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

FORM 10-Q

(Mark one)

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

For the quarterly period ended September 30, 2016

☐ **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: 000-24477

DIFFUSION PHARMACEUTICALS INC.

(Exact name of registrant as specified in its charter)

Delaware	**30-0645032**
(State of other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

2020 Avon Court, #4
Charlottesville, VA 22902
(Address of principal executive offices, including zip code)

(434) 220-0718
(Registrant's telephone number including area code)

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 definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

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

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

The number of shares of common stock outstanding at October 31, 2016 was 10,345,637 shares.

DIFFUSION PHARMACEUTICALS INC.
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As previously disclosed, on January 8, 2016, Diffusion Pharmaceuticals Inc. (f/k/a RestorGenex Corporation), a Delaware corporation (the "Company"), completed the merger (the "Merger") of its wholly owned subsidiary, Arco Merger Sub, LLC ("Merger Sub"), with and into Diffusion Pharmaceuticals LLC, a Virginia limited liability company ("Diffusion LLC"), in accordance with the terms of the Agreement and Plan of Merger, dated as of December 15, 2015, among the Company, Merger Sub and Diffusion LLC (the "Merger Agreement"). As a result of the Merger, Diffusion LLC, the surviving company in the Merger, became a wholly owned subsidiary of the Company and, following the Merger, the Company changed its corporate name from RestorGenex Corporation ("RestorGenex") to Diffusion Pharmaceuticals Inc.

For accounting purposes, the Merger is treated as a "reverse acquisition" under generally acceptable accounting principles in the United States ("U.S. GAAP") and Diffusion LLC is considered the accounting acquirer. Accordingly, Diffusion LLC's historical results of operations will replace the Company's historical results of operations for all periods prior to the Merger and, for all periods following the Merger, the results of operations of the combined company will be included in the Company's financial statements.

This quarterly report on Form 10-Q relates to the Company's three and nine-month periods ended September 30, 2016, which nine-month period includes the date of the completion of the Merger, and is therefore the Company's third quarterly report on Form 10-Q that includes results of operations for the combined company, including Diffusion LLC.

Unless the context otherwise requires, references to the "Company," the "combined company" "we," "our" or "us" in this report refer to Diffusion Pharmaceuticals Inc. and its subsidiaries; references to "Diffusion" refer to the Company following the completion of the Merger, references to "RestorGenex" refer to the Company prior to the completion of the Merger and references to "Diffusion LLC" refer to Diffusion Pharmaceuticals LLC, the Company's wholly-owned subsidiary following the Merger.

Except as otherwise noted, references to "common stock" in this report refer to common stock, par value $0.001 per share, of the Company. On August 17, 2016, the Company effected a 1-for-10 reverse split of its common stock. Unless noted otherwise, any share or per share amounts in this report, the accompanying unaudited condensed consolidated financial statements and related notes give retroactive effect to this reverse stock split.

This report contains the following trademarks, trade names and service marks of ours: RestorGenex and Diffusion. All other trade names, trademarks and service marks appearing in this quarterly report on Form 10-Q are the property of their respective owners. We have assumed that the reader understands that all such terms are source-indicating. Accordingly, such terms appear without the trade name, trademark or service mark notice for convenience only and should not be construed as being used in a descriptive or generic sense.

This quarterly report on Form 10-Q contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and are subject to the safe harbor created by those sections. For more information, see "Part I. Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations – Special Note Regarding Forward-Looking Statements."

PART I – FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

Diffusion Pharmaceuticals, Inc.
Condensed Consolidated Balance Sheets
(unaudited)

	September 30, 2016	December 31, 2015
Assets		
Current assets:		
Cash and cash equivalents	$ 3,021,388	$ 1,997,192
Prepaid expenses, deposits and other current assets	265,125	45,921
Total current assets	3,286,513	2,043,113
Property and equipment, net of accumulated depreciation of of $234,070 and $215,028, respectively	85,577	51,996
Intangible asset	8,639,000	-
Goodwill	6,929,258	-
Other assets	106,565	181,487
Total assets	$ 19,046,913	$ 2,276,596
Liabilities and Stockholders' Equity (Deficit)		
Current liabilities:		
Accounts payable	$ 757,466	$ 424,675
Other accrued expenses and liabilities	1,043,839	621,669
Current portion of convertible debt	1,880,000	424,964
Total current liabilities	3,681,305	1,471,308
Convertible debt, net of current portion	550,000	818,646
Deferred income taxes	3,279,363	-
Other liabilities	49,932	28,265
Total liabilities	7,560,600	2,318,219
Commitments and Contingencies		
Stockholders' Equity (Deficit):		
Common stock, $0.001 par value:		
1,000,000,000 shares authorized; 10,345,637 and 8,118,939 shares issued and outstanding at September 30, 2016 and December 31, 2015, respectively	10,346	8,119
Additional paid-in capital	69,094,497	42,102,876
Accumulated deficit	(57,618,530)	(42,152,618)
Total stockholders' equity (deficit)	11,486,313	(41,623)
Total liabilities and stockholders' equity (deficit)	$ 19,046,913	$ 2,276,596

See accompanying notes to unaudited condensed consolidated financial statements.

Diffusion Pharmaceuticals, Inc.
Condensed Consolidated Statements of Operations
(unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	**2015**	**2016**	**2015**
Operating expenses:				
Research and development	$ 1,941,743	$ 922,234	$ 5,739,456	$ 2,602,900
General and administrative	3,852,406	421,985	10,070,878	1,227,860
Depreciation	5,822	2,228	19,520	6,154
Loss from operations	5,799,971	1,346,447	15,829,854	3,836,914
Interest expense, net	1,378	76,170	854	160,315
Loss from operations before income tax benefit	(5,801,349)	(1,422,617)	(15,830,708)	(3,997,229)
Income tax benefit	(364,796)	-	(364,796)	-
Net loss	$ (5,436,553)	$ (1,422,617)	$ (15,465,912)	$ (3,997,229)
Per share information:				
Net loss per share of common stock, basic and diluted	$ (0.53)	$ (0.64)	$ (1.52)	$ (1.81)
Weighted average shares outstanding, basic and diluted	10,333,898	2,222,257	10,198,491	2,213,437

See accompanying notes to unaudited condensed consolidated financial statements.

Diffusion Pharmaceuticals, Inc.
Condensed Consolidated Statement of Changes in Stockholders' Equity (Deficit)
Nine Months Ended September 30, 2016
(unaudited)

	Common Stock		Additional Paid-in	Accumulated	Total Stockholders' Equity
	Shares	Amount	Capital	Deficit	(Deficit)
Balance at January 1, 2016	8,118,939	$ 8,119	$ 42,102,876	$ (42,152,618)	$ (41,623)
Fair value of RestorGenex shares	1,861,503	1,862	19,544,138	-	19,546,000
Estimated fair value of RestorGenex stock options outstanding	-	-	1,321,000	-	1,321,000
Estimated fair value of RestorGenex warrants outstanding	-	-	384,000	-	384,000
Common stock issued for advisory services	148,073	148	1,409,215	-	1,409,363
Conversion of convertible debt	217,122	217	711,278	-	711,495
Settlement of litigation matter upon issuance of convertible debt	-	-	2,500,000	-	2,500,000
Stock-based compensation expense	-	-	1,121,990	-	1,121,990
Net loss	-	-	-	(15,465,912)	(15,465,912)
Balance at September 30, 2016	10,345,637	$ 10,346	$ 69,094,497	$ (57,618,530)	$ 11,486,313

See accompanying notes to unaudited condensed consolidated financial statements.

Diffusion Pharmaceuticals, Inc.
Unaudited Consolidated Statements of Cash Flows

	Nine Months Ended September 30,	
	2016	**2015**
Operating activities:		
Net loss	$ (15,465,912)	$ (3,997,229)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	19,520	6,154
Loss on sale or disposal of assets	6,761	-
Stock-based compensation expense	1,121,990	373,989
Common stock issued for advisory services	1,409,363	-
Abandonment of in-process research and development intangible asset	951,000	-
Change in deferred income taxes	(364,796)	-
Settlement of litigation matter	2,500,000	-
Non-cash interest expense	7,067	160,315
Changes in operating assets and liabilities:		
Prepaid expenses, deposits and other assets	50,918	6,652
Accounts payable, accrued expenses and other liabilities	410,014	530,785
Net cash used in operating activities	(9,354,075)	(2,919,334)
Cash flows provided by investing activities:		
Purchases of property and equipment	(2,331)	(13,644)
Maturities of certificates of deposit	-	2,500,000
Cash received in reverse merger transaction	8,500,602	-
Net cash provided by investing activities	8,498,271	2,486,356
Cash flows provided by financing activities:		
Proceeds from the issuance of convertible debt	1,880,000	-
Net cash provided by financing activities	1,880,000	-
Net increase (decrease) in cash and cash equivalents	1,024,196	(432,978)
Cash and cash equivalents at beginning of period	1,997,192	2,336,519
Cash and cash equivalents at end of period	$ 3,021,388	$ 1,903,541
Supplemental disclosure of non-cash investing and financing activities:		
Conversion of convertible notes and related accrued interest into common stock	$ 711,495	$ 47,742
Consideration in connection with RestorGenex Corporation merger transaction	$ 21,261,000	$ -

See accompanying notes to unaudited condensed consolidated financial statements.

1. Organization and Description of Business

Diffusion Pharmaceuticals Inc. ("Diffusion" or the "Company"), a Delaware Corporation, is a clinical stage biotechnology company focused on extending the life expectancy of cancer patients by improving the effectiveness of current standard-of-care treatments, including radiation therapy and chemotherapy. The Company's lead product candidate, trans sodium crocetinate ("TSC"), uses a novel mechanism to re-oxygenate the microenvironment of solid cancerous tumors, thereby enhancing tumor cells' response to conventional treatment without additional side effects. TSC has received orphan drug designations for the treatment of glioblastoma multiforme ("GBM") and metastatic brain cancer. The Company expects to enter a Phase III study in newly diagnosed GBM patients and potentially a Phase II study in patients with pancreatic cancer in the next twelve months, assuming the availability of financial resources.

On August 17, 2016, the Company effected a 1-for-10 reverse split of its common stock. Any references in the unaudited condensed consolidated financial statements and related notes to share or per share amounts give retroactive effect to this reverse stock split.

On January 8, 2016, the Company completed a merger (the "Merger") of a wholly-owned subsidiary with Diffusion Pharmaceuticals LLC ("Diffusion LLC") pursuant to an Agreement and Plan of Merger, dated December 15, 2015, by and among the Company, Arco Merger Sub LLC and Diffusion LLC (the "Merger Agreement") and, as a result, Diffusion LLC became a wholly-owned subsidiary of the Company.

At the effective time of the Merger, each outstanding unit of membership interest of Diffusion LLC ("Diffusion Units") was converted into the right to receive 0.3652658 shares of the Company's common stock, as determined pursuant to the Merger Agreement ("Exchange Ratio"). Also at the effective time of the Merger, $1,125,000 of Diffusion LLC convertible notes were outstanding and the rights of the holders of each outstanding convertible promissory note convertible into Diffusion Units ("Diffusion Convertible Notes") were converted into the right to convert such securities into a number of shares of the Company's common stock equal to the number of Diffusion Units into which such Diffusion Convertible Notes would have been convertible under the terms of the note in effect immediately prior to the consummation of the Merger multiplied by the Exchange Ratio. In addition, at the effective time of the Merger and as a result of the Merger, all outstanding options to purchase Diffusion Units were converted into and became options to purchase the Company's common stock on terms substantially identical to those in effect prior to the effective time of the Merger, except for adjustments to the underlying number of shares and the exercise price based on the Exchange Ratio. As a result of the Merger, at the Effective Time, after taking into account the adjustments to the number of shares and exercise price as a result of the Merger, the Company assumed options to purchase Diffusion Units which converted into options to purchase an aggregate of 1,495,249 shares of the Company's common stock with a weighted average exercise price of $3.91 per share. No fractional shares of the Company's common stock were issued in connection with the Merger, and holders of Diffusion Units were eligible to receive cash in lieu thereof.

The Merger transaction was accounted for as a reverse acquisition under the acquisition method of accounting. Because Diffusion LLC's pre-transaction owners held an 84.1% economic and voting interest in the combined company immediately following the closing of the Merger, Diffusion LLC is considered to be the acquirer of the Company for accounting purposes. Accordingly, the historical financial statements of Diffusion LLC became the Company's historical financial statements including the comparative prior periods. All references in the unaudited interim condensed consolidated financial statements to the number of shares and per-share amounts of common stock have been retroactively restated to reflect the Exchange Ratio.

Immediately following the Merger, the holders of the Company's common stock immediately prior to the Merger held 1,861,503 shares, or approximately 15.9% of the common stock of the combined company, in each case, on a fully-diluted basis (subject to certain exceptions and adjustments).

2. Liquidity

The Company has not generated any revenues from product sales and has funded operations primarily from the proceeds of private placements of its membership units and convertible notes. Substantial additional financing will be required by the Company to continue to fund its research and development activities. No assurance can be given that any such financing will be available when needed or that the Company's research and development efforts will be successful.

The Company regularly explores alternative means of financing its operations and seeks funding through various sources, including public and private securities offerings, collaborative arrangements with third parties and other strategic alliances and business transactions. However, the Company currently does not have any commitments to obtain additional funds and may be unable to obtain sufficient funding in the future on acceptable terms, if at all. If the Company cannot obtain funding in the immediate future, it will need to delay, scale back or eliminate some or all of its research and development programs or enter into collaborations with third parties to: commercialize potential products or technologies that it might otherwise seek to develop or commercialize independently; consider various strategic alternatives, including a merger or sale of the Company; or cease operations. If the Company engages in collaborations, it may receive lower consideration upon commercialization of such products than if it had not entered into such arrangements or if it entered into such arrangements at later stages in the product development process.

The Company has prepared its financial statements assuming that it will continue as a going concern, which contemplates realization of assets and the satisfaction of liabilities in the normal course of business. The Company has incurred net losses since inception and it expects to generate losses from operations for the foreseeable future primarily due to research and development costs for its potential product candidates. Various internal and external factors will affect whether and when the Company's product candidates become approved drugs and how significant their market share will be. The regulatory approval and market acceptance of the Company's proposed future products (if any), length of time and cost of developing and commercializing these product candidates and/or failure of them at any stage of the drug approval process will materially affect the Company's financial condition and future operations. The Company believes its cash and cash equivalents at September 30, 2016 are sufficient to fund operations and meet its research and development goals into the early first quarter of 2017.

3. Basis of Presentation and Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited interim condensed consolidated financial statements of the Company have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP") for interim financial information as found in the Accounting Standard Codification ("ASC") and Accounting Standards Updates ("ASUs") of the Financial Accounting Standards Board ("FASB"), and with the instructions to Form 10-Q and Article 10 of Regulation S-X of the Securities and Exchange Commission (the "SEC"). In the opinion of management, the accompanying unaudited interim condensed consolidated financial statements of the Company include all normal and recurring adjustments (which consist primarily of accruals, estimates and assumptions that impact the financial statements) considered necessary to present fairly the Company's financial position as of September 30, 2016, its results of operations for the three and nine months ended September 30, 2016 and 2015 and cash flows for the nine months ended September 30, 2016 and 2015. Operating results for the three and nine months ended September 30, 2016 are not necessarily indicative of the results that may be expected for the year ending December 31, 2016. The unaudited interim condensed consolidated financial statements presented herein do not contain the required disclosures under GAAP for annual financial statements. The accompanying unaudited interim condensed consolidated financial statements should be read in conjunction with the annual audited financial statements and related notes as of and for the year ended December 31, 2015 filed with the SEC on Form 8-K/A on March 25, 2016.

The Company's members' capital at December 31, 2015 has been recast as common stock and additional paid in capital. On August 17, 2016, the Company effected a 1-for-10 reverse split of its common stock. The accompanying unaudited condensed consolidated financial statements and these notes give retroactive effect to this reverse stock split.

Fair Value of Financial Instruments

The carrying amounts of the Company's financial instruments, including cash equivalents, accounts payable, and accrued expenses approximate fair value due to the short-term nature of those instruments. As of September 30, 2016 and December 31, 2015, the fair value of the Company's outstanding convertible notes was approximately $5,950,000 and $4,800,000, respectively. The fair value of the convertible notes are determined using a binomial lattice model that utilizes certain unobservable inputs that fall within Level 3 of the fair value hierarchy.

Cash and Cash Equivalents

The Company considers any highly liquid investments, such as money market funds, with original maturities of three months or less to be cash and cash equivalents.

Property and Equipment

The Company records property and equipment at cost less accumulated depreciation and amortization. Costs of renewals and improvements that extend the useful lives of the assets are capitalized. Maintenance and repairs are expensed as incurred. Depreciation is recognized on a straight-line basis over the estimated useful lives of the assets, which generally range from five to fifteen years. The Company amortizes leasehold improvements over the shorter of the estimated useful life of the asset or the term of the related lease. Upon retirement or disposition of assets, the costs and related accumulated depreciation and amortization are removed from the accounts with the resulting gains or losses, if any, reflected in results of operations.

Long-Lived Assets

Long-lived assets are reviewed for potential impairment whenever events indicate that the carrying amount of such assets may not be recoverable. The Company does this by comparing the carrying value of the long-lived assets with the estimated future undiscounted cash flows expected to result from the use of the assets, including cash flows from disposition. If it is determined an impairment exists, the asset is written down to its estimated fair value. The Company has not recognized any impairment of long-lived assets during the nine months ended September 30, 2016.

Intangible Assets

Intangible assets are comprised of identifiable in-process research and development (“IPR&D”) assets and are considered indefinite-lived intangible assets and are assessed for impairment annually or more frequently if impairment indicators exist. If the associated research and development effort is abandoned, the related assets will be written-off and the Company will record a non-cash impairment loss. For those compounds that reach commercialization, the IPR&D assets will be amortized over their estimated useful lives. In August 2016, the Company abandoned the future development efforts for the IPR&D asset associated with the Company’s RES-440 product candidate, and the value of the IPR&D asset was written down to $0 (See Note 4).

Goodwill

Goodwill is the excess of the cost of an acquired entity over the net amounts assigned to tangible and intangible assets acquired and liabilities assumed. Goodwill is not amortized, but is subject to an annual impairment test. The Company has a single reporting unit and all goodwill relates to that reporting unit.

The Company performs its annual goodwill impairment test on October 1 of its fiscal year or more frequently if changes in circumstances or the occurrence of events suggest that an impairment exists. If the fair value of the reporting unit is less than its carrying value, an impairment loss is recorded to the extent that the implied fair value of the reporting unit’s goodwill is less than the carrying value of the reporting unit’s goodwill. The Company has not recognized any impairment of goodwill during the nine months ended September 30, 2016.

Research and Development

Major components of research and development costs include internal research and development (such as salaries and related employee benefits, equity-based compensation, supplies and allocated facility costs) and contracted services (research and development activities performed on the Company's behalf). Costs incurred for research and development are expensed as incurred.

At the end of the reporting period, the Company compares payments made to third-party service providers to the estimated progress toward completion of the research or development objectives. Such estimates are subject to change as additional information becomes available. Depending on the timing of payments to the service providers and the progress that the Company estimates has been made as a result of the services provided, the Company may record net prepaid or accrued expenses relating to these costs.

Upfront milestone payments made to third parties who perform research and development services on the Company's behalf are expensed as services are rendered.

Patent Costs

Patent costs, including related legal costs, are expensed as incurred and are recorded within general and administrative expenses in the statements of operations.

Income Taxes

Prior to the Merger, Diffusion LLC was treated as a partnership for federal and state income tax purposes. Diffusion LLC's taxable income or loss, as well as certain other tax attributes, were passed through directly to its members and were reported in each member's individual income tax return.

Upon completion of the Merger as discussed in Note 1, the Company converted from a partnership to a corporation for accounting purposes. As a corporation, the Company uses the asset and liability method of accounting for income taxes. Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. A valuation allowance is provided when it is more likely than not that some portion or all of a deferred tax asset will not be realized. The Company recognizes the benefit of an uncertain tax position that it has taken or expects to take on its income tax return it files, if such a position is more likely than not to be sustained.

Debt

The current and noncurrent portions of accrued interest related to the Company's Convertible Notes and 2016 Convertible Notes are included within other accrued expenses and liabilities and other liabilities, respectively, on the accompanying consolidated balance sheets. Debt issuance costs incurred in connection with debt financing arrangements are amortized to interest expense over the life of the respective financing arrangement using the effective interest method.

Stock-Based Compensation

The Company measures employee and nonemployee stock-based awards at grant-date fair value and records compensation expense on a straight-line basis over the vesting period of the award. Stock-based awards issued to non-employees are revalued until the award vests. The Company uses the Black-Scholes option pricing model to value its stock option awards. Estimating the fair value of stock option awards requires management to apply judgment and make estimates, including the volatility of the Company's common stock, the expected term of the Company's stock options, the expected dividend yield and the fair value of the Company's common stock on the measurement date. As a result, if factors change and management uses different assumptions, stock-based compensation expense could be materially different for future awards.

The expected life of stock options was estimated using the "simplified method" for employee options as the Company has no historical information to develop reasonable expectations about future exercise patterns and post vesting employment termination behavior for its stock option grants. The simplified method is based on the average of the vesting tranches and the contractual life of each grant. For options granted to non-employees, the Company uses the remaining contractual life. For stock price volatility, the Company uses comparable public companies as a basis for its expected volatility to calculate the fair value of option grants. The Company assumes no dividend yield because dividends are not expected to be paid in the near future, which is consistent with the Company's history of not paying dividends. The risk-free interest rate is based on U.S. Treasury notes with a term approximating the expected life of the option.

Net Loss Per Share

Basic loss per share is computed by dividing net loss applicable to common stockholders by the weighted average number of shares of common stock outstanding during each period. Diluted loss per share includes the effect, if any, from the potential exercise or conversion of securities, such as convertible debt, warrants, stock options and unvested restricted stock that would result in the issuance of incremental shares of common stock. In computing the basic and diluted net loss per share applicable to common stockholders, the weighted average number of shares remains the same for both calculations due to the fact that when a net loss exists, dilutive shares are not included in the calculation as the impact is anti-dilutive.

The following potentially dilutive securities outstanding as of September 30, 2016 and 2015 have been excluded from the computation of diluted weighted average shares outstanding, as they would be anti-dilutive:

	September 30,	
	2016	**2015**
Convertible debt	749,280	5,847,645
Common stock warrants	460,721	—
Stock options	2,010,409	1,109,605
Unvested restricted stock awards	10,738	18,410
	3,231,148	6,975,660

Amounts in the table reflect the common stock equivalents of the noted instruments.

Recent Accounting Pronouncements

In March 2016, the FASB issued ASU 2016-09, *Compensation – Improvements to Employee Share-Based Payment Accounting*, which simplifies several aspects of the accounting for employee share-based payment transactions including the accounting for income taxes, forfeitures, and statutory tax withholding requirements, as well as classification in the statement of cash flows. The guidance is applicable to public business entities for fiscal years beginning after December 15, 2016 and interim periods within those years. The Company is evaluating the effect that ASU 2016-09 will have on its condensed consolidated financial statements and related disclosures.

In March 2016, the FASB issued ASU 2016-06, *Contingent Put and Call Options in Debt Instruments*. The FASB issued final guidance clarifying that the assessment of whether an embedded contingent put or call option is clearly and closely related to the debt host only requires an analysis of the four-step decision sequence outlined in ASC 815-15-25-42. Entities are required to apply the guidance to existing debt instruments (or hybrid financial instruments that are determined to have a debt host) using a modified retrospective transition method as of the period of adoption. The guidance is effective for public business entities for fiscal years beginning after December 15, 2016, and interim periods within those fiscal years. Early adoption is permitted. The Company is evaluating the effect that ASU 2016-06 will have on its condensed consolidated financial statements and related disclosures.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*. The FASB issued the update to require the recognition of lease assets and liabilities on the balance sheet of lessees. The standard will be effective for fiscal years beginning after December 15, 2018, including interim periods within such fiscal years. The ASU requires a modified retrospective transition method with the option to elect a package of practical expedients. Early adoption is permitted. The Company is currently evaluating the potential impact of the adoption of this standard on its consolidated results of operations, financial position and cash flows and related disclosures.

In August 2014, the FASB issued ASU 2014-15, *Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern*. The amendments in this update will explicitly require a company's management to assess an entity's ability to continue as a going concern, and to provide related footnote disclosures in certain circumstances. The new standard will be effective in the first annual period ending after December 15, 2016. Early application is permitted. The Company is currently evaluating the potential impact of the adoption of this standard, but believes its adoption will have no impact on its consolidated results of operations, financial position or cash flows.

Reclassification

Certain prior period balances have been reclassified to conform with the current period presentation.

4. Acquisition

Merger of RestorGenex Corporation and Diffusion Pharmaceuticals LLC

On December 15, 2015, the Company, formerly known as RestorGenex Corporation (“RestorGenex”), entered into the Merger Agreement with Diffusion LLC. On January 8, 2016, the Company completed the Merger, with Diffusion LLC surviving as a wholly-owned subsidiary of the Company. Subsequent to the Merger, the Company was renamed “Diffusion Pharmaceuticals Inc.” and the Company’s ticker symbol on the OTC Bulletin Board was changed from “RESX” to “DFFN.” In November 2016, the Company's common stock was approved for listing on the NASDAQ Capital Market and will continue to trade under the ticker symbol "DFFN". Diffusion LLC and RestorGenex entered into the merger agreement in an effort to provide improved access to the capital markets in order to obtain the resources necessary to accelerate development of TSC in multiple clinical programs and continue to build an oncology-focused company.

The Merger transaction was accounted for as a reverse acquisition under the acquisition method of accounting. Because Diffusion LLC’s pre-transaction owners held an 84.1% economic and voting interest in the combined company immediately following the completion of the Merger, Diffusion LLC is considered to be the acquirer of RestorGenex for accounting purposes.

Each Diffusion Unit was converted into the right to receive 0.3652658 shares of the Company’s common stock, par value $0.001 per share (the “Common Stock”), as determined pursuant to the Exchange Ratio. Additionally, the right of holders of Diffusion Convertible Notes to convert such notes into Diffusion Units was converted into the right to convert such notes into a number of shares of Common Stock equal to the number of Diffusion Units into which such note would have been convertible under the terms of the note in effect immediately prior to the consummation of the Merger multiplied by the Exchange Ratio. In addition, all outstanding options to purchase Diffusion Units were assumed by the Company and the right to exercise converted into stock options to purchase Common Stock on terms substantially identical to those in effect prior to the Merger transaction, except for adjustments to the underlying number of shares and the exercise price based on the Exchange Ratio.

In connection with the Merger, the Company’s Board of Directors authorized, declared and effected a distribution of contingent value rights (“CVRs”) to shareholders of the Company as of the close of business on January 7, 2016. Each CVR is a non-transferable right to potentially receive certain cash payments in the event the Company receives net cash payments during the five-year period after the Merger as a result of the sale, transfer, license or similar transaction or any other agreement to the extent relating to the development of the Company’s product currently known as RES-440, a “soft” anti-androgen. See below and Note 11 for additional fair value information.

The purchase consideration in a reverse acquisition is determined with reference to the value of equity that the accounting acquirer, Diffusion LLC, would have had to issue to the owners of the accounting acquiree, RestorGenex, to give the pre-acquisition RestorGenex equity holders the same percentage interest in Diffusion LLC that such pre-acquisition RestorGenex equity holders held in the Company immediately following the reverse acquisition. The purchase price was calculated as follows:

Fair value of RestorGenex shares outstanding	$	19,546,000
Estimated fair value of RestorGenex stock options outstanding		1,321,000
Estimated fair value of RestorGenex warrants outstanding		384,000
CVRs – RES-440 product candidate		10,000
Total preliminary purchase price	$	21,261,000

The Merger transaction has been accounted for using the acquisition method of accounting, which requires that assets acquired and liabilities assumed be recognized at their fair values as of the acquisition date. The valuation technique utilized to value the IPR&D was the cost approach.

The following table summarizes the preliminary allocation of the purchase price to the assets acquired and liabilities assumed as of the acquisition date:

Cash and cash equivalents	$	8,500,602
Prepaid expenses and other assets		195,200
Property and equipment		57,531
Intangible assets		9,600,000
Goodwill		6,929,258
Accrued liabilities		(377,432)
Deferred tax liability		(3,644,159)
Net assets acquired	$	21,261,000

The above allocation of the purchase price is based on certain preliminary valuations and other analyses that have not been completed as of the date of the filing. Any changes in the estimated fair values of the net assets recorded for the Merger upon the finalization of more detailed analyses of the facts and circumstances that existed at the date of the transaction may change the allocation of the purchase price. As such, the purchase price allocations for this transaction are preliminary estimates, which are subject to change within the measurement period. During the three months ended September 30, 2016, the Company corrected the valuation of the acquired intangible assets and recorded an additional $283,000 and $107,226 to the estimated fair value of acquired intangible assets and deferred tax liability, respectively. As a result, goodwill decreased by $175,773.

Qualitative factors supporting the recognition of goodwill due to the Merger include the Company’s anticipated enhanced ability to secure additional capital and gain access to capital market opportunities as a public company and the potential value created by having a more well-rounded clinical development portfolio by adding the earlier stage RestorGenex products to the Company’s later state product portfolio.

Intangible assets acquired were as follows:

	Acquisition Date Fair Value	Accumulated Amortization	Impairment Upon Abandonment	Carrying Value at September 30,2016
RES 529	$ 8,639,000	$ -	$ -	$ 8,639,000
RES 440	961,000	-	(961,000)	-
Total in-process research and development costs (IPR&D)	$ 9,600,000	$ -	$ (961,000)	$ 8,639,000

The Company’s novel PI3K/Akt/mTOR pathway inhibitor, RES-529, is in preclinical development for oncology. Through a series of in vitro and in vivo animal models, RES-529 has been shown to have activity in several cancer types due to its ability to target and inhibit the PI3K/Akt/mTOR signal transduction pathway. RES-529 is a first-in-class inhibitor of both TORC1 and TORC2 that is mechanistically differentiated from other PI3K/Akt/mTOR pathway inhibitors currently in development. RES-529 has shown activity in both in vitro and in vivo glioblastoma animal models and has been demonstrated to be orally bioavailable and can cross the blood brain barrier.

In August 2016, the Board of Directors determined that RES-440, a “soft” anti-androgen compound for the treatment of acne vulgaris, was outside the Company’s core product focus, and was not a priority. Therefore, future development efforts were abandoned in the third quarter of 2016. In connection with its review of such abandonment, the Company concluded RES-440 was impaired in its entirety and the CVRs were remeasured and determined to have no value as of September 30, 2016. The abandonment resulted in a net impairment charge of $951,000 and was recorded as a component of research and development expenses within the Company’s unaudited condensed consolidated statements of operations for the three and nine months ended September 30, 2016. The abandonment also resulted in an income tax benefit of $364,796.

Pro Forma Financial Information (Unaudited)

The following pro forma financial information reflects the condensed consolidated results of operations of the Company as if the acquisition of RestorGenex had taken place on January 1, 2015. The pro forma financial information is not necessarily indicative of the results of operations as they would have been had the transactions been effected on the assumed date.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Net revenues	$ N/A	$ —	$ —	$ —
Net loss	$ N/A	$ (3,576,120)	$ (13,900,691)	$ (13,636,471)
Basic and diluted loss per share	$ N/A	$ (0.87)	$ (1.36)	$ (3.31)

Non-recurring pro forma transaction costs directly attributable to the Merger were $1,644,768 for the nine month period ended September 30, 2016 and have been deducted from the net loss presented above. The costs deducted from the nine months ended September 30, 2016 periods included a success fee of $1,000,000 and approximately 46,000 shares of common stock with a fair market value of $487,500 paid to a financial advisor upon the closing of the Merger on January 8, 2016. The three months ended September 30, 2016 are not presented as those results include RestorGenex results. Additionally, the Company incurred approximately $3,000,000 in severance costs as a result of resignations of executive officers immediately prior to the Merger. These costs are excluded from the pro forma financial information for the three and nine months ended September 30, 2016. The Company excluded an $11,100,000 goodwill impairment charge incurred by RestorGenex from the pro forma financial information for the three and nine month periods ended September 30, 2015.

5. Other Accrued Expenses and Liabilities

Other accrued expenses and liabilities consisted of the following:

	September 30, 2016	December 31, 2015
Accrued interest payable	$ 927	$ 14,009
Accrued payroll and payroll related expenses	491,678	56,947
Accrued professional fees	142,056	327,950
Accrued clinical studies expenses	326,410	184,737
Other accrued expenses	82,768	38,026
Total	$ 1,043,839	$ 621,669

6. Convertible Debt

The following table provides the details of the Convertible Notes outstanding at September 30, 2016:

Note	Issue Date	Maturity Date	Conversion Price	Interest Rate	Total Principal
2016 Convertible Notes	9/27/2016	9/27/2017	$ 3.50	6.00%	$ 1,880,000
Series B Note	3/15/2011	6/30/2018	$ 2.74	1.00%	550,000
Total principal amount					$ 2,430,000

On September 27, 2016, the Company issued and sold convertible promissory notes (“2016 Convertible Notes”) in an aggregate principal amount of $1,880,000. The 2016 Convertible Notes were issued to an investor and certain other parties in connection with the settlement of a litigation matter (see Note 9). The 2016 Convertible Notes have a term of one year and bear interest at a rate of 6.0% per annum with the principal and accrued interest due upon the earlier of the maturity date or conversion date. At any time prior to the maturity date, the holders may elect to convert, in whole or in part, the 2016 Convertible Notes (including any accrued but unpaid interest) into shares of the Company’s common stock, par value $0.001 per share, at a conversion price of $3.50 per share. In the event of a Change of Control (as defined in the 2016 Convertible Notes), the holders of the 2016 Convertible Notes may declare the aggregate outstanding amount of the 2016 Convertible Notes to be immediately due and payable or may elect to convert the 2016 Convertible Notes and any accrued but unpaid interest as if such conversion took place on the maturity date.

The Company accounted for the issuance of the convertible promissory notes in accordance with ASC 470-10-25 and, at the time of issuance, recorded a litigation settlement expense of $2,500,000 which represents the difference between the estimated fair value of the 2016 Convertible Notes issued and the cash received from the noteholders.

From December 2009 through December 2015, Diffusion LLC issued unsecured convertible promissory notes (the “Convertible Notes”) for gross proceeds of $22,384,320. The Convertible Notes bear interest at either 1% or 1.5% per annum. The Convertible Notes accrue interest beginning on the date of issuance, with the principal and accrued interest due upon the earlier of the maturity date or conversion date. At any time prior to the maturity date, the holders may elect to convert, in whole or in part, the Convertible Notes and any related accrued but unpaid interest into common stock of the Company at a price per share equal to the conversion price.

In the event of a Change of Control or a Qualified Financing (each as defined below), the holders of the Convertible Notes may declare the aggregate outstanding amount of the Convertible Notes to be immediately due and payable or may elect to convert the Convertible Notes and any accrued but unpaid interest as if such conversion took place on the maturity date. A Change of Control is defined as: (i) a merger or consolidation in which the members immediately prior to the transaction do not own, directly or indirectly, more than 50% of the membership interest of the surviving company; (ii) the acquisition of more than 50% of the Company’s outstanding membership interest by a single person, entity or group or persons or entities acting in concert or (iii) the sale or transfer of all or substantially all of the assets of the Company. A Qualified Financing is defined as a sale of units or other transaction that results in gross proceeds to the Company of at least $15,000,000, including the conversion of the Convertible Notes. Through the date the financial statements were available to be issued, there have been no Change of Control or Qualified Financing events.

The Company may prepay the Convertible Notes, in full or in part, at any time on a pari passu basis. Upon receipt of notice that the Company intends to prepay the Convertible Notes, holders will have the option to convert their notes in lieu of payment.

At the effective time of the Merger, $1,125,000 in aggregate principal amount of Convertible Notes were outstanding and the rights of the holders of each such outstanding Convertible Note convertible into Diffusion Units were converted into the right to convert such securities into a number of shares of the Company's common stock equal to the number of Diffusion Units such Convertible Note would be convertible into pursuant to its terms multiplied by the Exchange Ratio.

During the nine months ended September 30, 2016, the following Convertible Notes and the related accrued interest were converted into 217,122 shares of common stock:

Convertible Note Series	Principal	Accrued Interest	Total Principal and Accrued Interest
B	$ 20,000	$ 962	$ 20,962
C	425,000	14,538	439,538
E	50,000	770	50,770
F	200,000	225	200,225
Total	$ 695,000	$ 16,495	$ 711,495

During the three and nine months ended September 30, 2015, $54,500 and $1,361 of Series C principal and accrued interest, respectively, were converted into equity.

7. Stockholder's Equity

Common Stock

In connection with the reverse merger, as discussed in Note 4, the Company ascribed non-cash consideration of $384,000 to 478,200 warrants outstanding prior to the reverse merger. During the nine months ended September 30, 2016, the Company is deemed to have issued 2,226,698 shares of its common stock of which 1,861,503 are shares held by the former shareholders of RestorGenex immediately prior to the completion of the Merger, 45,643 shares were issued for advisory services provided to Diffusion LLC in connection with the Merger, 102,430 shares were issued for general financial advisory services provided to Diffusion Pharmaceuticals Inc. and 217,122 shares were issued pursuant to conversions of convertible debt as discussed in Note 6. The Company did not purchase or retire any shares of its common stock.

Legacy RestorGenex Warrants

During the nine months ended September 30, 2016, the Company did not grant any warrants to purchase shares of its common stock and no warrants were exercised. During the nine months ended September 30, 2016, warrants to purchase an aggregate of 17,479 shares of common stock expired unexercised.

Warrants to purchase an aggregate of 460,721 shares of the Company's common stock were outstanding and exercisable as of September 30, 2016, with per share exercise prices ranging from $20.00 to $750.00 and a weighted average exercise price of $54.27 per share.

8. Stock-Based Compensation

Stock-based Compensation

Upon consummation of the Merger, all outstanding options to purchase Diffusion LLC units were converted into stock options to purchase the Company's common stock on terms substantially identical to those in effect prior to the reverse merger, except for adjustments to the underlying number of shares and the exercise price based on the Exchange Ratio. At the time of the Merger, there were 301,156 RestorGenex stock options that were exercisable for shares of the Company's common stock at a weighted average exercise price of $40.13 per share.

The Company recorded stock-based compensation expense in the following expense categories of its unaudited interim condensed consolidated statements of operations for the periods indicated:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Research and development	$ 174,932	$ 78,289	$ 601,260	$ 197,871
General and administrative	215,425	63,119	520,730	176,118
Total stock-based compensation expense	$ 390,357	$ 141,408	$ 1,121,990	$ 373,989

The following table summarizes the activity related to all stock option grants to employees and non-employees for the nine months ended September 30, 2016:

	Number of Options	Weighted average exercise price per share	Weighted average remaining contractual life (in years)
Balance at January 1, 2016	1,495,615	$ 3.92	
RestorGenex options outstanding	301,156	40.13	
Cancelled	(48,190)	61.30	
Granted	261,828	8.89	
Outstanding at September 30, 2016	2,010,409	$ 8.62	7.6
Exercisable at September 30, 2016	1,357,109	$ 9.64	7.1
Vested and expected to vest at September 30, 2016	2,006,156	$ 8.62	7.6

At September 30, 2016, there was $3,076,088 of unrecognized compensation cost related to non-vested options of which $402,910 is attributable to 67,597 options issued to non-employees and subject to re-measurement until vested. The total unrecognized compensation expense will be recognized as expense over a weighted-average period of 5.9 years.

Generally, the options have a ten-year term and vest in equal monthly installments over three years. In August 2016, the Company granted an option to purchase 204,907 shares of Common Stock to a new director in connection with his appointment to the board of directors. The options will vest in equal quarterly installments over ten years and any options exercised are restricted from being sold until August 2021. All options granted were valued using the Black-Scholes model and assumptions used to value the options granted during the first nine months of 2016 were as follows:

Grant date fair value	$7.30 - $8.01
Exercise price	$8.75 - $9.60
Expected term (in years)	5.77 - 7.48
Risk-free interest rate	1.2% - 1.5%
Expected volatility	106.8% - 124.0%
Dividend yield	0%

Restricted Stock Awards

As of September 30, 2016, and December 31, 2015, there were 10,738 and 15,341, respectively, unvested shares of restricted stock. During the three and nine months ended September 30, 2016, 1,534 and 4,603 shares vested, respectively, and the Company recognized stock-based compensation expense of $3,024 and $9,057 during the three and nine months ended September 30, 2016, respectively. At September 30, 2016, there was $20,538 of unrecognized compensation cost related to unvested restricted stock that will be recognized as expense over a weighted average period of 1.7 years.

2015 Equity Plan

The 2015 Equity Plan, as amended in July 2016, currently allows for the issuance of up to a maximum of 500,000 shares of common stock in connection with the grant of stock-based awards, including stock options, restricted stock, restricted stock units, stock appreciation rights and other types of awards as deemed appropriate, not including shares subject to awards assumed in connection with certain transactions, including the Merger. As of September 30, 2016, there were 237,507 shares of common stock available for future issuance under the 2015 Equity Plan. In addition, beginning on January 1, 2017, on each January 1st through the term of the plan, up to 4.0% of the total shares of the Company's common stock outstanding as of December 31st may be added to the plan reserve upon Board approval.

9. Commitments and Contingencies

Office Space Rental

The Company leases office and laboratory facilities in Charlottesville, Virginia under a month-to-month cancelable operating lease. Rent expense related to the operating lease was $18,200 and $16,500 for the three months ended September 30, 2016 and 2015, respectively and $53,500 and $49,500 for the nine months ended September 30, 2016 and 2015, respectively.

In connection with the acquisition of RestorGenex in January 2016 (see Note 4), the Company assumed leased office space totaling approximately 2,900 square feet in Buffalo Grove, Illinois. The term of the lease commenced on September 15, 2014 and will continue through February 28, 2018. Rent expense related to the operating lease was $15,300 and $61,000 for the three and nine months ended September 30, 2016, respectively. During the nine months ended September 30, 2016, the Company vacated these leased premises and recorded an associated rent liability pursuant to Accounting Standard Codification Topic 420, *Exit or Disposal Cost Obligations (ASC 420)*. At September 30, 2016, the rent liability was $19,403 and is included in other liabilities.

The Company's contractual obligations with respect to rental commitment in Illinois as of September 30, 2016 was as follows:

	Rental Commitments
Payments due by period:	
One year	$ 75,300
Two years	31,600
Three years	—
Thereafter	—
Total	$ 106,900

Legal Proceedings

From time to time, the Company is subject to various pending or threatened legal actions and proceedings, including those that arise in the ordinary course of its business, which may include employment matters, breach of contract disputes and stockholder litigation. Such actions and proceedings are subject to many uncertainties and to outcomes that are not predictable with assurance and that may not be known for extended periods of time. The Company records a liability in its unaudited interim condensed consolidated financial statements for costs related to claims, including future legal costs, settlements and judgments, when the Company has assessed that a loss is probable and an amount can be reasonably estimated. If the reasonable estimate of a probable loss is a range, the Company records the most probable estimate of the loss or the minimum amount when no amount within the range is a better estimate than any other amount. The Company discloses a contingent liability even if the liability is not probable or the amount is not estimable, or both, if there is a reasonable possibility that a material loss may have been incurred. In the opinion of management, as of September 30, 2016, the amount of liability, if any, with respect to these matters, individually or in the aggregate, will not materially affect the Company's unaudited interim condensed consolidated results of operations, financial position or cash flows.

On August 7, 2014, a complaint was filed in the Superior Court of Los Angeles County, California by Paul Feller, the Company's former Chief Executive Officer under the caption *Paul Feller v. RestorGenex Corporation, Pro Sports & Entertainment, Inc., ProElite, Inc. and Stratus Media Group, GmbH* (Case No. BC553996). The complaint asserts various causes of action, including, among other things, promissory fraud, negligent misrepresentation, breach of contract, breach of employment agreement, breach of the covenant of good faith and fair dealing, violations of the California Labor Code and common counts. The plaintiff is seeking, among other things, compensatory damages in an undetermined amount, punitive damages, accrued interest and an award of attorneys' fees and costs. On December 30, 2014, the Company filed a petition to compel arbitration and a motion to stay the action. On April 1, 2015, the plaintiff filed a petition in opposition to the Company's petition to compel arbitration and a motion to stay the action. After a hearing for the petition and motion on April 14, 2015, the Court granted the Company's petition to compel arbitration and a motion to stay the action. On January 8, 2016, the plaintiff filed an arbitration demand with the American Arbitration Association. No arbitration hearing has yet been scheduled. The Company believes this matter is without merit and intends to defend the arbitration vigorously. Because this matter is in an early stage, the Company is unable to predict its outcome and the possible loss or range of loss, if any, associated with its resolution or any potential effect the matter may have on the Company's financial position. Depending on the outcome or resolution of this matter, it could have a material effect on the Company's financial position.

On September 21, 2015, David Schmidt, a former member of Diffusion LLC and current stockholder of the Company, filed suit (the "Original Complaint") in the Circuit Court for Albemarle County, Virginia (Case. No. CL15-791, David G. Schmidt v. Diffusion Pharmaceuticals LLC), which Complaint was amended on April 14, 2016 (the "Amended Complaint"). In December 2009, Mr. Schmidt purchased a $1.5 million convertible promissory note from Diffusion LLC which he elected to immediately convert in full into membership units at the contractual per-unit conversion price of $3.50. In 2012, Diffusion LLC negotiated a reduction of the conversion price, from $3.50 to $1.00, with respect to the notes in such series that remained outstanding at such time. The Original Complaint alleged that this renegotiation represented a breach of contract with respect to Mr. Schmidt's previously converted convertible note, and requested relief of specific performance requiring Diffusion LLC to issue him an additional 1,071,432.50 units, representing the additional number of units he would have received had he converted at the renegotiated conversion price. The claim was dismissed on March 14, 2016 for failure to state a viable cause of action, but Mr. Schmidt was given 21 days to file an amended complaint. The Amended Complaint alleged that Mr. Schmidt was denied the opportunity to exercise preemptive rights under Diffusion LLC's Operating Agreement to purchase the additional 1,071,432.50 units for $1 per unit. The sole relief sought by Mr. Schmidt was an order of specific performance requiring the Company to issue him 391,358 shares of the Common Stock (the equivalent of 1,071,432.50 Diffusion Units multiplied by the Exchange Ratio) in exchange for his payment of $1,071,432.50.

On September 27, 2016, the Company, Diffusion LLC, Mr. Schmidt and the other parties thereto entered into a Settlement Agreement (the "Settlement Agreement") pursuant to which, among other things, (i) Mr. Schmidt and Diffusion each agreed to submit a consent order to the Court dismissing all claims set forth in the Amended Complaint with prejudice and without an admission of liability by any party, (ii) Mr. Schmidt and Diffusion each released, on behalf of such party and its heirs, assigns, representatives, affiliates and agents, all claims and causes of action of any nature against the other party existing as of the date of the Settlement Agreement and (iii) as consideration therefor, the Company agreed to issue and sell, to Mr. Schmidt and the other parties to the Settlement Agreement, the 2016 Convertible Notes in an aggregate principal amount of $1,880,000.

The Company recognized a litigation settlement charge of $2,500,000 which represents the difference between the fair value of the 2016 Convertible Notes issued and the cash received from Mr. Schmidt and other parties. The settlement charge was recorded as a component of general and administrative expenses within the Company's unaudited condensed consolidated statements of operations for the three and nine months ended September 30, 2016.

10. Income Taxes

Deferred tax assets and liabilities are determined based on the differences between the financial statement carrying amounts and tax bases of assets and liabilities using enacted tax rates in effect for years in which differences are expected to reverse. A deferred tax liability of $3,644,159 was recorded for the basis differences associated with indefinite-lived in-process R&D assets. Due to their indefinite-lived treatment, the related deferred tax liabilities are not expected to reverse in a period that would support the realization of the Company's deferred tax assets. The Company maintains a valuation allowance against its deferred tax assets. In August 2016, the Company abandoned future development efforts for the IPR&D asset associated with RES-440 and recorded an impairment charge of $961,000 which is equal to its acquired value. Upon recognizing the impairment, the Company recognized an income tax benefit of $364,796 and reduced the carrying value of the related deferred tax liability as of September 30, 2016 (Note 4).

The Company has incurred net operating losses for federal and state income tax purposes since inception. The Tax Reform Act of 1986 (the "Act") provides for limitation on the use of net operating loss and research and development tax credit carryforwards following certain ownership changes (as defined in the Act) that could limit the Company's ability to utilize these carryforwards. The Company may have experienced various ownership changes as a result of past financings and acquisitions. Accordingly, the Company's ability to utilize the aforementioned carryforwards may be limited. Additionally, U.S. tax laws limit the time during which these carryforwards may be applied against future taxes; therefore, the Company has determined it is more likely than not that these net operating losses will not be realized.

11. Fair Value Measurements

Certain assets and liabilities are carried at fair value under GAAP. Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. Financial assets and liabilities carried at fair value are to be classified and disclosed in one of the following three levels of the fair value hierarchy, of which the first two are considered observable and the last is considered unobservable:

- Level 1—Quoted prices in active markets for identical assets or liabilities.
- Level 2—Observable inputs (other than Level 1 quoted prices), such as quoted prices in active markets for similar assets or liabilities, quoted prices in markets that are not active for identical or similar assets or liabilities, or other inputs that are observable or can be corroborated by observable market data.
- Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to determining the fair value of the assets or liabilities, including pricing models, discounted cash flow methodologies and similar techniques.

The asset's or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

The following table presents the Company's assets and liabilities that are measured at fair value on a recurring basis:

	September 30, 2016		
	(Level 1)	(Level 2)	(Level 3)
Assets			
Cash and cash equivalents	$ 3,021,388	$ —	$ —

	December 31, 2015		
	(Level 1)	(Level 2)	(Level 3)
Assets			
Cash and cash equivalents	$ 1,997,192	$ —	$ —

Contingent Value Rights Distribution

In December 2015, the Company's Board of Directors authorized, declared and effected a distribution of the CVRs to shareholders of the Company as of the close of business on January 7, 2016 (the "CVR Record Date") at a rate of one CVR for each share of Common Stock. The CVRs, which are not certificated and not attached to the shares of Common Stock, were payable immediately prior to the effective time. Each CVR represents a non-transferable right (subject to certain limited exceptions) to potentially receive certain cash payments in the event the Company receives net cash payments during the five-year period after the Merger as a result of the sale, transfer, license or similar transaction relating to the Company's product currently known as RES-440, which is a "soft" anti-androgen, upon the terms and subject to the conditions set forth in a contingent value rights agreement, dated January 8, 2016, between the Company and Computershare, Inc., as rights agent (the "CVR Agreement"). The aggregate cash payments to be distributed to the holders of the CVRs, if any, will be equal to the amount of net cash payments received by the Company as a result of the sale, transfer, license or similar transaction relating to RES-440, as determined pursuant to the CVR Agreement, but will not exceed $50,000,000 in the aggregate. Any option or warrant holder of the Company as of the record date for the CVRs would, at the time of exercise, be entitled to receive one CVR for each share of the Company's common stock issued upon the future exercise of the option or warrant, which would entitle the holder to a pro rata portion of any CVR payments made after the date of exercise.

In connection with the abandonment of the RES-440 IPR&D asset (see Note 4), the Company remeasured the value of each CVR and as of September 30, 2016, determined the CVRs have no value.

The reconciliation of the contingent consideration liability measured at fair value on a recurring basis using significant unobservable inputs (Level 3) is as follows:

	Contingent Consideration
Issued in connection with the Merger transaction	$ 10,000
Change in fair value upon abandonment of RES-440	(10,000)
Balance at September 30, 2016	$ —

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

You should read the following discussion of our financial condition and results of operations together with the unaudited interim condensed consolidated financial statements and the notes thereto included elsewhere in this report and other financial information included in this report. The following discussion may contain predictions, estimates and other forward looking statements that involve a number of risks and uncertainties, including those discussed under "*Part I — Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations—Special Note Regarding Forward Looking Statements*" in this report and under "*Part I — Item 1A. Risk Factors*" in our annual report on Form 10-K for the fiscal year ended December 31, 2015. These risks could cause our actual results to differ materially from any future performance suggested below.

Business Overview

We are a clinical stage biotechnology company focused on extending the life expectancy of cancer patients by improving the effectiveness of current standard-of-care treatments, including radiation therapy and chemotherapy. We are developing our lead product candidate, *transcrocetinate sodium*, also known as *trans sodium crocetinate* ("TSC"), for use in the many cancer types in which tumor oxygen deprivation ("hypoxia") is known to diminish the effectiveness of current treatments. TSC is designed to target the cancer's hypoxic micro-environment, re-oxygenating treatment-resistant tissue and making the cancer cells more susceptible to the therapeutic effects of standard-of-care radiation therapy and chemotherapy.

Our lead development programs target TSC against cancers known to be inherently treatment-resistant, including brain cancers and pancreatic cancer. A Phase 1/2 clinical trial of TSC combined with first-line radiation and chemotherapy in patients newly diagnosed with primary brain cancer ("glioblastoma" or "GBM") was completed in 2015. This trial provided evidence of efficacy and safety in extending overall survival without the addition of toxicity. Based on these results, an End-of-Phase 2 meeting was held with the U.S. Food and Drug Administration ("FDA") in August 2015, resulting in agreement on the design of a single 400 patient pivotal Phase 3 registration study which, if successful, would be sufficient to support approval. Discussions with the FDA regarding extension of the TSC development program from first line GBM into first-line pancreatic cancer treatment are currently underway. TSC has been granted Orphan Drug designations for the treatment of GBM and metastatic brain cancer.

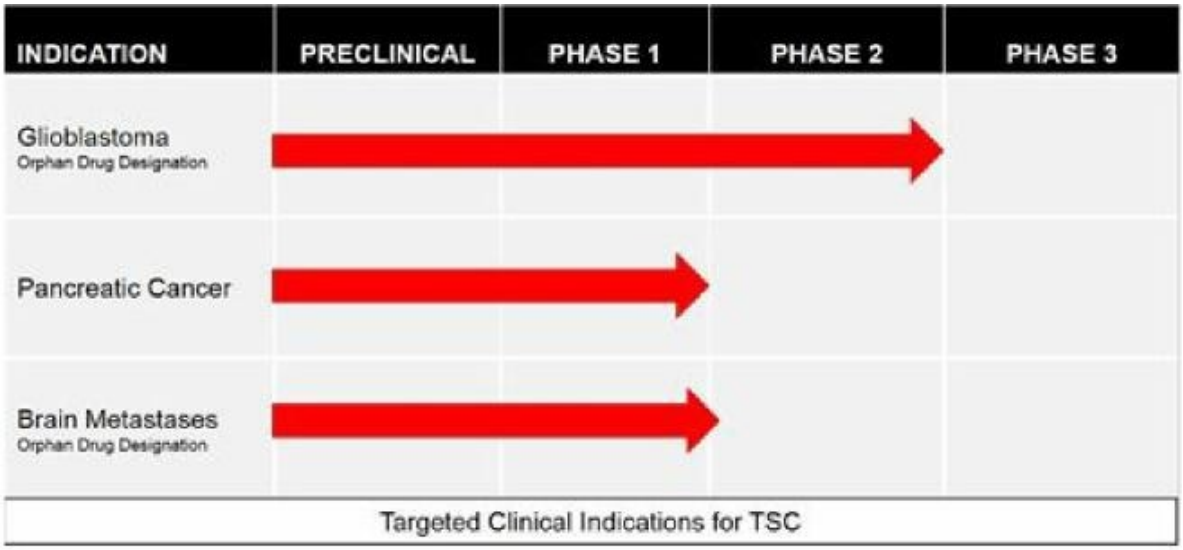
In addition to cancer, TSC also has potential applications in other indications involving hypoxia, such as hemorrhagic shock, stroke, peripheral artery disease and neurodegenerative diseases.

On January 8, 2016, we entered into a business combination whereby a wholly-owned subsidiary of the Company merged with and into Diffusion LLC, with Diffusion LLC surviving as our wholly-owned subsidiary (the "Merger"). In connection with the Merger, the Company issued to the holders of outstanding units of Diffusion LLC an aggregate of approximately 8.1 million shares of the Company's common stock ("Common Stock") and, as a result, immediately following the completion of the Merger, the former equity holders of Diffusion LLC owned approximately 84.1% of the Common Stock and the stockholders of RestorGenex immediately prior to the Merger owned approximately 15.9% of the Common Stock, in each case, on a fully-diluted basis (subject to certain exceptions and adjustments). Also in connection with the Merger, the pre-Merger directors and officers of the Company tendered their resignations and the pre-Merger directors and officers of Diffusion LLC were appointed as the new directors and officers of the Company, and our corporate headquarters was moved from Buffalo Grove, Illinois to Charlottesville, Virginia. Following the completion of the Merger, the Company changed its corporate name from "RestorGenex Corporation" to "Diffusion Pharmaceuticals Inc." and changed the trading symbol of the Company's Common Stock from "RESX" to "DFFN." In November 2016, our common stock was approved for listing on the NASDAQ Capital Market and will continue to trade under the ticker symbol "DFFN".

For accounting purposes, the Merger is treated as a “reverse acquisition” under generally acceptable accounting principles in the United States (“U.S. GAAP”) and Diffusion LLC is considered the accounting acquirer. Accordingly, Diffusion LLC’s historical results of operations will replace the Company’s historical results of operations for all periods prior to the Merger and, for all periods following the Merger, the results of operations of the combined company will be included in the Company’s financial statements. Unless otherwise stated, all comparisons in this Management’s Discussion and Analysis to prior year periods are to the results of Diffusion LLC for such period on a stand-alone basis.

Summary of Current Product Candidate Pipeline

The following table, as of September 30, 2016, summarizes the targeted clinical indications for Diffusion’s lead molecule, :



In addition to the TSC programs depicted in the table, we are exploring alternatives regarding how best to capitalize upon the legacy RestorGenex product candidate, RES-529, a novel PI3K/Akt/mTOR pathway inhibitor which has completed two Phase I clinical trials for age-related macular degeneration and was in preclinical development in oncology, specifically GBM.

The Company’s novel PI3K/Akt/mTOR pathway inhibitor, RES-529, is in preclinical development for oncology. Through a series of in vitro and in vivo animal models, RES-529 has been shown to have activity in several cancer types due to its ability to target and inhibit the PI3K/Akt/mTOR signal transduction pathway. RES-529 is a first-in-class inhibitor of both TORC1 and TORC2 that is mechanistically differentiated from other PI3K/Akt/mTOR pathway inhibitors currently in development. RES-529 has shown activity in both in vitro and in vivo glioblastoma animal models and has been demonstrated to be orally bioavailable and can cross the blood brain barrier.

Financial Summary

At September 30, 2016, we had cash and cash equivalents balances of $3.0 million. We have incurred operating losses since inception, have not generated any product sales revenue and have not achieved profitable operations. We incurred a net loss of $5.4 million and $15.5 million for the three and nine months ended September 30, 2016, respectively. Our accumulated deficit as of September 30, 2016 was $57.6 million, and we expect to continue to incur substantial losses in future periods. We anticipate that our operating expenses will increase substantially as we continue to advance our lead, clinical-stage product candidate, TSC. We anticipate that our expenses will substantially increase as we:

- complete regulatory and manufacturing activities and commence our planned Phase II and III clinical trials for TSC;
- continue the research, development and scale-up manufacturing capabilities to optimize products and dose forms for which we may obtain regulatory approval;
- conduct other preclinical and clinical studies to support the filing of a New Drug Application ("NDA") with the FDA;
- maintain, expand and protect our global intellectual property portfolio;
- hire additional clinical, manufacturing, and scientific personnel; and
- add operational, financial and management information systems and personnel, including personnel to support our drug development and potential future commercialization efforts.

We intend to use our existing cash and cash equivalents for working capital and to fund the research and development of TSC for use in the treatment of GBM, pancreatic cancer and brain metastases. We believe that our cash and cash equivalents as of September 30, 2016 will enable us to fund our operating expenses and capital expenditure requirements into the early first quarter of 2017. However, we will need to secure additional funding in the future, from one or more equity or debt financings, collaborations, or other sources, in order to carry out all of our planned research and development activities with respect to TSC and our other product candidates.

Financial Operations Overview

Revenues

We have not yet generated any revenue from product sales. We do not expect to generate revenue from product sales for the foreseeable future.

Research and Development Expense

Research and development costs are charged to expense as incurred. These costs include, but are not limited to, impairment of our in-process research and development, or IPR&D, assets, employee-related expenses, including salaries, benefits, stock-based compensation and travel expense reimbursement, as well as expenses related to third-party contract research arrangements. 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. As we advance our product candidates, we expect the amount of research and development costs will continue to increase for the foreseeable future.

General and Administrative Expense

General and administrative expenses consist principally of salaries and related costs for executive and other personnel, including stock-based compensation, expenses associated with investment bank and other financial advisory services, and travel expenses. Other general and administrative expenses include costs associated with the Merger, professional fees that were incurred in connection with preparing to operate and operating as a public company, settlement of litigation matters, facility-related costs, communication expenses and professional fees for legal, patent prosecution and maintenance, and consulting and accounting services.

Interest Expense, Net

Interest expense, net consists principally of the interest expense recorded in connection with our convertible debt instruments offset by the interest earned from our cash and cash equivalents.

Income Tax Benefit

Since inception, we have incurred net losses and have not recorded any U.S. federal or state income tax benefits for the losses as they have been offset by valuation allowances. Indefinite lived intangibles, such as IPR&D, cannot be utilized for purposes of future realization of deferred tax assets. Income tax benefits recognized are derived from the impairment charges related to our abandonment of the future development efforts for the RES-440 IPR&D asset.

Results of Operations for Three and Nine Months Ended September 30, 2016 Compared to Three and Nine Months Ended September 30, 2015

The following table sets forth our results of operations for the three months ended September 30, 2016 and 2015.

	Three Months Ended September 30,		
	2016	2015	Change
Operating expenses:			
Research and development	$ 1,941,743	$ 922,234	$ 1,019,509
General and administrative	3,852,406	421,985	3,430,421
Depreciation	5,822	2,228	3,594
Loss from operations	5,799,971	1,346,447	4,453,524
Interest expense, net	1,378	76,170	(74,792)
Loss from operations before income tax benefit	(5,801,349)	(1,422,617)	(4,378,732)
Income tax benefit	(364,796)	-	(364,796)
Net loss	$ (5,436,553)	$ (1,422,617)	$ (4,013,936)

We recognized $1.9 million in research and development expenses during the three months ended September 30, 2016 compared to $0.9 million in research and development expenses during the three months ended September 30, 2015. This increase was primarily a result of the $1.0 million noncash impairment charge upon our abandonment of the future development efforts of the RES-440 IPR&D asset. In addition, we had $0.2 million of research and development stock-based compensation expense during the three months ended September 30, 2016 compared to $0.1 million during the same period in 2015. We expect that our research and development expenses will increase significantly in future periods compared to prior year periods due to our anticipated efforts to advance the research and development of our technologies and product candidates.

General and administrative expenses were $3.9 million during the three months ended September 30, 2016 compared to $0.4 million during the three months ended September 30, 2015. The increase in general and administrative costs were primarily attributable to the $2.5 million noncash charge in September 2016 upon the settlement of the Schmidt litigation matter and a $0.5 million increase in professional fees in connection with operating as a public company in 2016. We had $0.4 million in salaries and wages during the three months ended September 30, 2016 compared to $0.2 million during the three months ended September 30, 2015 due to our increase in headcount. In addition, we had $0.2 million of stock-based compensation expense during the three months ended September 30, 2016 compared to $0.1 million during the three months ended September 30, 2015.

During the three months ended September 30, 2016, we recognized tax benefit of $0.4 million in connection with the impairment charge for RES-440.

The following table sets forth our results of operations for the nine months ended September 30, 2016 and 2015.

	Nine Months Ended September 30,		
	2016	2015	Change
Operating expenses:			
Research and development	$ 5,739,456	$ 2,602,900	$ 3,136,556
General and administrative	10,070,878	1,227,860	8,843,018
Depreciation	19,520	6,154	13,366
Loss from operations	(15,829,854)	(3,836,914)	(11,992,940)
Interest expense, net	854	160,315	(159,461)
Loss from operations before income tax benefit	(15,830,708)	(3,997,229)	(11,833,479)
Income tax benefit	(364,796)	-	(364,796)
Net loss	$ (15,465,912)	$ (3,997,229)	$ (11,468,683)

We recognized $5.7 million in research and development expenses during the nine months ended September 30, 2016 compared to $2.6 million in research and development expenses during the nine months ended September 30, 2015. This increase was primarily a result of $1.6 million in development expenses related to our TSC pancreatic cancer program and an increase in GBM-related drug manufacturing costs, and a $1.0 million noncash impairment charge upon our abandonment of future development efforts related to our RES-440 IPR&D asset. In addition, we had $0.6 million of research and development stock-based compensation expense during the nine months ended September 30, 2016 compared to $0.2 million during the same period in 2015. We expect that our research and development expenses will increase significantly in future periods compared to prior year periods due to our anticipated efforts to advance the research and development of our technologies and product candidates.

General and administrative expenses were $10.1 million during the nine months ended September 30, 2016 compared to $1.2 million during the nine months ended September 30, 2015. The increase in general and administrative costs were primarily attributable to acquisition costs of $2.0 million in connection with the reverse merger, $3.1 million in professional fees that were incurred in connection with preparing to operate as a public company and for investment bank advisory services and the $2.5 million noncash charge in September 2016 upon the settlement of the Schmidt litigation matter. We had $1.0 million salaries and wages during the nine months ended September 30, 2016 compared to $0.5 million during the nine months ended September 30, 2015 due to our increase in headcount. In addition, we had $0.5 million of stock-based compensation expense during the nine months ended September 30, 2016 compared to $0.2 million during the nine months ended September 30, 2015.

During the nine months ended September 30, 2016, we recognized tax benefit of $0.4 million in connection with the impairment charge for RES-440.

Liquidity and Capital Resources

Working Capital

Our working capital (deficit) totaled $(0.4) million, including $3.0 million in cash and cash equivalents, as of September 30, 2016.

The following table summarizes our working capital as of September 30, 2016 and December 31, 2015:

	September 30, 2016	December 31, 2015
Cash and cash equivalents	$ 3,021,388	$ 1,997,192
Prepaid expenses, deposits and other assets	265,125	45,921
Total current liabilities	(3,681,305)	(1,471,308)
Working capital (deficit)	$ (394,792)	$ 571,805

We expect to continue to incur net losses for the foreseeable future. We intend to use our existing cash and cash equivalents for working capital and to fund the research and development of our product candidates.

Cash Flows

The following table sets forth our cash flows for the nine months ended September 30, 2016 and 2015:

	Nine Months Ended September 30,	
Net cash (used in) provided by:	2016	2015
Operating activities	$ (9,354,075)	$ (2,919,334)
Investing activities	8,498,271	2,486,356
Financing activities	1,880,000	—
Net increase in cash and cash equivalents	$ 1,024,196	$ (432,978)

Operating Activities

Net cash used in operating activities of $9.4 million during the nine months ended September 30, 2016 was primarily attributable to our net loss of $15.5 million, the $0.4 reduction in our deferred tax liability that was offset by $6.0 million of non-cash charges and $0.5 million for the net change in our operating assets and liabilities. Noncash charges primarily consisted of stock-based compensation expense of $1.1 million, $1.0 million impairment charge in connection abandoning our future development efforts of RES-440, $2.5 million litigation settlement charge, and the issuance of 148,073 shares of our common stock for advisory services at an estimated fair value of $1.4 million. The net change in our operating assets and liabilities is primarily attributable to the increase in our accounts payable and accrued expenses due to the timing in processing our payroll and payment to our vendors for professional services and costs associated with our clinical and preclinical activities.

Net cash used in operating activities of $2.9 million during the nine months ended September 30, 2015 was primarily attributable to our net loss of $4.0 million that was offset by $0.5 million of non-cash charges and $0.5 million for the net change in our operating assets and liabilities. Noncash charges primarily consisted of stock-based compensation and non-cash interest related to our convertible debt.

Investing Activities

Net cash provided by investing activities was $8.5 million during the nine months ended September 30, 2016 compared to $2.5 million during the nine months ended September 30, 2015. We received $8.5 million in the Merger during the nine months ended September 30, 2016. During the nine months ended September 30, 2015, certificates of deposit matured and proceeds of $2.5 million were received.

Financing Activities

Net cash provided by financing activities was $1.9 million during the nine months ended September 30, 2016 and attributable to the cash proceeds received in connection with the issuance of 6.0% convertible notes in September 2016 in an aggregate principal amount of $1.9 million in connection with the settlement of the Schmidt litigation matter (the "2016 Convertible Notes"). There was no cash provided by or used in financing activities during the nine months ended September 30, 2015.

Capital Requirements

We expect to incur substantial expenses and generate significant operating losses as we intend to pursue our business strategy of developing our lead product candidate, TSC, for use in the treatment of GBM, pancreatic cancer and brain metastases.

To date, we have primarily used equity and debt financings to fund our ongoing business operations and short-term liquidity needs. We expect to continue this practice for the foreseeable future.

In January 2016, we completed a business combination whereby a wholly-owned subsidiary of the Company merged with Diffusion LLC. For accounting purposes, Diffusion LLC is considered the acquiring entity and, as a result, we acquired $8.5 million in cash. In September 2016, we issued the 2016 Convertible Notes and received cash proceeds of $1.9 million.

We believe our cash and cash equivalents as of September 30, 2016 will be sufficient to fund our planned operations into the early first quarter of 2017.

As of September 30, 2016, we did not have any existing credit facilities under which we could borrow funds. We may seek to raise additional funds through various sources, such as equity and debt financings, or through strategic collaborations and license agreements. We can give no assurances that we will be able to secure additional sources of funds to support our operations, or if such funds are available to us, that such additional financing will be sufficient to meet our needs or be on terms acceptable to us. This risk may increase if economic and market conditions deteriorate. If we are unable to obtain additional financing when needed, we may need to terminate, significantly modify or delay the development of our product candidates and our operations, or we may need to obtain funds through collaborators that may require us to relinquish rights to our technologies or product candidates that we might otherwise seek to develop or commercialize independently. If we are unable to raise any additional capital in the near-term and/or we cannot significantly reduce our expenses and are forced to terminate our operations, investors may experience a complete loss of their investment.

To the extent that we raise additional capital through the sale of our Common Stock, the interests of our current stockholders may be diluted. If we issue preferred stock or convertible debt securities, it could affect the rights of our common stockholders or reduce the value of our Common Stock. In particular, specific rights granted to future holders of preferred stock or convertible debt securities may include voting rights, preferences as to dividends and liquidation, conversion and redemption rights, sinking fund provisions, and restrictions on our ability to merge with or sell our assets to a third party. 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 or declaring dividends.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements, as defined by the rules and regulations of the SEC that have or are reasonably likely to have a material effect on our financial condition, changes in financial condition, revenue or expenses, results of operations, liquidity, capital expenditures or capital resources. As a result, we are not materially exposed to any financing, liquidity, market or credit risk that could arise if we had engaged in these arrangements.

Critical Accounting Policies

Certain of our critical accounting estimates require the application of significant judgment by management in selecting the appropriate assumptions in determining the estimate. By their nature, these judgments are subject to an inherent degree of uncertainty. We develop these judgments based on our historical experience, terms of existing contracts, our observance of trends in the industry and information available from other outside sources, as appropriate. Actual results may differ from these judgments under different assumptions or conditions. Different, reasonable estimates could have been used for the current period. Additionally, changes in accounting estimates are reasonably likely to occur from period to period. Both of these factors could have a material impact on the presentation of our financial condition, changes in financial condition or results of operations. We believe the following accounting estimates are the most critical to aid in fully understanding and evaluating our financial statements as they require our most subjective or complex judgments:

Goodwill

Goodwill is the excess of the cost of an acquired entity over the net amounts assigned to tangible and intangible assets acquired and liabilities assumed. We apply Accounting Standards Codification (ASC) 350 "*Goodwill and Other Intangible Assets*," which requires testing goodwill for impairment on an annual basis. We assess goodwill for impairment as part of our annual reporting process on October 1 of each year. In between valuations, we conduct additional tests if circumstances indicate a need for testing. We evaluate goodwill on a consolidated basis as we are organized as a single reporting unit. We consider certain triggering events when evaluating whether an interim goodwill impairment analysis is warranted. Among these would be a significant long-term decrease in our market capitalization based on events specific to our operations. There were no triggering events requiring an impairment analysis during the nine months ended September 30, 2016.

Intangible Assets

Our sole intangible asset as of September 30, 2016 consists of an in-process research and development ("IPR&D") intangible asset acquired as part of the reverse merger transaction on January 8, 2016. The fair value of the IPR&D assets was determined as of the acquisition date using the cost approach. The cost approach was chosen as we were not able to estimate an income stream attributable to the IPR&D assets given the fact that the related products have only completed limited preclinical and clinical trials and the timeline to commercial viability, if the FDA approval process is successful, is somewhat uncertain and would take a number of years. In August 2016, we abandoned future development efforts for the IPR&D asset associated with our RES-440 product candidate and recorded an impairment charge equal to the acquired value of RES-440. As the development efforts for our remaining RES-529 IPR&D asset continue, based on the facts and circumstances at the time of a future valuation for the purposes of assessing impairment, it is possible that the value for RES-529 currently on our unaudited condensed consolidated balance sheets could be substantially reduced or eliminated, which could result in a maximum pretax charge to operations equal to the current carrying value of our intangible asset of $8,639,000 as of September 30, 2016. We will test the IPR&D intangible asset for impairment on October 1, which is our annual impairment testing date, and we consider certain triggering events when evaluating whether an interim IPR&D impairment analysis is warranted. There were no triggering events requiring an impairment analysis for our RES-529 IPR&D asset during the three months ended September 30, 2016.

Stock-Based Compensation

We account for stock-based compensation based on the grant date fair value of the award. We recognize this cost as an expense over the requisite service period, which is generally the vesting period of the respective award. Forfeitures rates are used in stock-based compensation to adjust the recognized stock-based compensation expense to reflect the expected attrition of employees prior to their full vesting in stock-based compensation awards. Should an employee leave our company, management will adjust stock-based compensation to reflect the expense related to the portion of those awards that were unvested at the time of the employee's departure. We use the Black-Scholes option-pricing model to determine the estimated fair value of stock options. Critical inputs into the Black-Scholes option-pricing model include: the estimated grant date fair value of our common stock; the option exercise price; the expected term of the option in years; the annualized volatility of the stock; the risk-free interest rate; and the annual rate of quarterly dividends on the stock. If any of the assumptions used in the Black-Scholes model changes significantly, stock-based compensation for future awards may differ materially compared with the awards granted previously. The inputs that create the most sensitivity in our option valuation are the volatility and expected term.

Given our limited history as a publicly traded company following the Merger in January 2016, we did not have sufficient trading data to calculate volatility based on our own common stock, and the expected volatility was calculated as of each grant date based on reported data for a peer group of publicly traded companies for which historical information was available. The expected term of the stock options was determined based upon the simplified approach for employees, allowed under SEC Staff Accounting Bulletin No. 110, which assumes that the stock options will be exercised evenly from vesting to expiration, as we did not have sufficient historical exercise data to provide a reasonable basis upon which to estimate the expected term. As data associated with future exercises is obtained, the expected term of future grants will be adjusted accordingly. For non-employee awards, we use the remaining contractual term.

Special Note Regarding Forward-Looking Statements

This report includes forward-looking statements. We may, in some cases, use terms such as "believes," "estimates," "anticipates," "expects," "plans," "intends," "may," "could," "might," "will," "should," "approximately" or other words that convey uncertainty of future events or outcomes to identify these forward-looking statements. Forward-looking statements appear in a number of places throughout this Quarterly Report and include statements regarding our intentions, beliefs, projections, outlook, analyses or current expectations concerning, among other things, our ongoing and planned preclinical development and clinical trials, the timing of and our ability to make regulatory filings and obtain and maintain regulatory approvals for our product candidates, our intellectual property position, the degree of clinical utility of our products, particularly in specific patient populations, our ability to develop commercial functions, expectations regarding clinical trial data, our results of operations, cash needs, financial condition, liquidity, 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. Although we believe that we have a reasonable basis for each forward-looking statement contained in this Quarterly Report, 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 in this Annual Report. In addition, even if our results of operations, financial condition and liquidity, and the development of the industry in which we operate are consistent with the forward-looking statements contained in this Annual Report, they may not be predictive of results or developments in future periods.

Actual results could differ materially from our forward-looking statements due to a number of factors, including risks related to:

- our ability to obtain additional financing;
- our estimates regarding expenses, future revenues, capital requirements and needs for additional financing;
- the success and timing of our preclinical studies and clinical trials;
- the difficulties in obtaining and maintaining regulatory approval of our products and product candidates, and the labeling under any approval we may obtain;
- our plans and ability to develop and commercialize our product candidates;
- our failure to recruit or retain key scientific or management personnel or to retain our executive officers;
- the accuracy of our estimates of the size and characteristics of the potential markets for our product candidates and our ability to serve those markets;
- regulatory developments in the United States and foreign countries;
- the rate and degree of market acceptance of any of our product candidates;
- obtaining and maintaining intellectual property protection for our product candidates and our proprietary technology;
- our ability to operate our business without infringing the intellectual property rights of others;
- recently enacted and future legislation regarding the healthcare system;
- the success of competing products that are or may become available; and
- the performance of third parties, including contract research organizations and manufacturers.

You should also read carefully the factors described in the “Risk Factors” section of our Annual Report on Form 10-K filed with the Securities and Exchange Commission (the “SEC”) on March 25, 2016 (as amended) and elsewhere in our public filing to better understand the risks and uncertainties inherent in our business and underlying any forward-looking statements. As a result of these factors, we cannot assure you that the forward-looking statements in this Quarterly Report on Form 10-Q will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified timeframe, or at all.

Any forward-looking statements that we make in this Quarterly Report speak only as of the date of such statement, and, except as required by applicable law, we undertake no obligation to update such statements to reflect events or circumstances after the date of this Quarterly Report or to reflect the occurrence of unanticipated events. Comparisons of results for current and any prior periods are not intended to express any future trends or indications of future performance, unless expressed as such, and should only be viewed as historical data.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

This Item 3 is not applicable to us as a smaller reporting company and has been omitted.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

The term “disclosure controls and procedures” means our controls and other procedures 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. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive officer and principal financial officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

We maintain disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) that are designed to provide reasonable assurance that information required to be disclosed by us in the reports 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 principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. In designing and evaluating our disclosure controls and procedures, we recognize that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and we are required to apply our judgment in evaluating the cost-benefit relationship of possible internal controls. Our management evaluated, with the participation of our Chief Executive Officer and principal financial officer, the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered in this report. Based on that evaluation, our Chief Executive Officer and principal financial officer concluded that our disclosure controls and procedures were effective as of the end of such period to provide reasonable assurance that information required to be disclosed in our Exchange Act reports 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 principal financial officer, as appropriate to allow timely decisions regarding disclosure.

Our principal executive officer and principal financial officer do not expect that our disclosure controls and procedures or internal controls will prevent all error and all fraud. Although our disclosure controls and procedures were designed to provide reasonable assurance of achieving their objectives, a control system, no matter how well conceived and operated, can provide only reasonable, not absolute assurance that the objectives of the system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within our company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented if there exists in an individual a desire to do so. There can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions.

Change in Internal Control Over Financial Reporting

Prior to the Merger, Diffusion LLC was a private, non-reporting operating company not subject to the provisions of the Sarbanes-Oxley Act of 2002, as amended, applicable to public companies. We are continuing to integrate our pre-Merger business processes and information systems with those of Diffusion LLC, including internal controls. This work began immediately upon completion of the Merger in January 2016 and will continue throughout calendar year 2016.

There were no changes in internal control over financial reporting during the three months ended September 30, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. During the nine months ended September 30, 2016, we engaged several consultants with experience in public company accounting, financial reporting and SOX implementation, and have initiated the implementation of robust risk assessment, control design, control monitoring and related functions.

PART II – OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

For this item, please refer to Note 9 Commitments and Contingencies to the Notes to the Unaudited Condensed Consolidated Financial Statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q, which is incorporated herein by reference.

ITEM 1A. RISK FACTORS

Risks Related to Ownership of Our Common Stock and Other Securities

This Item 1A is not applicable to us as a smaller reporting company and has been omitted.

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

Unregistered Sales of Equity Securities

On September 27, 2016, the Company issued and sold 2016 Convertible Notes in an aggregate principal amount of $1,880,000. At any time prior to the maturity date, the holders may elect to convert, in whole or in part, the 2016 Convertible Notes (including any accrued but unpaid interest) into shares of Common Stock at a conversion price of $3.50 per share, as adjusted in accordance with the terms of the note. The securities were issued in reliance upon an exemption pursuant to Section 4(2) of the Securities Act of 1933, as amended.

Issuer Purchases of Equity Securities

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

Not applicable.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

Not applicable.

ITEM 6. EXHIBITS

See attached Exhibit Index.

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 14, 2016

DIFFUSION PHARMACEUTICALS INC.

By: /s/ David G. Kalergis
David G. Kalergis
Chairman and Chief Executive Officer
(Principal Executive Officer)

By: /s/ Ben L. Shealy
Ben L. Shealy
Senior Vice President, Finance
(Principal Financial and Accounting Officer)

DIFFUSION PHARMACEUTICALS INC.
QUARTERLY REPORT ON FORM 10-Q
EXHIBIT INDEX

Exhibit No.	Description	Method of Filing
3.1	Certificate of Incorporation (as amended) of Diffusion Pharmaceuticals Inc.	Filed herewith
31.1	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 and SEC Rule 13a-14(a)	Filed herewith
31.2	Certification of principal financial officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 and SEC Rule 13a-14(a)	Filed herewith
32.1	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Furnished herewith
32.2	Certification of principal financial officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Furnished herewith
101	The following materials from Diffusion's quarterly report on Form 10-Q for the quarter ended September 30, 2016, formatted in XBRL (Extensible Business Reporting Language): (i) the Unaudited Condensed Consolidated Balance Sheets, (ii) the Unaudited Condensed Consolidated Statements of Operations, (iii) the Unaudited Condensed Consolidated Statement of Changes in Stockholders' Equity (Deficit), (iv) the Unaudited Condensed Consolidated Statements of Cash Flows, and (v) Notes to Unaudited Condensed Consolidated Financial Statements	Filed herewith

EXHIBIT 3.1

CERTIFICATE OF INCORPORATION
OF
DIFFUSION PHARMACEUTICALS INC.
(AS AMENDED)

ARTICLE I
NAME

The name of the corporation is Diffusion Pharmaceuticals Inc. (the "Corporation").

ARTICLE II
REGISTERED OFFICE AND AGENT

The address of the registered office of the Corporation in the State of Delaware is 615 South Dupont Hwy., in the City of Dover, Zip Code of 19901, County of Kent. The name of the registered agent of the Corporation at that address is National Corporate Research, Ltd.

ARTICLE III
PURPOSE

The purpose of the Corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of the State of Delaware ("DGCL").

ARTICLE IV
CAPITAL STOCK

A. The total number of shares of common stock which the Corporation shall have authority to issue is 1,000,000,000, at a par value of $0.001 per share ("Common Stock"), and the total number of shares of preferred stock which the Corporation shall have authority to issue is 5,000,000, at a par value of $0.001 per share ("Preferred Stock").

1. Common Stock. All preferences, voting powers, relative, participating, optional or other special rights and privileges, and qualifications, limitations, or restrictions of the Common Stock are expressly made subject and subordinate to those that may be fixed with respect to any shares of the Preferred Stock. Except as otherwise required by law or this Certificate of Incorporation, each share of Common Stock shall entitle the holder thereof to one (1) vote, in person or by proxy, on each matter submitted to a vote of stockholders of the Corporation. Subject to the preferential rights of the Preferred Stock, the holders of shares of Common Stock shall be entitled to receive, when and if declared by the Board of Directors, out of the assets of the Corporation which are by law available therefor, dividends payable either in cash, in property or in shares of capital stock. In the event of any dissolution, liquidation or winding up of the affairs of the Corporation, after distribution in full of the preferential amounts, if any, to be distributed to the holders of shares of the Preferred Stock, holders of Common Stock shall be entitled, unless otherwise provided by law or this Certificate of Incorporation, to receive all of the remaining assets of the Corporation of whatever kind available for distribution to stockholders ratably in proportion to the number of shares of Common Stock held by them respectively.

2. Preferred Stock. The Preferred Stock may be issued from time to time in one or more series, as determined by the Board of Directors of the Corporation (the "Board of Directors"). The Board of Directors is expressly authorized to provide for the issue, in one or more series, of all or any of the remaining shares of Preferred Stock and, in the resolution or resolutions providing for such issue, to establish for each such series the number of its shares, the voting powers, full or limited, of the shares of such series, or that such shares shall have no voting powers, and the designations, preferences and relative, participating, optional or other special rights, if any, of the shares of such series, and any qualifications, limitations or restrictions thereof. The powers, preferences and relative, participating, optional and other special rights of each series of preferred stock and the qualifications, limitations or restrictions thereof, if any, may differ from those of any and all other series at any time outstanding. The Board of Directors is further expressly authorized to increase or decrease (but not below the number of shares of any such series then outstanding) the number of shares of any series, the number of which was fixed by it, subsequent to the issuance of shares of such series then outstanding, subject to the powers, preferences and rights, and the qualifications, limitations and restrictions thereof stated in this Certificate of Incorporation or the resolution of the Board of Directors originally fixing the number of shares of such series. If the number of shares of any series is so decreased, then the shares constituting such decrease shall resume the status which they had prior to the adoption of the resolution originally fixing the number of shares of such series.

Effective upon the effective time of this Certificate of Amendment of the Certificate of Incorporation with the Secretary of State of the State of Delaware (the "Effective Time"), each ten (10) shares of Common Stock issued and outstanding immediately prior to the Effective Time shall, automatically and without the necessity for any further action, be changed, reclassified and combined into one (10 share of Common Stock (the "Reverse Stock Split"). No fractional shares shall be issued in connection with the Reverse Stock Split. Stockholders who otherwise would be entitled to receive fractional shares of Common Stock shall have that rounded up to one additional whole share. Each certificate that immediately prior to the Effective Time represented shares of Common Stock ("Old Certificates") shall thereafter represent that number of shares of Common Stock into which the shares of Common Stock represented by the Old Certificate shall have been combined, subject to the elimination of fractional shares as described above.

ARTICLE V
EXCULPATION AND INDEMNIFICATION

A. Limitation of Liability. A director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except to the extent such exemption from liability or limitation thereof is not permitted under the DGCL as it presently exists or may hereafter be amended. Any amendment, modification or repeal of the foregoing sentence shall not adversely affect any right arising prior to the time of such amendment, modification or repeal.

B. Right of Indemnification. The Corporation shall indemnify and hold harmless, to the fullest extent permitted by applicable law as it presently exists or may hereafter be amended, any person (a "Covered Person") who was or is made or is threatened to be made a party or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (a "Proceeding"), by reason of the fact that he or she, or a person for whom he or she is the legal representative, is or was a director, officer, employee or agent of the Corporation or, while a director, officer, employee or agent of the Corporation, is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys' fees) reasonably incurred by such Covered Person. Notwithstanding the preceding sentence, except as otherwise provided in section D of this Article V, the Corporation shall not be required to indemnify a Covered Person in connection with a Proceeding (or part thereof) commenced by such Covered Person unless the commencement of such Proceeding (or part thereof) by the Covered Person was authorized in the specific case by the Board of Directors.

C. Prepayment of Expenses. The Corporation shall to the fullest extent not prohibited by applicable law pay the expenses (including attorneys' fees) incurred by a Covered Person in defending any Proceeding in advance of its final disposition, provided, however, that, to the extent required by law, such payment of expenses in advance of the final disposition of the Proceeding shall be made only upon receipt of an undertaking by the Covered Person to repay all amounts advanced if it should be ultimately determined that the Covered Person is not entitled to be indemnified under this Article V or otherwise.

D. Claims. If a claim for indemnification (following the final disposition of the Proceeding with respect to which indemnification is sought, including any settlement of such Proceeding) or advancement of expenses under this Article V is not paid in full within thirty (30) days after a written claim therefor by the Covered Person has been received by the Corporation, the Covered Person may file suit to recover the unpaid amount of such claim and, if successful in whole or in part, shall be entitled to be paid the expense of prosecuting such claim to the fullest extent permitted by applicable law. In any such action the Corporation shall have the burden of proving that the Covered Person is not entitled to the requested indemnification or advancement of expenses under this Article V and applicable law.

E. Non-Exclusivity of Rights. The rights conferred on any Covered Person by this Article V shall not be exclusive of any other rights which such Covered Person may have or hereafter acquire under any statute, any other provision of this Certificate of Incorporation, the Bylaws of the Corporation, or any agreement, vote of stockholders or disinterested directors or otherwise.

F. Insurance. The Corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the Corporation, or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the Corporation would have the power to indemnify such person against such liability under this Article V, the DGCL or otherwise.

G. Amendment or Repeal. Any right to indemnification or to advancement of expenses of any Covered Person arising hereunder shall not be eliminated or impaired by an amendment to or repeal of this Article V after the occurrence of the act or omission that is the subject of the civil, criminal, administrative or investigative action, suit or proceeding for which indemnification or advancement of expenses is sought.

H. Other Indemnification and Advancement of Expenses. This Article V shall not limit the right of the Corporation, to the extent and in the manner permitted by law, to indemnify and to advance expenses to persons other than Covered Persons when and as authorized by appropriate corporate action.

ARTICLE VI
MANAGEMENT

For the management of the business and for the conduct of the affairs of the Corporation, and in further definition, limitation and regulation of the powers of the Corporation, of its directors and of its stockholders or any class thereof, as the case may be, it is further provided that:

A. The management of the business and the conduct of the affairs of the Corporation shall be vested in the Board of Directors. The Board of Directors shall fix the number of directors that constitute the whole Board of Directors in the manner provided in the Bylaws of the Corporation, subject to any restrictions that may be set forth in this Certificate of Incorporation.

B. In furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly empowered to adopt, amend or repeal the Bylaws of the Corporation or adopt new Bylaws of the Corporation without any action on the part of the stockholders. Any adoption, amendment or repeal of the Bylaws of the Corporation by the Board of Directors shall require the approval of a majority of the directors then in office. The stockholders of the Corporation shall also have the power to adopt, amend or repeal the Bylaws of the Corporation; provided, however, that, in addition to any vote of the holders of any class or series of stock of the Corporation required by law or by this Certificate of Incorporation, the affirmative vote of the holders of at least sixty-six and two-thirds percent (66-2/3%) of the voting power of all of the then-outstanding shares of the capital stock of the Corporation entitled to vote generally in the election of directors, voting together as a single class, shall be required to adopt, amend or repeal any provision of the Bylaws of the Corporation.

C. The Corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by the DGCL, and all rights conferred upon stockholders herein are granted subject to this reservation.

ARTICLE VII
STOCKHOLDER MEETINGS

Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws of the Corporation may provide. Elections of directors need not be by written ballot unless and except to the extent that the Bylaws of the Corporation so provide. Any action required to or which may be taken at a meeting of stockholders of the corporation may be taken without a meeting if authorized by a writing signed by all of the holders of shares who would be entitled to vote upon the action at a meeting for such purpose.

ARTICLE VIII
INCORPORATOR

The name and mailing address of the incorporator of the Corporation are as follows:

Amy E. Culbert
Oppenheimer Wolff & Donnelly LLP
Campbell Mithun Tower, Suite 2000
222 South Ninth Street
Minneapolis, MN 55402

ARTICLE IX
EFFECTIVE TIME

This Certificate of Incorporation shall be effective as of 5:00 p.m. Eastern Time on June 18, 2015.

The undersigned, being the incorporator named above, for the purpose of forming a corporation pursuant to the DGCL, does hereby make this Certificate of Incorporation, hereby acknowledging, declaring and certifying that the foregoing Certificate of Incorporation is the undersigned's act and deed and the facts herein stated are true, and accordingly has hereunto set the undersigned's hand this 17th day of June, 2015.

INCORPORATOR:

By: /s/ Amy E. Culbert
Amy E. Culbert

Amended: August 17, 2016

Exhibit 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO SECTION 302 OF THE SARBANES OXLEY ACT OF 2002 AND SEC RULE 13a-14(a)

I, David G. Kalergis, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Diffusion Pharmaceuticals Inc.;

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

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

4. The registrant's other certifying officer(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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

5. The registrant's other certifying officer(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 14, 2016

/s/ David G. Kalergis
David G. Kalergis
Chairman and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT TO SECTION 302 OF THE SARBANES OXLEY ACT OF 2002 AND SEC RULE 13a-14(a)

I, Ben L. Shealy, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Diffusion Pharmaceuticals Inc.;

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

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

4. The registrant's other certifying officer(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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

5. The registrant's other certifying officer(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 14, 2016

/s/ Ben L. Shealy
Ben L. Shealy
Senior Vice President, Finance
(Principal Financial Officer)

Exhibit 32.1

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

In connection with the Quarterly Report of Diffusion Pharmaceuticals Inc. (the "Company") on Form 10-Q for the quarter ended September 30, 2016 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, David G. Kalergis, Chairman and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my 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.

/s/ David G. Kalergis
David G. Kalergis
Chairman and Chief Executive Officer
November 14, 2016

Exhibit 32.2

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

In connection with the Quarterly Report of Diffusion Pharmaceuticals Inc. (the "Company") on Form 10-Q for the quarter ended September 30, 2016 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Ben Shealy, Senior Vice President, Finance of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my 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.

/s/ Ben L. Shealy
Ben L. Shealy
Senior Vice President, Finance
November 14, 2016