

---

**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, 2015.

- 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: 001-37449

---

**Nivalis Therapeutics, Inc.**

(Exact name of Registrant as specified in its charter)

---

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**3122 Sterling Circle, Suite 200**  
**Boulder, Colorado**  
(Address of principal executive offices)

**20-8969493**  
(I.R.S. Employer  
Identification No.)

**80301**  
(Zip Code)

**(720) 945-7700**  
(Registrant's telephone number, including area code)

**Not Applicable**  
(Former name, former address and former fiscal year, if changed since last report)

---

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

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

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

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company	<input type="checkbox"/>

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

The number of outstanding shares of the registrant's common stock, par value \$0.001 per share, as of October 31, 2015 was 15,451,821.

---

NIVALIS THERAPEUTICS, INC.

FORM 10-Q

TABLE OF CONTENTS

	<u>Page</u>
<u>PART I. FINANCIAL INFORMATION</u>	
<u>ITEM 1. FINANCIAL STATEMENTS</u>	3
<u>Balance Sheets</u>	3
<u>Statements of Operations and Comprehensive Loss</u>	4
<u>Statement of Convertible Preferred Stock and Stockholders' Equity (Deficit)</u>	5
<u>Statements of Cash Flows</u>	6
<u>NOTES TO UNAUDITED FINANCIAL STATEMENTS</u>	7
<u>ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS</u>	13
<u>ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK</u>	22
<u>ITEM 4. CONTROLS AND PROCEDURES</u>	22
<u>PART II. OTHER INFORMATION</u>	
<u>ITEM 1. LEGAL PROCEEDINGS</u>	23
<u>ITEM 1A. RISK FACTORS</u>	23
<u>ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS</u>	58
<u>ITEM 3. DEFAULTS UPON SENIOR SECURITIES</u>	59
<u>ITEM 4. MINE SAFETY DISCLOSURES</u>	59
<u>ITEM 5. OTHER INFORMATION</u>	59
<u>ITEM 6. EXHIBITS</u>	59
<u>SIGNATURES</u>	61

**PART I. FINANCIAL INFORMATION****ITEM 1. FINANCIAL STATEMENTS****Nivalis Therapeutics, Inc.  
Balance Sheets  
(In thousands, except for share amounts)**

	<u>September 30, 2015</u>	<u>December 31, 2014</u>
	(unaudited)	
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 57,555	\$ 27,812
Marketable securities	35,096	—
Prepaid expenses and other current assets	996	630
Total current assets	<u>93,647</u>	<u>28,442</u>
Property and equipment and other assets, net	195	101
Total assets	<u>\$ 93,842</u>	<u>\$ 28,543</u>
<b>Liabilities and stockholders' equity (deficit)</b>		
Current liabilities:		
Accounts payable	\$ 1,552	\$ 929
Accrued direct program expenses	1,457	1,244
Accrued employee benefits	1,336	210
Accrued other liabilities	120	32
Total current liabilities	<u>4,465</u>	<u>2,415</u>
Commitments and contingencies		
Convertible preferred stock with liquidation preference; \$0.001 par value; zero and 23,228,986 shares authorized, respectively; zero and 19,978,986 shares issued and outstanding, respectively	—	41,880
Stockholders' equity (deficit):		
Preferred stock, \$0.001 par value; 10,000,000 and zero shares authorized, respectively; no shares issued and outstanding	—	—
Common stock, \$0.001 par value; 200,000,000 and 35,000,000 shares authorized, respectively; 15,451,821 and 2,211,158 shares issued and outstanding, respectively	15	2
Additional paid-in capital	231,621	110,265
Accumulated other comprehensive income	15	—
Accumulated deficit	<u>(142,274)</u>	<u>(126,019)</u>
Total stockholders' equity (deficit)	<u>89,377</u>	<u>(15,752)</u>
Total liabilities and stockholders' equity (deficit)	<u>\$ 93,842</u>	<u>\$ 28,543</u>

*The accompanying notes are an integral part of these financial statements.*

**Nivalis Therapeutics, Inc.**  
**Statements of Operations and Comprehensive Loss**  
**(In thousands, except share and per share amounts)**  
**(Unaudited)**

	<u>Three Months Ended</u>		<u>Nine Months Ended</u>	
	<u>September 30,</u>		<u>September 30,</u>	
	<u>2015</u>	<u>2014</u>	<u>2015</u>	<u>2014</u>
Revenue	\$ —	\$ —	\$ —	\$ —
Operating expenses:				
Research and development	4,279	2,164	11,761	9,378
General and administrative	1,822	490	4,507	1,623
Loss from operations	(6,101)	(2,654)	(16,268)	(11,001)
Other income, net	12	35	13	296
Interest expense	—	(392)	—	(845)
Net loss	(6,089)	(3,011)	(16,255)	(11,550)
Gain on extinguishment of convertible debt as a capital transaction	—	378	—	378
Net loss attributable to common stockholders	<u>\$ (6,089)</u>	<u>\$ (2,633)</u>	<u>\$ (16,255)</u>	<u>\$ (11,172)</u>
Change in unrealized gains (losses) on marketable securities	15	—	15	—
Comprehensive loss	<u>\$ (6,074)</u>	<u>\$ (2,633)</u>	<u>\$ (16,240)</u>	<u>\$ (11,172)</u>
Weighted average shares outstanding - basic and diluted	<u>15,451</u>	<u>343</u>	<u>7,322</u>	<u>223</u>
Net loss per share attributable to common stockholders - basic and diluted	<u>\$ (0.39)</u>	<u>\$ (7.68)</u>	<u>\$ (2.22)</u>	<u>\$ (50.10)</u>

*The accompanying notes are an integral part of these financial statements.*

**Nivalis Therapeutics, Inc.**  
**Statement of Convertible Preferred Stock and Stockholders' Equity (Deficit)**  
**(In thousands)**  
**(Unaudited)**

	Series 1		Series 2		Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income	Accumulated Deficit	Total Stockholders' Equity (Deficit)
	Convertible Preferred Stock		Convertible Preferred Stock		Shares	Amount				
	Shares	Amount	Shares	Amount	Shares	Amount				
Balance as of December 31, 2014	8,813	\$ 11,945	11,166	\$ 29,935	2,211	\$ 2	\$110,265	\$ —	\$ (126,019)	\$ (15,752)
Conversion of convertible preferred stock to common stock	(8,813)	(11,945)	(11,166)	(29,935)	6,916	7	41,873	—	—	41,880
Issuance of common stock, net of \$9.8 million of offering costs	—	—	—	—	6,325	6	78,765	—	—	78,771
Employee stock- based compensation expense	—	—	—	—	—	—	718	—	—	718
Change in unrealized gains (losses) on marketable securities	—	—	—	—	—	—	—	15	—	15
Net loss	—	—	—	—	—	—	—	—	(16,255)	(16,255)
Balance as of September 30, 2015	—	\$ —	—	\$ —	15,452	\$ 15	\$231,621	\$ 15	\$ (142,274)	\$ 89,377

*The accompanying notes are an integral part of these financial statements.*

**Nivalis Therapeutics, Inc.**  
**Statements of Cash Flows**  
**(In thousands)**  
**(Unaudited)**

	<b>Nine Months Ended</b>	
	<b>September 30,</b>	
	<b>2015</b>	<b>2014</b>
<b>Operating activities</b>		
Net loss	\$ (16,255)	\$ (11,550)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	47	70
Loss on disposal of assets	—	2
Stock-based compensation expense	718	57
Change in value of preferred stock warrant liabilities and derivative	—	(296)
Amortization of deferred financing costs and noncash interest	—	708
Changes in operating assets and liabilities:		
Prepaid expenses and other	(366)	25
Accounts payable	623	(304)
Accrued direct program expenses	213	146
Accrued employee benefits	1,126	(192)
Accrued other liabilities	88	55
Net cash used in operating activities	<u>(13,806)</u>	<u>(11,279)</u>
<b>Investing activities</b>		
Purchases of property and equipment	(142)	(4)
Purchases of marketable securities	<u>(35,081)</u>	<u>—</u>
Net cash used in investing activities	<u>(35,223)</u>	<u>(4)</u>
<b>Financing activities</b>		
Proceeds from issuance of common stock, net of offering costs	78,772	—
Decrease in restricted cash	—	2,500
Proceeds from notes payable, net	—	11,913
Principal payment on debt	—	(3,140)
Net cash provided by financing activities	<u>78,772</u>	<u>11,273</u>
Net increase (decrease) in cash and cash equivalents	29,743	(10)
Cash and cash equivalents, beginning of period	27,812	1,098
Cash and cash equivalents, end of period	<u>\$ 57,555</u>	<u>\$ 1,088</u>
<b>Supplemental disclosures of cash flow information</b>		
Cash paid for interest	\$ —	\$ 165
Conversion of convertible preferred stock to common stock	<u>\$ 41,880</u>	<u>\$ —</u>
Conversion of convertible debt and accrued interest to convertible preferred stock, net	<u>\$ —</u>	<u>\$ 24,700</u>

*The accompanying notes are an integral part of these financial statements.*

**NIVALIS THERAPEUTICS, INC.**

**NOTES TO UNAUDITED FINANCIAL STATEMENTS**

**1. Organization and Description of Business**

Nivalis Therapeutics, Inc., formerly N30 Pharmaceuticals, Inc. (the “Company” or “Nivalis”) is a clinical stage pharmaceutical company committed to the discovery, development and commercialization of therapeutics for people with cystic fibrosis. In addition to developing innovative solutions intended to extend and improve the lives of people with cystic fibrosis, Nivalis plans to utilize its proprietary S-nitrosoglutathione reductase (GSNOR) inhibitor portfolio to develop therapeutics for other diseases.

The Company was incorporated on August 1, 2012, under the laws of the State of Delaware, upon the conversion of its predecessor entity N30 Pharmaceuticals, LLC (“N30 LLC”), from a Delaware limited liability company to a Delaware Corporation (the “Company Conversion”). On February 11, 2015, the Company changed its name to Nivalis Therapeutics, Inc.

**2. Liquidity Risks**

The Company has incurred operating losses and has an accumulated deficit as a result of ongoing research and development spending. As of September 30, 2015, the Company had an accumulated deficit of \$142.3 million. Net losses and net cash used in operating activities for the nine months ended September 30, 2015 were \$16.3 million and \$13.8 million, respectively. The Company anticipates that operating losses and net cash used in operating activities will continue and substantially increase over the next several years as it expands development activities for its N91115 product candidate.

The Company has historically financed its operations primarily through the sale of its equity securities and debt offerings. The Company will continue to be dependent upon such sources of funds until it is able to generate positive cash flows from its operations. Management has determined that the Company’s existing cash, cash equivalents and marketable securities as of September 30, 2015 will be sufficient to fund operations at least through the next twelve months.

The Company expects to fund future operations through the sale of its equity securities, incurring debt, entering into partnerships, or obtaining grants or other nondilutive sources of financing. There can be no assurance that sufficient funds from these sources will be available to the Company when needed or at all or on terms that are favorable to the Company. If the Company is unable to obtain additional funding from these or other sources when needed, or to the extent needed, it would have a negative impact on the Company’s financial condition and its ability to pursue its business strategy. It could force the Company to delay, limit, reduce or terminate research and development programs and commercialization efforts or cause the Company to cease operations in full.

**3. Summary of Significant Accounting Policies**

***Basis of Presentation and Use of Estimates***

The financial statements have been prepared in accordance with U.S. generally accepted accounting principles (“GAAP”) and include all adjustments necessary for the presentation of the Company’s financial position, results of operations and cash flows for the periods presented. The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts and disclosures reported in the financial statements and accompanying notes, including accrued liabilities and the fair value-based measurement of equity instruments. Actual results could differ materially from those estimates. The Company evaluates its estimates and assumptions as facts and circumstances dictate.

***Unaudited Interim Financial Data***

The balance sheet at December 31, 2014 was derived from audited financial statements, but does not include all the disclosures required by U.S. GAAP. The accompanying interim financial statements as of September 30, 2015 and for the three and nine months ended September 30, 2015 and 2014, are unaudited. The unaudited interim financial statements have been prepared on a basis consistent with the audited financial statements, pursuant to the rules and

## [Table of Contents](#)

regulations of the SEC for interim financial statements. Certain information and footnote disclosures normally included in financial statements prepared in accordance with U.S. GAAP have been condensed or omitted pursuant to such rules and regulations. These financial statements should be read in conjunction with the Company's audited financial statements and the notes thereto for the year ended December 31, 2014. In the opinion of management, the financial statements reflect all adjustments (consisting of normal recurring adjustments) considered necessary to fairly state the Company's financial position as of September 30, 2015 and the results of operations and cash flows for the three and nine months ended September 30, 2015 and 2014. The results for the three and nine months ended September 30, 2015 are not necessarily indicative of the results to be expected for the year ending December 31, 2015 or for any future interim period.

### ***2014 Stock Conversion and Reverse Stock Split***

Effective September 23, 2014, all outstanding shares of preferred stock were converted on an 11.556-for-1 basis into shares of common stock (the "Stock Conversion"). Concurrent with this conversion, the Company effected a reverse stock split of its common stock, par value \$0.001 per share. Every four shares of common stock were reclassified and combined into one share of common stock. Fractional shares were issued as a result of the reverse stock split. The total number of authorized shares of common stock was also proportionally decreased by a ratio of 1:4 and the par value per share of the common stock continued to be \$0.001.

### ***2015 Stock Conversion and Reverse Stock Split***

On May 26, 2015, the Company's Board of Directors approved a 1-for-2.889 reverse stock split of its common stock. The reverse stock split became effective upon filing of a certificate of amendment to the Company's amended and restated certificate of incorporation on June 1, 2015. Upon the effectiveness of the reverse stock split, (i) every 2.889 shares of outstanding common stock were decreased to one share of common stock, (ii) the number of shares of common stock into which each outstanding option, right and warrant to purchase common stock is exercisable was proportionally decreased on a 1-for-2.889 basis and the exercise price of each outstanding option, right and warrant to purchase common stock was proportionately increased on a 1-for-2.889 basis, and (iii) the conversion ratio for each share of the Company's convertible preferred stock which was convertible into common stock was proportionally decreased on a corresponding basis in connection with the 1-for-2.889 reverse split. No fractional shares were issued as a result of the reverse stock split. The total number of authorized shares of common stock and the par value per share of common stock did not change as a result of the reverse stock split.

Effective June 22, 2015, all outstanding shares of convertible preferred stock were converted on a 2.889-for-1 basis into shares of common stock.

All of the share numbers, share prices, exercise prices and other per share information throughout these financial statements for all periods presented have been adjusted, on a retroactive basis, to reflect the 1-for-4 reverse stock split and the 1-for-2.889 reverse stock split.

### ***Comprehensive Loss***

Comprehensive loss is comprised of net loss and adjustments for the change in unrealized gains and losses on the Company's investments in available-for-sale marketable securities. The Company presents comprehensive loss and its components in the statements of operations and comprehensive loss for the three and nine months ended September 30, 2015.

### ***Net Loss per Share***

The Company reports net loss per share in accordance with the standard codification of ASC "Earnings per Share" ("ASC 260"). Under ASC 260, basic earnings per share, which excludes dilution, is computed by dividing net loss available to common stockholders by the weighted average number of common shares outstanding for the period. Diluted earnings per share reflects the potential dilution of securities that could be exercised or converted into common shares, and is computed by dividing net loss available to common stockholders by the weighted average of common shares outstanding plus the dilutive potential common shares. Diluted earnings per share excludes the impact of convertible preferred stock, employee stock options, restricted stock and stock purchase rights, as the effect would be anti-dilutive. During a loss period, the assumed exercise of in-the-money stock options and other potentially diluted instruments has an anti-dilutive effect and therefore, these instruments are excluded from the computation of dilutive earnings per share.

[Table of Contents](#)

***Fair Value of Financial Instruments***

The carrying amounts of cash equivalents and marketable securities approximate their fair value based upon quoted market prices. Certain financial instruments are not measured at fair value on a recurring basis, but are recorded at amounts that approximate their fair value due to their liquid or short-term nature, such as cash, accounts payable, accrued direct program expenses, and accrued employee benefits, and other financial instruments included within current assets or current liabilities.

The Company accounted for warrants to purchase its redeemable preferred stock pursuant to ASC Topic 480, *Distinguishing Liabilities from Equity*, and classified them as liabilities. The fair value of the outstanding preferred stock warrant liabilities at December 31, 2013 was \$267,750. Subsequent to the completion of the Stock Conversion on September 23, 2014, whereby all outstanding shares of preferred stock were converted into shares of common stock, the fair value of the preferred stock warrant liabilities was remeasured and reclassified into equity. During the three and nine months ended September 30, 2014 a remeasurement gain of \$4,000 and \$265,750, respectively, was recognized in other income, net in the statement of operations and comprehensive loss. Upon the Stock Conversion, the remaining balance of \$2,000 was reclassified from liabilities to equity.

***Marketable Securities***

The Company has designated marketable securities as available-for-sale securities and accounts for them at their respective fair values. Marketable securities are classified as short-term or long-term based on the nature of the securities and their availability to meet current operating requirements. Securities that are classified as available-for-sale are carried at fair value, including accrued interest, with temporary unrealized gains and losses reported as a component of stockholders' equity (deficit) until their disposition. The Company reviews all available-for-sale securities at each period end to determine if they remain available-for-sale based on the Company's then current intent and ability to sell the security if it is required to do so. The cost of securities sold is based on the specific identification method. All marketable securities are subject to a periodic impairment review. The Company will recognize an impairment charge when a decline in the fair value of the investments below the cost basis is judged to be other-than-temporary.

***Recent Accounting Pronouncements***

In August 2014, the FASB issued ASU No. 2014-15, Presentation of Financial Statements – Going Concern Disclosure of Uncertainties About an Entity's Ability to Continue as a Going Concern, which requires management to evaluate whether there are conditions or events that raise substantial doubt about an entity's ability to continue as a going concern and to provide disclosures when certain criteria are met. The guidance is effective for annual periods beginning in 2016 and interim reporting periods starting in the first quarter of 2017. Early application is permitted. The Company does not expect the standard will have a material impact on its disclosures.

***Fair Value Measurements***

In general, asset and liability fair values are determined using the following categories:

**Level 1** – inputs utilize quoted prices in active markets for identical assets or liabilities.

**Level 2** – inputs include quoted prices for similar assets or liabilities in active markets, and inputs other than quoted prices that are observable for the asset or liability, either directly or indirectly.

**Level 3** – inputs are unobservable inputs and include situations where there is little, if any, market activity for the balance sheet items at period end. Pricing inputs are unobservable for the terms and are based on the Company's own estimates about the assumptions that a market participant would use in pricing as asset.

The Company's financial instruments, including money market investments, corporate debt securities, and obligations of U.S. government agencies, are measured at fair value on a recurring basis. There were no transfers between levels for the nine months ended September 30, 2015.

[Table of Contents](#)

Assets and liabilities measured at fair value on a recurring basis consisted of the following types of instruments as of September 30, 2015 and December 31, 2014 (in thousands):

Description	September 30, 2015	Quoted prices in active markets for identical assets (Level 1)	Quoted prices for similar assets observable in the marketplace (Level 2)	December 31, 2014	Quoted prices in active markets for identical assets (Level 1)
Assets measured at fair value:					
Money market investments	\$ 16,305	\$ 16,305	\$ —	\$ 26,926	\$ 26,926
Obligations of U.S. government agencies and corporate debt securities	75,248	—	75,248	—	—

**4. Cash, Cash Equivalents and Marketable Securities**

The following is a summary of cash, cash equivalents and marketable securities as of September 30, 2015 and December 31, 2014 (in thousands):

	Amortized Cost	Gross unrealized gains	Gross unrealized losses	Fair market value
September 30, 2015				
Cash	\$ 1,098	\$ -	\$ -	\$ 1,098
Money market funds	16,305	-	-	16,305
Obligations of U.S. government agencies	22,094	3	-	22,097
Corporate debt securities	53,139	16	(4)	53,151
Total for September 30, 2015	\$ 92,636	\$ 19	\$ (4)	\$ 92,651
December 31, 2014				
Cash	\$ 886	\$ -	\$ -	\$ 886
Money market funds	26,926	-	-	26,926
Total for December 31, 2014	\$ 27,812	\$ -	\$ -	\$ 27,812

**5. Notes Payable**

As of September 30, 2015, the Company has no debt outstanding.

***Loan and Security Agreement***

During February 2011, the Company entered into a \$5.0 million loan and security agreement (“Loan Agreement”) with Horizon Technology Finance (“Horizon”). The interest rate for these loans was 11.25%. The Loan Agreement required that the Company maintain \$2.5 million in an account that was subject to an Account Control Agreement and restricted the Company from withdrawing the funds from this account without Horizon’s prior written consent. During July 2014, the entire outstanding balance under the Loan Agreement was paid in full and the remaining restricted cash held by the Company was fully released. The payment also released all previously pledged assets held as collateral under the loan.

***Convertible Debt***

During February, March, April, June, July, August and September 2014 (the “2014 Notes”), the Company issued subordinated secured convertible debt to two investors totaling \$12.0 million at an interest rate of 8.0% per annum. The outstanding principal and accrued and unpaid interest was convertible at the option of the investor into preferred shares in the Company.

The 2014 Notes included a change in control redemption which was deemed an embedded derivative. This redemption right and the right to convert at 75% of the price at which a new series of preferred stock was issued required the Company to bifurcate and separately account for the embedded derivatives, however the amount recorded and the impact on net loss was not material.

## [Table of Contents](#)

As part of the Stock Conversion on September 23, 2014, the holders of the 2014 Notes agreed to the issuance of shares of a newly created Series 1 convertible preferred stock in settlement of the 2014 Notes. The Company issued 8,813,203 Series 1 convertible preferred shares at a price of \$1.40 per share through the settlement of \$12,373,741 of convertible debt and related interest held by two separate investors. This transaction resulted in a gain on extinguishment of \$378,251, which was recognized through equity during the three months ended September 30, 2014, as this was a transaction with stockholders.

### **6. Stockholders' Equity**

During February 2014, the Company increased its authorized number of shares of convertible preferred stock to 30,233,694 shares. During March 2014, the Company increased its authorized number of shares of convertible preferred stock to 60,503,445 shares and increased its authorized number of shares of common stock to 25,000,000 shares.

Immediately following the Stock Conversion and the one-for-four reverse stock split effected in September 2014, the Company reestablished its authorized number of shares of convertible preferred stock to 8,866,753 shares and its authorized number of shares of common stock to 15,742,382 shares.

During November 2014, the Company increased its authorized number of shares of convertible preferred stock to 23,228,986 shares and increased its authorized number of shares of common stock to 35,000,000 shares.

Concurrent with the Company's initial public offering completed in June 2015 (the "IPO"), the Company increased its authorized number of shares of common stock to 200,000,000 shares, eliminated its authorized shares of convertible preferred stock and authorized 10,000,000 shares of preferred stock for future issuance.

#### ***Convertible Preferred Stock***

Immediately prior to the Stock Conversion, the Company had six series of outstanding convertible preferred stock: Series A-1 convertible preferred stock, Series A-2 convertible preferred stock, Series C-1 convertible preferred stock, Series C-2 convertible preferred stock, Series D convertible preferred stock and Series E convertible preferred stock. The convertible preferred stock was initially recorded at the issuance price on the date of issuance, net of issuance costs. On September 23, 2014 all outstanding preferred stock was converted into shares of common stock on an 11.556-for-1 basis. Concurrent with the Stock Conversion, a newly created Series 1 convertible preferred stock was issued in the settlement of the 2014 Notes. In November and December 2014, the Company raised \$31.0 million gross proceeds in a private placement of Series 2 convertible preferred stock.

On June 22, 2015, prior to the closing of the Company's IPO, all outstanding shares of convertible preferred stock, amounting to 19,978,986 shares, were automatically converted into 6,915,525 shares of common stock in accordance with the terms of the Company's amended and restated certificate of incorporation then in existence.

As of September 30, 2015, the Company had no preferred stock or convertible preferred stock outstanding.

#### ***Common Stock***

On June 22, 2015, the Company completed its IPO of 6,325,000 shares of its common stock, including 875,000 shares from the exercise of the underwriters' over-allotment option. The Company received proceeds of \$78.8 million from its IPO, net of \$9.8 million in expenses and underwriters' discounts and commissions relating to the issuance and distribution of the securities.

At September 30, 2015, shares of common stock have been reserved for issuance as follows (in thousands):

Options to purchase common stock - issued	1,804
Options to purchase common stock - unissued	588
Employee stock purchase plan	232
Common stock warrants	19
	<u>2,643</u>

[Table of Contents](#)

**7. Net Loss per Share**

The Company excluded the following common stock equivalents, outstanding as of the three and nine months ended September 30, 2015 and 2014, from the computation of diluted net loss per share for these same periods because they had an anti-dilutive impact on the computation (in thousands):

	September 30,	
	2015	2014
Options to purchase common stock - issued	1,804	112
Unvested restricted common stock	1	5
Convertible preferred stock	—	3,051
Warrants to purchase convertible preferred and common stock	19	19
Total	<u>1,824</u>	<u>3,187</u>

**8. Subsequent Events**

The Company has evaluated events up to the filing date of these interim financial statements and determined that no subsequent event activity required disclosure.

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

**Forward-Looking Information**

*This Quarterly Report on Form 10-Q and the information incorporated herein by reference includes statements that are, or may be deemed, "forward-looking statements." In some cases, these forward-looking statements can be identified by the use of forward-looking terminology, including the terms "believes," "estimates," "anticipates," "expects," "plans," "intends," "may," "could," "might," "will," "should," "approximately" or, in each case, their negative or other variations thereon or comparable terminology, although not all forward-looking statements contain these words. They appear in a number of places throughout this Quarterly Report on Form 10-Q and include statements regarding our intentions, beliefs, projections, outlook, analyses or current expectations concerning, among other things, our ongoing and planned preclinical studies and clinical trials, the timing of and our ability to make regulatory filings and obtain and maintain regulatory approvals for our product candidates, the degree of clinical utility of our products, particularly in specific patient populations, expectations regarding clinical trial data, our liquidity and future funding needs, our results of operations, financial condition, prospects, growth and strategies, the industry in which we operate and the trends that may affect the industry or us.*

*By their nature, forward-looking statements involve risks and uncertainties because they relate to events, competitive dynamics and industry change and depend on the economic circumstances that may or may not occur in the future or may occur on longer or shorter timelines than anticipated. We caution you that forward-looking statements are not guarantees of future performance and that our actual results of operations, financial condition and liquidity and the development of the industry in which we operate may differ materially from the forward-looking statements contained herein. You should also read carefully the factors described in the "Risk Factors" section of this Quarterly Report on Form 10-Q to better understand the risks and uncertainties inherent in our business and underlying any forward-looking statements.*

*Any forward-looking statements that we make in this Quarterly Report on Form 10-Q speak only as of the date of this report, and we undertake no obligation to update such statements to reflect events or circumstances after the date of this Quarterly Report on Form 10-Q or to reflect the occurrence of unanticipated events.*

**Overview**

We are a clinical stage pharmaceutical company committed to the discovery, development and commercialization of therapeutics for people with cystic fibrosis. In addition to developing innovative solutions intended to extend and improve the lives of people with cystic fibrosis, we plan to utilize our proprietary S-nitrosoglutathione reductase, or GSNOR, inhibitor portfolio to develop therapeutics for other diseases.

Cystic fibrosis, or CF, is a life-shortening genetic disease that affects an estimated 70,000 people worldwide, predominately in the United States and Europe. CF is characterized by a defect in the chloride channel of human cells known as the "cystic fibrosis transmembrane conductance regulator," or CFTR, which is caused by mutations in the CFTR gene. N91115 works through a novel mechanism of action called GSNOR inhibition to modulate the unstable and defective CFTR protein responsible for CF. GSNOR inhibition restores GSNO levels thereby modifying the chaperones responsible for CFTR protein degradation. This stabilizing effect increases the amount of CFTR protein at the cell surface and the function of the CFTR chloride channel which, in turn, leads to an increase in net chloride secretion. Nivalis discovered and owns exclusive rights to N91115 in the United States and all other major markets, including U.S. composition of matter patent protection until at least 2031.

Our Phase 1b clinical trial of N91115 in people having CF and having two copies of the F508del mutation was completed in September 2015. The randomized, double-blind, placebo-controlled, study of orally administered N91115 demonstrated favorable safety, tolerability and pharmacokinetics of various doses of N91115 (50, 100 and 200 mg twice daily) in a total of 51 people with CF. Furthermore, a trend toward a modest reduction in sweat chloride, a marker of CFTR activity, was observed in the highest dose tested.

A Phase 2 study of N91115 in people with CF who have two copies of the F508del mutation is planned to be initiated in the fourth quarter of 2015. This Phase 2 study is anticipated to be a twelve-week randomized, double-blind

## [Table of Contents](#)

placebo-controlled clinical trial to demonstrate safety and efficacy of N91115 when added to Orkambi™ (lumacaftor/ivacaftor), which is owned by Vertex Pharmaceuticals, Inc.

Our operations to date have focused on discovery and development of our portfolio of GSNOR inhibitors, including N91115 and N6022. N6022 was the first product candidate to emerge from our GSNOR inhibitor portfolio and was optimized for inhaled delivery with low oral bioavailability. In order to provide translational evidence of GSNOR's role in lung disease, we initially explored the effects of N6022 in patients with mild asthma using an intravenous formulation. N6022 demonstrated a significant, beneficial effect on the airways in these patients, thus confirming the beneficial effects of N6022 observed in our preclinical studies of asthma. N6022 paved the way for N91115 by establishing initial safety of the class in healthy subjects and patients with CF. Because an oral dosage form is preferable in CF, a systemic disease that is not confined to the lungs, we elected to discontinue further development of N6022 in the chronic management of CF, but we may pursue development of N6022 in an inhaled dosage form for other potential indications.

During June 2015, we completed our initial public offering, or IPO, of an aggregate 6,325,000 shares of common stock at a price to the public of \$14.00 per share for aggregate gross proceeds of \$88.6 million, before underwriting commission and discounts and offering expenses. Our common stock is listed on the NASDAQ Global Market under the symbol "NVLS".

To date, we have not generated any revenue. Based on our current plans, we do not expect to generate any revenue for the foreseeable future. Since inception, we have financed our operations primarily through the proceeds from our IPO, as well as private placements of equity, debt and convertible debt. From our inception in July 2003 to September 30, 2015, we raised \$225.0 million in net proceeds from these sources, of which all \$5.0 million in debt has been repaid. As of September 30, 2015, we had cash, cash equivalents and marketable securities of \$92.7 million and no debt.

We have incurred losses from operations in each year since our inception. Our net losses were \$6.1 million and \$16.3 million for the three and nine months ended September 30, 2015, respectively. As of September 30, 2015, we had an accumulated deficit of \$142.3 million. We expect to continue incurring losses for the foreseeable future as we advance our lead product candidate, N91115, through clinical development, regulatory approval and, if approved, commercialization. We expect that research and development expenses will increase as we continue to develop our product candidates, and general and administrative costs will increase as we operate as a public company. We anticipate that we will need to raise additional capital in addition to the recently raised IPO proceeds prior to the commercialization of N91115 or any other potential product candidate. Until such time that we can generate revenue from product sales, which, based on our current development plans, we do not expect to occur until 2018 at the earliest, we expect to finance our operating activities primarily through selling equity, incurring debt, entering into partnerships, and obtaining grants or seeking other nondilutive sources of financing. However, we may be unable to raise additional funds or enter into such arrangements when needed on favorable terms, if at all. Our failure to raise capital when needed would have a negative impact on our financial condition and our ability to pursue our business strategy. It could force us to delay, limit, reduce or terminate our research and development programs and commercialization efforts or cause us to cease operations in full.

### **Financial Operations Overview**

#### *Revenue*

To date, we have not generated any revenue. In the future, we may generate revenue from sales or licensing of N91115 or other potential product candidates. Based on our current development plans, however, we do not expect to generate product revenue until 2018 at the earliest. If we fail to complete the clinical development of an N91115-based therapy, our ability to generate future revenue, and our results of operations and financial position, will be adversely affected.

[Table of Contents](#)**Research and Development Expense**

Research and development expense consists of costs incurred for the development of our product candidates, which include:

- employee-related expenses, including salaries, benefits, travel and other compensation expenses;
- expenses incurred for contract research organizations, or CROs, clinical investigators, clinical consultants and clinical sites that will conduct our preclinical studies and clinical trials as well as costs associated with acquiring, developing and manufacturing preclinical and clinical supplies, which we refer to collectively as direct program expenses;
- costs associated with regulatory filings; and
- costs of laboratory supplies, facilities, depreciation and other expenses, which include direct and allocated expenses for rent and maintenance of facilities, insurance and other operating costs related to research and development.

Research and development costs are expensed as incurred. Research and development activities are central to our business model. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development primarily due to the increased size and duration of later-stage clinical trials. We plan to increase our research and development expenses for the foreseeable future as we seek to advance clinical development of our lead product candidate, N91115.

The following table identifies direct program expenses on a program-specific basis for our product candidates. All other research and development costs, including salaries, benefits and stock-based compensation, consulting and outsourced services, facilities and depreciation, and other expenses are not allocated to specific programs as they are deployed across a number of projects under development. Other expenses include travel, lab and office supplies, business insurance and other miscellaneous expenses.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2015	2014	2015	2014
	(in thousands)			
<b>Direct program expenses:</b>				
N91115 for cystic fibrosis	\$ 2,534	\$ 814	\$ 6,969	\$ 2,795
N6022 for cystic fibrosis	—	—	—	1,603
Total direct program expenses	2,534	814	6,969	4,398
<b>Personnel and other expenses</b>				
Salaries, benefits and stock-based compensation	1,209	1,153	3,548	3,936
Consulting and outsourced services	107	8	244	318
Facilities and depreciation	68	69	203	213
Other expenses	361	120	797	513
Total research and development expenses	\$ 4,279	\$ 2,164	\$ 11,761	\$ 9,378

All of our research and development expenses for the three and nine months ended September 30, 2015 and 2014 relate to the development of N91115 and, to a lesser extent, N6022. We have expended an aggregate of approximately \$14.4 million for direct program expenses related to N91115 from inception through September 30, 2015. The successful development of N91115 or any other potential product candidate is uncertain. We cannot reasonably estimate or know the nature, timing and costs of the efforts that will be necessary to complete the remainder of the development of, or when the period in which we receive material net cash inflows may commence, from N91115 or any other potential product candidate. This uncertainty is due to the numerous risks and uncertainties associated with the duration and cost of clinical trials which vary significantly over the life of a project as a result of differences arising during clinical development, including:

- the number and results of our clinical trials;
- the number of clinical sites included in the trials;

## [Table of Contents](#)

- the number of patients that ultimately participate in the trials;
- the length of time required to enroll suitable patients; and
- the ability to obtain a drug supply for our trials.

Our expenditures are subject to additional uncertainties, including the commercial uptake of Vertex's Orkambi, our preclinical study and clinical trial expenses, our costs to acquire, develop and manufacture preclinical study and clinical trial materials, the timing of regulatory approval for N91115 and post-commercialization and other incremental research and development costs for N91115 or any other potential product candidate. We may obtain unexpected results from our clinical trials. We may elect to discontinue, delay or modify clinical trials of some product candidates or focus on others. Changes in variables with respect to the development of a product candidate could mean a significant change in the costs and timing associated with the development of that product candidate. For example, if the U.S. Food and Drug Administration, or FDA, or other regulatory authorities were to require us to conduct preclinical studies or clinical trials beyond those which we anticipate, or if we experience significant delays in enrollment in any of our clinical trials, we could be required to expend significant additional financial resources and time on the clinical development of our product candidates.

### ***General and Administrative Expense***

General and administrative expense consists principally of salaries and related costs not included in research and development expenses, including stock-based compensation, for personnel in executive, finance, business development and information technology functions. Other general and administrative expenses include facility costs and professional fees for legal, patent review, consulting and accounting services.

We anticipate that our general and administrative expense will increase during the next two fiscal years due to many factors. The most significant of these factors include:

- increased personnel expenses, other than research and development personnel, to support the clinical development of N91115;
- increased patent filing and prosecution costs related to maintaining our patent portfolio; and
- increased expenses related to becoming and operating as a publicly traded company, including increased legal and accounting services, addition of new headcount to support stock exchange and SEC reporting compliance, public and investor relations and communication needs and increased insurance premiums.

### ***Other Income, Net***

Other income, net consists primarily of the gain on the change in the fair value of preferred stock warrant liabilities. When all outstanding shares of preferred stock converted into shares of common stock on September 23, 2014, warrants exercisable for shares of our preferred stock automatically adjusted to become exercisable for shares of common stock, and therefore changes in the fair value of preferred stock warrant liabilities will no longer impact other income, net.

### ***Interest Expense***

Interest expense consists primarily of interest accrued on our previously outstanding convertible debt and interest paid on our previously outstanding Loan and Security Agreement with Horizon Technology Finance dated February 18, 2011, or the Horizon Loan. We repaid all outstanding principal and interest under the Horizon Loan in full in July 2014 and all principal and accrued interest under our convertible debt converted into equity in September 2014. Also included in interest expense is the amortization of the discount on the Horizon Loan and convertible debt during 2014.

[Table of Contents](#)**Results of Operations***Comparison of the Three and Nine Months Ended September 30, 2015 and 2014.*

**Research and Development Expenses.** Research and development expenses for the three and nine months ended September 30, 2015 and 2014 were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2015	2014	2015	2014
	(in thousands)			
Research and development expenses	\$ 4,279	\$ 2,164	\$ 11,761	\$ 9,378
Increase from prior period	\$ 2,115	\$ —	\$ 2,383	\$ —
% change from prior period	97.7 %		25.4 %	

The increase in research and development expenses for the three months ended September 30, 2015 compared to the same period in the prior year was primarily due to an increase in direct program expenses for N91115 including clinical trial expenses which increased by \$950,000 during the comparable periods due to the Phase 1b trial that was initiated during the first quarter of fiscal 2015 and completed in September 2015. The remaining increase in direct program expenses of approximately \$770,000 was attributed to the production of N91115 for clinical trials and initiation of long-term toxicology studies.

The increase in research and development expenses for the nine months ended September 30, 2015 compared to the same period in the prior year was primarily due to an increase in direct program expenses of \$2.6 million which was partially offset by decreased personnel and other expenses of \$188,000. The increase in direct program expenses was largely driven by clinical trial expenses increasing by \$2.7 million during the comparable periods due to the Phase 1b trial that was initiated during the first quarter of fiscal 2015 and completed in September 2015. During the first nine months of fiscal 2014, a smaller Phase 1a safety trial was in process. The remaining increase in direct program expenses of approximately \$1.5 million was attributed to the production of N91115 for clinical trials and initiation of long-term toxicology studies. Partially offsetting these increases were decreased clinical trial expenses for N6022 of \$1.6 million during the comparable periods as the Phase 1b trial of N6022 in people with CF was completed in April 2014. The decrease in personnel and other expenses during the nine months ended September 30, 2015 compared to the same period in the prior year was primarily attributable to a decrease in headcount as a result of a reduction in force that was implemented in July 2014.

**General and Administrative Expenses.** General and administrative expenses for the three and nine months ended September 30, 2015 and 2014 were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2015	2014	2015	2014
	(in thousands)			
General and administrative expenses	\$ 1,822	\$ 490	\$ 4,507	\$ 1,623
Increase from prior period	\$ 1,332	\$ —	\$ 2,884	\$ —

The increase in general and administrative expenses for the three and nine months ended September 30, 2015 compared to the same periods in the prior year was primarily due to increased expenses related to becoming and operating as a publicly-traded company, including increased salary expense, employee benefits and stock-based compensation expense tied to a revised employee incentive plan and the hiring of a new CEO and CFO during the early part of 2015. Additionally, audit fees, legal support costs, patent expenses, travel costs and various marketing and investor relations expenses increased by approximately \$745,000 and \$1.5 million during the three and nine months ended September 30, 2015, respectively, compared with the same periods in the prior year.

**Other Income, Net.**

The decrease in other income, net for the three and nine months ended September 30, 2015 compared to the same periods in the prior year was primarily due to approximately \$4,000 and \$266,000 recorded as a gain during the three and nine months ended September 30, 2014, respectively, due to the change in the fair value of preferred stock warrant liabilities that were adjusted to fair market value. These preferred stock warrant liabilities were reclassified as a component of equity during September 2014. Therefore no similar mark-to-market adjustment was recorded during 2015.

[Table of Contents](#)**Interest Expense.**

There was no interest expense for the three and nine months ended September 30, 2015 due to repayment of the Horizon Loan in July 2014 and conversion of the convertible debt in September 2014 compared to the same periods in the prior year in which interest was paid on the outstanding Horizon Loan and interest accrued on the convertible debt outstanding.

**Liquidity and Capital Resources**

We have funded our operations primarily through the proceeds from our IPO in June 2015 as well as private placements of equity, convertible debt and the Horizon Loan. We received \$78.8 million in net proceeds from the IPO, \$88.8 million in net proceeds from the issuance of convertible preferred stock, \$52.4 million of net proceeds through the issuance of convertible debt and \$5.0 million of gross proceeds from the issuance of the Horizon Loan, which was fully repaid in July 2014. As of September 30, 2015, we had cash, cash equivalents and marketable securities of \$92.7 million.

The following table sets forth the primary sources and uses of cash for the nine months ended September 30, 2015 and 2014:

	<b>Nine Months Ended September 30,</b>	
	<b>2015</b>	<b>2014</b>
	<b>(in thousands)</b>	
Net cash used in operating activities	\$ (13,806)	\$ (11,279)
Net cash used in investing activities	(35,223)	(4)
Net cash provided by financing activities	78,772	11,273
Net increase (decrease) in cash and cash equivalents	<u>\$ 29,743</u>	<u>\$ (10)</u>

**Operating Activities**

During the nine months ended September 30, 2015, our net loss of \$16.3 million included noncash charges of \$765,000, primarily associated with stock-based compensation. During this same period, our net operating liabilities, excluding cash, cash equivalents and marketable securities, increased by approximately \$1.7 million and thus decreased our net cash used in operating activities to \$13.8 million. Net operating liabilities increased primarily because of higher accrued employee benefits of \$1.1 million, increases in accounts payable and accrued direct program expenses of \$836,000, and were slightly offset by increases in prepaid expenses of \$366,000. Accrued employee benefit costs increased due to implementation of the 2015 employee incentive plan that was initiated at the beginning of the year. Increases in accounts payable and accrued direct program expenses were directly related to research and development costs for our Phase 1b clinical trial which began in the first quarter of 2015. Prepaid expenses increased due to higher prepaid premium costs for Directors and Officers insurance, upon becoming a public company.

During the first half of fiscal 2014, our net loss of \$11.6 million included noncash charges of \$541,000. During the same period, our net operating assets, excluding cash, cash equivalents and marketable securities, increased by \$270,000, largely the result of decreased accounts payable and decreased employee benefits.

**Investing Activities**

The net cash used in investing activities of \$35.2 million for the nine months ended September 30, 2015 was primarily related to the purchase of marketable securities.

**Financing Activities**

The cash provided by financing activities for the nine months ended September 30, 2015 resulted from \$78.8 million of net proceeds from the sale of common stock in our IPO that closed during June 2015. The cash provided by financing activities for the nine months ended September 30, 2014 was primarily the result of \$11.9 million received from the issuance of convertible debt and \$2.5 million from the release of restricted cash associated with the Horizon Loan. These increases were partially offset by the full repayment during July 2014 of the then outstanding balance of \$3.1 million on the Horizon Loan.

## [Table of Contents](#)

### ***Funding Requirements***

We believe our existing cash, cash equivalents and marketable securities will provide resources to complete the Phase 2 clinical trial and to fund our operating expenses and capital expenditure requirements to mid-2017 when we expect to be enrolling patients in our Phase 3 clinical program for N91115. We have based these estimates on assumptions that may prove to be incorrect, and given the risks and uncertainties associated with drug development and commercialization, we could use our capital resources sooner than expected. Our present and future funding requirements will depend on many factors, including but not limited to:

- personnel-related expenses, including salaries, benefits, travel and other compensation expenses;
- our ability to advance the clinical development program for our lead product candidate, N91115;
- the scope, progress, results and costs of preclinical development and clinical trials of N91115 and any other product candidate;
- the costs, timing and outcome of regulatory review of N91115 or any other potential product candidate;
- the revenue, if any, received from commercial sales of N91115 or any other potential product candidate for which we, or any future partner, may receive marketing approval;
- the costs and timing of future commercialization activities, including product manufacturing, marketing, sales and distribution, for N91115 or any other potential product candidate for which we receive marketing approval and do not partner for commercialization; and
- the extent to which we acquire, in-license or out-license other products and technologies.

Existing cash, cash equivalents and marketable securities will not be sufficient to fund our operations through successful development and commercialization of N91115 or any other potential product candidate. If we were unable to obtain additional financing, we may be required to reduce the scope of, delay, or eliminate some or all of our planned development and commercialization activities, which could harm our business. For more information as to the risks associated with our future funding requirements, see Item 1A. – “Risk Factors.”

### **Critical Accounting Policies and Significant Judgments and Estimates**

Our discussion and analysis of our financial condition and results of operations are based on our financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles, or GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities and expenses and the disclosure of contingent assets and liabilities in our financial statements. On an ongoing basis, we evaluate our estimates and judgments, including those related to accrued expenses. We base our estimates on historical experience, known trends and events and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following accounting policies to be most critical to the judgments and estimates used in the preparation of our financial statements.

#### ***Accrued Direct Program Expenses***

Substantial portions of our preclinical studies and clinical trials are performed by third parties, such as CROs, laboratories, medical centers and other vendors. As part of the process of preparing our financial statements, we are required to estimate our accrued direct program expenses. This process involves identifying services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of actual cost. The majority of our service providers invoice us monthly in arrears for services performed. We make estimates of our direct program expenses as of each balance sheet

[Table of Contents](#)

date in our financial statements based on facts and circumstances known to us. Examples of direct program expenses include:

- fees owed to contract research organizations in connection with preclinical and toxicology studies and clinical trials;
- fees owed to investigative sites in connection with clinical trials;
- fees owed to contract manufacturers in connection with the production of drug supply materials; and
- other fees owed in relation to direct programs.

We have not had any material adjustments to estimated amounts recorded in previous periods. At September 30, 2015 and December 31, 2014, we had accrued direct program expenses of \$1.5 million and \$1.2 million, respectively.

**Convertible Debt**

We have entered into, and may in the future enter into, debt financing transactions whereby such debt is convertible into preferred or common shares. We account for such instruments under Accounting Standards Codification, or ASC, 470-20 “Debt with Conversion and Other Options” which require companies to bifurcate conversion options from their host instruments and account for them as free standing derivative financial instruments according to certain criteria. We account for convertible debt instruments that have been determined to be free standing derivative financial instruments in accordance with ASC 815 “Derivatives and Hedging”. Under ASC 815, a portion of the proceeds received upon the issuance of the convertible debt is allocated to the fair value of the derivative and a corresponding discount is recorded on the convertible debt. The derivative is subsequently marked to market at each reporting date based on current fair value, with the changes in fair value reported in results of operations.

During 2014, we issued an aggregate of \$12.0 million of convertible debt to investors. The 2014 convertible debt instruments contained a change in control redemption, which was deemed an embedded derivative and required us to bifurcate and separately account for the embedded derivative as a liability. These derivatives were recognized at fair value with an immaterial mark-to-market gain recognized in other income, net in the Statements of Operations and Comprehensive Loss during the three and nine months ended September 30, 2014. The discount on the debt was amortized through interest expense for which an immaterial amount was recognized in the Statements of Operations and Comprehensive Loss during the three and nine months ended September 30, 2014. All of this debt converted into shares of Series 1 convertible preferred stock in September 2014.

**Contractual Obligations and Commitments**

The following table summarizes our contractual obligations at September 30, 2015:

	Payments due by period (in thousands) (unaudited)				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Purchase obligations	\$ 6,824	\$ 5,828	\$ 996	\$ —	\$ —
Operating leases	696	278	279	139	—
Total obligations	\$ 7,520	\$ 6,106	\$ 1,275	\$ 139	\$ —

We have entered into contracts with third parties to provide future services, which include research and development, clinical development support and testing services. These purchase obligations include both cancellable and non-cancellable amounts. We also have an operating lease obligation for office and laboratory space, which will expire on March 31, 2018. We have the option to renew the lease for an additional three-year term and the option to terminate the lease at any time after March 31, 2017, for a termination fee of \$25,000.

[Table of Contents](#)

**Related Party Transactions**

At various points during 2014, we issued an aggregate of \$12.0 million of convertible debt to certain existing investors. Interest accrued on these loans until the loans and all accrued interest were converted in full on September 23, 2014 to Series 1 convertible preferred stock.

**Off-Balance Sheet Arrangements**

We did not have during the periods presented, and we do not currently have, any off-balance sheet activities, as defined in Item 303(a)(4) of Regulation S-K.

**Recent Accounting Pronouncements**

In August 2014, the FASB issued ASU No. 2014-15, Presentation of Financial Statements – Going Concern Disclosure of Uncertainties About an Entity’s Ability to Continue as a Going Concern, which requires management to evaluate whether there are conditions or events that raise substantial doubt about an entity’s ability to continue as a going concern and to provide disclosures when certain criteria are met. The guidance is effective for annual periods beginning in 2016 and interim reporting periods starting in the first quarter of 2017. Early application is permitted. We do not expect the standard will have a material impact on our disclosures.

Other accounting standards that have been issued or proposed by the FASB or other standards-setting bodies that do not require adoption until a future date are not expected to have a material impact on our financial statements upon adoption.

We qualify as an “emerging growth company” pursuant to the provisions of the JOBS Act, which allows us to delay adoption of certain accounting standards until those standards would otherwise apply to private companies. However, we irrevocably chose to “opt out” of such extended transition period, and as a result, we plan to comply with any new or revised accounting standards on the relevant dates on which non-emerging growth companies must adopt such standards.

**ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

We are exposed to market risk related to changes in interest rates. As of September 30, 2015, we had cash, cash equivalents and marketable securities of \$92.7 million, consisting of deposits with commercial banks in checking, interest-bearing and demand money market accounts, corporate debt securities and obligations of U.S. government agencies. The primary objectives of our investment policy are to preserve principal and maintain proper liquidity to meet operating needs.

Our investment policy specifies credit quality standards for our investments and limits the amount of credit exposure to any single issue, issuer or type of investment. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates, particularly because our investments are in short-term securities. Due to the short-term duration of our investment portfolio and the low risk profile of our investments, an immediate 100 basis point change in interest rates would not have a material effect on the fair market value of our portfolio.

**ITEM 4. CONTROLS AND PROCEDURES**

**Evaluation of Disclosure Controls and Procedures**

We maintain disclosure controls and procedures, as defined in Rule 13a-15(e) promulgated under the Exchange Act, that are designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure. Any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objective. In connection with the filing of this Quarterly Report on Form 10-Q, an evaluation was carried out by our management, with the participation of our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures. Based upon this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of September 30, 2015.

**Changes in Internal Control over Financial Reporting**

This Quarterly Report on Form 10-Q does not include a report on changes in our internal controls over financial reporting that occurred during our most recent fiscal quarter due to a transition period established by the Exchange Act for newly public companies.

## PART II. OTHER INFORMATION

### ITEM 1. LEGAL PROCEEDINGS

We are not currently a party to any legal proceedings.

### ITEM 1A. RISK FACTORS

*Investing in our common stock involves a high degree of risk. In evaluating our business, investors should carefully consider the following risk factors, together with all other information included in this Quarterly Report, before deciding whether to invest in shares of our common stock. These risk factors contain, in addition to historical information, forward-looking statements that involve risks and uncertainties. Our actual results could differ significantly from the results discussed in the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed below. The order in which the following risks are presented is not intended to reflect the magnitude of the risks described. The occurrence of any of the following risks could have a material adverse effect on our business, financial condition, results of operations and prospects. In that case, the trading price of our common stock could decline, and an investor may lose part or all of his, her or its investment.*

#### **Risks Relating to Our Financial Condition and Need for Additional Capital**

***We have incurred significant losses since our inception. We anticipate that we will continue to incur significant losses for the foreseeable future.***

We are a clinical stage pharmaceutical company focused primarily on developing our lead product candidate, N91115, for CF. We have incurred significant net losses in each year since our inception, including net losses of \$16.3 million and \$11.6 million for the nine months ended September 30, 2015 and 2014, respectively. As of September 30, 2015, we had an accumulated deficit of \$142.3 million.

To date, we have financed our operations primarily through sales of our equity securities and convertible debt. We have devoted most of our financial resources to research and development, including our preclinical research and development activities and clinical trials. We have not completed the development of any product candidate. We expect to continue to incur significant and increasing losses and negative cash flows for the foreseeable future. The size of our losses will depend, in part, on the rate of future expenditures and our ability to generate revenue. We expect to incur substantial and increased expenses arising from the clinical development of N91115 or any other potential product candidate, including, in particular, as we:

- prepare for and execute on the Phase 2 and Phase 3 clinical programs for N91115;
- scale up development, including contracted manufacturing processes and quantities to prepare for larger clinical trials and the commercialization of N91115;
- seek to obtain regulatory approvals for N91115;
- prepare for the commercialization of N91115, including establishing an infrastructure for the sales, marketing and distribution of N91115 for any indications for which we receive regulatory approval;
- expand our research and development activities to identify and potentially advance other product candidates;
- maintain, expand and protect our intellectual property portfolio; and
- add operational, financial and management information systems and personnel to support our clinical development, commercialization efforts and operations as a public company.

***Our recurring losses from operations have raised substantial doubt regarding our ability to continue as a going concern.***

We have had recurring losses from operations and previous reports on our financial statements by our independent registered public accounting firm have included an explanatory paragraph with respect to our ability to continue as a going concern. We will likely not generate meaningful revenue until and unless N91115 or another potential product candidate is approved by the FDA or comparable regulatory agencies in other countries and

## [Table of Contents](#)

successfully marketed, either by us or a partner, an outcome which may not occur. We believe that our existing cash, cash equivalents and marketable securities and interest thereon will be sufficient to fund our projected operating requirements to mid-2017. However, if we are unable to continue as a going concern, we may have to liquidate our assets, and the values we receive for our assets in liquidation and dissolution could be significantly lower than the values reflected in our financial statements. The perception that we may not be able to continue as a going concern may have an adverse impact on our business due to concerns about our ability to meet our contractual obligations. If we are unable to continue as a going concern, an investor could lose all or part of their investment in our company.

***Our ability to generate future revenue and achieve and maintain profitability is uncertain and depends upon our ability to successfully develop, obtain regulatory approval for and commercialize N91115 or any other potential product candidate.***

Our ability to generate revenue and achieve profitability depends on our ability, alone or with collaborators, to successfully complete the development of, obtain the necessary regulatory approvals for, and commercialize, a product candidate. We have never obtained approval for or commercialized a product candidate. Our N91115 development program is currently focused on demonstrating the clinical benefit of a triple therapy for CF patients. This triple therapy includes N91115, a CFTR stabilizer, administered with Vertex's co-formulated CFTR modulators, lumacaftor with ivacaftor, or lumacaftor/ivacaftor. We do not anticipate generating revenue from sales of N91115 or any other potential product candidate for the foreseeable future, if ever. Our ability to generate future revenue depends heavily on:

- obtaining regulatory approval in the United States for N91115 in CF and equivalent foreign regulatory approvals;
- the commercial launch of lumacaftor/ivacaftor in the U.S. and in other geographic regions;
- the continued commercial viability of lumacaftor/ivacaftor as a leading therapy in CF;
- whether N91115 may be combined with other future commercially successful therapies, if any, that could influence the standard of care in CF, and the age groups and geographic regions in which these other therapies are available;
- launching and commercializing N91115, including establishing an infrastructure for the sales, marketing and distribution of N91115;
- achieving broad market acceptance of N91115 in the medical community and with third party payers;
- obtaining favorable results for and continuing to develop N91115, including successfully initiating and completing our planned Phase 2 clinical program, as well as future trials thereafter; and
- generating a pipeline of product candidates other than N91115.

Conducting preclinical testing and clinical trials is a time-consuming, expensive and uncertain process that takes years to complete, and we may never generate the necessary data required to obtain regulatory approval and generate revenue. Our anticipated development costs would likely increase if we do not obtain favorable clinical results or if development of N91115 or any other potential product candidate is delayed. In particular, if the commercialization of Vertex's lumacaftor/ivacaftor is delayed or abandoned and/or we are required by the U.S. Food and Drug Administration, or FDA, or comparable regulatory authorities in other countries, to perform studies or trials in addition to those that we currently anticipate, we would likely incur higher costs than we currently anticipate. Because of the numerous risks and uncertainties associated with pharmaceutical product development, we are unable to predict the timing or amount of any increase in our anticipated development costs.

In addition, N91115 or any other potential product candidate, if approved, may not achieve commercial success. Our commercial revenue, if any, will be derived from sales of products that we do not expect to be commercially available until at least 2018, if at all. Even if a product candidate is approved for commercial sale, we anticipate incurring significant costs in connection with commercialization. As a result, we cannot assure that we will be able to generate revenue, or that we will achieve or maintain profitability even if we do generate revenue.

Even if N91115 or any other potential product candidate receives regulatory approvals or is commercialized, if it later shows unanticipated properties, or if revenue is insufficient, we will not achieve or maintain profitability and our

## [Table of Contents](#)

business may fail. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would depress the value of our company and could impair our ability to raise capital, expand our business, diversify our product offerings or continue our operations. A decline in the value of our company could cause an investor to lose all or part of his, her or its investment.

***We will need to raise additional funding to launch and commercialize N91115 or any other potential product candidate, which may not be available on acceptable terms, if at all. If we fail to obtain additional financing, we could be forced to delay, reduce or eliminate development efforts for N91115 and any other potential product candidate, seek corporate partners or relinquish or license on unfavorable terms our rights to technologies or product candidates.***

Developing pharmaceutical products, including conducting preclinical studies and clinical trials, is a time-consuming, expensive and uncertain process that takes years to complete. We expect our research and development expenses to substantially increase in connection with our ongoing activities, particularly as we advance our clinical program for N91115.

Based upon our current operating plan, we expect that our existing cash, cash equivalents and marketable securities will enable us to fund our operating expenses and capital expenditure requirements to mid-2017 when we expect to be enrolling patients in our Phase 3 clinical trial for N91115. We will require additional funding prior to the completion of development, approval and commercialization of N91115. However, changing circumstances beyond our control may cause us to consume capital more rapidly than we currently anticipate. For example, our clinical trials may encounter technical, enrollment or other difficulties that could increase our development costs more than we expected, or the FDA may require us to perform studies or trials in addition to those that we currently anticipate. We will need to raise additional funds if we choose to initiate clinical trials for a potential product candidate other than N91115 or to administer N91115 with drugs other than lumacaftor/ivacaftor. We will also need to raise additional funds if we need to obtain regulatory approval to expand the label for N91115 in distinct CF populations. In any event, we will require additional capital to obtain regulatory approval for, and the commercialization of, our product candidates.

Securing additional financing may divert our management from our day-to-day activities, which may adversely affect our ability to develop and commercialize N91115 or any other potential product candidate. In addition, we cannot guarantee that future financing will be available in sufficient amounts or on terms acceptable to us, if at all. If we are unable to raise additional capital when required or on acceptable terms, we may be required to:

- significantly delay, scale back or discontinue the development or commercialization of N91115 or any other potential product candidate;
- seek corporate partners at an earlier stage than otherwise would be desirable or on terms that are less favorable than might otherwise be available; or
- relinquish or license on unfavorable terms, our rights to technologies or to N91115 or any other potential product candidate that we otherwise would seek to develop or commercialize ourselves, or sell all of our assets or our entire business.

If we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we will be prevented from pursuing development and commercialization efforts, which will have a material adverse effect on our business, operating results and prospects, and may cause us to cease operations.

***Raising additional capital may cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights to our technologies or to a product candidate.***

Until such time, if ever, as we can generate substantial product revenue, we expect to finance our cash needs primarily through public or private equity or convertible debt offerings, partnerships, grants or other nondilutive sources of financing. We currently do not have any committed external source of funds.

To the extent that we raise additional capital through the sale of equity or convertible debt, the ownership interests of our stockholders will be diluted. In addition, the terms of any equity or convertible debt we agree to issue may include liquidation or other preferences that adversely affect the rights of our stockholders. Convertible debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures, and declaring dividends, and will impose

## [Table of Contents](#)

limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business.

If we are unable to raise additional funds, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates, or grant licenses on terms that may not be favorable to us. If we are unable to expand our operations or otherwise capitalize on our business opportunities, our business, financial condition and results of operations could be materially adversely affected. If we are unable to raise additional funds when needed, we may be required to delay, limit, reduce or terminate our research and development or commercialization efforts, or grant others rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

***We have a limited operating history, which may make it difficult for investors to evaluate the success of our business to date and to assess our future viability.***

We are a clinical stage pharmaceutical company with a limited operating history. Our operations to date have been primarily limited to organizing and staffing our company, acquiring and developing product and technology rights and conducting research and development activities. We have recently completed Phase 1b clinical development for N91115.

We have not obtained regulatory approval for N91115 or any other potential product candidate. Consequently, any predictions about our future success, performance or viability may not be as accurate as they could be if we had a longer operating history, achieved a later stage of clinical development or approved products on the market.

***Our inability to utilize our net operating loss carryforwards before they expire may adversely affect our results of operations and financial condition.***

As of December 31, 2014 we had federal and state net operating loss carryforwards of \$34.6 million, which may be utilized against future federal and state income taxes. In general, a corporation that undergoes an “ownership change” is subject to limitations on its ability to utilize its pre-change net operating loss carryforwards, or NOLs, to offset future taxable income. In general, an ownership change occurs if the aggregate stock ownership of certain stockholders, generally stockholders beneficially owning five percent or more of our common stock, applying certain look-through and aggregation rules, increases by more than 50% over such stockholders’ lowest percentage ownership during the testing period, generally three years. Purchases of our common stock in amounts greater than specified levels, which will be beyond our control, could create a limitation on our ability to utilize our NOLs for tax purposes in the future. Limitations imposed on our ability to utilize NOLs could cause us to pay U.S. federal and state income taxes earlier than we would otherwise be required if such limitations were not in effect and could cause such NOLs to expire unused. Furthermore, we may not be able to generate sufficient taxable income to utilize our NOLs before they expire beginning in 2032. In addition, at the state level there may be periods during which the use of NOLs is suspended or otherwise limited, which would accelerate or may permanently increase state taxes owed. If any of these events occur, we may not derive some or all of the expected benefits from our NOLs, and our results of operations and financial condition may be adversely affected as a result. As of September 30, 2015, we have not performed a formal study to determine whether limitations to our NOLs have occurred or whether such limitations could result from the sale of shares in our initial public offering in June 2015. Such limitations could be significant.

### **Risks Relating to Clinical Development and Regulatory Approval**

***We depend almost entirely on the success of our lead product candidate, N91115, which has recently completed Phase 1b clinical testing, and will need regulatory approval, with which we have no experience, before it can be commercialized. We may not be able to obtain or may be delayed in obtaining regulatory approval for N91115.***

We depend almost entirely on the success of our lead product candidate, N91115, which recently completed Phase 1b clinical testing. Regulatory agencies, including the FDA, ultimately must approve any product candidate before it can be promoted, marketed or commercially distributed. N91115 and any other potential product candidate we develop will be subject to extensive and rigorous review and regulation by governmental authorities. We have never obtained approval for or commercialized a product candidate. The timing of this process can be unpredictable and may include post-marketing studies and surveillance, which would require the expenditure of additional resources beyond our existing cash, cash equivalents or marketable securities. Of the large number of drugs in development for approval in the United States, only a small percentage successfully complete the regulatory approval process and are commercialized. The success of N91115 depends on, among other things:

- our ability to complete clinical trials and other product research and development activities;

## [Table of Contents](#)

- whether our clinical trials for N91115 demonstrate statistically significant and clinically meaningful efficacy not outweighed by safety issues;
- meeting FDA and other regulatory agencies' requirements to obtain approval for a product candidate; and
- ensuring that the manufacturing processes and facilities of the third parties with which we contract to manufacture our product candidates are in compliance with all relevant regulatory requirements, including those of the FDA.

If we do not achieve one or more of these factors in a timely manner or at all, we could experience significant delays in our ability to obtain regulatory approval of N91115, including, but not limited to, denial of a new drug application, or NDA. We have never applied for, and have never received, regulatory approval for a drug. If we are unable to successfully complete the clinical development of N91115 and meet other related regulatory requirements, we will be unable to obtain approval of an NDA from the FDA. It is possible that, even if we successfully complete the clinical development of N91115, the FDA may refuse to accept our NDA for substantive review or may conclude after review of our data that our application is insufficient. If the FDA does not accept or approve our NDA, it may require that we conduct additional clinical, nonclinical or manufacturing studies or analyses and submit that data to it before it will reconsider our application. Depending on the extent of these or any other FDA requirements, approval of any NDA or application that we submit may be delayed by several years, or may require us to expend more resources than we have available. It is also possible that additional studies, if performed and completed, may not be considered sufficient by the FDA to approve our NDA.

In addition, the regulatory agencies may not complete their review processes in a timely manner, or additional delays may result if N91115 is brought before an FDA advisory committee, which could recommend restrictions on approval or recommend non-approval of the product candidate. In addition, we may experience delays or rejections based upon additional government regulation from future legislation or administrative action, or changes in regulatory agency policy during the period of product development, clinical studies and the review process. As a result, we cannot predict when, if at all, we will receive regulatory approval of any product candidate.

Any delay in obtaining, or an inability to obtain, regulatory approvals would prevent us from commercializing N91115, generating revenue and achieving and sustaining profitability. If any of these outcomes occur, we may be forced to abandon our development efforts for N91115, which would have a material adverse effect on our business and could potentially cause us to cease operations. These factors could materially harm our business, and the value of our common stock would likely decline.

***Our lead product candidate, N91115, is initially being developed for a triple therapy of N91115 along with Vertex's lumacaftor/ivacaftor, and we may be unsuccessful in obtaining regulatory approval for, or commercially launching, N91115 if Vertex is unable to, or decides not to, proceed with its commercial launch of lumacaftor/ivacaftor in all geographic regions.***

Our initial development plans for N91115 focus on a triple therapy of N91115 along with Vertex's lumacaftor/ivacaftor, which was approved by the FDA on July 2, 2015, and recommended for approval by the European Union's Committee for Medicinal Products for Human Use (CHMP) on September 25, 2015. Consequently, the development of N91115 depends upon the successful and timely commercial launch of lumacaftor/ivacaftor in the U.S. and the regulatory approval and commercial launch of lumacaftor/ivacaftor in other geographic regions. If Vertex is unable to, or decides not to proceed with its commercial launch of lumacaftor/ivacaftor in any geographic region, this could prevent or significantly delay our ability to advance N91115 through clinical development to commercialization.

We have no agreements in place with Vertex, including any agreements to incentivize Vertex to proceed with its commercial launch of lumacaftor/ivacaftor or to provide us with clinical supply of lumacaftor/ivacaftor, and our plans to develop N91115 have not been established in conjunction with Vertex. Vertex is not obligated in any way to continue with its currently disclosed plans and could stop the commercial launch of lumacaftor/ivacaftor at any time. We have no control over Vertex's interactions with the FDA or other regulatory authorities and cannot intervene in that process. It is also possible that Vertex may experience a number of unforeseen events during their attempts to commercialize lumacaftor/ivacaftor that prevent it from pursuing commercialization. Vertex could decide to de-prioritize commercialization of lumacaftor/ivacaftor in relation to other projects, or deploy insufficient resources to support the commercialization of lumacaftor/ivacaftor. Also, Vertex could merge with a third party that decides to terminate or

## [Table of Contents](#)

de-prioritize the commercialization of lumacaftor/ivacaftor. In any of such events, we may be forced to abandon our development efforts of N91115 or reinitiate our efforts to test administration of N91115 with different therapies. Any of these events would have a material adverse effect on our business and could potentially cause us to cease operations.

***The timing of the development of N91115 and its commercial launch may be significantly delayed if there are setbacks or delays in the commercial launch of lumacaftor/ivacaftor.***

We are dependent on publicly disclosed information with respect to Vertex's commercialization timeline for lumacaftor/ivacaftor, and this may make it more difficult to evaluate our business and prospects at any given point in time, and could also impair our ability to raise capital on our desired timeline. The commercialization of lumacaftor/ivacaftor could take longer than we currently expect, which would significantly delay our plans to develop N91115, including the conduct of clinical trials, ultimate approval and commercial marketing of N91115.

***Even if Vertex commercially launches lumacaftor/ivacaftor on a timely basis, we may be unsuccessful or significantly delayed in the development and commercial launch of N91115 if Vertex fails to comply with ongoing regulatory requirements or does not continue to produce or commercialize lumacaftor/ivacaftor, or we are otherwise unable to obtain lumacaftor/ivacaftor.***

Even if Vertex commercially launches lumacaftor/ivacaftor, the development of N91115 also depends upon Vertex's continued compliance with regulatory requirements and the continued commercial availability of lumacaftor/ivacaftor for use in our clinical trials and for our commercialization efforts. Vertex's failure to comply with ongoing regulatory requirements could result in a major delay in, or prevent, the development and approval of N91115.

Even if Vertex completes the commercial launch of lumacaftor/ivacaftor, it has no obligation to continue producing, commercializing or making lumacaftor/ivacaftor available to patients, or to continue producing lumacaftor/ivacaftor in any particular quantity, which could prevent our ability to obtain lumacaftor/ivacaftor for use in our planned clinical trials or impact the number of patients taking lumacaftor/ivacaftor who are available to enroll in our clinical trials. For example, Vertex may encounter manufacturing or other production issues and fail to produce enough lumacaftor/ivacaftor for us to successfully complete our studies and clinical trials, and this could cause our N91115 development program or commercialization efforts to fail or be significantly delayed. This could result in insufficient or no revenue and force us to pursue an alternative plan of business or cease operations entirely.

***Even if Vertex commercially launches lumacaftor/ivacaftor on a timely basis, we may be unsuccessful or significantly delayed in the development and commercial launch of N91115 if there are not enough appropriate patients available to conduct our clinical trials.***

Even if Vertex commercially launches lumacaftor/ivacaftor on a timely basis, if there are not enough available patients treated with lumacaftor/ivacaftor to enroll in our clinical trials, we may be unable to advance N91115 through clinical development or be significantly delayed. For example, if Vertex fails to gain reimbursement for lumacaftor/ivacaftor, there could be insufficient patients treated to conduct our clinical trials or enrollment in our clinical trials could take longer, and we may be forced to pay to obtain the drug for patients enrolling in our clinical trials, which could delay our clinical development, reduce the number of patients enrolling and require us to seek additional sources of funding to complete our development plans.

In addition, patients and their physicians may conclude lumacaftor/ivacaftor is sufficiently effective on its own, leading to an insufficient number of patients available to enroll in our clinical trials, which would cause our clinical trials to fail or be delayed. Patients and their doctors may decide to wait for longer than we currently anticipate in order to evaluate the effect of lumacaftor/ivacaftor prior to enrolling in our clinical trials, which would significantly delay our N91115 development program. In addition, if physicians or patients do not perceive the benefits of lumacaftor/ivacaftor as clinically meaningful, this may negatively affect uptake and patients may stop taking lumacaftor/ivacaftor. Moreover, if only patients who are unsuccessfully treated on lumacaftor/ivacaftor decide to enroll in our clinical trials for N91115, our clinical trials may not be successful and could fail. Any of these would have a material adverse effect on our business and could potentially cause us to cease operations.

## [Table of Contents](#)

***Even if Vertex commercially launches lumacaftor/ivacaftor on a timely basis, we may be unsuccessful or significantly delayed in the development and commercial launch of N91115 if lumacaftor/ivacaftor has unexpected longer term safety or efficacy issues.***

Our plans for the development of N91115 depend on our expectation that lumacaftor/ivacaftor will be safe and effective, successfully marketed, physicians will prescribe lumacaftor/ivacaftor and patients will continue treatment. However, lumacaftor/ivacaftor could encounter unexpected results in the future and be associated with adverse outcomes during long-term use, forcing Vertex to amend its label or discontinue commercialization. This would have a material adverse effect on our business and could potentially cause us to cease operations.

***If we pursue regulatory approval of N91115 for a triple therapy only along with lumacaftor/ivacaftor, and lumacaftor/ivacaftor subsequently becomes obsolete as a standard of care or its use is discontinued, we may be unsuccessful or significantly delayed in the development and commercial launch of N91115, or we may be forced to abandon or reinitiate our development efforts for N91115.***

Our initial development plans for N91115 focus on a triple therapy of N91115 along with lumacaftor/ivacaftor. Changes in standard of care or use patterns of lumacaftor/ivacaftor could make our triple therapy obsolete. If N91115 is approved specifically by indication from the FDA to be administered only along with lumacaftor/ivacaftor and use of another therapy becomes more prevalent than lumacaftor/ivacaftor or makes a stabilizer obsolete, revenue from sales of N91115 could be negatively impacted and our financial results and stock price would be adversely affected. We may also be forced to abandon our development efforts of N91115 or reinitiate our efforts to test administration of N91115 along with a different drug. This would have a material adverse effect on our business and could potentially cause us to cease operations.

***The regulatory approval processes of the FDA, the European Medicines Agency, or EMA, and comparable foreign regulatory authorities are lengthy, time-consuming and inherently unpredictable.***

We are not permitted to market N91115 or any other potential product candidate in the United States or outside the United States until we receive approval of an NDA from the FDA or approval of a marketing application from the comparable regulatory authority in other countries, respectively. Prior to submitting an NDA to the FDA for approval of N91115, we will need to complete our ongoing preclinical and toxicology studies in CF, as well as all necessary clinical trials. We are still conducting ongoing preclinical studies and Phase 1 clinical trials. We have not yet commenced our Phase 2 clinical trial to assess the safety and efficacy of N91115 in CF patients. Successfully initiating and completing our Phase 2 and Phase 3 clinical programs and obtaining approval of an NDA is a complex, lengthy, expensive and uncertain process, and FDA and other comparable foreign regulatory authorities may delay, limit or deny approval of N91115 or any other potential product candidate for many reasons, including, among others:

- the results of our clinical trials may not meet the level of statistically significant and clinically meaningful efficacy with an acceptable safety profile as required by FDA, or other comparable regulatory authorities in other countries, for marketing approval;
- the FDA or other comparable regulatory authorities in other countries may disagree with the number, design, size, conduct or implementation of our clinical trials;
- the FDA or other comparable regulatory authorities may find the data from preclinical studies and clinical trials insufficient to demonstrate that the potential clinical and other benefits outweigh its safety risks;
- the FDA or other comparable regulatory authorities in other countries may disagree with our interpretation of data from our preclinical studies and clinical trials;
- the FDA or other comparable regulatory authorities in other countries may not accept data generated at one or more of our clinical trial sites;
- if our NDAs or similar applications, if and when submitted, are reviewed by FDA or other comparable regulatory authorities, as applicable, the regulatory authorities may have difficulties scheduling the necessary review meetings in a timely manner, may recommend against approval of our application or may recommend that FDA or other comparable regulatory authorities, as applicable, require, as a condition of

## [Table of Contents](#)

approval, additional preclinical studies or clinical trials, limitations on approved labeling or distribution and restrictions on use;

- the FDA may determine that our NDAs, if and when submitted, must follow a different regulatory pathway than we have attempted, and there may be potentially extended standards, timelines, and/or costs in order to pursue approval;
- the FDA may require development of a Risk Evaluation and Mitigation Strategy as a condition of approval or post-approval, and other comparable regulatory authorities may grant only conditional approval or impose specific obligations as a condition for marketing authorization, or may require us to conduct post-authorization safety studies;
- the FDA or other comparable regulatory authorities may determine that the manufacturing processes or facilities of third party manufacturers with which we contract are not in compliance with all relevant regulatory requirements, including current good manufacturing practice, or cGMP, requirements; or
- the FDA or other comparable regulatory authorities may change their approval policies or adopt new regulations.

Any of these factors, many of which are beyond our control, could jeopardize our ability to obtain regulatory approval for and successfully market N91115 or any other potential product candidate. Moreover, because we are almost entirely dependent on N91115, any such setback in our pursuit of regulatory approval would have a material adverse effect on our business and prospects.

***We depend on the successful completion of clinical trials for N91115 or any other potential product candidate. The positive clinical results, if any, obtained by us in clinical trials may not be repeated in later-stage clinical trials.***

Before obtaining regulatory approval for the sale of N91115 or any other potential product candidate, we must conduct extensive clinical trials to demonstrate safety and efficacy in humans. We have not completed the clinical trials necessary to support an application for approval to market our lead product candidate, N91115. Successful completion of such clinical trials is a prerequisite to submitting an NDA to the FDA and, consequently, the ultimate approval and commercial marketing of N91115 or any other potential product candidate. A failure of one or more clinical trials can occur at any stage of testing. The outcome of preclinical testing and early clinical trials may not be predictive of the success of later preclinical testing or clinical trials, and interim results of a clinical trial do not necessarily predict final results. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval for their products.

To date, we have completed dose escalation and drug:drug interaction trials in healthy subjects and pharmacokinetic and dose-ranging safety trials in CF patients as part of our Phase 1 clinical program. We need to complete our ongoing preclinical and toxicology studies, as well as Phase 1, Phase 2 and Phase 3 clinical trials prior to submitting N91115 for regulatory approval. We have conducted limited safety studies in humans to date and have not yet commenced our planned Phase 2 or Phase 3 clinical programs to assess the safety and efficacy of N91115 in CF patients. A number of companies in the pharmaceutical and biotechnology industries, including those with greater resources and experience than us, have suffered significant setbacks in late stage clinical development, even after seeing promising results in earlier clinical trials.

We may experience a number of unforeseen events during, or as a result of, clinical trials for N91115 or any other potential product candidate that could adversely affect the completion of our clinical trials, including:

- regulators, and/or institutional review boards or other reviewing bodies may not authorize us or our investigators to commence a clinical trial, or to conduct or continue a clinical trial at a prospective or specific trial site;
- our clinical trials are subject to review by the Protocol Review Committee, or PRC, of the Therapeutic Development Network of the Cystic Fibrosis Foundation's Therapeutics Branch. The PRC may not sanction our trial for conduct at prospective trial sites or may provide a ranking that adversely impacts recruitment in our clinical trials compared with other investigational new drugs in CF;

## [Table of Contents](#)

- clinical trials of N91115 or any other potential product candidate may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical trials or abandon product development programs;
- the number of subjects required for clinical trials of N91115 or any other potential product candidate may be larger than we anticipate, enrollment in these clinical trials may be insufficient or slower than we anticipate, particularly given the small patient population with CF and the number of clinical trials being conducted at any given time is high leading to fewer available patients for any given clinical trial, or subjects may drop out of these clinical trials at a higher rate than we anticipate;
- our third party contractors may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;
- we might have to suspend or terminate clinical trials of N91115 or any other potential product candidate for various reasons, including a finding that the subjects are being exposed to unacceptable health risks;
- regulators, institutional review boards or data monitoring committees may require or recommend that we or our investigators suspend or terminate clinical research for various reasons, including safety signals or noncompliance with regulatory requirements;
- the cost of clinical trials of N91115 or any other potential product candidate may be greater than we anticipate;
- the supply or quality of N91115 or any other potential product candidate or other materials necessary to conduct clinical trials of our product candidates may be insufficient or inadequate; and
- N91115 or any other potential product candidate may have undesirable side effects or other unexpected characteristics.

Negative or inconclusive results of our clinical trials of N91115, or any other clinical trial we conduct, could mandate repeated or additional clinical studies. Despite the safety results reported in earlier clinical trials for N91115, we do not know whether any other clinical trials we may conduct will demonstrate adequate efficacy and safety to result in regulatory approval to market N91115 or any other potential product candidate. If later stage clinical trials do not produce favorable results, our ability to obtain regulatory approval for N91115 or any other potential product candidate may be adversely impacted.

***Delays in clinical trials are common and have many causes, and any delay could have a material adverse effect on our business such as increased costs and delays in our ability to obtain regulatory approval and commence product sales. We may be required to suspend, repeat or terminate our clinical trials if they are not conducted in accordance with regulatory requirements, the results are negative or inconclusive or the trials are not well designed.***

Clinical testing is expensive, difficult to design and implement, can take many years to complete and is uncertain as to outcome. Clinical trials must be conducted in accordance with FDA regulations or other applicable foreign government regulations, and are subject to oversight by the FDA or other foreign regulatory authorities and institutional review boards at the medical institutions where the clinical trials are conducted. In addition, clinical trials must be conducted with product candidates produced under current Good Manufacturing Practices, or cGMP, and may require large numbers of test subjects.

We may experience delays in clinical trials at any stage of development and testing of N91115 or any other potential product candidate. We plan to begin our Phase 2 clinical trial during the fourth quarter of 2015. Our planned clinical trials may not begin on time, have an effective design, enroll a sufficient number of patients or be completed on schedule, if at all.

Events, excluding our current dependence on the commercial launch of lumacaftor/ivacaftor in the U.S. and other geographic regions, which may result in a delay or unsuccessful completion of clinical trials for N91115, include:

- inability to raise funding necessary to initiate or continue a trial;
- delays in obtaining regulatory approval to commence a trial;

## [Table of Contents](#)

- delays in reaching agreement with FDA or regulatory authorities in other countries on final trial design;
- delays in the review of our clinical trials by the PRC of the Therapeutic Development Network of the Cystic Fibrosis Foundation's Therapeutic branch;
- imposition of a clinical hold based on the submission of results of clinical and preclinical studies or following an inspection of our clinical trial operations or trial sites by the FDA or other regulatory authorities;
- delays in reaching agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical trial sites;
- delays in obtaining required institutional review board approval at each site;
- delays in recruiting and retaining suitable subjects to participate in a trial;
- delays in having subjects complete participation in a trial or return for post-treatment follow-up;
- delays caused by subjects dropping out of a trial due to side effects or otherwise;
- clinical sites dropping out of a trial to the detriment of enrollment;
- study personnel may administer the wrong version of N91115 or other potential product candidate or assign study therapy to the wrong treatment group, resulting in disqualification of subjects from data analysis;
- study personnel may not perform in accordance with good clinical practices;
- N91115 or other potential product candidate may have unforeseen adverse side effects;
- time required to add new clinical sites; and
- delays by our contract manufacturers to produce and deliver sufficient supply of clinical trial materials.

If initiation or completion of any of our clinical trials, including our Phase 2 clinical trial of N91115, are delayed for any of the above reasons, our development may be arrested, development costs may increase, our approval process could be delayed, any periods during which we may have the exclusive right to commercialize N91115 or any other potential product candidate may be reduced and our competitors may have more time to bring products to market before we do or otherwise delay us. Any of these events could impair our ability to generate revenue from product sales and impair our ability to generate regulatory and commercialization milestones and royalties, all of which could have a material adverse effect on our business.

***N91115 or any other potential product candidate may cause adverse events or have other properties that could delay or prevent their regulatory approval or limit the scope of any approved label or market acceptance.***

Undesirable adverse events caused by N91115 or any other potential product candidate could cause us or regulatory authorities to interrupt, delay, halt or terminate clinical trials and could result in the denial of regulatory approval by the FDA or other comparable foreign regulatory authorities for any or all targeted indications. It is possible that during the course of the clinical development of N91115 or any other potential product candidate, results of our clinical trials could reveal an unacceptable severity and prevalence of adverse events. In addition, our remaining preclinical testing may produce inconclusive or negative safety results, which may require us to conduct additional preclinical testing or to abandon N91115 or other potential product candidate. Also, N91115 or any other potential product candidate may have unfavorable pharmacology or toxicity characteristics, or cause undesirable side effects.

Undesirable adverse events caused by N91115 or any other potential product candidate could affect patient recruitment or the ability of enrolled patients to complete a clinical trial or result in potential product liability claims. In addition, adverse events that occur in our trials as a consequence of the serious disease that is being studied may negatively affect the profile of N91115 or any other potential product candidate. The FDA or other regulatory authorities may determine that additional safety testing is required for N91115 or any other potential product candidate, which would cause a delay in our clinical development of such product candidate.

## [Table of Contents](#)

Additionally if N91115 or any other potential product candidate receives marketing approval, and we or others later identify undesirable adverse events caused by such products, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw approval of N91115 or any other potential product candidate or impose restrictions on their distribution in the form of a modified risk evaluation and mitigation strategy;
- regulatory authorities may require additional labeling, such as warnings or contraindications;
- we may be required to change the way the product is administered or to conduct additional clinical studies;
- we could be sued and held liable for harm caused to patients; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the particular product candidate, if approved, and could significantly harm our business, results of operations and prospects. Any such events would increase our costs and could delay or prevent our ability to commercialize our product candidates, which could adversely impact our business, financial condition and results of operations.

***N91115 and any other potential product candidate based on our GSNOR inhibitor portfolio are based on a novel technology, which may raise development issues we may not anticipate or be able to resolve, and regulatory issues that could delay or prevent approval.***

N91115 and any other potential product candidate based on our GSNOR inhibitor technology platform are based on a novel technology, and there can be no assurance that unforeseen development problems related to our novel technology will not arise in the future and cause significant delays. We may be unable to resolve any such unforeseen problems.

Regulatory approval of novel product candidates can be more expensive and take longer than other, more well-known or extensively studied pharmaceutical product candidates due to our and regulatory agencies' lack of experience with them. There are no other GSNOR inhibitors that we know of in clinical development and none have been approved to date. The novelty of our platform may lengthen the regulatory review process, require us to conduct additional studies or clinical trials, increase our development costs, lead to changes in regulatory positions and interpretations, delay or prevent approval and commercialization of N91115 or any other potential product candidate based on our GSNOR inhibitor technology platform or lead to significant post-approval limitations or restrictions. For example, the FDA could require additional studies or characterization that may be difficult or impossible to perform.

***If we are not able to obtain orphan product status for N91115 and any other potential product candidate for which we seek this status, we will not be able to claim the tax credits for our clinical trials of such product candidate provided by this status or potentially take advantage of other benefits of orphan drug status.***

Regulatory authorities in some jurisdictions, including the United States and the European Union, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan Drug Act, the FDA may designate a product as an orphan drug if it is a drug intended to treat a rare disease or condition, which is generally defined as a patient population of fewer than 200,000 individuals in the United States who have been diagnosed as having the disease or condition at the time of the submission of the request for orphan drug designation. Under Regulation No. (EC) 141/2000 on Orphan Medicinal Products, a medicinal product may be designated as an orphan medicinal product if, among other things, it is intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition affecting not more than five in 10,000 people in the European Union when the application is made. Generally, if a product with an orphan drug designation subsequently receives the first marketing approval for the indication for which it has such designation, the product is entitled to a period of market exclusivity. This exclusivity precludes the EMA or the FDA, as applicable, from approving another marketing application for the same or, in the European Union, a similar drug for the same indication for that time period, unless, among other things, the later product is clinically superior. The applicable period is seven years in the United States and ten years in the European Union following marketing approval. The EU exclusivity period can be reduced to six years if a drug no longer meets the criteria for orphan drug designation, for example if the drug is sufficiently profitable so that market exclusivity is no longer justified.

## [Table of Contents](#)

We own exclusive rights to N91115 in the United States and all other major markets, including U.S. composition of matter patent protection until at least 2031. The potential benefits conferred by orphan status are that it may allow us to benefit from an exclusive marketing period should our patents not be enforceable or subject to challenge and it provides for tax credits for certain clinical trial expenses that can be applied against future revenue, if any.

In the United States, orphan drug exclusivity may be lost if the FDA withdraws or revokes the orphan drug designation as permitted by law, we withdraw the marketing application for the drug, we consent to another's marketing application for approval of the same use or indication as the designated orphan drug, or we fail to assure a sufficient quantity of the drug as required by law. Similarly, in the European Union, exclusivity may be lost if we request the removal of the orphan drug designation or the drug no longer meets any of the criteria that made it eligible for orphan drug status at the outset. Even after an orphan drug is approved, the same or, in the European Union, a similar drug can subsequently be approved for the same condition if the competent regulatory agency concludes that the later drug is clinically superior to the original orphan drug by providing a significant therapeutic advantage over and above that drug. We intend to seek an orphan drug designation for N91115, and we may do so for other potential product candidates as well. We initially applied for orphan drug designation for N91115 at the outset of our clinical development, but we were denied because, according to the FDA, we lacked sufficient data and information to support those designations at the time. Since then, we believe that we have developed, and continue to develop, clinical data that will allow us to resubmit our requests. The FDA may not designate N91115 as an orphan drug when we resubmit. Even if it does, if we lose orphan drug exclusivity or if our competitors obtain orphan drug exclusivity for other rare diseases or conditions we are targeting before we do, we may be delayed in obtaining marketing authorization or we may lose out on the potential benefits of market exclusivity associated with the orphan drug designation.

***We may not be granted a fast track designation by the FDA for N91115 or any other potential product candidate for which we seek such designation. If granted, fast track designation may not actually lead to a faster development, regulatory review or approval.***

If a drug is intended for the treatment of a serious condition and preclinical or clinical data demonstrate the potential to address an unmet medical need, the sponsor may apply for FDA fast track designation. The FDA has broad discretion whether or not to grant this designation, and even if we believe N91115 or any other potential product candidate is eligible for this designation, we cannot be sure that the FDA would decide to grant it. Even if we do receive fast track designation, we may not experience a faster development process, review or approval compared to conventional FDA procedures. The FDA may withdraw fast track designation if it believes that the designation is no longer supported by data from our clinical development program. We initially applied for fast track designation for N91115 at the outset of our clinical development, but we were denied because, according to the FDA, we lacked sufficient data and information to support those designations at the time. Since then, we believe that we have developed, and continue to develop, clinical data that will allow us to resubmit our requests. We may do so for other potential product candidates in the future as well.

***We may not be granted a breakthrough therapy designation by the FDA for N91115 or any other potential product candidate. If granted, a breakthrough therapy designation may not actually lead to a faster development or regulatory review or approval, and it will not increase the likelihood that N91115 or any other potential product candidate will receive regulatory approval.***

We intend to seek a breakthrough therapy designation for N91115, and we may do so for other potential product candidates as well. A breakthrough therapy is defined as a drug that is intended, alone or in combination with one or more other drugs, to treat a serious disease or condition, and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over available therapies on one or more clinically significant endpoints. For product candidates that have been designated as breakthrough therapies, interaction and communication between the FDA and the sponsor of the trial can help to identify the most efficient path for clinical development while minimizing the number of patients placed on ineffective control regimens. Product candidates designated as breakthrough therapies by the FDA are also eligible for accelerated approval.

Designation as a breakthrough therapy is within the discretion of the FDA. Accordingly, even if we believe N91115 or any other potential product candidate meets the criteria for designation as a breakthrough therapy, the FDA may disagree and instead determine not to make such designation. The availability of breakthrough therapy designation was established with the passage of the Food and Drug Administration Safety and Innovation Act of 2012, and while the FDA has released guidance as to the criteria it uses in designating drugs as breakthrough therapies, we cannot be sure

## [Table of Contents](#)

that N91115 or any other potential product candidate will meet the FDA's qualifying criteria for such designation. In any event, the receipt of a breakthrough therapy designation for a product candidate may not result in a faster development process, review or approval compared to drugs considered for approval under conventional FDA procedures and does not assure ultimate approval by the FDA. In addition, even if N91115 or any other potential product candidate qualifies as a breakthrough therapy, the FDA may later decide that the products no longer meet the conditions for such qualification or decide that the time period for FDA review or approval will not be shortened.

### ***Even if we obtain regulatory approval for N91115 or any other potential product candidate, we will still face extensive ongoing regulatory requirements.***

Even if we obtain regulatory approval in the United States, the FDA may still impose significant future restrictions on the indicated uses or marketing of N91115 or any other potential product candidate, or impose ongoing requirements for potentially costly post-approval studies or post-market surveillance, including Phase 4 clinical trials. Should we obtain regulatory approval for N91115 or any other potential product candidate, we will be subject to ongoing FDA requirements governing the labeling, manufacturing, packaging, storage, distribution, safety surveillance, advertising, promotion, record-keeping and reporting of safety and other post-market information. The holder of an approved NDA is obligated to monitor and report adverse events and any failure of a product to meet the specifications in the NDA. The holder of an approved NDA must also submit new or supplemental applications and obtain FDA approval for certain changes to the approved product, product labeling or manufacturing process. Advertising and promotional materials must comply with FDA rules and are subject to FDA review, in addition to other potentially applicable federal and state laws.

In addition, manufacturers of drug products and their facilities are subject to payment of user fees and continual review and periodic inspections by the FDA and other regulatory authorities for compliance with cGMPs, and adherence to commitments made in the NDA. If we, or a regulatory agency, discover previously unknown problems with a product, such as quality issues or adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured, a regulatory agency may impose restrictions relative to that product or the manufacturing facility, including necessitating recall or withdrawal of the product from the market or suspension of manufacturing.

If we fail to comply with applicable ongoing regulatory requirements following approval of a product candidate, a regulatory agency may:

- issue an untitled or warning letter asserting that we are in violation of the law;
- seek an injunction or impose civil or criminal penalties or monetary fines;
- suspend or withdraw regulatory approval;
- suspend any ongoing clinical trials;
- refuse to approve a pending NDA or supplements to an NDA submitted by us; or
- demand recall and/or seize product.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response and could generate negative publicity. The occurrence of any event or penalty described above may inhibit our ability to commercialize N91115 or any other potential product candidate and inhibit our ability to generate revenue.

### ***The approval of N91115 or any other potential product candidate in any given market does not ensure approval in any other market.***

In order to market any product candidate, we must establish and comply with numerous and varying regulatory requirements on a country-by-country basis regarding safety and efficacy. Approval in the United States by the FDA or by a regulatory agency in another country does not ensure approval by the regulatory authorities in other countries or jurisdictions or ensure approval for the same conditions of use. In addition, clinical trials conducted in one country may not be accepted by regulatory authorities in other countries, and regulatory approval in one country does not guarantee regulatory approval in any other country. Approval processes vary among countries and can involve additional product testing and validation and additional administrative review periods. Seeking foreign regulatory approval could result in difficulties and costs for us and require additional preclinical studies or clinical trials which could be costly and time-

## [Table of Contents](#)

consuming. Regulatory requirements can vary widely from country to country and could delay or prevent the introduction of our product candidates in those countries. We do not have any product candidates approved for sale in any jurisdiction, including international markets, and we do not have experience in obtaining regulatory approval in international markets. If we fail to comply with regulatory requirements in international markets or to obtain and maintain required approvals, or if regulatory approvals in international markets are delayed, our target market will be reduced and our ability to realize the full market potential of our product candidates will be unrealized.

### **Risks Related to Manufacturing and Reliance on Third Parties**

***We rely on third party contract manufacturers, including a single source supplier for one of our manufacturing processes, which limits our ability to control the availability of, and manufacturing costs for, N91115 and any other potential product candidate.***

We do not own or operate, and we do not expect to own or operate, facilities for product manufacturing, storage, distribution or testing. We rely, and expect to continue to rely, on third party manufacturers to manufacture and distribute our product candidates for clinical trials. We obtain N91115 to meet our clinical supply needs through a third party manufacturing network. Our supply chain for N91115 includes a sole source supplier for one of our manufacturing processes. A disruption in the clinical supply of N91115 could delay the completion of clinical trials and impact timelines for filing an NDA and comparable foreign regulatory submissions. We cannot be certain that we will be able to establish sufficient sources for manufacturing all of our N91115 supply needs on a timely basis or at all.

We intend to rely on these manufacturers to produce commercial supplies of our product candidates which are approved and commercialized. As a result of our reliance on these third party manufacturers and suppliers, including a sole source supplier of one of our manufacturing processes, we could be subject to significant supply disruptions outside of our control. Our supply chain for sourcing raw materials and manufacturing drug product ready for distribution is a multi-step international endeavor. Third party contract manufacturers, including some in China, supply us with raw materials, and contract manufacturers in the United States and China convert these raw materials into drug substance and convert the drug substance into final dosage form. Establishing and managing this supply chain requires a significant financial commitment and the creation and maintenance of numerous third party contractual relationships. Although we attempt to effectively manage the business relationships with companies in our supply chain, we do not have control over their operations.

Supply disruptions may result from a number of factors, including:

- the inability of a supplier to provide raw materials;
- equipment malfunctions or failures at the facilities of any future collaborators or suppliers;
- high process failure rates;
- inability to meet our product specifications and quality requirements consistently;
- damage to facilities due to natural or man-made disasters;
- changes in regulatory requirements or standards that require modifications to any future collaborators' or suppliers' manufacturing processes;
- action by regulatory authorities or by us that results in the halting or slowdown of production of components or finished product at our facilities or the facilities of future collaborators or suppliers;
- problems that delay or prevent manufacturing technology transfer to another facility, contract manufacturer or future collaborator with subsequent delay or inability to start up a commercial facility;
- a contract manufacturer or supplier going out of business, undergoing a capacity shortfall or otherwise failing to produce product as contractually required;
- employee or contractor misconduct or negligence; and
- shipping delays, losses or interruptions.

## [Table of Contents](#)

Further, if our contract manufacturers are not in compliance with regulatory requirements at any stage, including post approval, we may be fined, forced to remove a product from the market and/or experience other adverse consequences, including delays, which could materially harm our business.

Difficulties or delays in our contract manufacturers' production of drug substances could delay our clinical trials, cause delays in the approval of our product candidates, increase our costs, damage our reputation, interrupt or cease commercial supply and cause us to lose revenue and market share if we are unable to timely meet market demand for any products that are approved for sale.

***Alternative manufacturers may not exist should we need them. If we utilize alternative manufacturers or alternative materials and processes, we may be subject to additional regulatory requirements, manufacturing delays and increased costs.***

Because manufacturing processes are highly complex and are subject to a lengthy regulatory approval process, alternative qualified production capacity and sufficiently trained or qualified personnel may not be available on a timely or cost-effective basis or at all should we require them. If we utilize an alternative manufacturer or alternative component, we may be required to demonstrate comparability of the products and product candidates before releasing them for clinical use and we may not be able to find an alternative supplier. The loss of any of our current suppliers could result in manufacturing delays for the component substitution, and we may need to accept changes in terms or price from our existing supplier in order to avoid such delays.

***We lack experience, and may experience difficulties managing our manufacturing processes.***

We are an early stage company and do not have significant experience managing the complex manufacturing processes necessary for the development of our product candidates. We expect to need managerial, operational and other resources to oversee our manufacturing processes and relationships. Our future financial performance and our ability to commercialize N91115 or any other potential product candidate and to compete effectively will depend, in part, on our ability to manage any future growth, including with respect to our manufacturing processes, effectively. We may not be able to accomplish this, and our failure to accomplish any of them could prevent us from successfully growing our company.

***Our contract manufacturers may develop independently or jointly with us proprietary processes, which could increase our reliance on such manufacturers or increase our costs should we be required to obtain a license to have the drug manufactured by an alternative manufacturer.***

In the course of providing its services, a contract manufacturer may develop process technology related to the manufacture of N91115 or any other potential product candidate that the manufacturer owns, either independently or jointly with us. This would increase our reliance on that manufacturer or require us to obtain a license from that manufacturer in order to have our product candidates manufactured by other suppliers utilizing the same process.

***We rely on third parties to conduct our preclinical studies and some of our clinical trials. These third parties may not perform as contractually required or expected and issues may arise that could delay the completion of clinical trials and impact regulatory approval for N91115.***

We sometimes rely on third parties, such as CROs, medical institutions, academic institutions, clinical investigators and contract laboratories, to conduct our preclinical studies and clinical trials. We are responsible for confirming that our preclinical studies are conducted in accordance with applicable regulations and that each of our clinical trials is conducted in accordance with its general investigational plan and protocol. The FDA requires us to comply with Good Laboratory Practices for conducting and recording the results of our preclinical studies and Good Clinical Practices, or GCP, for conducting, monitoring, recording and reporting the results of clinical trials to assure that data and reported results are accurate and that the clinical trial participants are adequately protected. Our reliance on third parties does not relieve us of these responsibilities. If the third parties conducting our clinical trials do not perform their contractual duties or obligations, do not meet expected deadlines, fail to comply with GCP, do not adhere to our clinical trial protocols or otherwise fail to generate reliable clinical data, we may need to enter into new arrangements with alternative third parties and our clinical trials may be more costly than expected or budgeted, extended, delayed or terminated or may need to be repeated, and we may not be able to obtain regulatory approval for or commercialize the product candidate being tested in such trials.

## [Table of Contents](#)

Our CROs may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical studies or other drug development activities that could harm our competitive position. If our CROs do not successfully carry out their contractual duties or obligations, fail to meet expected deadlines, or if the quality or accuracy of the clinical data they obtain is comprised due to the failure to adhere to our clinical protocols or regulatory requirements, or for any other reasons, our clinical studies may be extended, delayed or terminated, and we may not be able to obtain regulatory approval for, or successfully commercialize our product candidates.

Further, if our contract manufacturers are not in compliance with regulatory requirements at any stage, including post-marketing approval, we may be fined, forced to remove a product from the market and/or experience other adverse consequences, including delays, which could materially harm our business.

***During the course of the product life cycle we will make process changes to scale up manufacturing to commercial quantities or transfer the production to alternate sites or contract manufacturers. Our ability to successfully implement these changes will depend on our ability to demonstrate, to the satisfaction of the FDA and other regulatory agencies, that the product made by the new process or at the new site is comparable to the original product.***

In the event that manufacturing process changes are necessary for the further development of a product candidate, we may not be able to reach agreement with regulatory agencies on the criteria for demonstrating comparability to the original product, which would require us to repeat clinical studies performed with the original product. This could result in lengthy delays in implementing the new process or site and substantial lost revenue as a result of our inability to meet commercial demand. If we reach agreement with regulatory agencies on the criteria for establishing comparability, we may not be able to meet these criteria or may suffer lengthy delays in meeting these criteria. This may result in significant lost revenue due to inability to meet commercial demand with the original product. Furthermore, studies to demonstrate comparability, or any other studies on the new process or site such as validation studies, may uncover findings that result in regulatory agencies delaying or refusing to approve the new process or site.

***We may explore future collaborations with third parties for the development and commercialization of N91115 or another potential product candidate. If we are unable to form such collaborations or they are not successful, we may not be able to complete the development of these product candidates.***

We do not currently have any collaboration agreements for the development of N91115 or any other potential product candidate, but we may seek third party collaborators in the future.

If any such collaborations are established in the future, we may have limited control over the amount and timing of resources that our collaborators dedicate to the development of N91115 and any other potential product candidate. This is also likely to be true in any future collaborations with third parties once any of our product candidates are commercialized. Our ability to generate revenue from these arrangements will depend on our collaborators' abilities to successfully perform the functions assigned to them in these arrangements.

Collaborations involving our product candidates pose the following risks to us:

- collaborators may have significant discretion in determining the efforts and resources that they will apply to these collaborations;
- collaborators may not pursue development and commercialization of N91115 or any other potential product candidate, or may elect not to continue development or commercialization programs based on clinical trial results, changes in the collaborator's strategic focus or available funding, or external factors such as an acquisition that diverts resources or creates competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our product candidates if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours;

## [Table of Contents](#)

- collaborators may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our proprietary information or expose us to potential litigation;
- disputes may arise between the collaborators and us that result in the delay or termination of the research, development or commercialization of N91115 or any other potential product candidate, or that result in costly litigation or arbitration that diverts management attention and resources;
- collaborations may be terminated and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable product candidate;
- collaborators may elect to take over manufacturing rather than retain us as manufacturers and may encounter problems in starting up or gaining approval for their manufacturing operation and so be unable to continue development of N91115 or any other potential product candidate;
- we may be required to undertake the expenditure of substantial operational, financial and managerial resources in connection with any collaboration;
- we may be required to issue equity securities to collaborators that would dilute our existing stockholders' percentage ownership;
- we may be required to assume substantial actual or contingent liabilities;
- collaborators may not commit adequate resources to the marketing and distribution of our product candidates, limiting our potential revenue from N91115 or any other potential product candidate; and
- collaborators may experience financial difficulties.

We face a number of challenges in seeking future collaborations. Collaborations are complex and any potential discussions may not result in a definitive agreement for many reasons. For example, whether we reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration, and the proposed collaborator's evaluation of a number of factors, such as the design or results of our clinical trials, the potential market for our product candidates, the costs and complexities of manufacturing and delivering our product candidates to patients, the potential of competing products or product candidates, the existence of uncertainty with respect to ownership or the coverage of our intellectual property, and industry and market conditions generally. If we determine that additional collaborations for N91115 or any other potential product candidate are necessary and are unable to enter into such collaborations on acceptable terms, we might elect to delay or scale back the development or commercialization of our product candidates in order to preserve our financial resources or to allow us adequate time to develop the required resources and systems and expertise ourselves.

Collaboration agreements may not lead to development or commercialization of product candidates in the most efficient manner, or at all. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators. If a future collaborator of ours were to be involved in a business combination, the continued pursuit and emphasis on our product development or commercialization program could be delayed, diminished or terminated.

### **Risks Relating to Commercialization of Our Product Candidates**

***The market opportunity for N91115 is limited by the age groups and geographic regions in which lumacaftor/ivacaftor is approved and commercialized, and also depends on the longer term success of lumacaftor/ivacaftor.***

N91115 is initially being targeted for a triple therapy of N91115 along with lumacaftor/ivacaftor in CF patients homozygous for F508del. Consequently, N91115 will be administered to patients taking lumacaftor/ivacaftor in the patient populations and in the countries for which this therapy has received approval and has been commercialized. For example, we cannot test N91115 for safety and efficacy in a triple therapy along with lumacaftor/ivacaftor in the pediatric population until lumacaftor/ivacaftor has received approval for that population. This limitation could result in a negative impact on the revenue generated from N91115 and our financial results and stock price would be adversely

## [Table of Contents](#)

affected. Further, if use of another therapy becomes more prevalent than lumacaftor/ivacaftor or makes lumacaftor/ivacaftor obsolete, revenue could be negatively impacted and our financial results and stock price would be adversely affected.

***N91115 or any other potential product candidate in CF may depend, in part, on whether CF therapies other than lumacaftor/ivacaftor are developed and commercially launched, and also depend on the longer term success of these therapies.***

In addition to lumacaftor and ivacaftor, there are other CF therapies currently under development or that may be developed in the future. We may expand the development of N91115 by testing it with additional CF therapies that we deem appropriate if, and as, they become commercially available and we may do the same with any potential product candidate other than N91115. We would, therefore, be dependent on the approval, commercialization and success of these other CF therapies, as well as the patient populations and countries for which such therapies received approval and were commercialized.

In addition, should we administer N91115 or any other potential product candidate with any other CF therapies, we would be subject to numerous additional risks. For example, the other therapies may lead to toxicities that are improperly attributed to our product candidate or the administration of our product candidate with such other therapies may result in toxicities that such other therapies do not produce when used alone. Other therapies with which we may administer our product candidate could be removed from the market and thus be unavailable for testing or commercial use. Testing our product candidate with other therapies may increase the risk of significant adverse effects or test failures. The timing, outcome and cost of developing a product candidate to be used with other therapies is difficult to predict and dependent on a number of factors that are outside our reasonable control. If we experience efficacy, safety or toxicity issues in our clinical trials or with any other therapies, we may not receive approval to market our product candidate, which could prevent us from ever generating revenue or achieving profitability. These limitations could result in a negative impact on our revenue and our financial results and stock price would be adversely affected.

***The commercial success of N91115 and any other potential product candidate will depend upon the acceptance of those products, if approved, by the medical community, including physicians, patients and healthcare payers.***

Even if N91115 or any other potential product candidate is approved for sale, it may nevertheless fail to achieve sufficient market acceptance by physicians, patients, healthcare payers and others in the medical community. If these product candidates, if approved, do not achieve an adequate level of acceptance, we may not generate significant product revenue and we may not become profitable. The degree of market acceptance of N91115 or any other potential product candidate will depend on a number of factors, including:

- demonstration of safety and efficacy in our clinical trials;
- the relative convenience, ease of administration and acceptance by physicians, patients and healthcare payers;
- the prevalence and severity of any adverse effects;
- limitations or warnings contained in the FDA-approved label for the relevant product candidate;
- availability of alternative treatments;
- pricing and cost-effectiveness;
- the effectiveness of our or any future collaborators' sales and marketing strategies; and
- our ability to obtain and maintain payer approval, sufficient third party coverage or reimbursement, which may vary from country to country.

If N91115 or any other potential product candidate is approved but does not achieve an adequate level of acceptance by physicians, patients and healthcare payers, we may not generate sufficient revenue and we may not become or remain profitable.

## [Table of Contents](#)

***We lack marketing experience, and may be unable to establish sales and marketing capabilities or enter into agreements with third parties to sell and market N91115 or any other potential product candidate, and we may not be successful in commercializing N91115 or any other potential product candidate if and when approved.***

We do not have a sales or marketing infrastructure, and we have limited experience in the sales, marketing or distribution of pharmaceutical products. Our commercialization strategy will target key prescribing physicians and advocacy groups, as well as provide patients with support programs, ensure product access and help secure reimbursement. In the future, we may choose to build a focused sales and marketing infrastructure to market or co-promote N91115 or any other potential product candidate if and when approved, which would be expensive and time-consuming. Alternatively, we may elect to outsource these functions to third parties. Either approach carries significant risks. For example, recruiting and training a sales force is expensive and time-consuming and, if done improperly, could delay a product launch and result in limited sales or failure to satisfy complex legal standards. If the commercial launch of a product candidate for which we recruit a sales force and establish marketing capabilities is delayed or does not occur for any reason, we would have prematurely or unnecessarily incurred these commercialization expenses. This may be costly, and our investment would be lost if we cannot retain or reposition our sales and marketing personnel. Outside of North America and Europe, we may seek a partner to commercialize our products.

Factors that may inhibit our efforts to commercialize N91115 or any other potential product candidate on our own include:

- inability to recruit, manage and retain adequate numbers of effective sales and marketing personnel;
- the inability of marketing personnel to develop effective marketing strategies;
- the inability of sales personnel to obtain access to or persuade adequate numbers of physicians to prescribe any future products;
- the lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines; and
- unforeseen costs and expenses associated with creating an independent sales and marketing organization.

We may also not be successful in entering into additional arrangements with third parties to sell and market N91115 or any other potential product candidate or doing so on terms that are favorable to us. Even if we do enter into arrangements with third parties to perform sales, marketing and distribution services, our product revenue or the profitability of N91115 or any other potential product candidate is likely to be lower than if we were to market and sell our products ourselves. In addition, we likely will have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our products effectively. If we do not establish sales and marketing capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our product candidates.

***Competitive products for the treatment of CF may reduce or eliminate the commercial opportunity for N91115 or any other potential product candidate. If our competitors develop technologies or product candidates more rapidly than we do or their technologies, including delivery technologies, are more effective or safer than ours, our ability to develop and successfully commercialize our product may be adversely affected.***

The clinical and commercial landscape for CF is highly competitive and subject to rapid and significant technological change. New data from clinical stage products continue to emerge. It is possible that these data may alter the current standard of care, completely precluding us from further developing N91115 or any other potential product candidate for cystic fibrosis. Further, it is possible that we may initiate a clinical trial or trials for N91115 or any other potential product candidate only to find that data from competing products make it impossible for us to complete enrollment in clinical trials, resulting in our inability to file for marketing approval with regulatory agencies. Even if N91115 or any other potential product candidate is approved, it may have limited sales due to particularly intense competition in the CF market.

We are initially developing N91115 for a triple therapy of N91115 along with lumacaftor/ivacaftor for CF patients. Changes in standard of care or use patterns could make our triple therapy obsolete. If N91115 is approved for administration along with lumacaftor/ivacaftor and use of another therapy becomes more prevalent than

## [Table of Contents](#)

lumacaftor/ivacaftor, sales of N91115 could be negatively impacted and our financial results and stock price would be adversely affected.

Competitive therapeutic treatments include those that are currently in development and any new treatments that enter the market. We believe that a significant number of products are currently under development, and may become commercially available in the future, for the treatment of conditions for which we may try to develop product candidates. Our potential competitors include large pharmaceutical and biotechnology companies, specialty pharmaceutical and generic drug companies, academic institutions, government agencies and research institutions. We are aware of several disease modifying CF therapies in development, including those of Vertex Pharmaceuticals, PTC Therapeutics, Novartis, Pfizer, Bayer, Galapagos, ProQR Therapeutics, Flatley Discovery Labs, Parion Sciences, Reata, Concert, Proteostasis, Calista, Shire, Gilead Sciences, AbbVie, AmpliPhi Biosciences and F. Hoffmann-LaRoche.

Many of our competitors have greater financial, technical, manufacturing, marketing, sales and supply resources, and human resources or experience than us and significantly greater experience in the discovery and development of product candidates, obtaining FDA and other regulatory approvals of products and the commercialization of those products. Accordingly, our competitors may be more successful than we may be in obtaining FDA approval for therapies and achieving widespread market acceptance. Our competitors' products may be more effective, or more effectively marketed and sold, than any product candidate we may commercialize and may render our therapies obsolete or non-competitive before we can recover development and commercialization expenses.

If our lead product candidate, N91115, is approved for the indications we are currently pursuing, it could compete with a range of therapeutic treatments that are in development. For example, although N91115 is being developed for a triple therapy of N91115 along with lumacaftor/ivacaftor, Vertex is developing other combinations that may obviate the applicability of N91115.

If we obtain approval for any product candidate, we will face competition based on many different factors, including the efficacy, safety and tolerability of our products, the ease with which our products can be administered and the extent to which patients accept relatively new routes of administration, the timing and scope of regulatory approvals for these products, the availability and cost of manufacturing, marketing and sales capabilities, price, reimbursement coverage and patent position. Competing products could present superior treatment alternatives, including being more effective, safer, less expensive or marketed and sold more effectively than any products we may develop. Competitive products may make any products we develop obsolete or noncompetitive before we recover the expense of developing and commercializing our product candidates. Such competitors could also recruit our employees, which could negatively impact our level of expertise and our ability to execute our business plan. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a small number of competitors.

We also compete with other clinical stage companies and institutions for clinical trial participants, which could reduce our ability to recruit participants for our clinical trials. Delay in recruiting clinical trial participants could adversely affect our ability to bring a product to market prior to our competitors. Further, research and discoveries by others may result in breakthroughs that render our product candidates obsolete even before they begin to generate any revenue.

In addition, our competitors may obtain patent protection, regulatory exclusivities, or FDA approval and commercialize products more rapidly than we do, which may impact future sales of any of our product candidates that receive marketing approval. If the FDA approves the commercial sale of any of our product candidates, we will also be competing with respect to marketing capabilities and manufacturing efficiency, areas in which we have limited or no experience. We expect competition among products will be based on product efficacy and safety, the timing and scope of regulatory approvals, availability of supply, marketing and sales capabilities, product price, reimbursement coverage by government and private third party payers, regulatory exclusivities and patent position. Our profitability and financial position will suffer if our products receive regulatory approval, but cannot compete effectively in the marketplace.

Furthermore, regulatory authorities' assessment of the data and results required to demonstrate safety and efficacy can change over time and can be affected by many factors, such as the emergence of new information, including on other products, changing policies and agency funding, staffing and leadership. We cannot be sure whether future changes to the regulatory environment will be favorable or unfavorable to our business prospects. For example, average review times at the FDA for marketing approval applications can be affected by a variety of factors, including budget and funding levels and statutory, regulatory and policy changes.

## [Table of Contents](#)

***Payer approval and reimbursement may not be available for N91115 or any other potential product candidate, which could make it difficult for us to sell our product candidates profitably.***

Obtaining formulary approval can be a complex and time-consuming process. We cannot be certain if and when we will obtain formulary approval to allow us to sell N91115 or any other potential product candidate into our target markets. Failure to obtain timely formulary approval and appropriate coverage will limit our commercial success.

Furthermore, market acceptance and sales of N91115, or any other potential product candidate that we develop, will depend in part on the extent to which reimbursement for these products and related treatments will be available from government health administration authorities, private health insurers and other organizations. Government authorities and third party payers, such as private health insurers, managed care organizations and pharmacy benefit management organizations, decide which medications they will pay for, at what tier level and establish reimbursement levels. A primary trend in the United States healthcare industry and elsewhere is cost containment. Government authorities and these third party payers have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. Increasingly, third party payers are requiring that companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. We cannot be sure that reimbursement will be available for any product that we commercialize and, if reimbursement is available, what the level of reimbursement will be. Reimbursement may impact the demand for, or the price of, any product for which we obtain marketing approval. Obtaining reimbursement for our products may be particularly difficult because of the higher prices already associated with CFTR modulators in CF, as well as those often associated with products administered under the supervision of a physician in general. Also, reimbursement amounts may reduce the demand for, or the price of, our products. If reimbursement is not available, or is available only to limited levels, we may not be able to successfully commercialize N91115 or any other potential product candidate that we develop. We will also be required to establish systems and programs that assist patients in determining the reimbursement level and in some instances establishing patient economic support programs to alleviate the economic burden of co-pays and/or co-insurance. These patient support programs are complex, costly and require knowledge and expertise that we currently do not possess.

There have been a number of legislative and regulatory proposals to change the healthcare system in the United States and in some foreign jurisdictions that could affect our ability to sell any future products profitably. These legislative and regulatory changes may negatively impact the reimbursement for any future products, following approval. The availability of generic treatments may also substantially reduce the likelihood of reimbursement for N91115 or any other potential product candidate. The application of user fees to generic drug products will likely expedite the approval of additional generic drug treatments. We expect to experience pricing pressures in connection with the sale of N91115 and any other potential product candidate that we develop, due to the trend toward managed healthcare, the increasing influence of managed care and additional legislative changes.

In addition, there may be significant delays in obtaining reimbursement for approved products, and coverage may be more limited than the purposes for which the product is approved by the FDA or regulatory authorities in other countries. Moreover, eligibility for reimbursement does not imply that any product will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. Payment rates may vary according to the use of the product and the clinical setting in which it is used, may be based on payments allowed for lower cost products that are already reimbursed, and may be incorporated into existing payments for other services. Net prices for products may be reduced by mandatory discounts or rebates required by government healthcare programs or private payers and by any future relaxation of laws that presently restrict imports of products from countries where they may be sold at lower prices than in the United States. Third party payers often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement policies.

Our inability to promptly obtain coverage and profitable payment rates from both government funded and private payers for any of N91115 and any other potential product candidate could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize products and our overall financial condition.

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

The success of our business depends primarily on our ability to identify, develop and commercialize one or more product candidates. Because we have limited financial and managerial resources, we focus on research programs and product candidates for the indications that take advantage of our team's deep expertise and knowledge and that we believe are the most scientifically and commercially promising. We are initially developing N91115 for a triple therapy

## [Table of Contents](#)

of N91115 along with lumacaftor/ivacaftor for CF patients. Our resource allocation decisions may cause us to fail to capitalize on viable scientific or commercial products or profitable market opportunities. In addition, we may spend valuable time and managerial and financial resources on research programs and product candidates for specific indications that ultimately do not yield any scientifically or commercially viable products. If we do not accurately evaluate the scientific and commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in situations where it would have been more advantageous for us to retain sole rights to development and commercialization or miss out on the commercial opportunity entirely.

### **Risks Relating to Regulation of Our Industry**

***The pharmaceutical industry is subject to significant regulation and oversight in the United States, in addition to approval of products for sale and marketing.***

In addition to FDA restrictions on marketing of pharmaceutical products, several other types of state and federal laws have been applied to restrict certain marketing practices in the pharmaceutical industry in recent years. These laws include anti-kickback statutes and false claims statutes.

The federal healthcare program anti-kickback statute prohibits, among other things, knowingly and willfully soliciting, receiving, offering, or paying anything of value, directly or indirectly, in return for the referral of any services or acquisition of any good reimbursable under Medicare, Medicaid or another federal healthcare program. This statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on one hand and prescribers, purchasers and formulary managers on the other. Although there are a number of statutory exemptions and regulatory safe harbors protecting certain common activities from prosecution, the exemptions and safe harbors are drawn narrowly, and practices that involve remuneration intended to induce prescribing, purchases or recommendations that implicate federal healthcare programs may be subject to scrutiny if they do not qualify for an exemption or safe harbor. To qualify for a safe harbor, the activity must fit squarely within the safe harbor. Arrangements that do not meet a safe harbor are not necessarily illegal but will be evaluated in a case by case basis. Our practices may not in all cases meet all of the criteria for safe harbor protection from anti-kickback liability.

Federal false claims laws prohibit any person from knowingly presenting, or causing to be presented, a false claim for payment to the federal government, or knowingly making, or causing to be made, a false statement to get a false claim paid. Recently, several pharmaceutical and other healthcare companies have been prosecuted under these laws for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. Other companies have been prosecuted for causing false claims to be submitted because of marketing of the product for unapproved, or off-label, and thus non-reimbursable, uses. The majority of states also have statutes or regulations similar to the federal anti-kickback law and false claims laws, which apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payer. Sanctions under these federal and state laws may include civil monetary penalties, exclusion of a manufacturer's products from reimbursement under government programs, criminal fines, imprisonment, and other sanctions. Because of the breadth of these laws and the narrowness of the safe harbors, it is possible that some of our business activities could be subject to challenge under one or more of these laws, which could have a material adverse effect on our business, financial condition and results of operations.

***We may be subject, directly or indirectly, to federal and state healthcare fraud and abuse laws and health information privacy and security laws. If we are unable to comply, or have not fully complied, with such laws, we could face substantial penalties.***

If we obtain FDA approval for any of our product candidates and begin commercializing those products in the United States, our operations may be directly, or indirectly through our customers, subject to various federal and state fraud and abuse laws, including, without limitation, the federal anti-kickback statute. These laws may impact, among other things, our proposed sales, marketing and education programs. In addition, we may be subject to patient privacy regulation by both the federal government and the states in which we conduct our business. The laws that may affect our ability to operate include:

- the federal healthcare anti-kickback statute which prohibits, among other things, persons or entities from knowingly and willfully soliciting, offering, receiving or paying any remuneration (including any kickback, bribe, or certain rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce or reward

## [Table of Contents](#)

either the referral of an individual for, or the purchase, lease, order or recommendation of, any good, facility, item or service, for which payment may be made, in whole or in part, under federal healthcare programs such as Medicare and Medicaid;

- the federal false claims laws and civil monetary penalties, including civil whistleblower or qui tam actions, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, to the federal government, claims for payment or approval that are false or fraudulent or from knowingly making a false statement to improperly avoid, decrease or conceal an obligation to pay money to the federal government;
- the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA) which, among other things, imposes criminal liability for knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or to obtain, by means of false or fraudulent pretenses, representations, or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payer (e.g., public or private) and knowingly or willfully falsifying, concealing, or covering up by any trick or device a material fact or making any materially false statement using or making any false or fraudulent document, in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare matters;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act (HITECH) and its implementing regulations, and as amended again by the final HIPAA omnibus rule, Modifications to the HIPAA Privacy, Security, Enforcement, and Breach Notification Rules Under HITECH and the Genetic Information Nondiscrimination Act; Other Modifications to HIPAA, published in January 2013, which imposes certain obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information without appropriate authorization by entities subject to the rule, such as health plans, clearinghouses and healthcare providers;
- the federal Food, Drug and Cosmetic Act, or FDCA, which prohibits, among other things, the adulteration or misbranding of drugs and medical devices;
- the federal Physician Payments Sunshine Act, enacted as part of the Patient Protection and Affordable Care Act and Health Care and Education Reconciliation Act of 2010 (collectively, the Health Care Reform Law), and its implementing regulations, which requires manufacturers of drugs, devices, biologicals and medical supplies to report to the Centers for Medicare and Medicaid Services information related to payments and other transfers of value made to physicians and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members; and
- analogous state laws and regulations, including: state anti-kickback and false claims laws, which may apply to our business practices, including but not limited to, research, distribution, sales and marketing arrangements and claims involving healthcare items or services reimbursed by state governmental and non-governmental third party payers, including private insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government; and state laws and regulations that require manufacturers to file reports relating to pricing and marketing information, which requires tracking gifts and other remuneration and items of value provided to healthcare professionals and entities.

If our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

## [Table of Contents](#)

### ***Our employees may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements, which could have a material adverse effect on our business.***

We are exposed to the risk of employee fraud or other misconduct. Misconduct by employees could include intentional failures to comply with FDA regulations, provide accurate information to the FDA, comply with manufacturing standards we have established, comply with federal and state healthcare fraud and abuse laws and regulations, report financial information or data accurately or disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Employee misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. We have adopted a Code of Business Conduct and Ethics, but it is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent misconduct may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business and results of operations, including the imposition of significant fines or other sanctions.

### ***Healthcare reform measures could adversely affect our business.***

In the United States and foreign jurisdictions, there have been a number of legislative and regulatory changes to the healthcare system that could affect our future results of operations. In particular, there have been and continue to be a number of initiatives at the United States federal and state levels that seek to reduce healthcare costs. Most recently, in March 2010, the Patient Protection and Affordable Health Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, or collectively the ACA, was enacted, which includes measures to significantly change the way healthcare is financed by both governmental and private insurers. Among the provisions of the ACA of greatest importance to the pharmaceutical and biotechnology industry are the following:

- an annual, nondeductible fee on any entity that manufactures or imports certain branded prescription drugs and biologic agents, apportioned among these entities according to their market share in certain government healthcare programs;
- new requirements to report certain financial arrangements with physicians and others, including reporting any “transfer of value” made or distributed to prescribers and other healthcare providers and reporting any investment interests held by physicians and their immediate family members;
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research;
- creation of the Independent Payment Advisory Board which, beginning in 2014, has authority to recommend certain changes to the Medicare program that could result in reduced payments for prescription drugs and those recommendations could have the effect of law even if Congress does not act on the recommendations; and
- establishment of a Center for Medicare Innovation at the Centers for Medicare & Medicaid Services to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending.

At this time, the full effect that the ACA would have on our business remains unclear.

Individual states have become increasingly aggressive in passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access, and marketing cost disclosure and transparency measures, and designed to encourage importation from other countries and bulk purchasing. Legally mandated price controls on payment amounts by third party payers or other restrictions could harm our business, results of operations, financial condition and prospects. In addition, regional healthcare authorities and individual hospitals are increasingly using bidding procedures to determine what pharmaceutical products and which suppliers will be included in their prescription drug and other

## [Table of Contents](#)

healthcare programs. This could reduce ultimate demand for our products or put pressure on our product pricing, which could negatively affect our business, results of operations, financial condition and prospects.

In addition, given recent federal and state government initiatives directed at lowering the total cost of healthcare, Congress and state legislatures will likely continue to focus on healthcare reform, the cost of prescription drugs and biologics and the reform of the Medicare and Medicaid programs. While we cannot predict the full outcome of any such legislation, it may result in decreased reimbursement for drugs and biologics, which may further exacerbate industry-wide pressure to reduce prescription drug prices. This could harm our ability to generate revenue. Increases in importation or re-importation of pharmaceutical products from foreign countries into the United States could put competitive pressure on our ability to profitably price our products, which, in turn, could adversely affect our business, results of operations, financial condition and prospects. We might elect not to seek approval for or market our products in foreign jurisdictions in order to minimize the risk of re-importation, which could also reduce the revenue we generate from our product sales. It is also possible that other legislative proposals having similar effects will be adopted.

### **Risks Relating to Protecting Our Intellectual Property**

***It is difficult and expensive to protect our intellectual property rights and we cannot ensure that they will prevent third parties from competing against us.***

Our success will depend, in part, on our ability to obtain and maintain intellectual property rights, both in the United States and other countries, successfully defend this intellectual property against third party challenges and successfully enforce this intellectual property to prevent third party infringement. We rely upon a combination of patents, trade secret protection and confidentiality agreements.

Our ability to protect any of our product candidates and technologies from unauthorized or infringing use by third parties depends in substantial part on our ability to obtain and maintain valid and enforceable patents in both the United States and other countries. Patent matters in the biotechnology and pharmaceutical industries can be highly uncertain and involve complex legal and factual questions. Changes in either the patent laws, implementing regulations or in interpretations of patent laws may diminish the value of our patent rights.

There can be no assurance that we will discover or develop patentable products or processes or that patents will issue from any pending patent applications owned or licensed by us or any patent applications we may own or license in the future, or if issued, that the breadth of such patent coverage will be sufficient. We cannot guarantee that claims of issued patents owned or licensed to us, either now or in the future, are or will be held valid or enforceable by the courts or, even if unchallenged, will provide us with exclusivity or commercial value for our product candidates or technology or any significant protection against competitive products or prevent others from designing around our claims. Further, if we encounter delays in regulatory approvals, the period of time during which we could market our product candidates under patent protection could be reduced. Our patent rights also depend on our compliance with technology and patent licenses upon which our patent rights are based and upon the validity of assignments of patent rights from consultants and other inventors that were, or are, not employed by us.

Patent applications are generally maintained in confidence until publication. In the United States, for example, patent applications are maintained in secrecy for up to 18 months after their filing. Similarly, publication of discoveries in scientific or patent literature often lag behind actual discoveries. Consequently, we cannot be certain that we were the first to invent, or the first to file patent applications on our product candidates. There is also no assurance that all of the potentially relevant prior art relating to our patents and patent applications has been found, which could be used by a third party to challenge validity of our patents or prevent a patent from issuing from a pending patent application.

In addition, even if patents do successfully issue, third parties may challenge any patent we own or license through adversarial proceedings in the issuing offices, which could result in the invalidation or unenforceability of some or all of the relevant patent claims. If a third party asserts a substantial new question of patentability against any claim of a United States patent we own or license, the USPTO may grant a request for reexamination, which may result in a loss of scope of some claims or a loss of the entire patent. The adoption of the America Invents Act has established additional opportunities for third parties to invalidate United States patent claims, including *inter partes* review and post-grant review, on the basis of a lower legal standards than reexamination and additional grounds.

We will incur significant ongoing expenses in maintaining our patent portfolio. Should we lack the funds to maintain our patent portfolio or to enforce our rights against infringers, we could be adversely impacted. Even if claims

## [Table of Contents](#)

of infringement are without merit, any such action could divert the time and attention of management and impair our ability to access additional capital and/or cost us significant funds to defend.

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

Filing, prosecuting and defending patents on all of our product candidates throughout the world would be prohibitively expensive. Competitors may manufacture and sell our potential products in those foreign countries where we have not filed for patent protection or where patent protection may be unavailable, not obtainable or ultimately not enforceable. Our competitors might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets and, further, may be able to export otherwise infringing products to territories where we have patent protection but where enforcement is not as strong as that in the United States. These products may compete with our products in jurisdictions where we do not have any issued patents and our patent claims or other intellectual property rights may not be effective or sufficient to prevent them from so competing.

Our patent portfolio includes patents and patent applications in countries outside of the United States, including Europe, Canada, Japan and Australia. The scope of coverage provided by these patents varies from country to country. Moreover, the laws of some foreign jurisdictions do not provide intellectual property rights to the same extent as in the United States and many companies have encountered significant difficulties in obtaining such rights in foreign jurisdictions. Outside of the United States, patents we own or license may become subject to patent opposition in the European Patent Office or similar proceedings, which may result in loss of scope of some claims or loss of the entire patent. Participation in adversarial proceedings is very complex, expensive, and may divert our management's attention from our core business and may result in unfavorable outcomes that could adversely affect our ability to prevent third parties from competing with us.

Many companies have also encountered significant problems in protecting and defending intellectual property rights in certain foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to pharmaceuticals, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights generally. For example, an April 2014 report from the Office of the United States Trade Representative identified a number of countries, including India and China, where challenges to the procurement and enforcement of patent rights have been reported. Several countries, including India and China, have been listed in the report every year since 1989. If we encounter difficulties in protecting our intellectual property rights in foreign jurisdictions, our business prospects could be substantially harmed. Proceedings to enforce our patent rights in certain foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business.

### ***Intellectual property rights do not necessarily address all potential threats to our competitive advantage.***

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations, and may not adequately protect our business, or permit us to maintain our competitive advantage. The following examples are illustrative:

- Others may be able to make compounds that are similar to our product candidates but that are not covered by the claims of the patents that we own or have exclusively licensed;
- We or our licensors or strategic collaborators might not have been the first to make the inventions covered by the issued patent or pending patent application that we own or have exclusively licensed;
- We or our licensors or strategic collaborators might not have been the first to file patent applications covering certain of our inventions;
- Others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;
- It is possible that our pending patent applications will not lead to issued patents;
- Issued patents that we own or have exclusively licensed may not provide us with any competitive advantages, or may be held invalid or unenforceable, as a result of legal challenges by our competitors;

## [Table of Contents](#)

- Our competitors might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;
- We may not develop additional proprietary technologies that are patentable; and
- The patents of others may have an adverse effect on our business.

Should any of these events occur, they could significantly harm our business, results of operations and prospects.

### ***Recent patent reform legislation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents.***

On September 16, 2011, the Leahy-Smith America Invents Act, or the Leahy-Smith Act, was signed into law. The Leahy-Smith Act includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications will be prosecuted and may also affect patent litigation. Accordingly, it is not clear what, if any, impact the Leahy-Smith Act will have on the operation of our business, our current and pending patent portfolio and future intellectual property strategy. However, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business and financial condition.

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

Periodic maintenance fees on any issued patent are due to be paid to the U.S. Patent and Trademark Office, or USPTO, the European Patent Office, or EPO, and other foreign patent agencies in several stages over the lifetime of the patent. The USPTO and various foreign national or international patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of patent rights include, but are not limited to, failure to timely file national and regional stage patent applications based on our international patent application, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we or our licensors fail to maintain the patents and patent applications covering our product candidates, our competitors might be able to enter the market, which would have a material adverse effect on our business.

### ***Some of our intellectual property is licensed to us by a third party. If we fail to comply with our obligations in the agreement under which we license intellectual property rights from that third party, or otherwise experience disruptions to our business relationships with our licensor, we could lose license rights that are important to our business.***

We have a license under certain patents and/or know-how to develop and commercialize certain of our potential product candidates. Our existing license agreements impose, and we expect that any future license agreements will impose on us, various obligations. If we fail to comply with our obligations under these agreements, the licensor may have the right to terminate the license. If any of our licenses are terminated and we are not able to negotiate other agreements for use of the intellectual property protections underlying these product candidates, we would not be able to manufacture and market these potential products, which would adversely affect our business prospects and financial condition.

### ***The patent protection and patent prosecution for some of our potential product candidates is dependent or may be dependent in the future on third parties.***

While we normally seek and gain the right to fully prosecute the patents relating to our potential product candidates, there may be times when platform technology patents or product-specific patents that relate to our potential product candidates are controlled by our licensors. In addition, our licensors and/or licensees may have back-up rights to prosecute patent applications in the event that we do not do so or choose not to do so, and our licensees may have the

## [Table of Contents](#)

right to assume patent prosecution rights after certain milestones are reached. If any of our licensing partners fail to appropriately prosecute and maintain patent protection for patents covering any of our potential product candidates, our ability to develop and commercialize those potential product candidates may be adversely affected and we may not be able to prevent competitors from making, using and selling competing products.

***We may be subject to litigation alleging that we are infringing the intellectual property rights of third parties or litigation or other adversarial proceedings seeking to invalidate our patents or other proprietary rights, and we may need to resort to litigation to protect or enforce our patents or other proprietary rights, all of which will be costly to defend or pursue and uncertain in its outcome and may prevent or delay development and commercialization efforts or otherwise affect our business.***

Our success also will depend, in part, on our refraining from infringing patents or otherwise violating intellectual property owned or controlled by others. Numerous patents and pending applications are owned by third parties in the fields in which we are or may develop product candidates, both in the United States and elsewhere. It is difficult for industry participants, including us, to identify all third party patent rights that may be relevant to N91115 or any other potential product candidates because patent searching is imperfect due to differences in terminology among patents, incomplete databases and the difficulty in assessing the meaning of patent claims. Moreover, because some patent applications are maintained in secrecy until the patents publish, we cannot be certain that third parties have not filed patent applications that cover our potential product candidates and technologies. Pharmaceutical companies, biotechnology companies, universities, research institutions and others may have filed patent applications or have received, or may obtain, issued patents in the United States or elsewhere relating to aspects of our technology, including our potential product candidates, processes for manufacture or methods of use, including combination therapy. It is uncertain whether the issuance of any third party patents will require us to alter our potential product candidates or processes, obtain licenses, or cease certain activities.

If patents issued to third parties contain blocking, dominating or conflicting claims and such claims are ultimately determined to be valid, we may be required to obtain licenses to these patents or to develop or obtain alternative non-infringing technology and cease practicing those activities, including potentially manufacturing or selling any products deemed to infringe those patents. If any licenses are required, there can be no assurance that we will be able to obtain any such licenses on commercially favorable terms, if at all, and if these licenses are not obtained, we might be prevented from pursuing the development and commercialization of certain of our potential product candidates. Even if a license can be obtained on acceptable terms, the rights may be non-exclusive, which could give our competitors access to the same technology or intellectual property rights licensed to us. Our failure to obtain a license to any technology that we may require to commercialize our potential product candidates on favorable terms may have a material adverse impact on our business, financial condition and results of operations.

We may be exposed to, or threatened with, future litigation by third parties having patent or other intellectual property rights alleging that our technologies, including our potential product candidates, processes for manufacture or methods of use, including combination therapy, or other proprietary technologies infringe their intellectual property rights. Parties making claims against us may obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize one or more of our potential product candidates. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. In the event of a successful infringement or other intellectual property claim against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, obtain one or more licenses from third parties, pay royalties or redesign our affected products, which may be impossible or require substantial time and monetary expenditure. We cannot predict whether any such license would be available at all or whether it would be available on commercially reasonable terms. Parties making successful claims against us may obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize one or more of our potential product candidates. We cannot provide any assurances that third party patents do not exist which might be enforced against our products or potential product candidates, resulting in either an injunction prohibiting our sales, or, with respect to our sales, an obligation on our part to pay royalties and/or other forms of compensation to third parties.

Litigation, which could result in substantial costs to us (even if determined in our favor), may also be necessary to enforce any patents issued or licensed to us. The cost to us in initiating any litigation or other proceeding relating to patent or other proprietary rights, even if resolved in our favor, could be substantial, and litigation would divert our management's attention. Some of our competitors may be able to sustain the costs of complex patent litigation more

## [Table of Contents](#)

effectively than we can because they have substantially greater resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could delay our research and development efforts and limit our ability to continue our operations.

If we were to initiate legal proceedings against a third party to enforce a patent covering one of our potential product candidates or our technology, the defendant could counterclaim that our patent is invalid or unenforceable. In patent litigation in the United States and in most European countries, defendant counterclaims alleging invalidity or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, for example, lack of novelty, obviousness or non-enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. The outcome following legal assertions of invalidity and unenforceability during patent litigation is unpredictable. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art, of which we and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of the patent protection on one or more of our products or certain aspects of our platform technology. Such a loss of patent protection could have a material adverse impact on our business. Patents and other intellectual property rights also will not protect our technology if competitors design around our protected technology without legally infringing our patents or other intellectual property rights.

In addition, if a third party has filed patent applications in the United States prior to March 16, 2013 that claim technology also claimed by us, we may have to participate in interference proceedings in the USPTO to determine priority of invention. Such proceedings can be lengthy, are costly to defend and involve complex questions of law and fact the outcomes of which are difficult to predict. Moreover, we may have to participate in adversarial proceedings in the USPTO or foreign patent offices. An adverse decision relating to our patent rights could require us to cease using such technology, any of which could have a material adverse effect on our business, financial condition and results of operations. If initiated, adversarial proceedings could result in substantial costs to us, even if the eventual outcome is favorable to us.

***If we are not able to adequately prevent disclosure of trade secrets and other proprietary information, the value of our technology and products could be significantly diminished.***

We also rely on trade secrets to protect technology, especially where patent protection is not believed to be appropriate or obtainable or where patents have not issued. We attempt to protect our proprietary technology and processes, in part, with confidentiality agreements and assignment of invention agreements with our employees and confidentiality agreements with our consultants and certain contractors. There can be no assurance that these agreements will not be breached, that we would have adequate remedies for any breach, or that our trade secrets will not otherwise become known or be independently discovered by competitors. We may fail in certain circumstances to obtain the necessary confidentiality agreements, or their scope or term may not be sufficiently broad to protect our interests.

If our trade secrets or other intellectual property become known to our competitors, it could result in a material adverse effect on our business, financial condition and results of operations. To the extent that we or our consultants or research collaborators use intellectual property owned by others in work for us, disputes may also arise as to the rights to related or resulting know-how and inventions.

***We may be subject to claims that we or our employees or consultants have wrongfully used or disclosed alleged trade secrets of our employees' or consultants' former employers or their clients. These claims may be costly to defend and if we do not successfully do so, we may be required to pay monetary damages and may lose valuable intellectual property rights or personnel.***

Many of our employees were previously employed at universities or biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although no claims against us are currently pending, we may be subject to claims that these employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. If we fail in defending such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. A loss of key research personnel or their work product could compromise our ability to commercialize, or prevent us from commercializing, our product candidates, which could severely harm our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

## **Risks Relating to Our Business Operations and Industry**

### ***Our future success depends on our ability to retain executives and to attract, retain and motivate key personnel.***

Because of the specialized scientific nature of our business and the unique properties of our GSNOR inhibitor platform, our success is highly dependent upon our ability to attract and retain qualified scientific and technical personnel, consultants and advisors. We are dependent on the principal members of our management staff, particularly Mr. Jon Congleton and Mr. R. Michael Carruthers, to help us achieve our business objectives. We are also dependent on the principal members of our scientific staff, particularly Ms. Janice Troha and Drs. Steven Shoemaker and Sherif Gabriel, who have extensive knowledge of, and experience developing, GSNOR inhibitors. The loss of their services might significantly delay or prevent the achievement of our research, development and business objectives.

We will need to recruit a significant number of additional personnel in order to achieve our operating goals. In order to pursue our product development and marketing and sales plans, we will need to hire additional qualified scientific personnel to perform research and development, as well as personnel with expertise in clinical testing, government regulation, manufacturing, marketing and sales, which may strain our existing managerial, operational, regulatory compliance, financial and other resources. We also rely on consultants and advisors to assist in formulating our research and development strategy and adhering to complex regulatory requirements. We face competition for qualified individuals from numerous pharmaceutical and biotechnology companies, universities and other research institutions. There can be no assurance that we will be able to attract and retain such individuals on acceptable terms, if at all. Additionally, our facilities are located in Colorado, which may make attracting and retaining qualified scientific and technical personnel from outside of Colorado difficult. The failure to attract and retain qualified personnel, consultants and advisors could delay or prevent our ability to commercialize our N91115 and other potential product candidate based on our GSNOR inhibitor portfolio, which could have a material adverse effect on our business, financial condition and results of operations.

### ***We will need to grow the size of our organization, and we may experience difficulties managing this growth.***

We are an early stage company with 26 full-time employees and one part-time employee as of November 3, 2015. As our development and commercialization plans and strategies develop, we expect to need additional research and development, managerial, operational, sales, marketing, financial and other resources. Future growth would impose significant added responsibilities on members of management, including:

- managing our clinical trials effectively;
- preparing for and executing on the commercial launch of N91115 or any other potential product candidate;
- identifying, recruiting, maintaining, motivating and integrating additional employees;
- managing our internal development efforts effectively while complying with our contractual obligations to other third parties;
- improving our managerial, development, operational and finance systems; and
- developing our compliance infrastructure and processes to ensure compliance with complex regulations and industry standards regarding us and our potential product candidates.

As our operations expand, we expect that we will need to manage additional relationships with various strategic partners, suppliers and other third parties. Our future financial performance and our ability to commercialize our product candidates and to compete effectively will depend, in part, on our ability to manage any future growth effectively. To that end, we must be able to manage our development efforts and clinical studies and trials effectively and hire, train and integrate additional management, administrative and sales and marketing personnel. We may not be able to accomplish these tasks, and our failure to accomplish any of them could prevent us from successfully growing our company.

### ***We are exposed to potential product liability or similar claims, and insurance against these claims may not be available to us at a reasonable rate in the future or at all.***

Our business exposes us to potential liability risks that are inherent in the testing, manufacturing and marketing of human therapeutic products. Clinical trials involve the testing of product candidates on human subjects or volunteers under a research plan, and carry a risk of liability for personal injury or death to patients due to unforeseen adverse side

## [Table of Contents](#)

effects, improper administration of the product candidate, or other factors. Many of these patients are already seriously ill and are therefore particularly vulnerable to further illness or death.

We currently carry clinical trial liability insurance in the amount of \$10.0 million in the aggregate, but there can be no assurance that we will be able to maintain such insurance or that the amount of such insurance will be adequate to cover claims. We could be materially and adversely affected if we were required to pay damages or incur defense costs in connection with a claim outside the scope of indemnity or insurance coverage, if the indemnity is not performed or enforced in accordance with its terms, or if our liability exceeds the amount of applicable insurance. In addition, there can be no assurance that insurance will continue to be available on terms acceptable to us, if at all, or that if obtained, the insurance coverage will be sufficient to cover any potential claims or liabilities. Similar risks would exist upon the commercialization or marketing of any products by us or our collaborators.

Regardless of their merit or eventual outcome, product liability claims may result in:

- decreased demand for our product;
- injury to our reputation and significant negative media attention;
- withdrawal of clinical trial participants;
- costs of litigation;
- distraction of management; and
- substantial monetary awards to plaintiffs.

Should any of these events occur, it could have a material adverse effect on our business and financial condition.

***We may become involved in securities class action litigation that could divert management's attention and adversely affect our business and could subject us to significant liabilities.***

The stock markets have from time to time experienced significant price and volume fluctuations that have affected the market prices for the common stock of pharmaceutical companies. These broad market fluctuations as well as a broad range of other factors, including the realization of any of the risks described in this "Risk Factors" section of this quarterly report, may cause the market price of our common stock to decline. In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because biotechnology and pharmaceutical companies generally experience significant stock price volatility. We may become involved in this type of litigation in the future. Litigation often is expensive and diverts management's attention and resources, which could adversely affect our business. Any adverse determination in any such litigation or any amounts paid to settle any such actual or threatened litigation could require that we make significant payments.

### **Risks Related to Ownership of Our Common Stock**

***Our stock price is likely to be volatile and an active, liquid and orderly trading market may not develop for our common stock. As a result, stockholders may not be able to resell shares at or above their purchase price.***

Prior to our initial public offering, which was completed in June 2015, there was no public market for shares of our common stock. Although our common stock is listed on The NASDAQ Global Market, an active trading market for our common stock may not develop or, if it develops, may not be sustained. The lack of an active market may impair the ability of our stockholders to sell their shares at the time they wish to sell them or at a price that they consider reasonable, which may reduce the fair market value of their shares. Further, an inactive market may also impair our ability to raise capital by selling our common stock and may impair our ability to enter into strategic partnership or acquire future products or licenses by using our common stock as consideration.

The market price of our common stock may fluctuate substantially as a result of many factors, some of which are beyond our control. For example, shares of our common stock have traded as high as \$20.43 and as low as \$7.59 in the four month period following our IPO date. These fluctuations could cause an investor to lose all or part of the value

## [Table of Contents](#)

of his, her or its investment in our common stock. Factors that could cause fluctuations in the market price of our common stock include the following:

- the development status of N91115 or any other potential product candidate and when they receive regulatory approval;
- the results of our preclinical studies and clinical trials;
- performance of third parties on whom we rely to manufacture our products, product components and product candidates, including their ability to comply with regulatory requirements;
- the success of, and fluctuation in, the revenue generated from our product candidates, if approved;
- our execution of our sales and marketing, manufacturing and other aspects of our business plan;
- results of operations that vary from those of our competitors and the expectations of securities analysts and investors;
- changes in expectations as to our future financial performance, including financial estimates by securities analysts and investors;
- our announcement of significant contracts, acquisitions, or capital commitments;
- announcements by our competitors of competing products or other initiatives;
- announcements by third parties of significant claims or proceedings against us;
- regulatory and reimbursement developments in the United States and abroad;
- future sales of our common stock;
- additions or departures of key personnel; and
- general domestic and international economic conditions unrelated to our performance.

In addition, the stock market in general has experienced significant price and volume fluctuations that have often been unrelated or disproportionate to operating performance of individual companies. These broad market factors may adversely affect the market price of our common stock, regardless of our operating performance. In the past, following periods of volatility in the market price of a company's securities, securities class action litigation has often been instituted. A securities class action suit against us could result in significant liabilities and, regardless of the outcome, could result in substantial costs and the diversion of our management's attention and resources.

***Our principal stockholders will have a controlling influence over our business affairs and may make business decisions with which stockholders disagree and which may adversely affect the value of their investment.***

Our principal stockholders, which consist of entities affiliated with the Estate of Arnold H. Snider, III, Deerfield Management Company, L.P., RA Capital Healthcare Fund, LP, Wellington Management Company LLP and Tiger Partners, L.P., and certain of their affiliates, will beneficially own or control, directly or indirectly, approximately 54%. As a result, if some of these persons or entities act together, they will have the ability to exercise significant influence over matters submitted to our stockholders for approval, including the election and removal of directors, amendments to our certificate of incorporation and bylaws and the approval of any business combination. These actions may be taken even if they are opposed by other stockholders. This concentration of ownership may also have the effect of delaying or preventing a change of control of our company or discouraging others from making tender offers for our shares, which could prevent our stockholders from receiving a premium for their shares. Some of these persons or entities who make up our principal stockholders may have interests different from other stockholders.

***Future sales, or the perception of future sales, of a substantial amount of our common shares could depress the trading price of our common stock.***

If we or our stockholders sell substantial amounts of our shares of common stock in the public market or if the market perceives that these sales could occur, the market price of shares of our common stock could decline. These sales

## [Table of Contents](#)

may make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem appropriate, or to use equity as consideration for future acquisitions.

As of November 3, 2015, we have 200,000,000 shares of common stock authorized and 15,451,821 shares of common stock outstanding. Of these shares, the 6,325,000 shares sold during our IPO are freely tradable (other than any shares sold to existing investors who are subject to lock-up agreements). We, our executive officers and directors, and holders of substantially all of our capital stock outstanding have entered into agreements with the underwriters in our initial public offering not to sell or otherwise dispose of shares of our common stock for a period of at least 180 days following completion of our initial public offering in June 2015, with certain exceptions. Immediately upon the expiration of this lock-up period, and without giving effect to the purchase of shares by entities affiliated with certain of our existing stockholders approximately 2.8 million shares will be freely tradable pursuant to Rule 144 under the Securities Act by non-affiliates and another approximately 6.9 million shares will be eligible for resale pursuant to Rule 144 under the Securities Act, subject to the volume, manner of sale, holding period and other limitations of Rule 144.

***The JOBS Act will allow us to postpone the date by which we must comply with certain laws and regulations intended to protect investors and to reduce the amount of information we provide in our reports filed with the SEC. We cannot be certain if this reduced disclosure will make our common stock less attractive to investors.***

The JOBS Act is intended to reduce the regulatory burden on “emerging growth companies.” As defined in the JOBS Act, we qualify as an “emerging growth company” and could remain an “emerging growth company” until as late as December 31, 2020. For so long as we are an “emerging growth company,” we will, among other things:

- not be required to comply with the auditor attestation requirements of Section 404(b) of Sarbanes-Oxley;
- not be required to hold a nonbinding advisory stockholder vote on executive compensation pursuant to Section 14A(a) of the Exchange Act;
- not be required to seek stockholder approval of any golden parachute payments not previously approved pursuant to Section 14A(b) of the Exchange Act;
- be exempt from any rule adopted by the Public Company Accounting Oversight Board, requiring mandatory audit firm rotation or a supplemental auditor discussion and analysis; and
- be subject to reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements.

We have irrevocably elected not to avail ourselves of an extended transition period under the JOBS Act that permits an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. As a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for other companies.

Furthermore, if we take advantage of some or all of the reduced disclosure requirements above, investors may find our common stock less attractive, which may result in a less active trading market for our common stock and greater stock price volatility.

***As a public reporting company, we will be subject to rules and regulations established from time to time by the SEC and the Public Company Accounting Oversight Board, or PCAOB, regarding our internal control over financial reporting. We may not complete needed improvements to our internal control over financial reporting in a timely manner, or these internal controls may not be determined to be effective, which may adversely affect investor confidence in our company and, as a result, the market price of our common stock and a stockholder’s investment in our stock.***

As a public reporting company, we are subject to the rules and regulations established from time to time by the SEC and the PCAOB. These rules and regulations require, among other things, that we establish and periodically evaluate procedures with respect to our internal controls over financial reporting. Reporting obligations as a public company are likely to place a considerable strain on our financial and management systems, processes and controls, as well as on our personnel.

## [Table of Contents](#)

In addition, as a public company we are required to document and test our internal controls over financial reporting pursuant to Section 404 of Sarbanes-Oxley so that our management can certify as to the effectiveness of our internal controls over financial reporting by the time our annual report for the year ending December 31, 2016 is due and thereafter, which will require us to document and make significant changes to our internal controls over financial reporting. Likewise, our independent registered public accounting firm will be required to provide an attestation report on the effectiveness of our internal control over financial reporting at such time as we cease to be an “emerging growth company,” as defined in the JOBS Act, although, as described in the preceding risk factor, we could potentially qualify as an “emerging growth company” until December 31, 2020. At such time, our independent registered public accounting firm may issue a report that is adverse in the event it is not satisfied with the level at which our controls are documented, designed or operating.

If our senior management is unable to conclude that we have effective internal control over financial reporting, or to certify the effectiveness of such controls, or if our independent registered public accounting firm cannot render an unqualified opinion on management’s assessment and the effectiveness of our internal control over financial reporting, or if material weaknesses in our internal controls are identified, we could be subject to regulatory scrutiny and a loss of public confidence, which could have a material adverse effect on our business and our stock price. In addition, if we do not maintain adequate financial and management personnel, processes and controls, we may not be able to manage our business effectively or accurately report our financial performance on a timely basis, which could cause a decline in our common stock price and adversely affect our results of operations and financial condition.

### ***Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.***

Our disclosure controls and procedures are designed to reasonably ensure that information required to be disclosed by us in reports we file or submit under the Exchange Act is accumulated and communicated to management and recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. We believe that any disclosure controls and procedures as well as internal controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are and will be met. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements due to error or fraud may occur and not be detected.

### ***We will incur significantly increased costs as a result of operating as a public company, and our management will be required to devote substantial time to compliance efforts.***

We will incur significant legal, accounting, insurance and other expenses as a result of being a public company. The Dodd-Frank Act and Sarbanes-Oxley as well as related rules implemented by the SEC and The Nasdaq Global Market, have required changes in corporate governance practices of public companies. In addition, rules that the SEC is implementing or is required to implement pursuant to the Dodd-Frank Act are expected to require additional changes. We expect that compliance with these and other similar laws, rules and regulations, including compliance with Section 404 of Sarbanes-Oxley, will substantially increase our expenses, including our legal and accounting costs, and make some activities more time-consuming and costly. We also expect these laws, rules and regulations to make it more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage, which may make it more difficult for us to attract and retain qualified persons to serve on our Board of Directors or as officers. Although the JOBS Act may for a limited period of time somewhat lessen the cost of complying with these additional regulatory and other requirements, we nonetheless expect a substantial increase in legal, accounting, insurance and certain other expenses in the future, which will negatively impact our business, results of operations and financial condition.

## [Table of Contents](#)

### ***Anti-takeover provisions in our charter documents could discourage, delay or prevent a change in control of our company and may affect the trading price of our common stock.***

Our corporate documents and the Delaware General Corporation Law, or DGCL, contain provisions that may enable our Board of Directors to resist a change in control of our company even if a change in control were to be considered favorable by our stockholders. These provisions:

- stagger the terms of our Board of Directors and require 66<sup>2</sup>/<sub>3</sub>% stockholder voting to remove directors, who may only be removed for cause;
- authorize our Board of Directors to issue “blank check” preferred stock and to determine the rights and preferences of those shares, which may be senior to our common stock, without prior stockholder approval;
- establish advance notice requirements for nominating directors and proposing matters to be voted on by stockholders at stockholders meetings;
- prohibit our stockholders from calling a special meeting and prohibit stockholders from acting by written consent;
- require 66<sup>2</sup>/<sub>3</sub>% stockholder voting to effect certain amendments to our certificate of incorporation and bylaws; and
- prohibit cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates.

These provisions could discourage, delay or prevent a transaction involving a change in control of our company. These provisions could also discourage proxy contests and make it more difficult for stockholders to elect directors of their choosing and cause us to take other corporate actions our stockholders desire.

### ***Claims for indemnification by our directors and officers may reduce our available funds to satisfy successful third party claims against us and may reduce the amount of money available to us.***

Our amended and restated certificate of incorporation provides that we will indemnify our directors to the fullest extent permitted by Delaware law.

In addition, as permitted by Section 145 of the DGCL, our amended and restated bylaws and our indemnification agreements that we have entered into with our directors and officers provide that:

- We will indemnify our directors and officers for serving us in those capacities or for serving other business enterprises at our request, to the fullest extent permitted by Delaware law. Delaware law provides that a corporation may indemnify such person if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal proceeding, had no reasonable cause to believe such person’s conduct was unlawful.
- We may, in our discretion, indemnify other employees and agents in those circumstances where indemnification is permitted by applicable law.
- We are required to advance expenses, as incurred, to our directors and officers in connection with defending a proceeding, except that such directors or officers shall undertake to repay such advances if it is ultimately determined that such person is not entitled to indemnification.
- We will not be obligated pursuant to our amended and restated bylaws to indemnify any director or officer in connection with any proceeding (or part thereof) initiated by such person unless the proceeding was authorized in the specific case by our Board of Directors or such indemnification is required to be made pursuant to our amended and restated bylaws.
- The rights conferred in our amended and restated bylaws are not exclusive, and we are authorized to enter into indemnification agreements with our directors, officers, employees and agents and to obtain insurance to indemnify such persons.

## [Table of Contents](#)

- We may not retroactively amend our amended and restated bylaw provisions to reduce our indemnification obligations to our directors or officers.

As a result, if we are required to indemnify one or more of our directors or officers, it may reduce our available funds to satisfy successful third party claims against us, may reduce the amount of money available to us and may have a material adverse effect on our business and financial condition.

***Our amended and restated certificate of incorporation designates the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, employees or agents.***

Our amended and restated certificate of incorporation provides that, unless we consent in writing to an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for any derivative action or proceeding brought on our behalf, any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, employees or agents to us or our stockholders, any action asserting a claim arising pursuant to any provision of the DGCL our amended and restated certificate of incorporation or our amended and restated bylaws or any action asserting a claim that is governed by the internal affairs doctrine, in each case subject to the Court of Chancery having personal jurisdiction over the indispensable parties named as defendants therein and the claim not being one which is vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery or for which the Court of Chancery does not have subject matter jurisdiction. Any person purchasing or otherwise acquiring any interest in any shares of our capital stock shall be deemed to have notice of and to have consented to this provision of our amended and restated certificate of incorporation. This choice of forum provision may limit our stockholders' ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers, employees or agents, which may discourage such lawsuits against us and our directors, officers, employees and agents even though an action, if successful, might benefit our stockholders. Stockholders who do bring a claim in the Court of Chancery could face additional litigation costs in pursuing any such claim, particularly if they do not reside in or near Delaware. The Court of Chancery may also reach different judgments or results than would other courts, including courts where a stockholder considering an action may be located or would otherwise choose to bring the action, and such judgments or results may be more favorable to us than to our stockholders. Alternatively, if a court were to find this provision of our amended and restated certificate of incorporation inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could have a material adverse effect on our business, financial condition or results of operations.

***We do not expect to pay any dividends on our common stock for the foreseeable future.***

We currently expect to retain all future earnings, if any, for future operations and expansion, and have no current plans to pay any cash dividends to holders of our common stock for the foreseeable future. Any decision to declare and pay dividends in the future will be made at the discretion of our Board of Directors and will depend on, among other things, our results of operations, financial condition, cash requirements, contractual restrictions and other factors that our Board of Directors may deem relevant. As a result, stockholders may not receive any return on an investment in our common stock unless stockholders sell our common stock for a price greater than that which they paid for it.

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

### **Use of Proceeds**

Our initial public offering, or IPO, of common stock was effected through a Registration Statement on Form S-1 (File No. 333-204127) declared effective by the SEC on June 16, 2015. On June 22, 2015, we sold 6,325,000 shares of common stock, including 825,000 shares sold to the underwriter pursuant to its option to purchase such shares to cover over allotments, at an initial public offering price of \$14.00 per share, for aggregate gross proceeds of \$88.6 million. The underwriters of the offering were Cowen & Company, Stifel, Baird and H.C. Wainwright & Co. Following the sale of the shares in connection with the closing of the IPO, the offering terminated.

Through November 3, 2015, we had not used any of our IPO proceeds for working capital or general corporate expenses. There has been no material change in our planned use of the net proceeds from the IPO as described in the final prospectus for the offering filed with the SEC pursuant to Rule 424(b).

[Table of Contents](#)

**ITEM 3. DEFAULTS UPON SENIOR SECURITIES**

None.

**ITEM 4. MINE SAFETY DISCLOSURES**

Not Applicable.

**ITEM 5. OTHER INFORMATION**

Not Applicable.

**ITEM 6. EXHIBITS**

(a) Exhibits

The exhibits listed on the accompanying exhibit index are filed or incorporated by reference (as stated therein) as part of this Quarterly Report on Form 10-Q.

**INDEX TO EXHIBITS**

- 3.1 Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference from Exhibit 4.1 to the Registrant's Registration Statement on Form S-8 (Registration No. 333-205220) filed on June 25, 2015).
- 3.2 Amended and Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3.4 to the Registrant's Registration Statement on Form S-1 (Registration No. 333-204127), filed May 13, 2015)
- 31.1 Certification of the Registrant's Chief Executive Officer pursuant to Exchange Act Rules 13a-14(a)/15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
- 31.2 Certification of the Registrant's Chief Financial Officer pursuant to Exchange Act Rules 13a-14(a)/15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
- 32.1 Certification of the Registrant's Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
- 101.INS XBRL Instance Document
- 101.SCH XBRL Taxonomy Extension Schema Document
- 101.CAL XBRL Taxonomy Extension Calculation Linkbase Document
- 101.LAB XBRL Taxonomy Extension Label Linkbase Document
- 101.PRE XBRL Taxonomy Extension Presentation Linkbase Document
- 101.DEF XBRL Taxonomy Extension Definition Linkbase Document

**SIGNATURES**

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

Date: November 3, 2015

**NIVALIS THERAPEUTICS, INC.**

By: /s/ Jon Congleton  
Jon Congleton  
President and Chief Executive Officer; Director  
(Principal Executive Officer)

By: /s/ R. Michael Carruthers  
R. Michael Carruthers  
Chief Financial Officer  
(Principal Financial and Accounting Officer)

I, Jon Congleton, President and Chief Executive Officer of Nivalis Therapeutics, Inc., certify that:

1. I have reviewed this quarterly report on Form 10-Q of Nivalis Therapeutics, Inc. for the quarter ended September 30, 2015;
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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) 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: November 3, 2015

/s/ JON CONGLETON

Jon Congleton  
President and Chief Executive Officer

---

I, R. Michael Carruthers, Chief Financial Officer of Nivalis Therapeutics, Inc., certify that:

1. I have reviewed this quarterly report on Form 10-Q of Nivalis Therapeutics, Inc. for the quarter ended September 30, 2015;
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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) 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: November 3, 2015

/s/ R. MICHAEL CARRUTHERS

R. Michael Carruthers  
Chief Financial Officer

---

**CERTIFICATIONS PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002  
(18 U.S.C. SECTION 1350)**

In connection with the Quarterly Report of Nivalis Therapeutics, Inc., a Delaware corporation (the "Company"), on Form 10-Q for the quarter ended September 30, 2015, as filed with the Securities and Exchange Commission (the "Report"), each of the undersigned, in the capacities and on the date indicated below, hereby certifies, pursuant to § 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. § 1350), that to his knowledge:

- (1) 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.

Date: November 3, 2015

/s/ JON CONGLETON

\_\_\_\_\_  
Jon Congleton  
President and Chief Executive Officer

/s/ R. MICHAEL CARRUTHERS

\_\_\_\_\_  
R. Michael Carruthers  
Chief Financial Officer

---

