrease in gross costs incurred primarily due to the relative timing of the B-SIMPLE4 trial's enrollment initiation, which occurred in late third quarter of 2020, compared to enrollment initiations for the previous Phase 3 trials (B-SIMPLE1 and B-SIMPLE2), which occurred in late second quarter of 2019. As a result of these differences in the timing of trial execution activities between the comparative periods, we incurred substantially more gross costs during the comparative period in 2019. This decrease was partially offset by a $3.4 million corresponding decrease in contra-research and development expense from the ratable amortization of the Ligand Funding Agreement liability, which represents Ligand's contribution to the clinical development and regulatory approval of SB206 for the treatment of molluscum.

The $3.4 million decrease in other research and development expenses was primarily driven by (i) a $2.1 million net decrease in research and development personnel costs, (ii) a $0.9 million decrease in costs associated with our manufacturing technology transfer projects to third-party manufacturers, (iii) a $0.3 million decrease in depreciation expense and (iv) a $0.5 million decrease in manufacturing materials and support costs at our Morrisville, North Carolina facility, partially offset by (v) $0.3 million of discrete Morrisville, North Carolina facility decommissioning costs incurred during the second and third quarters of 2020 and (vi) a $0.1 million increase in other preclinical development costs.

The $2.1 million net decrease in research and development personnel costs is primarily due to (i) a $1.1 million decrease in recurring salary and benefits costs due to a reduced number of research and development personnel between the two comparative periods, (ii) a $0.5 million decrease in salary, accrued bonuses and benefits costs associated with personnel who changed roles between the comparative periods and, as a result, changed from research and development expenses to general and administrative expenses between the comparative periods, (iii) $0.5 million in discrete charges during the first quarter of 2019 primarily related to severance and one-time payments associated with the departure of our former chief scientific officer in January 2019, and (iv) a $0.4 million decrease in non-cash compensation expense associated with the change in the fair value of our Performance Plan liability. These decreases were partially offset by $0.4 million in discrete severance charges and retention incentive compensation associated with business realignment and personnel reduction actions taken during the first quarter of 2020.

General and administrative expenses

General and administrative expenses were $8.8 million for the nine months ended September 30, 2020, compared to $8.6 million for the nine months ended September 30, 2019. The increase of approximately $0.3 million, or 3%, was primarily due to (i) $1.7 million of aggregate non-cash expense related to the issuance of commitment shares as consideration for entering into the June 2020 Aspire CSPA and July 2020 Aspire CSPA, partially offset by (ii) a $1.4 million decrease in general and administrative personnel and related costs and (ii) a $0.1 million decrease in other general and administrative expenses.

The $1.4 million decrease in general and administrative personnel and related costs is primarily due to (i) a $0.4 million discrete charge in the first quarter of 2019 primarily related to severance and one-time payments associated with the departure of our former chief business officer in January 2019, (ii) $0.5 million decrease in recurring salary and benefits costs due to a reduced number of general and administrative personnel between the two comparative periods and (iii) a $1.2 million decrease in non-cash compensation expenses, including a $0.8 million decrease associated with the change in the fair value of our Performance Plan liability and a $0.4 million decrease in stock option and other share-based compensation expenses. These decreases were partially offset by (i) a $0.6 million increase in salary, accrued bonuses and benefits costs associated with personnel who changed roles between the comparative periods and, as a result, changed from research and development expenses to general and administrative expenses between the comparative periods and (ii) $0.1 million of discrete retention incentive compensation and severance charges associated business realignment and personnel reductions occurring in the first quarter of 2020.

Impairment loss on long-lived assets

As of June 29, 2020, we evaluated all of our long-lived assets for potential held for sale classification, and assessed our remaining long-lived assets classified as held and used for potential impairment pursuant to accounting policies described in "Note 1—Organization and Significant Accounting Policies" to the accompanying condensed consolidated financial statements. Our evaluation resulted in a $2.4 million non-cash impairment loss on long-lived assets for the nine months ended September 30, 2020 comprised of (i) a $0.9 million impairment charge recognized on the leasehold improvements affixed to the Morrisville, North Carolina facility, (ii) a $0.2 million impairment charge recognized on furniture and equipment to be sold to our landlord's new tenant pursuant to a bill of sale described in "Note 8—Commitments and Contingencies" to the accompanying condensed consolidated financial statements, (iii) a $0.8 million impairment charge recognized on certain manufacturing and laboratory equipment that we intend to sell through a consignment seller, and (iv) a $0.5 million impairment charge recognized on equipment and other property not directly associated with our continuing research and development and pilot scale drug manufacturing capabilities.

For additional information regarding our impairment evaluation see "Note 14—Assets Held for Sale, Impairment Charges" to the accompanying condensed consolidated financial statements.

Loss on facility asset group disposition

In conjunction with the lease termination transaction as described in “Note 8—Commitments and Contingencies” to the accompanying condensed consolidated financial statements, all assets and liabilities within the facility asset group were disposed of on July 16, 2020. As of the disposition date, the aggregate carrying value of the assets was $7.3 million and the aggregate carrying value of the associated lease liabilities was $6.0 million. The $1.3 million net charge resulting from the write-off of these assets and liabilities was combined with $0.5 million of other direct costs incurred in connection with the lease termination transaction to result in a $1.8 million total loss on disposition. This loss, which is in addition to the impairment loss recognized during the quarterly period ended June 30, 2020 and described in “Note 14—Assets Held for Sale, Impairment Charges” to the accompanying condensed consolidated financial statements, was based upon Company-specific facts and circumstances associated with the July 2020 lease termination transaction, rather than the market participant valuation model that was required to be used during the impairment assessment as of June 29, 2020.

For additional information regarding our facility asset group disposition see “Note 15—Asset Group Disposition” to the accompanying condensed consolidated financial statements.

Other income (expense), net

Other income (expense), net was negligible for the nine months ended September 30, 2020, compared to $0.3 million income for the nine months ended September 30, 2019.

Liquidity and Capital Resources

As of September 30, 2020, we had a total cash and cash equivalents of $43.1 million and positive working capital of $36.7 million.

From inception through September 30, 2020, we have raised total equity and debt proceeds of $235.8 million to fund our operations, including (i) $5.2 million in net proceeds from the sale of common stock (or pre-funded warrants in lieu thereof) and accompanying common warrants in the March 2020 Public Offering, (ii) $7.2 million in net proceeds from the sale of common stock (or pre-funded warrants in lieu thereof) in the March 2020 Registered Direct Offering, (iii) an additional $5.5 million of proceeds associated with exercises through September 30, 2020 of common warrants issued as part of the March 2020 Public Offering, and (iv) $32.7 million in proceeds from the sale of common stock under our August 2019, June 2020 and July 2020 common stock purchase agreements with Aspire Capital. In addition, through September 30, 2020, we have also generated additional liquidity and capital through other sources including: (i) governmental research contracts and grants totaling $12.7 million; (ii) our licensing and supply arrangements with Sato, totaling $24.2 million, described below; and (iii) $37.0 million in proceeds from two funding transactions during the second quarter of 2019, also described below.

We believe that our existing cash and cash equivalents balance as of September 30, 2020, and expected contractual payments to be received in connection with existing licensing agreements, will provide us with adequate liquidity to fund our operating needs through the fourth quarter of 2021. This operating forecast and related cash projection includes the expected costs associated with a pivotal Phase 3 trial for SB206 as a treatment for molluscum, the B-SIMPLE4 trial, and development activities in certain priority therapeutic areas, but excludes any potential costs associated with other late-stage clinical development programs. Further advancement of the molluscum contagiosum (SB206) program beyond the conduct and completion of the B-SIMPLE4 trial, or advancement of any other late-stage clinical program across our platform, is subject to our ability to secure additional capital, and has been and may be further impacted by the COVID-19 pandemic. We will need significant additional funding to make further advancements in our product development programs beyond those currently included in our operating forecast and related cash projection.

With our existing cash on hand, we expect to incur substantial research and development expenses in 2020 on: (i) the SB206 molluscum program, including the conduct of the B-SIMPLE4 trial, including supporting activities; (ii) conducting drug manufacturing capability transfer activities to our external third-party CMOs; and (iii) conducting additional development activities in certain priority therapeutic areas. We also expect to incur substantial costs in 2020 associated with our research and development personnel, and certain facility infrastructure and drug manufacturing capabilities to support preclinical and clinical development activities, including costs associated with the primary facility lease transaction as described in “Corporate Updates.”

We may decide to revise our development and operating plans or the related timing, depending on information we learn through our research and development activities, the impact of outside factors such as the COVID-19 pandemic, our ability to enter into strategic arrangements, our ability to access additional capital and our financial priorities. Our assumptions and plans may change and could impact the magnitude and/or timing of development and operating expenses and, therefore, our cash runway.

We will need significant additional funding to support our planned and future operating activities and make further advancements in our product development programs beyond those currently included in our operating forecast and related cash projection. We do not currently have sufficient funds to complete development and commercialization of any of our product candidates. Our ability to continue to operate our business, including our ability to advance development programs unrelated to the B-SIMPLE4 trial, as well as our ability to progress SB206 for molluscum to an NDA filing, which would occur, if at all, following completion of the B-SIMPLE4 trial, is dependent upon our ability to access additional sources of capital, including, but not limited to (i) equity or debt financings, including through potential sales under the July 2020 Aspire CSPA; or (ii) non-dilutive sources, such as partnerships, collaborations, licensing, grants or other strategic relationships. Our equity issuances during the nine months ended September 30, 2020, have resulted in significant dilution to our existing stockholders. Any future additional issuances of equity, or debt that could be convertible into equity, would result in further significant dilution to our existing stockholders. Alternatively, we may seek to engage in one or more potential transactions, such as the sale of the Company, or sale or divestiture of some of our assets, such as a sale of our dermatology platform assets, but there can be no assurance that we will be able to enter into such a transaction or transactions on a timely basis or at all or on terms that are favorable to us. If we are forced to terminate or eliminate our product development programs or pursue other strategic alternatives or corporate transactions, there can be no assurance that such actions would result in any additional stockholder value.

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 one of our current or future product candidates and achieve successful commercialization by a strategic partner or by ourselves. 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 any commercialization activities. We are subject to all of the risks inherent 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. Our anticipated expenditure levels may change if we adjust our current operating plan. Such actions could delay development timelines and have a material adverse effect on our results of operations, financial condition and market valuation. As of September 30, 2020, we had an accumulated deficit of $242.6 million.

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.

Prior Aspire Common Stock Purchase Agreements

On August 30, 2019, we entered into the 2019 Aspire CSPA, and on June 15, 2020, we entered into the June 2020 Aspire CSPA, which provide that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital was committed to purchase up to an aggregate of $25.0 million and $20.0 million, respectively, of shares of our common stock at our request from time to time during the 30-month term of each agreement. The June 2020 Aspire CSPA replaced the 2019 Aspire CSPA, which was terminated under the terms of the June 2020 Aspire CSPA.

As of September 30, 2020, we had sold 4,865,717 shares of common stock at an average price of $0.62 per share under the 2019 Aspire CSPA. These amounts, combined with the 345,622 shares issued as part of the commitment fee related to the agreement's execution, resulted in a total of 5,211,339 shares being issued to Aspire Capital under the agreement as of September 30, 2020. As of September 30, 2020, we had sold 37,764,280 shares of common stock at an average price of $0.53 per share under the June 2020 Aspire CSPA. These amounts, combined with the 1,449,275 shares issued as part of the commitment fee related to the agreement's execution, resulted in a total of 39,213,555 shares being issued to Aspire Capital under the agreement as of September 30, 2020. As of September 30, 2020, there was no remaining availability for sales of common stock under the June 2020 Aspire CSPA, which was fully utilized prior to entry into the July 2020 Aspire CSPA noted below. The 2019 Aspire CSPA and June 2020 Aspire CSPA had substantially similar terms to the July 2020 Aspire CSPA described below. See "Note 10—Stockholders' Equity (Deficit)" to the accompanying condensed consolidated financial statements for information regarding the 2019 Aspire CSPA and the June 2020 Aspire CSPA.

July 2020 Aspire CSPA

On July 21, 2020, we entered into the July 2020 Aspire CSPA which provides that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital is committed to purchase up to an aggregate of $30.0 million of shares of our common stock at our request from time to time during the 30-month term of the July 2020 Aspire CSPA. Upon execution of the July 2020 Aspire CSPA, we agreed to sell to Aspire Capital 5,555,555 shares of common stock at $0.90 per share for proceeds of $5.0 million. In addition, as consideration for entering into the July 2020 Aspire CSPA, we issued to Aspire Capital 1,000,000 shares of our common stock as a commitment fee. The July 2020 Aspire CSPA replaced the June 2020 Aspire CSPA described above.

Concurrently with entering into the July 2020 Aspire CSPA, we also entered into a registration rights agreement with Aspire Capital, in which we agreed to file one or more registration statements, as permissible and necessary to register under the Securities Act of 1933, as amended, or the Securities Act, registering the sale of the shares of our common stock that have been and may be issued to Aspire Capital under the July 2020 Aspire CSPA. On July 23, 2020, we filed with the Securities and Exchange Commission, or the SEC, a prospectus supplement to our effective shelf Registration Statement on Form S-3 (File No. 333-236583) registering all of the shares of common stock that may be offered to Aspire Capital from time to time under the July 2020 Aspire CSPA.

Under the terms of the July 2020 Aspire CSPA, on any trading day we select, we have the right, in our sole discretion, to present Aspire Capital with a purchase notice, or the Purchase Notice, directing Aspire Capital (as principal) to purchase up to 300,000 shares of our common stock per business day, up to an aggregate of $30.0 million of our common stock, at a per share price equal to the lesser of (i) the lowest sale price of our common stock on the purchase date; or (ii) the arithmetic average of the three lowest closing sale prices for our common stock during the ten consecutive trading days ending on the trading day immediately preceding the purchase date. The aggregate purchase price payable by Aspire Capital on any one purchase date may not exceed $0.5 million, unless otherwise mutually agreed. The parties may mutually agree to increase the number of shares of our common stock that may be purchased per trading day pursuant to the terms of the July 2020 Aspire CSPA to up to 2,000,000 shares.

In addition, on any date on which we submit a Purchase Notice in an amount equal to 300,000 shares, we can also, in our sole discretion, present Aspire Capital with a volume-weighted average price purchase notice, or a VWAP Purchase Notice, directing Aspire Capital to purchase an amount of our common stock equal to up to 30% of the aggregate shares of our common stock traded on its principal market on the next trading day, or the VWAP Purchase Date, subject to a maximum number of shares determined by us. The purchase price per share pursuant to such VWAP Purchase Notice is generally 97% of the volume-weighted average price for our common stock traded on our principal market on the VWAP Purchase Date.

Under the terms of the July 2020 Aspire CSPA, the number of shares that may be sold to Aspire Capital is limited to 25,433,642 shares, or the Exchange Cap, which represents 19.99% of our outstanding shares of common stock on July 21, 2020, unless stockholder approval or an exception pursuant to the rules of the Nasdaq Global Market is obtained to issue more than 19.99%. This limitation will not apply if, at any time the Exchange Cap is reached and at all times thereafter, the average price paid for all shares issued under the July 2020 Aspire CSPA is equal to or greater than $0.5907, which is the arithmetic average of the five closing sale prices of our common stock immediately preceding the execution of the July 2020 Aspire CSPA. The July 2020 Aspire CSPA provides that we and Aspire Capital shall not effect any sales under the July 2020 Aspire CSPA on any purchase date where the closing sale price of our common stock is less than $0.15.

There are no trading volume requirements or restrictions under the July 2020 Aspire CSPA, and we will control the timing and amount of sales of our common stock to Aspire Capital. Aspire Capital has no right to require any sales by us, but is obligated to make purchases from us as we may direct in accordance with the July 2020 Aspire CSPA. There are no limitations on use of proceeds, financial or business covenants, restrictions on future financing transactions, rights of first refusal, participation rights, penalties or liquidated damages in the July 2020 Aspire CSPA. The July 2020 Aspire CSPA may be terminated by us at any time, at our discretion, without any penalty or additional cost to us. Any proceeds we receive under the July 2020 Aspire CSPA are expected to be used for the advancement of our research and development programs and for general corporate purposes, capital expenditures and working capital.

As of September 30, 2020, we have sold 13,092,464 shares of common stock at an average price of $0.74 per share under the July 2020 Aspire CSPA. These amounts, combined with the 1,000,000 shares issued as part of the commitment fee related to the agreement's execution, resulted in a total of 14,092,464 shares being issued to Aspire Capital under the agreement as of September 30, 2020. As of September 30, 2020, there was $20.4 million of remaining availability for sales of common stock under the July 2020 Aspire CSPA.

Primary Facility Lease Financing

As described in the “Corporate Updates” section, in July 2020 we recently completed a lease termination transaction associated with our approximately 51,000 square foot leased facility in Morrisville, North Carolina, which had served as our corporate headquarters and sole research, development and manufacturing facility. The transaction is part of our broader strategic plan to shift our operating cost structure characteristics from fixed to variable and to reduce or offset fixed lease obligations. The ten-year, non-cancellable lease agreement was originally entered into in 2016, immediately prior to its termination in July 2020, had approximately 6 years remaining under the lease term and approximately $7.9 million in remaining minimum lease payments.

As of June 29, 2020, we evaluated all of our long-lived assets for potential held for sale classification, and assessed our remaining long-lived assets classified as held and used for potential impairment pursuant to accounting policies described in “Note 1—Organization and Significant Accounting Policies” to the accompanying condensed consolidated financial statements. This evaluation and assessment was triggered by the previously described decommissioning of our large scale drug manufacturing capability and by the planned lease termination transaction that was executed in July 2020. In connection with this evaluation and impairment assessment, which is described in “Note 14—Assets Held for Sale, Impairment Charges” to the accompanying condensed consolidated financial statements, we recognized non-cash impairment losses totaling $2.4 million in the second quarter of 2020.

In conjunction with the lease termination transaction, as described in “Note 15—Asset Group Disposition” to the accompanying condensed consolidated financial statements, all assets and liabilities within the facility asset group were disposed of on July 16, 2020. As of the disposition date, the aggregate carrying value of the assets was $7.3 million and the aggregate carrying value of the associated lease liabilities was $6.0 million. The $1.3 million net charge resulting from the write-off of these assets and liabilities was combined with $0.5 million of other direct costs incurred in connection with the lease termination transaction to result in a $1.8 million total loss on disposition within the accompanying condensed consolidated financial statements. This loss, which is in addition to the impairment loss recognized during the quarterly period ended June 30, 2020, described above, was based upon Company-specific facts and circumstances associated with the July 2020 lease termination transaction, rather than the market participant valuation model that was required to be used during the impairment assessment as of June 29, 2020.

Paycheck Protection Program

On April 22, 2020, and as subsequently amended, we entered into the Note for an unsecured loan of approximately $1.0 million made to us, or the Loan, under the Paycheck Protection Program, or the PPP. The PPP was established under the CARES Act and is administered by the SBA. The Loan to us was made through PNC Bank, National Association. Subject to the terms of the Note, the Loan bears interest at a fixed rate of one percent (1%) per annum. Principal and interest on unforgiven amounts are payable monthly commencing on the fifteenth day of the month following the First Payment Date, as defined within the Note. The Note provides that the Loan may be prepaid by us at any time prior to the April 22, 2022 maturity date without penalty. Under the terms of the CARES Act, PPP loan recipients can apply for and be granted forgiveness for all or a portion of loans granted under the PPP, with such forgiveness to be determined, subject to limitations, based on the use of loan proceeds for payment of permitted and program-eligible expenses. Interest payable on the Note may be forgiven only if the SBA agrees to pay such interest on the forgiven principal amount of the Note. No assurance is provided that we will obtain forgiveness of the Loan in whole or in part. We will be obligated to repay any portion of the principal amount of the Note that is not forgiven, together with interest accrued and accruing thereon at the rate set forth above, until such unforgiven portion is paid in full.

See “Note 9—Paycheck Protection Program” to the accompanying condensed consolidated financial statements for information regarding the Loan.

Royalty and Milestone Payments Purchase Agreement with Reedy Creek Investments LLC

On April 29, 2019, we entered into the Purchase Agreement with Reedy Creek, pursuant to which Reedy Creek provided us funding in an initial amount of $25.0 million for us to use primarily to pursue the development, regulatory approval and commercialization (including through out-license agreements and other third-party arrangements) activities for SB206, for the treatment of molluscum, and advancing programmatically other activities with respect to SB414, for atopic dermatitis, and SB204, for acne. Reedy Creek was to provide $10.0 million of additional funding contingent upon our achievement of the primary endpoints in each of the two SB206 Phase 3 clinical trials no later than March 31, 2020. Based on the top line efficacy results from the Phase 3 SB206 program released in January 2020, we understand that Reedy Creek will not be paying us the contingent $10.0 million of additional funding.

Pursuant to the Purchase Agreement, we will pay Reedy Creek ongoing quarterly payments, calculated based on an applicable percentage per product of any upfront fees, milestone payments, royalty payments or equivalent payments received by us pursuant to any out-license agreement for the products in the United States, Mexico or Canada, net of any upfront fees, milestone payments, royalty payments or equivalent payments paid by us to third parties pursuant to any agreements under which we have in-licensed intellectual property with respect to the products.

The applicable percentage used for determining the ongoing quarterly payments, applied to amounts received directly by us pursuant to any out-license agreement for each product, ranges from 10% for SB206 to 20% for SB414 and SB204. However, the agreement provides that the applicable percentage for each product will be 25% for fees or milestone payments received by us (but not royalty payments received by us) until Reedy Creek has received payments under the Purchase Agreement equal to the total funding amount provided by Reedy Creek under the Purchase Agreement. If we decide to commercialize any product on our own following regulatory approval, as opposed to commercializing through an out-license agreement or other third-party arrangement, we will be obligated to pay Reedy Creek a low single digits royalty on net sales of the products.

Development Funding and Royalties Agreement with Ligand Pharmaceuticals Incorporated

On May 4, 2019, we entered into the Funding Agreement with Ligand, pursuant to which Ligand provided us funding of $12.0 million for us to use to pursue the development and regulatory approval of SB206, for the treatment of molluscum.

Pursuant to the Funding Agreement, we will pay Ligand up to $20.0 million in milestone payments upon the achievement by us of certain regulatory and commercial milestones associated with SB206 or any product that incorporates or uses NVN1000, the active pharmaceutical ingredient for our clinical stage product candidates, for the treatment of molluscum. In addition to the milestone payments, we will pay Ligand tiered royalties ranging from 7% to 10% based on annual aggregate net sales of the products in the United States, Mexico or Canada.

Expansion of Partnership with Sato in Japanese Territory

On October 5, 2018, we and Sato entered into the second amendment to the initial license agreement dated January 12, 2017, or the Sato Amendment. The initial license agreement had focused on the development and commercialization of SB204 for the treatment of acne vulgaris in Japan. The Sato Amendment also provides Sato with the exclusive rights to develop and commercialize SB206 and related dosage forms for the treatment of viral skin infections, including but not limited to molluscum contagiosum and external genital warts, in Japan. We have received approximately $24.2 million from Sato beginning January 2017 through September 30, 2020 under the Amended Sato Agreement, including (i) a $10.8 million upfront payment received following the execution of the agreement in January 2017; (ii) a $2.2 million payment related to the initiation of a Phase 1 trial in Japan in the third quarter of 2018; and (iii) $11.2 million of installment payments received following the October 2018 amendment to our amended license agreement with Sato. Under the terms of the Sato Amendment, we received an upfront payment from Sato totaling 1.25 billion JPY (approximately $11.2 million USD) to be paid in three installments over a 12 months period. We received the first installment of 0.25 billion JPY (approximately $2.2 million USD) in October 2018, the second installment of 0.5 billion JPY (approximately $4.5 million USD) in March 2019 and the third installment of 0.5 billion JPY (approximately $4.6 million USD) in November 2019. The Sato Amendment also provides for an aggregate of 1.0 billion JPY in additional non-contingent milestone payments that become payable upon the earlier occurrence of specified fixed dates in the future or the achievement of specified milestone events.

Cash Flows

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

	Nine Months Ended September 30,	
	2020	2019
	(in thousands)	
Net cash (used in) provided by:		
Operating activities	$ (21,868)	$ (11,421)
Investing activities	(90)	(38)
Financing activities	50,779	25,271
Net increase in cash, cash equivalents and restricted cash	$ 28,821	$ 13,812

Net Cash Used in Operating Activities

During the nine months ended September 30, 2020, net cash used in operating activities was $21.9 million and consisted primarily of a net loss of $22.7 million, with adjustments for non-cash amounts related to (i) depreciation expense of $1.1 million, (ii) impairment of long-lived assets of $2.4 million, (iii) loss on facility asset group disposition of $0.8 million, (iv) share-based compensation expense of $0.8 million, (v) fees of $1.7 million related to commitment shares for the June 2020 Aspire CSPA and July 2020 Aspire CSPA, and (vi) a loss on disposal of equipment of $0.1 million, and a $6.1 million net decrease in other operating assets and liabilities. The net decrease in operating assets and liabilities was primarily due to a $2.2 million decrease in research and development service obligation liabilities related to the amortization of the Ligand Funding Agreement liability, a $3.3 million decrease in deferred revenue associated with our performance under, and revenue recognition of, the Amended Sato Agreement, a $0.3 million decrease in accrued legal and professional fees, and a $1.4 million decrease in accounts payable. These decreases were partially offset primarily by a $0.7 million decrease in prepaid expenses and other current assets, a $0.3 million increase in accrued compensation and a $0.3 million decrease in contracts and grants receivable. The changes in accounts payable during the nine months ended September 30, 2020 were primarily related to timing of invoice receipts and payments associated with the SB206 Phase 3 development program.

During the nine months ended September 30, 2019, net cash used in operating activities was $11.4 million and consisted primarily of a net loss of $24.4 million, with adjustments for non-cash amounts related primarily to depreciation expense of $1.5 million, share-based compensation expense for both equity-based and liability-based awards of $2.4 million and a $9.0 million favorable change in other operating assets and liabilities. The favorable net change in assets and liabilities was primarily due to (i) a $12.0 million increase related to the advanced payment for the research and development service obligation associated with the Funding Agreement with Ligand, offset by a $5.5 million decrease in research and development service obligation liabilities related to the amortization of the liability associated with Ligand, (ii) a $1.2 million increase in deferred revenue following the receipt of an additional upfront installment payment under the Amended Sato Agreement during the first quarter of 2019; (iii) a $1.2 million increase in accounts payable and (iv) a $0.8 million increase in accrued outside research and development services. The increase in accounts payable and accruals was primarily related to the Phase 3 development program for molluscum. These favorable changes were partially offset by changes in other operating assets and liabilities totaling $0.7 million, including an increase in contracts and grants receivable and a decrease in accrued legal and professional fees.

Net Cash Used in Investing Activities

During the nine months ended September 30, 2020, the $0.1 million of net cash used in investing activities was primarily related to installment payments made to a drug delivery device technology manufacturing vendor in connection with an ongoing drug delivery device technology enhancement project of $0.4 million, offset by $0.3 million of proceeds from the sale of equipment.

During the nine months ended September 30, 2019, net cash used in investing activities was minimal and consisted of purchases of laboratory and manufacturing equipment.

Net Cash Provided by Financing Activities

During the nine months ended September 30, 2020, net cash provided by financing activities was $50.8 million and consisted primarily of $5.3 million of proceeds, net of underwriting fees, from closing of our March 2020 Public Offering, $5.5 million of proceeds from the exercise of common warrants associated with the March 2020 Public Offering, $7.3 million of proceeds, net of placement agent fees, from our March 2020 Registered Direct Offering, $1.0 million from the entry into a promissory note for an unsecured loan under the PPP, and $31.9 million of proceeds from the sale of our common stock pursuant to the 2019 Aspire CSPA, the June 2020 Aspire CSPA and the July 2020 Aspire CSPA. These financing cash inflows were partially offset by $0.2 million of other offering costs, including legal and professional fees, directly associated with the March 2020 Public Offering, March 2020 Registered Direct Offering and the February 2020 shelf registration statement filing.

During the nine months ended September 30, 2019, net cash provided by financing activities was $25.3 million and consisted primarily of funding received pursuant to the Purchase Agreement with Reedy Creek.

Capital Requirements

As of September 30, 2020, we had a total cash and cash equivalents balance of $43.1 million and positive working capital of $36.7 million. We believe that our existing cash and cash equivalents balance as of September 30, 2020, and expected contractual payments to be received in connection with existing licensing agreements, will provide us with adequate liquidity to fund our operating needs through the fourth quarter of 2021. This operating forecast and related cash projection includes the expected costs associated with a pivotal Phase 3 trial for SB206 as a treatment for molluscum, the B-SIMPLE4 trial, and development activities in certain priority therapeutic areas, but excludes any potential costs associated with other late-stage clinical development programs. Further advancement of the molluscum contagiosum (SB206) program beyond the conduct and completion of the B-SIMPLE4 trial, or advancement of any other late-stage clinical program across our platform, is subject to our ability to secure additional capital, and has been and may be further impacted by the COVID-19 pandemic. We will need significant additional funding to make further advancements in our product development programs beyond those currently included in our operating forecast and related cash projection.

We are utilizing our existing capital resources to fund the ongoing and near-term operating and development activities, as described in the “Priority Development Pipeline” and “Pipeline Expansion Opportunities” section above. We also expect to incur substantial costs in 2020 associated with our research and development personnel, and certain facility infrastructure and drug manufacturing capabilities to support preclinical and clinical development activities, as described in the “Business Updates” and “Corporate Updates” section, including costs associated with the primary facility lease transaction. While our operating forecast and related cash projection includes these expected costs and the costs associated with the B-SIMPLE4 trial and development activities in certain priority therapeutic areas, it excludes any potential costs associated with other new clinical stage development programs. If we were to progress other clinical stage development programs, we will need significant additional funding, including, but not limited to through (i) equity or debt financings, including through potential sales under the July 2020 Aspire CSPA; or (ii) non-dilutive sources, such as partnerships, collaborations, licensing, grants or other strategic relationships. Any issuance of equity or debt that could be convertible into equity would result in significant dilution to our existing stockholders. If we continue to attempt to raise additional capital, there can be no assurance that we will be able to obtain it on terms acceptable to us, on a timely basis, or at all. The current market value of our common stock may negatively impact funding options and the acceptability of funding terms. A failure to obtain sufficient funds on acceptable terms when needed could cause us to alter or reduce our planned operating activities to conserve our cash and cash equivalents, including but not limited to delaying planned activities directly related to or in support of product candidate development. Our anticipated expenditure levels may change if we adjust our current operating plan and could impact the magnitude and/or timing of development and operating expenses and therefore our cash runway. Such actions could delay development timelines and have a material adverse effect on our results of operations, financial condition and market valuation. As of September 30, 2020, we had an accumulated deficit of $242.6 million.

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 one of our current or future product candidates and achieve successful commercialization by a strategic partner or by ourselves. 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 any commercialization activities. We are subject to all of the risks inherent 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.

Adequate funding may not be available to us on terms acceptable to us, on a timely basis, or at all. The current market value of our common stock may negatively impact funding options and the acceptability of funding terms. Our failure to obtain sufficient additional 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, reducing, terminating or eliminating planned product candidate development activities, such as our current hold on most of our clinical development programs, to conserve our cash and cash equivalents or, ultimately, we may need to dissolve and liquidate our assets or seek protection under bankruptcy laws. Such actions could delay development timelines and have a material adverse effect on our business, results of operations, financial condition and market valuation. If we are forced to terminate or eliminate our product development programs, wind down our operations, liquidate or seek bankruptcy protection, it is unclear to what extent we will be able to pay our obligations, and, accordingly, it is further unclear whether and to what extent any resources would be available for distributions to our stockholders, whereby, our stockholders may lose some or all of their investment. If we are forced to terminate or eliminate our product development programs or pursue other strategic alternatives or corporate transactions, there can be no assurance that such actions would result in any additional stockholder value. Alternatively, we may seek to engage in one or more potential transactions, such as the sale of the Company, or sale or divestiture of some of our assets, such as a sale of our dermatology platform assets, but there can be no assurance that we will be able to enter into such a transaction or transactions on a timely basis or at all or on terms that are favorable to us. If we are forced to terminate or eliminate our product development programs or pursue other strategic alternatives or corporate transactions, there can be no assurance that such actions would result in any additional stockholder value.

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 or timing 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 trials conducted by us or potential future partners;
- the progress, timing, costs and results of development and preclinical study activities relating to other potential applications of our nitric oxide platform;
- the number and characteristics of product candidates that we pursue;
- our ability to enter into strategic relationships to support the continued development of certain product candidates and the success of those arrangements;
- our success in optimizing the size and capability of our manufacturing capabilities and related processes to meet our strategic objectives;
- our success in the technical transfer of methods and processes related to our drug substance and drug product manufacturing with our current and/or potential future contract manufacturing partners;
- 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 and SB206 in Japan;
- the terms and timing of any future collaborations, licensing, consulting, financing 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 costs associated with any potential future securities litigation, and the outcome of that litigation;
- 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 or out licensing of our product candidates.

Contractual Obligations and Contingent Liabilities

Except for compensatory obligations described in "Note 8—Commitments and Contingencies" and the Loan we received under the PPP described in "Note 9—Paycheck Protection Program" to the accompanying condensed consolidated financial statements, there were no material changes during the nine months ended September 30, 2020 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.

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 2021. However, if certain events occur prior to such date, 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 such date.

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 United States generally accepted accounting principles, or U.S. GAAP. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported revenue 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. Except for the following matters, during the nine months ended September 30, 2020, there were no other material changes to our critical accounting policies.

Assessment of Long-Lived Assets for Held-for-Sale Classification and Potential Impairment; Assets and Liabilities Measured at Fair Value on a Non-Recurring Basis

As described in "Note 14—Assets Held for Sale, Impairment Charges" to the accompanying condensed consolidated financial statements, we evaluated all of our long-lived assets for potential for held for sale classification and potential impairment as of June 29, 2020. This evaluation, which included the conduct of nonrecurring fair value measurements pursuant to FASB ASC 820, *Fair Value Measurements*, required the use of significant judgments and estimates.

The carrying values of long-lived assets within disposal groups that met the criteria to be classified as held for sale were adjusted to equal the disposal groups' fair value less cost to sell. Quoted or estimated selling prices were used to estimate the fair value of the disposal group assets, which were determined to be Level 2 or Level 3 inputs within the fair value measurement hierarchy in ASC 820, respectively.

Long-lived assets in certain asset groups that remained classified as held and used were assessed for potential impairment. For those asset groups that had indicators of impairment and failed a test of recoverability, their carrying value was adjusted to equal their estimated fair value. For the asset group consisting of a right-of-use lease asset, leasehold improvements and other property affixed to the Morrisville, North Carolina facility, we determined that the lease terms established in the new tenant's prime lease of the Morrisville, North Carolina facility were representative of the asset group's highest and best use and were consistent with market terms; therefore, such terms were considered to be the best available valuation inputs for the fair value estimate, and such inputs were determined to be Level 3 inputs within the fair value measurement hierarchy. For the asset group consisting of other property and equipment not directly associated with our continuing research, development and pilot scale drug manufacturing capabilities, we determined that a market participant was unlikely to pay any material value for such assets and therefore we determined that their fair value was zero. The inputs used to estimate fair value of this asset group were determined to be Level 3 inputs within the fair value measurement hierarchy. Given the impairment recorded among our long-lived assets, it is reasonably possible that changes in judgments and assumptions we used to estimate the fair value of such assets or other circumstances, including changes in our intended use of such assets, could cause us to consider some portion or all of the remaining long-lived assets to become impaired.

Restatement of Previously Issued Financial Statements

On May 14, 2020, the Audit Committee of our board of directors, in consultation with management and BDO USA, LLP, concluded that, because of a misapplication of the accounting guidance applicable to the warrants we issued in January 2018, our previously issued consolidated financial statements for the year ended December 31, 2018, and all quarterly periods of 2019 and 2018, or the Affected Periods, should no longer be relied upon. On May 20, 2020, we restated our consolidated financial statements for all Affected Periods in our Annual Report on Form 10-K/A (Amendment No. 1) for the fiscal year ended December 31, 2019. As such, the comparative information provided for the three and nine months ended September 30, 2019 contained in the results of operations discussed above reflect these previously restated amounts.

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 condensed consolidated financial statements.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Not applicable.

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 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 principal executive and financial officers, has evaluated the effectiveness of our disclosure controls and procedures as of September 30, 2020, the end of the period covered by this Quarterly Report on Form 10-Q. Our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives, and management necessarily applies its judgment in evaluating the cost benefit relationship of possible controls and procedures. Based upon such evaluation, our principal executive and financial officers have concluded because of the previously reported material weakness in our internal control over financial reporting discussed below, our disclosure controls and procedures were not effective as of such date at the reasonable assurance level.

Remediation of Previously Reported Material Weakness

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in the Exchange Act Rule 13a-15(f). Our internal control over financial reporting is designed to provide reasonable assurance to our management and board of directors regarding the preparation and fair presentation of published financial statements. A control system, no matter how well designed and operated, can only provide reasonable, not absolute, assurance that the objectives of the control system are met. Because of these inherent limitations, management does not expect that our internal control over financial reporting will prevent all error and all fraud. In our Annual Report on Form 10-K/A (Amendment No. 1) for the fiscal year ended December 31, 2019, filed with the SEC on May 20, 2020, management concluded that our internal control over financial reporting was not effective as of December 31, 2019 because of a material weakness in internal control related to the accounting for significant and unusual transactions.

We have devoted, and plan to continue to devote, significant efforts and resources to the remediation plan for the previously reported material weakness described in our prior periodic filings and to the improvement of our internal control over financial reporting. While we have processes to identify and apply accounting guidance pertaining to significant and unusual transactions, we have begun and plan to continue to enhance the design of control activities that will better enable our understanding of the nuances of increasingly complex accounting standards and their application. We have initiated the following changes in our internal control over financial reporting during the three months ended September 30, 2020:

- expanded access to accounting research databases; and
- enhanced assessment, scoping and involvement of highly qualified consultative third party professionals regarding potentially complex accounting matters.

As we continue to evaluate and work to remediate this material weakness our internal control over financial reporting, we may determine to take additional measures to address the material weakness or determine to supplement or modify certain of the remediation efforts described above. The elements of our remediation plan can only be accomplished over time, and we can offer no assurance that these initiatives will ultimately have the intended effects.

Restatement of Previously Issued Financial Statements

On May 14, 2020, we revised our prior position on accounting for warrants and concluded that our previously issued consolidated financial statements for the year ended December 31, 2018, and all quarterly periods of 2019 and 2018, or the Affected Periods, should not be relied upon because of a misapplication in the guidance on warrant accounting. On May 20, 2020, we restated our consolidated financial statements for all Affected Periods in our Annual Report on Form 10-K/A (Amendment No. 1) for the fiscal year ended December 31, 2019.

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

Except for the changes described above to remediate the previously reported material weakness, there have been no significant changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act) during the three months ended September 30, 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings

We are not currently a party to any material legal proceedings and are not aware of any claims or actions pending or threatened against us that we believe could have a material adverse effect on our business, operating results, cash flows or financial statements. In the future, we may from time to time become involved in litigation relating to claims arising from our ordinary course of business.

Item 1A. Risk Factors

There have been no material changes to the risk factors disclosed in our Annual Report, except as follows:

We have restated our consolidated financial statements for the year ended December 31, 2018, and all quarterly periods of 2019 and 2018, which may lead to additional risks and uncertainties, including loss of investor confidence and negative impacts on our stock price.

On May 14, 2020, we concluded that, because of a misapplication of the accounting guidance applicable to the warrants we issued in January 2018, our previously issued consolidated financial statements for the Affected Periods should no longer be relied upon. As such, we determined that we would restate our consolidated financial statements for each of the Affected Periods and that we would revise our consolidated financial statements for the year ended December 31, 2019 in connection with the restatement of our consolidated financial statements for the Affected Periods, which we did on May 20, 2020. As a result of these events, we have become subject to a number of additional costs and risks, including unanticipated costs for accounting and legal fees in connection with the restatement and the remediation of our ineffective disclosure controls and procedures and material weakness in internal control over financial reporting. In addition, the attention of our management team has been diverted by these efforts. We could be subject to additional stockholder, regulatory or other actions in connection with the restatement or other matters. If any such actions occur, they will, regardless of the outcome, consume a significant amount of management's time and attention and may result in additional legal, accounting, insurance and other costs. If we do not prevail in any such proceedings, we could be required to pay substantial damages or settlement costs. In addition, the restatement and related matters could impair our reputation or could cause our counterparties to lose confidence in us. Each of these occurrences could have a material adverse effect on our business, results of operations, financial condition and stock price.

We have identified a material weakness in our internal control over financial reporting. This material weakness could continue to adversely affect our ability to report our results of operations and financial condition accurately and in a timely manner.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with U.S. GAAP. Our management is likewise required, on a quarterly basis, to evaluate the effectiveness of our internal controls and to disclose any changes and material weaknesses identified through such evaluation in those internal controls. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis.

In connection with the restatement described above, we identified a material weakness in our internal controls related to the accounting for significant and unusual transactions. As a result of this material weakness, in our Annual Report on Form 10-K/A (Amendment No. 1) for the fiscal year ended December 31, 2019, filed with the SEC on May 20, 2020, management concluded that our internal control over financial reporting was not effective as of December 31, 2019.

To respond to this material weakness, we have devoted, and plan to continue to devote, significant effort and resources to the remediation and improvement of our internal control over financial reporting. While we have processes to identify and appropriately apply applicable accounting requirements, we plan to enhance these processes to better evaluate our research and understanding of the nuances of the complex accounting standards that apply to our consolidated financial statements. Our plans at this time include (i) providing expanded access to accounting research databases; and (ii) enhanced assessment, scoping and involvement of highly qualified consultative third party professionals regarding potentially complex accounting matters. The elements of our remediation plan can only be accomplished over time, and we can offer no assurance that these initiatives will ultimately have the intended effects. For a discussion of management's consideration of the material weakness identified related to the accounting for a significant and unusual transactions, see Part I, Item 4: Controls and Procedures included in this Quarterly Report on Form 10-Q.

Any failure to maintain such internal control could adversely impact our ability to report our financial results on a timely and accurate basis. If our financial statements are not accurate, investors may not have a complete understanding of our operations. Likewise, if our financial statements are not filed on a timely basis, we could be subject to sanctions or investigations by the stock exchange on which our common stock is listed, the SEC or other regulatory authorities. In either case, there could result a material adverse effect on our business. Failure to timely file will cause us to be ineligible to utilize short form registration statements on Form S-3 or Form S-4, which may impair our ability to obtain capital in a timely fashion to execute our business strategies or issue shares to effect an acquisition. Inferior internal control could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our stock.

We can give no assurance that the measures we have taken and plan to take in the future will remediate the material weakness identified or that any additional material weaknesses or restatements of financial results will not arise in the future due to a failure to implement and maintain adequate internal control over financial reporting or circumvention of these controls. In addition, even if we are successful in strengthening our controls and procedures, in the future those controls and procedures may not be adequate to prevent or identify irregularities or errors or to facilitate the fair presentation of our consolidated financial statements.

Our operations have been impacted by and we may face further business disruption and related risks resulting from the COVID-19 pandemic which could have a material adverse effect on our business.

The novel strain of a virus named SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2), or coronavirus, which causes novel coronavirus disease 2019, or COVID-19, has spread globally and has resulted in authorities implementing numerous measures to try to contain the virus, such as travel bans and restrictions, quarantines, shelter in place orders, and shutdowns. Moreover, even where restrictions are and remain lifted, the absence of viable treatment options or a vaccine could lead people to continue to self-isolate and not participate in the economy at pre-pandemic levels for a prolonged period of time. The COVID-19 pandemic, and the mitigation measures and uncertainty resulting from it, have had and will likely continue to have an adverse impact on economic, public health and behavioral conditions in the United States and worldwide, which in each case could have an adverse effect on our business and financial condition, including impairing our ability to raise capital when needed or on terms that are favorable to us.

The timetable for development of our product candidates has been impacted and may face further disruption and our business could be further adversely affected by the outbreak of COVID-19. As disclosed in greater detail in “Management’s Discussion and Analysis of Financial Condition and Results of Operations—COVID-19 Overview,” we have implemented protocols and other measures to continue our critical business functions, maximize employee safety and account for potential impacts of the COVID-19 pandemic in our B-SIMPLE4 trial design. Nonetheless, we are continuing to assess our business plans and the impact COVID-19 may have on our ability to conduct our planned preclinical studies and clinical trials, most of which also remain subject to available funding, including our ability to recruit patients to participate in clinical trials and access sites and investigators to conduct our clinical trials, and our ability to rely on our current and future third-party relationships (including with third-party manufacturers, vendors, and strategic partners). There can be no assurance that this analysis will enable us to avoid part or all of any impact from the spread of COVID-19 or its consequences, including downturns in business sentiment generally or in our sector in particular. In particular, COVID-19 impacted the timing of trial initiation of our B-SIMPLE4 Phase 3 trial for SB206, and we are assessing any further impact of COVID-19 on the B-SIMPLE4 Phase 3 trial for SB206, including delay, postponement or other impacts to the trial. We may face difficulties and/or delays with site initiation and patient enrollment for the B-SIMPLE4 Phase 3 trial for SB206 or our other planned preclinical or clinical trials if (i) the prevalence of molluscum contagiosum is reduced as a result of the various measures implemented by authorities to try to contain COVID-19, (ii) the patient populations that are eligible for our planned clinical trials are impacted by the COVID-19 pandemic, or (iii) if healthcare resources continue to be prioritized toward the COVID-19 pandemic. Because the greatest incidence of molluscum is in children aged one to 14 years, school and child care center closures or reliance on virtual learning could impact our ability to conduct the B-SIMPLE4 Phase 3 trial for SB206. Moreover, the COVID-19 pandemic may continue to affect the business of the FDA or other health authorities, which could result in delays in our interactions with the FDA related to our planned clinical trials.

If we or any future third-parties with whom we partner (including manufacturers, vendors, strategic partners, clinical trial sites, and CROs), or the FDA or other health authorities, experience delays or other disruptions, inefficiencies or other adverse impacts associated with the COVID-19 pandemic, our ability to conduct our business and operations could be further adversely affected, which could prevent or delay us continuing development of our product candidates, and ultimately of reviews and approvals of our product candidates. The extent to which COVID-19 and global efforts to contain its spread will impact our business including our operations, preclinical studies, clinical trials, and financial condition will depend on future developments, which are highly uncertain and cannot be predicted at this time, and include the duration, severity, and scope of the pandemic, including the timing and availability of treatment options or a vaccine, and the actions taken by other parties, such as governmental authorities, to contain and treat COVID-19.

Our evaluation and potential pursuit of strategic and financial alternatives may result in significant transaction expenses and could adversely impact our business and our stock price.

On April 20, 2020, we announced that we are evaluating strategic and financial alternatives focused on maximizing stockholder value, and we have engaged H.C. Wainwright to assist in that process. We have not stated a definitive timeline for completion of this process, and there can be no assurance that this process will result in the Company pursuing any strategic or financial alternatives, or that a strategic or financial alternative, if any, would be completed successfully or at all. Moreover, there can be no assurance that any such strategic or financial alternative, if completed, will yield additional stockholder value. Our board of directors may determine to suspend or terminate our evaluation of strategic or financial alternatives, or any pursuit of such alternatives, at any time due to various factors. In addition, our evaluation and pursuit of any strategic or financial alternatives is dependent upon a number of factors that may be beyond our control, including among other factors, market conditions, travel restrictions, industry trends, regulatory limitations, the interest of third parties in our business and the availability of financing to potential strategic partners on reasonable terms.

Further, the process of evaluating and pursuing strategic and financial alternatives, the public announcement of such process or any decision or transaction resulting from such process could adversely impact our business and our stock price. We may devote a significant amount of time and resources to evaluating and pursuing potential strategic and financial alternatives, which could result in the diversion of management’s attention from our existing business and focus on our current strategy. In connection with the evaluation and potential pursuit of any strategic and/or financial alternatives, we may incur significant transaction expenses (including equity compensation, severance pay and legal, accounting and financial advisory fees); fail to retain or attract key personnel; or fail to strengthen or maintain our business and relationships with our existing partners and vendors. As a result, we may fail to achieve objectives related to the development of our clinical product candidates or other operational objectives, which may have a material adverse effect on our business.

We do not intend to discuss or disclose developments or provide updates on the progress or status of this process unless and until it has been completed, or our board of directors has concluded that disclosure is appropriate or required. As such, perceived uncertainties related to the future of the Company and speculation regarding the evaluation and potential pursuit of any strategic and/or financial alternatives and related developments may make it more difficult for us to attract and retain key personnel and business partners or cause our stock price to fluctuate significantly.

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

Unregistered Sales of Equity Securities

None.

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

Not applicable.

Item 6. Exhibits

The following exhibits are being filed herewith or are being incorporated by reference and are numbered in accordance with Item 601 of Regulation S-K:

			INCORPORATED BY REFERENCE			
EXHIBIT NO.	DESCRIPTION	Filed Herewith	FORM	File No.	Exhibit	Filing Date
4.1	Registration Rights Agreement, dated July 21, 2020, between Novan, Inc. and Aspire Capital Fund, LLC.		8-K	001-37880	4.1	July 22, 2020
10.1	Letter Amendment, dated August 20, 2020, to the Paycheck Protection Term Note, dated April 22, 2020, in favor of PNC Bank, National Association	X				
10.2	Common Stock Purchase Agreement, dated July 21, 2020, between Novan, Inc. and Aspire Capital Fund, LLC.		8-K	001-37880	10.1	July 22, 2020
10.3	Non-Employee Director Compensation Policy.		8-K	001-37880	10.1	September 24, 2020
10.4	Employment Agreement, dated September 23, 2020, by and between Novan, Inc. and John M. Gay.		8-K	001-37880	10.2	September 24, 2020
10.5	Lease Termination Agreement, dated July 16, 2020, by and between Novan, Inc. and Durham Hopson, LLC.	X				
10.6	Form of Director and Executive Officer Indemnification Agreement	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	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.					

			INCORPORATED BY REFERENCE			
EXHIBIT NO.	DESCRIPTION	Filed Herewith	FORM	File No.	Exhibit	Filing Date
101.SCH	Inline XBRL Taxonomy Extension Schema Document.	X				
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.	X				
101.DEF	Inline XBRL Taxonomy Extension Definition Document.	X				
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.	X				
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.	X				
104	Cover Page Interactive Data File - the cover page XBRL tags are embedded within the Inline XBRL Instance document included in Exhibit 101.					

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/ Paula Brown Stafford
Paula Brown Stafford
Chairman, President and Chief Executive Officer
(Principal Executive Officer)

/s/ John M. Gay
John M. Gay
Chief Financial Officer
(Principal Financial Officer)

/s/ Andrew J. Novak
Andrew J. Novak
Vice President, Accounting and Business Operations
(Principal Accounting Officer)

Date: October 30, 2020

Exhibit 10.1

08/20/2020

NOVAN INC
Attn: John Gay, Paula Stafford

This letter describes amendments made by PNC to your Paycheck Protection Program loan documents as a result of the *Paycheck Protection Program Flexibility Act of 2020*, which was signed into law on June 5, 2020

Key terms used in this letter include:

- **PPP** the SBA's Paycheck Protection Program
- **Facility** your PPP loan
- **Note** the note, as extended, amended, or modified, that evidences your PPP loan
- **PNC** PNC Bank, National Association

Dear Valued Customer

Thank you for banking with PNC. As always, we appreciate your business and the opportunity to serve you.

We are modifying the terms of the Note for your Facility because of recent changes to the laws governing the PPP. The Paycheck Protection Program Flexibility Act of 2020 significantly modifies the loan forgiveness process and provides other benefits to you as a PPP loan recipient. Your modified Note reflects some of these modifications and benefits.

Summary of Note Amendments:

Below is a summary of the amendments that we are making to your Note. You should read the actual text of the amendments on the next page of this letter for a complete understanding of the new terms and conditions of your Note. Any capitalized terms that we use in this letter but don't otherwise define have the meanings given to those terms in the Note.

Changes have been made to the amount of time your loan may be deferred. If you apply for forgiveness, the Act changes the deferral period (the period of time when you do not have to pay principal, interest, and fees) from six months to the date that PNC receives your approved loan forgiveness funds from the SBA. If you don't apply for forgiveness, your payments could be deferred for up to 16 months to the date that is 10 months following the earlier of 24 weeks after your loan was funded, or December 31, 2020. As a result, your Deferral Period, Deferral Expiration Date and First Payment Date are being amended to comply with the Act, and the time you have to repay any unforgiven amount prior to your maturity date may be shorter.

More non-payroll costs might be eligible for forgiveness. The Act now allows your total forgiven amount to include up to 40% of non-payroll costs (this was originally capped at 25%). In light of this change to the Act, we are amending your Note to remove language requiring you to use at least 75% of the loan proceeds be used for eligible payroll costs.

<u>Text of Note Amendments:</u>

Effective as of June 5, 2020, Sections 2 and 3 of the Note were amended and restated to read as follows:

"**2. <u>Structure; Payment Terms</u>**. During the Deferral Period, interest on the outstanding principal balance will accrue at the Fixed Rate, but neither principal nor interest shall be due and payable. On the Deferral Expiration Date, the Conversion Balance shall convert to an amortizing term loan payable as set forth below.

On the First Payment Date, all accrued interest that is not forgiven under the Program shall be due and payable. Additionally, on the First Payment Date, and continuing on the 15th day of each month thereafter until the Maturity Date, equal monthly installments of principal shall be due and payable in an amount sufficient to fully amortize the Conversion Balance over the remaining term of the Facility. Interest shall be payable at the same times as the monthly principal payments. Any outstanding principal and accrued interest shall be due and payable in full on the Maturity Date.

If any payment under this Note shall become due on a day other than a Business Day, such payment shall be made on the next succeeding Business Day and such extension of time shall be included in computing interest in connection with such payment. The Borrower hereby authorizes the Bank to charge the Borrower's deposit account at the Bank for any payment when due. Payments received will be applied to charges, fees and expenses (including attorneys' fees), accrued interest and principal in any order the Bank may choose, in its sole discretion.

The following terms shall have the meanings set forth below:

"**Business Day**" shall mean any day other than a Saturday or Sunday or a legal holiday on which commercial banks are authorized or required by law to be closed for business in the State of Delaware.

"**Conversion Balance**" shall mean the outstanding principal of the Facility, less any forgiven amounts, as determined on the Deferral Expiration Date.

"**Deferral Expiration Date**" shall mean either (a) the date any forgiven amount of the Facility is remitted to the Bank, or (b) the date that a final determination is made that no portion of the Facility will be forgiven; provided, however, if the Borrower fails to apply for forgiveness by the Latest Forgiveness Application Date, the Deferral Expiration Date shall mean the Latest Forgiveness Application Date. In no event shall the Deferral Expiration Date be later than the Maturity Date.

"**Deferral Period**" shall mean the period beginning on the date of this Note and ending on the Deferral Expiration Date.

"**First Payment Date**" shall mean the 15th day of the month following the month in which the Deferral Expiration Date occurs.

"**Latest Forgiveness Application Date**" shall mean the date that is 10 months after the earlier to occur of (a) the date that is 24 weeks after the date the Facility is funded; and (b) December 31, 2020.

"**Maturity Dat**e" shall mean the 2nd anniversary of the date of this Note.

3. **<u>Forgiveness of the Facility</u>**. All or a portion of this Facility may be forgiven in accordance with the Program requirements. The amount of forgiveness shall be calculated (and may be reduced) in accordance with the requirements of the Program."

Except as described above, the Note and other Loan Documents remain unchanged and in full force and effect as written.

We're committed to you and look forward to continuing to support your business. Please refer to PNC.com for more information on the Paycheck Protection Program Flexibility Act.

Sincerely,

PNC BANK, NATIONAL ASSOCIATION

LEASE TERMINATION AGREEMENT

THIS LEASE TERMINATION AGREEMENT (this "**Termination Agreement**") is made and entered into as of the 16th day of July, 2020, by and between **DURHAM HOPSON, LLC**, a Delaware limited liability company, (as successor-in-interest to Durham Hopson Road, LLC) hereinafter called "**Landlord**"; and **NOVAN, INC.**, a Delaware corporation, hereinafter called "**Tenant**".

STATEMENT OF PURPOSE

A. WHEREAS, Landlord and Tenant entered into that certain Lease dated August 17, 2015, as amended by that First Amendment to Lease dated January 6, 2016, and as amended by that Second Amendment to Lease dated September 12, 2016 (collectively, the "**Lease**"), covering approximately 51,350 rentable square feet (the "**Premises**") in that certain office building located at 4105 Hopson Road, Durham, North Carolina (the "**Building**").

B. WHEREAS, Kriya Therapeutics, Inc., a Delaware corporation ("**Kriya**") and Landlord are entering into a lease (the "**Kriya Lease**") for the Premises in the Building whereby such lease shall be effective upon the date Landlord delivers the Premises to Kriya.

C. WHEREAS, Tenant and Kriya are entering into a sublease agreement (and Landlord is consenting to such sublease) (the "**Kriya Sublease**") effective upon the effectiveness of this Termination Agreement where Tenant subleases a portion of the Building from Kriya.

WHEREAS, Landlord and Tenant now desire to terminate the Lease in accordance with the terms hereinafter provided.

NOW, THEREFORE, in consideration of the statement of purpose, the mutual covenants contained herein and other valuable consideration, the receipt of which is hereby acknowledged, the parties hereto agree as follows:

1. Termination of Lease. Landlord and Tenant hereby agree that in exchange for a fee payable by Tenant to Landlord of Six Hundred Thousand and No/100 Dollars ($600,000.00) (the "**Termination Fee**") which shall be due when Tenant returns this Termination Agreement to Landlord, and for Tenant's agreement to vacate the Premises (except as otherwise set forth in the Kriya Sublease) on the "Commencement Date" of the Kriya Lease (the "**Termination Date**"), the Lease shall be terminated effective as of such Termination Date and thereafter, Tenant shall have (x) no further right to occupy or possess the Premises under the Lease and (y) no further obligation under the Lease with respect to the Premises. The Termination Fee shall be paid as set forth in Section 6 of this Termination Agreement with the balance of such Termination Fee ($60,828.00) being paid in cash upon Tenant's delivery of an executed copy of this Termination Agreement to Landlord. Landlord and Tenant each expressly acknowledges and agrees that the Lease and all of the parties' right, title and interest thereunder and any estate created thereby shall be deemed terminated effective on the Termination Date so long as the parties comply with this Termination Agreement. Until the Termination Date, Landlord and Tenant shall each continue to perform their respective duties and obligations under the Lease. On or before the

Termination Date and except as otherwise set forth in the Kriya Sublease, Tenant shall decommission the Premises, comply with the requirements under Sections 15.1, 15.2, and 15.3 of the Lease, and deliver to Landlord all keys to the Premises and any other means of access. In accordance with Section 3.1 of the Lease, the parties hereby acknowledge and agree that if the Termination Date occurs on a date that is not the first day of a month then any Rent paid for the fractional portion of such month after the Termination Date shall be promptly refunded to Tenant based on a daily rate for such month.

2. Condition Precedent. This Termination Agreement and all obligations of Tenant and Landlord hereunder are contingent upon the mutual execution and delivery of (a) the Kriya Lease, (b) the Kriya Sublease, and both such agreements are also contingent upon the mutual execution and delivery of this Termination Agreement.

3. Release. So long as Tenant complies with its obligations set forth in the Lease (except as otherwise set forth in this Termination Agreement) prior to and until the Termination Date and as set forth in this Termination Agreement, (a) Landlord, for itself and its successors and assigns, does hereby release and discharge Tenant, its employees, agents and officers from all claims, costs, actions and causes of action arising out of or related to the Lease and/or Tenant's use of the Premises prior to the Termination Date, but Landlord does not release Tenant from any potential liability that may arise during Tenant's occupancy of a portion of the Premises after the Termination Date pursuant to the Kriya Sublease and (b) Tenant shall not have any further monetary liability or obligations (i) under the Lease and/or (ii) except as otherwise set forth in the Kriya Sublease, in respect of the Premises, all from and after the Termination Date except as otherwise stated herein. Notwithstanding anything else contained in this Termination Agreement, Tenant shall be responsible for any payment due to Landlord as the result of a reconciliation of common area maintenance expenses, taxes and insurance costs related to the Building under the Lease at the end of calendar year in which the Termination Date occurs. For clarity, any balance in Tenant's favor held by Landlord at the end of calendar year in which the Termination Date occurs shall be reimbursed to Tenant within sixty (60) days after Landlord conducts a reconciliation of such calendar year. Following the Termination Date, Tenant, for itself and its successors and assigns, does hereby release and discharge Landlord, its employees, agents, officers and successors and assigns from all claims, costs, actions and causes of action arising out of or related to the Lease and/or the Premises from and after the Termination Date. Notwithstanding anything contained herein, in no event shall this Termination Agreement limit Tenant's liability under Applicable Law regarding Tenant's use of Hazardous Materials at the Building at any time before or after the Termination Date.

4. Representations and Warranties of Tenant. Tenant has a valid leasehold interest in the Premises granted by the Lease and has not assigned or encumbered its leasehold interest, subleased the Premises nor granted a security interest in its leasehold interest that is the subject of the Lease; and Tenant certifies that there are no tenants or other persons or entities having a right to possession of the Premises or any portion thereof under the Lease after Tenant vacates the Premises (except as otherwise set forth in the Kriya Sublease).

5. Expenses. In the event that Tenant defaults under any of its obligations set forth above and fails to remedy such default within ten (10) business days after receipt of written

notice thereof, Landlord shall be entitled to employ all rights and remedies available to it for enforcement of such obligations, and Tenant shall be responsible for paying all reasonable documented out-of-pocket costs and expenses of the Landlord, including reasonable attorneys' fees in enforcing the obligations of Tenant hereunder.

6. Security Deposit. Landlord represents and warrants that the L/C Security (as defined in the Lease) is in the amount of Five Hundred Thirty Nine Thousand One Hundred Seventy Two and No/100 Dollars ($539,172.00) (the "Security Deposit"). Landlord and Tenant hereby agree that Tenant shall forfeit the entirety of the Security Deposit as Tenant's partial payment of the Termination Fee under Section 1 of this Termination Agreement, provided, however, applying the Security Deposit toward the Termination Fee in no event releases Tenant from any applicable obligation under the Lease.

7. Benefits and Binding Effect. This Termination Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and assigns.

8. Counterparts/Signatures. This Termination Agreement may be executed in counterparts. All executed counterparts shall constitute one agreement, and each counterpart shall be deemed an original. The parties hereby acknowledge and agree that electronic signatures, facsimile signatures or signatures transmitted by electronic mail in so-called "pdf" format shall be legal and binding and shall have the same full force and effect as if an original of this Termination Agreement had been delivered. Landlord and Tenant (i) intend to be bound by the signatures (whether original, faxed or electronic) on any document sent by facsimile or electronic mail, (ii) are aware that the other party will rely on such signatures, and (iii) hereby waive any defenses to the enforcement of the terms of this Termination Agreement based on the foregoing forms of signature.

9. Miscellaneous. This Termination Agreement shall become effective only upon full execution and delivery of this Termination Agreement by Landlord and Tenant and the satisfaction of the conditions precedent under Section 2 of this Termination Agreement. This Termination Agreement contains the parties' entire agreement regarding the subject matter covered by this Termination Agreement, and supersedes all prior correspondence, negotiations, and agreements, if any, whether oral or written, between the parties concerning such subject matter. There are no contemporaneous oral agreements, and there are no representations or warranties between the parties as to the subject matter covered by this Termination Agreement that are not contained in this Termination Agreement.

[**Signatures to follow**]

IN WITNESS WHEREOF, the parties hereto have caused this Termination Agreement to be duly executed pursuant to authority duly given as of the day and year first above written.

LANDLORD:

DURHAM HOPSON, LLC
a Delaware limited liability company

By: /s/ Adam B. Sichol
Name: ADAM SICHOL
Title: Authorized Signatory

TENANT:

NOVAN, INC.
a Delaware corporation

By: /s/ Paula Brown Stafford
Name: Paula Brown Stafford
Title: President and CEO

Exhibit 10.6

NOVAN, INC.

INDEMNIFICATION AGREEMENT

THIS INDEMNIFICATION AGREEMENT (the "Agreement") is made and entered into as of _________, 20__ between Novan, Inc., a Delaware corporation (the "Company"), and [Name] ("Indemnitee").

WITNESSETH THAT:

WHEREAS, highly competent persons have become more reluctant to serve corporations as [directors] [officers] or in other capacities unless they are provided with adequate protection through insurance or adequate indemnification against inordinate risks of claims and actions against them arising out of their service to and activities on behalf of the corporation;

WHEREAS, the Board of Directors of the Company (the "Board") has determined that, in order to attract and retain qualified individuals, the Company will attempt to maintain on an ongoing basis, at its sole expense, liability insurance to protect persons serving the Company and its subsidiaries from certain liabilities. Although the furnishing of such insurance has been a customary and widespread practice among United States-based corporations and other business enterprises, the Company believes that, given current market conditions and trends, such insurance may be available to it in the future only at higher premiums and with more exclusions. At the same time, directors, officers, and other persons in service to corporations or business enterprises are being increasingly subjected to expensive and time-consuming litigation relating to, among other things, matters that traditionally would have been brought only against the Company or business enterprise itself. The By-laws of the Company require indemnification of the officers and directors of the Company. Indemnitee may also be entitled to indemnification pursuant to the General Corporation Law of the State of Delaware ("DGCL"). The By-laws and the DGCL expressly provide that the indemnification provisions set forth therein are not exclusive, and thereby contemplate that contracts may be entered into between the Company and members of the Board, officers and other persons with respect to indemnification;

WHEREAS, the uncertainties relating to such insurance and to indemnification have increased the difficulty of attracting and retaining such persons;

WHEREAS, the Board has determined that the increased difficulty in attracting and retaining such persons is detrimental to the best interests of the Company's stockholders and that the Company should act to assure such persons that there will be increased certainty of such protection in the future;

WHEREAS, it is reasonable, prudent and necessary for the Company contractually to obligate itself to indemnify, and to advance expenses on behalf of, such persons to the fullest extent permitted by applicable law so that they will serve or continue to serve the Company free from undue concern that they will not be so indemnified;

WHEREAS, this Agreement is a supplement to and in furtherance of the By-laws of the Company and any resolutions adopted pursuant thereto, and shall not be deemed a substitute therefor, nor to diminish or abrogate any rights of Indemnitee thereunder; [and]

WHEREAS, Indemnitee does not regard the protection available under the Company's By-laws and insurance as adequate in the present circumstances, and may not be willing to serve as an officer or director without adequate protection, and the Company desires Indemnitee to serve in such capacity. Indemnitee is willing to serve, continue to serve and to take on additional service for or on behalf of the Company on the condition that he be so indemnified[.][; and]

[WHEREAS, Indemnitee has certain rights to indemnification and/or insurance provided by [NAME] which Indemnitee and [NAME] intend to be secondary to the primary obligation of the Company to indemnify Indemnitee as provided herein, with the Company's acknowledgement and agreement to the foregoing being a material condition to Indemnitee's willingness to serve on the Board.]

NOW, THEREFORE, in consideration of Indemnitee's agreement to serve as [an officer] [a director] from and after the date hereof, the parties hereto agree as follows:

1. Indemnity of Indemnitee. The Company hereby agrees to hold harmless and indemnify Indemnitee to the fullest extent permitted by law, as such may be amended from time to time. In furtherance of the foregoing indemnification, and without limiting the generality thereof:

(a) Proceedings Other Than Proceedings by or in the Right of the Company. Indemnitee shall be entitled to the rights of indemnification provided in this Section l(a) if, by reason of his Corporate Status (as hereinafter defined), the Indemnitee is, or is threatened to be made, a party to or participant in any Proceeding (as hereinafter defined) other than a Proceeding by or in the right of the Company. Pursuant to this Section 1(a), Indemnitee shall be indemnified against all Expenses (as hereinafter defined), judgments, penalties, fines and amounts paid in settlement actually and reasonably incurred by him, or on his behalf, in connection with such Proceeding or any claim, issue or matter therein, if the Indemnitee acted in good faith and in a manner the Indemnitee reasonably believed to be in or not opposed to the best interests of the Company, and with respect to any criminal Proceeding, had no reasonable cause to believe the Indemnitee's conduct was unlawful.

(b) Proceedings by or in the Right of the Company. Indemnitee shall be entitled to the rights of indemnification provided in this Section 1(b) if, by reason of his Corporate Status, the Indemnitee is, or is threatened to be made, a party to or participant in any Proceeding brought by or in the right of the Company. Pursuant to this Section 1(b), Indemnitee shall be indemnified against all Expenses actually and reasonably incurred by the Indemnitee, or on the Indemnitee's behalf, in connection with such Proceeding if the Indemnitee acted in good faith and in a manner the Indemnitee reasonably believed to be in or not opposed to the best interests of the Company; provided, however, if applicable law so provides, no indemnification against such Expenses shall be made in respect of any claim, issue or matter in such Proceeding as to which Indemnitee shall have been adjudged to be liable to the Company unless and to the extent that the Court of Chancery of the State of Delaware shall determine that such indemnification may be made.

(c) Indemnification for Expenses of a Party Who is Wholly or Partly Successful. Notwithstanding any other provision of this Agreement, to the extent that Indemnitee is, by reason of his Corporate Status, a party to and is successful, on the merits or otherwise, in any Proceeding, he shall be indemnified to the maximum extent permitted by law, as such may be amended from time to time, against all Expenses actually and reasonably incurred by him or on his behalf in connection therewith. If Indemnitee is not wholly successful in such Proceeding but is successful, on the merits or otherwise, as to one or more but less than all claims, issues or matters in such Proceeding, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by him or on his behalf in connection with each successfully resolved claim, issue or matter. For purposes of this Section and without limitation, the termination of any claim, issue or matter in such a Proceeding by dismissal, with or without prejudice, shall be deemed to be a successful result as to such claim, issue or matter.

(d) Indemnification of Appointing Stockholder. If (i) Indemnitee is or was affiliated with one or more venture capital funds that has invested in the Company (an "Appointing Stockholder"), and (ii) the Appointing Stockholder is, or is threatened to be made, a party to or a participant in any Proceeding relating to or arising by reason of Appointing Stockholder's position as a stockholder of, or lender to, the Company, or Appointing Stockholder's appointment of or affiliation with Indemnitee or any other director, including without limitation any alleged misappropriation of a Company asset or corporate opportunity, any claim of misappropriation or infringement of intellectual property relating to the Company, any alleged false or misleading statement or omission made by the Company (or on its behalf) or its employees or agents, or any allegation of inappropriate control or influence over the Company or its Board members, officers, equity holders or debt holders, then the Appointing Stockholder will be entitled to indemnification hereunder for Expenses to the same extent as Indemnitee, and the terms of this Agreement as they relate to procedures for indemnification of Indemnitee and advancement of Expenses shall apply to any such indemnification of Appointing Stockholder.

The rights provided to the Appointing Stockholder under this Section 1 shall (i) be suspended during any period during which the Appointing Stockholder does not have a representative on the Company's Board and (ii) terminate on an initial public offering of the Company's Common Stock; provided, however, that in the event of any such suspension or termination, the Appointing Stockholder's rights to indemnification will not be suspended or terminated with respect to any Proceeding based in whole or in part on facts and circumstances occurring at any time prior to such suspension or termination regardless of whether the Proceeding arises before or after such suspension or termination. The Company and Indemnitee agree that the Appointing Stockholder is an express third party beneficiary of the terms of this Section 1(d).

2. Additional Indemnity. In addition to, and without regard to any limitations on, the indemnification provided for in Section 1 of this Agreement, the Company shall and hereby does indemnify and hold harmless Indemnitee against all Expenses, judgments, penalties, fines and amounts paid in settlement actually and reasonably incurred by him or on his behalf if, by reason of his Corporate Status, he is, or is threatened to be made, a party to or participant in any Proceeding (including a Proceeding by or in the right of the Company), including, without limitation, all liability arising out of the negligence or active or passive wrongdoing of Indemnitee. The only limitation that shall exist upon the Company's obligations pursuant to this Agreement shall be that the Company shall not be obligated to make any payment to Indemnitee that is finally determined (under the procedures, and subject to the presumptions, set forth in Sections 6 and 7 hereof) to be unlawful.

3. Contribution.

(a) Whether or not the indemnification provided in Sections 1 and 2 hereof is available, in respect of any threatened, pending or completed action, suit or proceeding in which the Company is jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), the Company shall pay, in the first instance, the entire amount of any judgment or settlement of such action, suit or proceeding without requiring Indemnitee to contribute to such payment and the Company hereby waives and relinquishes any right of contribution it may have against Indemnitee. The Company shall not enter into any settlement of any action, suit or proceeding in which the Company is jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding) unless such settlement provides for a full and final release of all claims asserted against Indemnitee.

(b) Without diminishing or impairing the obligations of the Company set forth in the preceding subparagraph, if, for any reason, Indemnitee shall elect or be required to pay all or any portion of any judgment or settlement in any threatened, pending or completed action, suit or proceeding in which the Company is jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), the Company shall contribute to the amount of Expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred and paid or payable by Indemnitee in proportion to the relative benefits received by the Company and all officers, directors or employees of the Company, other than Indemnitee, who are jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), on the one hand, and Indemnitee, on the other hand, from the transaction or events from which such action, suit or proceeding arose; provided, however, that the proportion determined on the basis of relative benefit may, to the extent necessary to conform to law, be further adjusted by reference to the relative fault of the Company and all officers, directors or employees of the Company other than Indemnitee who are jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), on the one hand, and Indemnitee, on the other hand, in connection with the transaction or events that resulted in such expenses, judgments, fines or settlement amounts, as well as any other equitable considerations which applicable law may require to be considered. The relative fault of the Company and all officers, directors or employees of the Company, other than Indemnitee, who are jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), on the one hand, and Indemnitee, on the other hand, shall be determined by reference to, among other things, the degree to which their actions were motivated by intent to gain personal profit or advantage, the degree to which their liability is primary or secondary and the degree to which their conduct is active or passive.

(c) The Company hereby agrees to fully indemnify and hold Indemnitee harmless from any claims of contribution which may be brought by officers, directors or employees of the Company, other than Indemnitee, who may be jointly liable with Indemnitee.

(d) To the fullest extent permissible under applicable law, if the indemnification provided for in this Agreement is unavailable to Indemnitee for any reason whatsoever, the Company, in lieu of indemnifying Indemnitee, shall contribute to the amount incurred by Indemnitee, whether for judgments, fines, penalties, excise taxes, amounts paid or to be paid in settlement and/or for Expenses, in connection with any claim relating to an indemnifiable event under this Agreement, in such proportion as is deemed fair and reasonable in light of all of the circumstances of such Proceeding in order to reflect (i) the relative benefits received by the Company and Indemnitee as a result of the event(s) and/or transaction(s) giving cause to such Proceeding and/or (ii) the relative fault of the Company (and its directors, officers, employees and agents) and Indemnitee in connection with such event(s) and/or transaction(s).

4. Indemnification for Expenses of a Witness. Notwithstanding any other provision of this Agreement, to the extent that Indemnitee is, by reason of his Corporate Status, a witness, or is made (or asked) to respond to discovery requests, in any Proceeding to which Indemnitee is not a party, he shall be indemnified against all Expenses actually and reasonably incurred by him or on his behalf in connection therewith.

5. Advancement of Expenses. Notwithstanding any other provision of this Agreement, the Company shall advance all Expenses incurred by or on behalf of Indemnitee in connection with any Proceeding by reason of Indemnitee’s Corporate Status within thirty (30) days after the receipt by the Company of a statement or statements from Indemnitee requesting such advance or advances from time to time, whether prior to or after final disposition of such Proceeding. Such statement or statements shall reasonably evidence the Expenses incurred by Indemnitee and shall include or be preceded or

accompanied by a written undertaking by or on behalf of Indemnitee to repay any Expenses advanced if it shall ultimately be determined that Indemnitee is not entitled to be indemnified against such Expenses. Any advances and undertakings to repay pursuant to this Section 5 shall be unsecured and interest free.

6. Procedures and Presumptions for Determination of Entitlement to Indemnification. It is the intent of this Agreement to secure for Indemnitee rights of indemnity that are as favorable as may be permitted under the DGCL and public policy of the State of Delaware. Accordingly, the parties agree that the following procedures and presumptions shall apply in the event of any question as to whether Indemnitee is entitled to indemnification under this Agreement:

(a) To obtain indemnification under this Agreement, Indemnitee shall submit to the Company a written request, including therein or therewith such documentation and information as is reasonably available to Indemnitee and is reasonably necessary to determine whether and to what extent Indemnitee is entitled to indemnification. The Secretary of the Company shall, promptly upon receipt of such a request for indemnification, advise the Board in writing that Indemnitee has requested indemnification. Notwithstanding the foregoing, any failure of Indemnitee to provide such a request to the Company, or to provide such a request in a timely fashion, shall not relieve the Company of any liability that it may have to Indemnitee unless, and to the extent that, such failure actually and materially prejudices the interests of the Company.

(b) Upon written request by Indemnitee for indemnification pursuant to the first sentence of Section 6(a) hereof, a determination with respect to Indemnitee's entitlement thereto shall be made in the specific case by one of the following four methods, which shall be at the election of the Board: (1) by a majority vote of the Disinterested Directors, even though less than a quorum, (2) by a committee of disinterested directors designated by a majority vote of the disinterested directors, even though less than a quorum, (3) if there are no disinterested directors or if the disinterested directors so direct, by Independent Counsel in a written opinion to the Board, a copy of which shall be delivered to the Indemnitee, or (4) if so directed by the Board, by the stockholders of the Company. For purposes hereof, disinterested directors are those members of the Board who are not parties to the action, suit or proceeding in respect of which indemnification is sought by Indemnitee.

(c) If the determination of entitlement to indemnification is to be made by Independent Counsel pursuant to Section 6(b) hereof, the Independent Counsel shall be selected as provided in this Section 6(c). The Independent Counsel shall be selected by the Board. Indemnitee may, within ten (10) days after such written notice of selection shall have been given, deliver to the Company a written objection to such selection; provided, however, that such objection may be asserted only on the ground that the Independent Counsel so selected does not meet the requirements of "Independent Counsel" as defined in Section 13 of this Agreement, and the objection shall set forth with particularity the factual basis of such assertion. Absent a proper and timely objection, the person so selected shall act as Independent Counsel. If a written objection is made and substantiated, the Independent Counsel selected may not serve as Independent Counsel unless and until such objection is withdrawn or a court has determined that such objection is without merit. If, within twenty (20) days after submission by Indemnitee of a written request for indemnification pursuant to Section 6(a) hereof, no Independent Counsel shall have been selected and not objected to, either the Company or Indemnitee may petition the Court of Chancery of the State of Delaware or other court of competent jurisdiction for resolution of any objection which shall have been made by the Indemnitee to the Company's selection of Independent Counsel and/or for the appointment as Independent Counsel of a person selected by the court or by such other person as the court shall designate, and the person with respect to whom all objections are so resolved or the person so appointed shall act as Independent Counsel under Section 6(b) hereof. The

Company shall pay any and all reasonable fees and expenses of Independent Counsel incurred by such Independent Counsel in connection with acting pursuant to Section 6(b) hereof, and the Company shall pay all reasonable fees and expenses incident to the procedures of this Section 6(c), regardless of the manner in which such Independent Counsel was selected or appointed.

(d) In making a determination with respect to entitlement to indemnification hereunder, the person or persons or entity making such determination shall presume that Indemnitee is entitled to indemnification under this Agreement. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence. Neither the failure of the Company (including by its directors or independent legal counsel) to have made a determination prior to the commencement of any action pursuant to this Agreement that indemnification is proper in the circumstances because Indemnitee has met the applicable standard of conduct, nor an actual determination by the Company (including by its directors or independent legal counsel) that Indemnitee has not met such applicable standard of conduct, shall be a defense to the action or create a presumption that Indemnitee has not met the applicable standard of conduct.

(e) Indemnitee shall be deemed to have acted in good faith if Indemnitee's action is based on the records or books of account of the Enterprise (as hereinafter defined), including financial statements, or on information supplied to Indemnitee by the officers of the Enterprise in the course of their duties, or on the advice of legal counsel for the Enterprise or on information or records given or reports made to the Enterprise by an independent certified public accountant or by an appraiser or other expert selected with reasonable care by the Enterprise. In addition, the knowledge and/or actions, or failure to act, of any director, officer, agent or employee of the Enterprise shall not be imputed to Indemnitee for purposes of determining the right to indemnification under this Agreement. Whether or not the foregoing provisions of this Section 6(e) are satisfied, it shall in any event be presumed that Indemnitee has at all times acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the Company. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence.

(f) If the person, persons or entity empowered or selected under Section 6 to determine whether Indemnitee is entitled to indemnification shall not have made a determination within sixty (60) days after receipt by the Company of the request therefor, the requisite determination of entitlement to indemnification shall be deemed to have been made and Indemnitee shall be entitled to such indemnification absent (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's statement not materially misleading, in connection with the request for indemnification, or (ii) a prohibition of such indemnification under applicable law; provided, however, that such sixty (60)-day period may be extended for a reasonable time, not to exceed an additional thirty (30) days, if the person, persons or entity making such determination with respect to entitlement to indemnification in good faith requires such additional time to obtain or evaluate documentation and/or information relating thereto; and provided, further, that the foregoing provisions of this Section 6(f) shall not apply if the determination of entitlement to indemnification is to be made by the stockholders pursuant to Section 6(b) of this Agreement and if (A) within fifteen (15) days after receipt by the Company of the request for such determination, the Board or the Disinterested Directors, if appropriate, resolve to submit such determination to the stockholders for their consideration at an annual meeting thereof to be held within seventy-five (75) days after such receipt and such determination is made thereat, or (B) a special meeting of stockholders is called within fifteen (15) days after such receipt for the purpose of making such determination, such meeting is held for such purpose within sixty (60) days after having been so called and such determination is made thereat.

(g) Indemnitee shall cooperate with the person, persons or entity making such determination with respect to Indemnitee's entitlement to indemnification, including providing to such person, persons or entity upon reasonable advance request any documentation or information which is not privileged or otherwise protected from disclosure and which is reasonably available to Indemnitee and reasonably necessary to such determination. Any Independent Counsel, member of the Board or stockholder of the Company shall act reasonably and in good faith in making a determination regarding the Indemnitee's entitlement to indemnification under this Agreement. Any costs or expenses (including attorneys' fees and disbursements) incurred by Indemnitee in so cooperating with the person, persons or entity making such determination shall be borne by the Company (irrespective of the determination as to Indemnitee's entitlement to indemnification) and the Company hereby indemnifies and agrees to hold Indemnitee harmless therefrom.

(h) The Company acknowledges that a settlement or other disposition short of final judgment may be successful if it permits a party to avoid expense, delay, distraction, disruption and uncertainty. In the event that any action, claim or proceeding to which Indemnitee is a party is resolved in any manner other than by adverse judgment against Indemnitee (including, without limitation, settlement of such action, claim or proceeding with or without payment of money or other consideration) it shall be presumed that Indemnitee has been successful on the merits or otherwise in such action, suit or proceeding. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence.

(i) The termination of any Proceeding or of any claim, issue or matter therein, by judgment, order, settlement or conviction, or upon a plea of nolo contendere or its equivalent, shall not (except as otherwise expressly provided in this Agreement) of itself adversely affect the right of Indemnitee to indemnification or create a presumption that Indemnitee did not act in good faith and in a manner which he reasonably believed to be in or not opposed to the best interests of the Company or, with respect to any criminal Proceeding, that Indemnitee had reasonable cause to believe that his conduct was unlawful.

7. Remedies of Indemnitee.

(a) In the event that (i) a determination is made pursuant to Section 6 of this Agreement that Indemnitee is not entitled to indemnification under this Agreement, (ii) advancement of Expenses is not timely made pursuant to Section 5 of this Agreement, (iii) no determination of entitlement to indemnification is made pursuant to Section 6(b) of this Agreement within ninety (90) days after receipt by the Company of the request for indemnification, (iv) payment of indemnification is not made pursuant to this Agreement within ten (10) days after receipt by the Company of a written request therefor or (v) payment of indemnification is not made within ten (10) days after a determination has been made that Indemnitee is entitled to indemnification or such determination is deemed to have been made pursuant to Section 6 of this Agreement, Indemnitee shall be entitled to an adjudication in an appropriate court of the State of Delaware, or in any other court of competent jurisdiction, of Indemnitee's entitlement to such indemnification. Indemnitee shall commence such proceeding seeking an adjudication within one hundred eighty (180) days following the date on which Indemnitee first has the right to commence such proceeding pursuant to this Section 7(a). The Company shall not oppose Indemnitee's right to seek any such adjudication.

(b) In the event that a determination shall have been made pursuant to Section 6(b) of this Agreement that Indemnitee is not entitled to indemnification, any judicial proceeding commenced pursuant to this Section 7 shall be conducted in all respects as a de novo trial on the merits, and Indemnitee shall not be prejudiced by reason of the adverse determination under Section 6(b).

(c) If a determination shall have been made pursuant to Section 6(b) of this Agreement that Indemnitee is entitled to indemnification, the Company shall be bound by such determination in any judicial proceeding commenced pursuant to this Section 7, absent (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's misstatement not materially misleading in connection with the application for indemnification, or (ii) a prohibition of such indemnification under applicable law.

(d) In the event that Indemnitee, pursuant to this Section 7, seeks a judicial adjudication of his rights under, or to recover damages for breach of, this Agreement, or to recover under any directors' and officers' liability insurance policies maintained by the Company, the Company shall pay on his behalf, in advance, any and all expenses (of the types described in the definition of Expenses in Section 13 of this Agreement) actually and reasonably incurred by him in such judicial adjudication, regardless of whether Indemnitee ultimately is determined to be entitled to such indemnification, advancement of expenses or insurance recovery.

(e) The Company shall be precluded from asserting in any judicial proceeding commenced pursuant to this Section 7 that the procedures and presumptions of this Agreement are not valid, binding and enforceable and shall stipulate in any such court that the Company is bound by all the provisions of this Agreement. The Company shall indemnify Indemnitee against any and all Expenses and, if requested by Indemnitee, shall (within ten (10) days after receipt by the Company of a written request therefore) advance, to the extent not prohibited by law, such expenses to Indemnitee, which are incurred by Indemnitee in connection with any action brought by Indemnitee for indemnification or advance of Expenses from the Company under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company, regardless of whether Indemnitee ultimately is determined to be entitled to such indemnification, advancement of Expenses or insurance recovery, as the case may be.

(f) Notwithstanding anything in this Agreement to the contrary, no determination as to entitlement to indemnification under this Agreement shall be required to be made prior to the final disposition of the Proceeding.

8. Non-Exclusivity; Survival of Rights; Insurance; Primacy of Indemnification; Subrogation.

(a) The rights of indemnification as provided by this Agreement shall not be deemed exclusive of any other rights to which Indemnitee may at any time be entitled under applicable law, the Certificate of Incorporation, the By-laws, any agreement, a vote of stockholders, a resolution of directors of the Company, or otherwise. No amendment, alteration or repeal of this Agreement or of any provision hereof shall limit or restrict any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee in his Corporate Status prior to such amendment, alteration or repeal. To the extent that a change in the DGCL, whether by statute or judicial decision, permits greater indemnification than would be afforded currently under the Certificate of Incorporation, By-laws and this Agreement, it is the intent of the parties hereto that Indemnitee shall enjoy by this Agreement the greater benefits so afforded by such change. No right or remedy herein conferred is intended to be exclusive of any other right or remedy, and every other right and remedy shall be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other right or remedy.

(b) To the extent that the Company maintains an insurance policy or policies providing liability insurance for directors, officers, employees, or agents or fiduciaries of the Company or of any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise that such person serves at the request of the Company, Indemnitee shall be covered by such policy or policies in accordance with its or their terms to the maximum extent of the coverage available for any director, officer, employee, agent or fiduciary under such policy or policies. If, at the time of the receipt of a notice of a claim pursuant to the terms hereof, the Company has directors' and officers' liability insurance in effect, the Company shall give prompt notice of the commencement of such proceeding to the insurers in accordance with the procedures set forth in the respective policies. The Company shall thereafter take all necessary or desirable action to cause such insurers to pay, on behalf of the Indemnitee, all amounts payable as a result of such proceeding in accordance with the terms of such policies.

(c) [The Company hereby acknowledges that Indemnitee has certain rights to indemnification, advancement of expenses and/or insurance provided by [•] and certain of its affiliates (collectively, the "Fund Indemnitors"). The Company hereby agrees (i) that it is the indemnitor of first resort (i.e., its obligations to Indemnitee are primary and any obligation of the Fund Indemnitors to advance expenses or to provide indemnification for the same expenses or liabilities incurred by Indemnitee are secondary), (ii) that it shall be required to advance the full amount of expenses incurred by Indemnitee and shall be liable for the full amount of all Expenses, judgments, penalties, fines and amounts paid in settlement to the extent legally permitted and as required by the terms of this Agreement and the Certificate of Incorporation or Bylaws of the Company (or any other agreement between the Company and Indemnitee), without regard to any rights Indemnitee may have against the Fund Indemnitors, and, (iii) that it irrevocably waives, relinquishes and releases the Fund Indemnitors from any and all claims against the Fund Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. The Company further agrees that no advancement or payment by the Fund Indemnitors on behalf of Indemnitee with respect to any claim for which Indemnitee has sought indemnification from the Company shall affect the foregoing and the Fund Indemnitors shall have a right of contribution and/or be subrogated to the extent of such advancement or payment to all of the rights of recovery of Indemnitee against the Company. The Company and Indemnitee agree that the Fund Indemnitors are express third party beneficiaries of the terms of this Section 8(c).]

(d) [Except as provided in paragraph (c) above,] the event of any payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee (other than against the Fund Indemnitors), who shall execute all papers required and take all action necessary to secure such rights, including execution of such documents as are necessary to enable the Company to bring suit to enforce such rights.

(e) [Except as provided in paragraph (c) above,] the Company shall not be liable under this Agreement to make any payment of amounts otherwise indemnifiable hereunder if and to the extent that Indemnitee has otherwise actually received such payment under any insurance policy, contract, agreement or otherwise.

(f) [Except as provided in paragraph (c) above,] the Company's obligation to indemnify or advance Expenses hereunder to Indemnitee who is or was serving at the request of the Company as a director, officer, employee or agent of any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise shall be reduced by any amount Indemnitee has actually received as indemnification or advancement of expenses from such other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise.

9. Exception to Right of Indemnification. Notwithstanding any provision in this Agreement, the Company shall not be obligated under this Agreement to make any indemnity in connection with any claim made against Indemnitee:

(a) for which payment has actually been made to or on behalf of Indemnitee under any insurance policy or other indemnity provision, except with respect to any excess beyond the amount paid under any insurance policy or other indemnity provision[, provided, that the foregoing shall not affect the rights of Indemnitee or the Fund Indemnitors set forth in Section 8(c) above]; or

(b) for an accounting of profits made from the purchase and sale (or sale and purchase) by Indemnitee of securities of the Company within the meaning of Section 16(b) of the Securities Exchange Act of 1934, as amended, or similar provisions of state statutory law or common law; or

(c) in connection with any Proceeding (or any part of any Proceeding) initiated by Indemnitee, including any Proceeding (or any part of any Proceeding) initiated by Indemnitee against the Company or its directors, officers, employees or other indemnitees, unless (i) the Board authorized the Proceeding (or any part of any Proceeding) prior to its initiation or (ii) the Company provides the indemnification, in its sole discretion, pursuant to the powers vested in the Company under applicable law.

10. Duration of Agreement. All agreements and obligations of the Company contained herein shall continue during the period Indemnitee is an officer or director of the Company (or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise) and shall continue thereafter so long as Indemnitee shall be subject to any Proceeding (or any proceeding commenced under Section 7 hereof) by reason of his Corporate Status, whether or not he is acting or serving in any such capacity at the time any liability or expense is incurred for which indemnification can be provided under this Agreement. This Agreement shall be binding upon and inure to the benefit of and be enforceable by the parties hereto and their respective successors (including any direct or indirect successor by purchase, merger, consolidation or otherwise to all or substantially all of the business or assets of the Company), assigns, spouses, heirs, executors and personal and legal representatives.

11. Security. To the extent requested by Indemnitee and approved by the Board, the Company may at any time and from time to time provide security to Indemnitee for the Company's obligations hereunder through an irrevocable bank line of credit, funded trust or other collateral. Any such security, once provided to Indemnitee, may not be revoked or released without the prior written consent of the Indemnitee.

12. Enforcement.

(a) The Company expressly confirms and agrees that it has entered into this Agreement and assumes the obligations imposed on it hereby in order to induce Indemnitee to serve as an officer or director of the Company, and the Company acknowledges that Indemnitee is relying upon this Agreement in serving as an officer or director of the Company.

(b) This Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes all prior agreements and understandings, oral, written and implied, between the parties hereto with respect to the subject matter hereof.

(c) The Company shall not seek from a court, or agree to, a "bar order" which would have the effect of prohibiting or limiting the Indemnitee's rights to receive advancement of expenses under this Agreement.

13. Definitions. For purposes of this Agreement:

(a) “Corporate Status” describes the status of a person who is or was a director, officer, employee, agent or fiduciary of the Company or of any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise that such person is or was serving at the express written request of the Company.

(b) “Disinterested Director” means a director of the Company who is not and was not a party to the Proceeding in respect of which indemnification is sought by Indemnitee.

(c) “Enterprise” shall mean the Company and any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise that Indemnitee is or was serving at the express written request of the Company as a director, officer, employee, agent or fiduciary.

(d) “Expenses” shall include all reasonable attorneys’ fees, retainers, court costs, transcript costs, fees of experts, witness fees, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees and all other disbursements or expenses of the types customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, participating, or being or preparing to be a witness in a Proceeding, or responding to, or objecting to, a request to provide discovery in any Proceeding. Expenses also shall include Expenses incurred in connection with any appeal resulting from any Proceeding and any federal, state, local or foreign taxes imposed on the Indemnitee as a result of the actual or deemed receipt of any payments under this Agreement, including without limitation the premium, security for, and other costs relating to any cost bond, supersede as bond, or other appeal bond or its equivalent. Expenses, however, shall not include amounts paid in settlement by Indemnitee or the amount of judgments or fines against Indemnitee.

(e) “Independent Counsel” means a law firm, or a member of a law firm, that is experienced in matters of corporation law and neither presently is, nor in the past five years has been, retained to represent: (i) the Company or Indemnitee in any matter material to either such party (other than with respect to matters concerning Indemnitee under this Agreement, or of other indemnitees under similar indemnification agreements), or (ii) any other party to the Proceeding giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term “Independent Counsel” shall not include any person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee’s rights under this Agreement. The Company agrees to pay the reasonable fees of the Independent Counsel referred to above and to fully indemnify such counsel against any and all Expenses, claims, liabilities and damages arising out of or relating to this Agreement or its engagement pursuant hereto.

(f) “Proceeding” includes any threatened, pending or completed action, suit, arbitration, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or any other actual, threatened or completed proceeding, whether brought by or in the right of the Company or otherwise and whether civil, criminal, administrative or investigative, in which Indemnitee was, is or will be involved as a party or otherwise, by reason of his or her Corporate Status, by reason of any action taken by him or of any inaction on his part while acting in his or her Corporate Status; in each case whether or not he is acting or serving in any such capacity at the time any liability or expense is incurred for which indemnification can be provided under this Agreement; including one pending on or before the date of this Agreement, but excluding one initiated by an Indemnitee pursuant to Section 7 of this Agreement to enforce his rights under this Agreement.

14. Severability. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision. Further, the invalidity or unenforceability of any provision hereof as to either Indemnitee or Appointing Stockholder shall in no way affect the validity or enforceability of any provision hereof as to the other. Without limiting the generality of the foregoing, this Agreement is intended to confer upon Indemnitee and Appointing Stockholder indemnification rights to the fullest extent permitted by applicable laws. In the event any provision hereof conflicts with any applicable law, such provision shall be deemed modified, consistent with the aforementioned intent, to the extent necessary to resolve such conflict.

15. Modification and Waiver. No supplement, modification, termination or amendment of this Agreement shall be binding unless executed in writing by both of the parties hereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provisions hereof (whether or not similar) nor shall such waiver constitute a continuing waiver.

16. Notice By Indemnitee. Indemnitee agrees promptly to notify the Company in writing upon being served with or otherwise receiving any summons, citation, subpoena, complaint, indictment, information or other document relating to any Proceeding or matter which may be subject to indemnification covered hereunder. The failure to so notify the Company shall not relieve the Company of any obligation which it may have to Indemnitee under this Agreement or otherwise unless and only to the extent that such failure or delay materially prejudices the Company.

17. Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given: (a) upon personal delivery to the party to be notified, (b) when sent by confirmed electronic mail or facsimile if sent during normal business hours of the recipient, and if not so confirmed, then on the next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent:

(a) To Indemnitee at the address set forth below Indemnitee's signature hereto.

(b) To the Company at:

Novan, Inc.
4105 Hopson Road
Morrisville, NC 27560
Attention: Chief Executive Officer

or to such other address as may have been furnished to Indemnitee by the Company or to the Company by Indemnitee, as the case may be.

18. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, *e.g.*, www.docusign.com) or any other

transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

19. Headings. The headings of the paragraphs of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction thereof.

20. Governing Law and Consent to Jurisdiction. This Agreement and the legal relations among the parties shall be governed by, and construed and enforced in accordance with, the laws of the State of Delaware, without regard to its conflict of laws rules. The Company and Indemnitee hereby irrevocably and unconditionally (i) agree that any action or proceeding arising out of or in connection with this Agreement shall be brought only in the Chancery Court of the State of Delaware (the "Delaware Court"), and not in any other state or federal court in the United States of America or any court in any other country, (ii) consent to submit to the exclusive jurisdiction of the Delaware Court for purposes of any action or proceeding arising out of or in connection with this Agreement, (iii) appoint, to the extent such party is not otherwise subject to service of process in the State of Delaware, irrevocably Incorporating Services, Ltd., 3500 S. DuPont Highway, Dover, DE 19901 in the case of the Company, and [______], in the case of the Indemnitee as its agent in the State of Delaware as such party's agent for acceptance of legal process in connection with any such action or proceeding against such party with the same legal force and validity as if served upon such party personally within the State of Delaware, (iv) waive any objection to the laying of venue of any such action or proceeding in the Delaware Court, and (v) waive, and agree not to plead or to make, any claim that any such action or proceeding brought in the Delaware Court has been brought in an improper or inconvenient forum.

SIGNATURE PAGE TO FOLLOW

IN WITNESS WHEREOF, the parties hereto have executed this Indemnification Agreement on and as of the day and year first above written.

NOVAN, INC.

By:______________________________________
Name:
Title:

INDEMNITEE

____
Name:

Address:
____
____
____

Exhibit 31.1

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

I, Paula Brown Stafford, 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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

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

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

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

Date: October 30, 2020

/s/ Paula Brown Stafford

Paula Brown Stafford

Chief Executive Officer

(Principal Executive Officer)

Exhibit 31.2

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

I, John M. Gay, 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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

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

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

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

Date: October 30, 2020

/s/ John M. Gay

John M. Gay

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, Paula Brown Stafford, 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 September 30, 2020 (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: October 30, 2020

/s/ Paula Brown Stafford

Paula Brown Stafford
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, John M. Gay, 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 September 30, 2020 (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: October 30, 2020

/s/ John M. Gay

John M. Gay
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.