

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

FORM 10-Q

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

For the quarterly period ended September 30, 2022

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

Commission file number: 1-16467

RESPIRERX PHARMACEUTICALS INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

33-0303583
(I.R.S. Employer
Identification Number)

126 Valley Road, Suite C
Glen Rock, New Jersey 07452
 (Address of principal executive offices)

(201) 444-4947
(Registrant's telephone number, including area code)

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

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
N/A	N/A	N/A

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 every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes ☒ No ☐

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

Large accelerated filer ☐

Accelerated filer ☐Non-accelerated filer ☒Smaller reporting company ☒Emerging growth company ☐

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

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

Yes ☐ No ☒

As of November 10, 2022, the Company had 119,594,276, shares of common stock, \$0.001 par value, issued and outstanding.

**RESPIRERX PHARMACEUTICALS INC.
AND SUBSIDIARY**

TABLE OF CONTENTS

	<u>Page Number</u>
<u>PART I - FINANCIAL INFORMATION</u>	
<u>Item 1. Condensed Consolidated Financial Statements</u>	4
<u>Condensed Consolidated Balance Sheets - September 30, 2022 (Unaudited) and December 31, 2021</u>	4
<u>Condensed Consolidated Statements of Operations (Unaudited) – Three-months and Nine-months Ended September 30, 2022 and 2021</u>	5
<u>Condensed Consolidated Statements of Stockholders’ Deficiency (Unaudited) - Three-months and Nine-months Ended September 30, 2022 and 2021</u>	6
<u>Condensed Consolidated Statements of Cash Flows (Unaudited) - Nine-months Ended September 30, 2022 and 2021</u>	7
<u>Notes to Condensed Consolidated Financial Statements (Unaudited)</u>	9
<u>Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations</u>	26
<u>Item 3. Quantitative and Qualitative Disclosures about Market Risk</u>	32
<u>Item 4. Controls and Procedures</u>	32
<u>PART II - OTHER INFORMATION</u>	
<u>Item 1. Legal Proceedings</u>	33
<u>Item 1A. Risk Factors</u>	33
<u>Item 2. Unregistered Sales of Equity Securities and Use of Proceeds</u>	33
<u>Item 3. Defaults Upon Senior Securities</u>	33
<u>Item 4. Mine Safety Disclosures</u>	34
<u>Item 5. Other Information</u>	34
<u>Item 6. Exhibits</u>	34
<u>SIGNATURES</u>	35

INTRODUCTORY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q of RespireRx Pharmaceuticals Inc., referred to herein as our “Q3 2022 Quarterly Report” (“RespireRx” and together with RespireRx’s wholly owned subsidiary, Pier Pharmaceuticals, Inc. (“Pier”), the “Company,” “we,” “us” or “our,” unless the context indicates otherwise) 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 the Company intends that such forward-looking statements be subject to the safe harbor created thereby. These might include statements regarding the Company’s future plans, targets, estimates, assumptions, financial position, business strategy and other plans and objectives for future operations, and assumptions and predictions about research and development efforts, including, but not limited to, preclinical and clinical research design, execution, timing, costs and results, future product demand, supply, manufacturing, costs, marketing and pricing factors.

In some cases, forward-looking statements may be identified by words including “assumes,” “could,” “ongoing,” “potential,” “predicts,” “projects,” “should,” “will,” “would,” “anticipates,” “believes,” “intends,” “estimates,” “expects,” “plans,” “contemplates,” “targets,” “continues,” “budgets,” “may,” or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words, and such statements may include, but are not limited to, statements regarding (i) future research plans, expenditures and results, (ii) potential collaborative arrangements, (iii) the potential utility of the Company’s products candidates, (iv) reorganization plans, and (v) the need for, and availability of, additional financing. Forward-looking statements are based on information available at the time the statements are made and involve known and unknown risks, uncertainties and other factors that may cause our results, levels of activity, performance or achievements to be materially different from the information expressed or implied by the forward-looking statements in this Q3 2022 Quarterly Report.

These factors include but are not limited to, regulatory policies or changes thereto, available cash, research and development results, issuance of patents, competition from other similar businesses, interest of third parties in collaborations with us, and market and general economic factors, and other risk factors disclosed in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021 as filed with the SEC on April 15, 2022 (the “2021 Form 10-K”) and as may be included in our Q1 2022, Q2 2022 and in this Q3 2022 Quarterly Report.

You should read these risk factors and the other cautionary statements made in the Company’s filings as being applicable to all related forward-looking statements wherever they appear in this Q3 2022 Quarterly Report. We cannot assure you that the forward-looking statements in our Q1, Q2 2022 and in this Q3 2022 Quarterly Report or in our 2021 Annual Report will prove to be accurate and therefore prospective investors are encouraged not to place undue reliance on forward-looking statements. You should read this Q3 2022 Quarterly Report completely. Other than as required by law, we undertake no obligation to update or revise these forward-looking statements, even though our situation may change in the future.

We caution investors not to place undue reliance on any forward-looking statement that speaks only as of the date made and to recognize that forward-looking statements are predictions of future results, which may not occur as anticipated. Actual results could differ materially from those anticipated in the forward-looking statements and from historical results, due to the risks and uncertainties described in our Q1 2022 Q2 2022 and in this Q3 2022 Quarterly Report and our Annual Report in our 2021 Form 10-K, as well as others that we may consider immaterial or do not anticipate at this time. These forward-looking statements are based on assumptions regarding the Company’s business and technology, which involve judgments with respect to, among other things, future scientific, economic, regulatory and competitive conditions, collaborations with third parties, and future business decisions, all of which are difficult or impossible to predict accurately and many of which are beyond the Company’s control. Although we believe that the expectations reflected in our forward-looking statements are reasonable, we do not know whether our expectations will prove correct. Our expectations reflected in our forward-looking statements can be affected by inaccurate assumptions that we might make or by known or unknown risks and uncertainties, including those described in our Q1 2022, Q2 2022 and in this Q3 2022 Quarterly Report and our Annual Report in our 2021 Form 10-K. These risks and uncertainties are not exclusive and further information concerning us and our business, including factors that potentially could materially affect our financial results or condition, may emerge from time to time.

Forward-looking statements speak only as of the date they are made. The Company does not undertake and specifically declines any obligation to update any forward-looking statements or to publicly announce the results of any revisions to any statements to reflect new information or future events or developments.

PART I - FINANCIAL INFORMATION

ITEM 1. CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

**RESPIRERX PHARMACEUTICALS INC.
AND SUBSIDIARY**

CONDENSED CONSOLIDATED BALANCE SHEETS

	September 30, 2022	December 31, 2021
	(unaudited)	
Current assets:		
Cash and cash equivalents	\$ 60	\$ 1,398
Deferred financing costs	-	177,883
Prepaid expenses	50,543	29,456
Total current assets	50,603	208,737
Total assets	\$ 50,603	\$ 208,737
LIABILITIES AND STOCKHOLDERS' DEFICIENCY		
Current liabilities:		
Accounts payable and accrued expenses, including amounts owed to related parties (Note 5)	\$ 5,751,058	\$ 5,235,767
Accrued compensation and related expenses	3,130,708	2,608,708
Convertible notes payable, currently due and payable on demand, including accrued interest of \$211,449 and \$151,391 at September 30, 2022 and December 31, 2021 (Note 4)	1,213,350	790,153
Note payable to SY Corporation, including accrued interest of \$495,239 and \$459,358 at September 30, 2022 and December 31, 2021, payment obligation currently in default (Note 4)	722,648	837,104
Notes and advances payable from officers, including accrued interest (Note 4)	363,551	230,356
Notes payable to former officer, including accrued interest (Note 4)	220,571	205,222
Other short-term notes payable	35,346	15,185
Total current liabilities	11,437,232	9,922,495
Long-term liabilities		
Long-term accounts payable associated with payment settlement agreements due to affiliates (Note 5)	204,000	294,000
Total long-term liabilities	204,000	294,000
Total liabilities	11,641,232	10,216,495
Commitments and contingencies (Note 8)		
Stockholders' deficiency: (Note 6)		
Series B convertible preferred stock, \$0.001 par value; \$0.6667 per share liquidation preference; aggregate liquidation preference \$25,001; shares authorized: 37,500; shares issued and outstanding: 37,500; common shares issuable upon conversion at 0.000030 common shares per Series B share: 1	21,703	21,703
Common stock, \$0.001 par value; shares authorized: 2,000,000,000; shares issued and outstanding: 119,594,276 outstanding at September 30, 2022 and 97,894,276 at December 31, 2021, respectively	119,594	97,894
Additional paid-in capital	164,036,239	163,827,781
Accumulated deficit	(175,768,165)	(173,955,136)
Total stockholders' deficiency	(11,590,629)	(10,007,758)
Total liabilities and stockholders' deficiency	\$ 50,603	\$ 208,737

See accompanying notes to condensed consolidated financial statements (unaudited).

**RESPIRERX PHARMACEUTICALS INC.
AND SUBSIDIARY**

**CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)**

	Three-Months Ended September 30,		Nine-Months Ended September 30,	
	2022	2021	2022	2021
Operating expenses:				
General and administrative, including related parties	\$ 250,916	\$ 423,558	\$ 958,086	\$ 1,495,103
Research and development, including related parties	138,050	157,751	400,307	550,343
Total operating expenses	388,966	581,309	1,358,393	2,045,446
Loss from operations	(388,966)	(581,309)	(1,358,393)	(2,045,446)
Gain on warrant exchange	-	-	-	1,099
Gain/(Loss) on extinguishment or settlement or modification of debt and other liabilities	(71,161)	62,548	(71,161)	62,548
Interest expense, including related parties	(94,643)	(228,253)	(533,812)	(459,566)
Foreign currency transaction gain (loss)	82,192	38,332	150,337	70,220
Net loss	\$ (472,578)	\$ (708,682)	\$ (1,813,029)	\$ (2,371,145)
Deemed dividend associated with most favored nation provisions of convertible notes	\$ (1,168,594)	\$ (378,042)	\$ (1,520,332)	\$ (378,042)
Net loss attributable to common stockholders	<u>\$ (1,642,172)</u>	<u>\$ (1,086,724)</u>	<u>\$ (3,333,361)</u>	<u>\$ (2,749,187)</u>
Net loss per common share attributable to common stockholders - basic and diluted	<u>\$ (0.01)</u>	<u>\$ (0.01)</u>	<u>\$ (0.03)</u>	<u>\$ (0.03)</u>
Weighted average common shares outstanding - basic and diluted	<u>119,264,928</u>	<u>90,396,596</u>	<u>107,816,034</u>	<u>83,757,619</u>

See accompanying notes to condensed consolidated financial statements (unaudited).

**RESPIRERX PHARMACEUTICALS INC.
AND SUBSIDIARY**

**CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' DEFICIENCY
(Unaudited)**

Three-months and Nine-months Ended September 30, 2022

	Series B Convertible Preferred Stock		Common Stock		Additional	Accumulated	Total
	Shares	Amount	Shares	Par Value	Paid-in Capital	Deficit	Stockholders' Deficiency
Balance, December 31, 2021	37,500	\$ 21,703	97,894,276	\$ 97,894	\$163,827,781	\$(173,955,136)	\$ (10,007,758)
Net loss	-	-	-	-	-	(860,163)	(860,163)
Balance, March 31, 2022	37,500	\$ 21,703	97,894,276	\$ 97,894	\$163,827,781	\$(174,815,299)	\$ (10,867,921)
Warrant value for issuance of convertible note	-	-	-	-	25,000	-	25,000
Issuance of common stock upon convertible notes conversions	-	-	19,175,000	19,175	172,575	-	191,750
Net loss	-	-	-	-	-	(480,288)	(480,288)
Balance, June 30, 2022	37,500	21,703	117,069,276	117,069	164,025,356	(175,295,587)	(11,131,459)
Issuance of common stock upon convertible note conversion	-	-	2,525,000	2,525	22,725	-	25,250
Issuance of convertible notes	-	-	-	-	(11,842)	-	(11,842)
Net loss	-	-	-	-	-	(472,578)	(472,578)
Balance, September 30, 2022	<u>37,500</u>	<u>\$ 21,703</u>	<u>119,594,276</u>	<u>\$119,594</u>	<u>\$164,036,239</u>	<u>\$(175,768,165)</u>	<u>\$ (11,590,629)</u>

Three-months and Nine-months Ended September 30, 2021

	Series B Convertible Preferred Stock		Common Stock		Additional	Accumulated	Total
	Shares	Amount	Shares	Par Value	Paid-in Capital	Deficit	Stockholders' Deficiency
Balance, December 31, 2020	37,500	\$ 21,703	71,271,095	\$71,271	\$162,654,002	\$(170,810,296)	\$ (8,063,320)
Sale of common stock	-	-	3,600,000	3,600	113,699	-	117,299
Costs of stock issuance	-	-	-	-	(52,609)	-	(52,609)
Issuance of note commitment shares and beneficial conversion feature	-	-	2,000,000	2,000	95,500	-	97,500
Issuance of common stock upon conversion of convertible notes	-	-	12,625,557	12,626	239,885	-	252,511
Stock -based compensation	-	-	-	-	44,250	-	44,250
Adjustment due to reverse stock split	-	-	(56)	-	-	-	-
Net loss	-	-	-	-	-	(850,249)	(850,249)
Balance, March 31, 2021	37,500	21,703	89,496,596	89,497	163,094,727	(171,660,545)	(8,454,618)
Issuance of common stock upon cashless warrant exercise	-	-	900,000	900	(900)	-	-
Stock-based compensation	-	-	-	-	7,500	-	7,500
Gain on warrant exchanges	-	-	-	-	(1,099)	-	(1,099)
Note discounts	-	-	-	-	443,550	-	443,550
Net loss	-	-	-	-	-	(812,214)	(812,214)
Balance, June 30, 2021	37,500	21,703	90,396,596	90,397	163,543,778	(172,472,759)	(8,816,881)
Issuance of note with beneficial conversion features, other note discounts and warrant	-	-	-	-	98,175	-	98,175
Stock-based compensation	-	-	-	-	2,500	-	2,500
Net loss	-	-	-	-	-	(708,682)	(708,682)
Balance, September 30, 2021	<u>37,500</u>	<u>\$ 21,703</u>	<u>90,396,596</u>	<u>\$90,397</u>	<u>\$163,644,453</u>	<u>\$(173,181,441)</u>	<u>\$ (9,424,888)</u>

See accompanying notes to condensed consolidated financial statements (unaudited).

**RESPIRERX PHARMACEUTICALS INC.
AND SUBSIDIARY**

**CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)**

	Nine-months Ended September 30,	
	2022	2021
Cash flows from operating activities:		
Net loss	\$ (1,813,029)	\$ (2,371,145)
Adjustments to reconcile net loss to net cash used in operating activities:		
Amortization of original issue discount, capitalized note costs and debt discounts to interest expense	382,377	341,305
Stock-based compensation included in -		
General and administrative expenses	-	28,000
Research and development expenses	-	26,250
Equity-based conversion fees	2,000	6,070
Gain on warrant exchange	-	(1,099)
Loss on modification of convertible notes	71,161	-
Foreign currency transaction (gain) loss	(150,337)	(70,220)
Changes in operating assets and liabilities:		
Increase (decrease) in cash from		
Deferred financing costs	177,883	(167,976)
Prepaid expenses	74,764	(29,796)
Fees paid with shares of Common Stock	-	-
Accounts payable and accrued expenses	438,950	470,280
Accrued compensation and related expenses	522,000	867,950
Accrued interest payable	139,170	99,749
Net cash used in operating activities	<u>(155,061)</u>	<u>(800,622)</u>
Cash flows from financing activities:		
Proceeds from convertible note borrowings	120,000	754,500
Capitalized note costs and original issue discount	-	(109,950)
Proceeds from sale of Common Stock	-	117,299
Borrowings on short-term notes payable, net of repayments	(75,689)	31,374
Proceeds from or repayment of officer advance	109,412	7,130
Net cash provided by financing activities	<u>153,723</u>	<u>800,353</u>
Cash and cash equivalents:		
Net (decrease)/increase	(1,338)	(269)
Balance at beginning of period	1,398	825
Balance at end of period	<u>\$ 60</u>	<u>\$ 556</u>

(Continued)

**RESPIRERX PHARMACEUTICALS INC.
AND SUBSIDIARY**

**CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)**

(Continued)

	Nine-months Ended September30,	
	2022	2021
Supplemental disclosures of cash flow information:		
Cash paid for -		
Interest	\$ 10,308	\$ 6,653
Income taxes	\$ -	\$ -
Non-cash financing activities:		
Amortization of deferred financing costs	\$ -	\$ 52,609
Conversion of accounts payable to long-term liabilities	\$ 90,000	\$ 332,000
Conversion of accounts payable to officer to notes payable to officer	\$ 13,659	\$ -
Commitment shares/warrants issued with debt financing	\$ 13,158	\$ 58,500
Shares issued with conversion of debt	\$ 217,000	\$ 239,885
Increase in principal amount of convertible note	\$ -	\$ 5,000
Issuance of warrants as deemed dividend associated with most-favored nation provisions of convertible notes	\$ 1,623,054	\$ 378,042
Insurance policies	\$ 95,850	\$ -
Debt discounts established for convertible debt	\$ 13,334	\$ 580,725
Cashless warrant exercises	\$ -	\$ 900

See accompanying notes to condensed consolidated financial statements (unaudited).

**RESPIRERX PHARMACEUTICALS INC.
AND SUBSIDIARY**

**NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)**

1. Organization and Basis of Presentation

Organization

RespireRx Pharmaceuticals Inc. (“RespireRx”) was formed in 1987 under the name Cortex Pharmaceuticals, Inc. to engage in the discovery, development and commercialization of innovative pharmaceuticals for the treatment of neurological and psychiatric disorders. On December 16, 2015, RespireRx filed a Certificate of Amendment to its Second Restated Certificate of Incorporation (as amended, the “Certificate of Incorporation”) with the Secretary of State of the State of Delaware to amend its Second Restated Certificate of Incorporation to change its name from Cortex Pharmaceuticals, Inc. to RespireRx Pharmaceuticals Inc. In August 2012, RespireRx acquired Pier Pharmaceuticals, Inc. (“Pier”), which is now a wholly owned subsidiary. Pier was a clinical stage biopharmaceutical company developing a pharmacologic treatment for obstructive sleep apnea (“OSA”) and had been engaged in research and clinical development activities which activities are now in RespireRx.

Basis of Presentation

The condensed consolidated financial statements are of RespireRx and its wholly-owned subsidiary, Pier (collectively referred to herein as the “Company,” “we” or “our,” unless the context indicates otherwise). The condensed consolidated financial statements of the Company at September 30, 2022 and for the three- and nine-months ended September 30, 2022 and 2021, are unaudited. In the opinion of management, all adjustments (including normal recurring adjustments) have been made that are necessary to present fairly the condensed consolidated financial position of the Company, the condensed results of operations, condensed changes in stockholders’ deficiency and condensed changes in cash flows as of and for the three- and nine-month periods ended September 30, 2022 and 2021. Condensed consolidated operating results for the interim periods presented are not necessarily indicative of the results to be expected for a full fiscal year. The consolidated balance sheet at December 31, 2021 has been derived from the Company’s audited consolidated financial statements at such date.

The condensed consolidated financial statements and related notes have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission (the “SEC”). Accordingly, certain information and note disclosures normally included in financial statements prepared in accordance with United States generally accepted accounting principles (“GAAP”) have been omitted pursuant to such rules and regulations. These condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and other information included in the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2021 as filed with the SEC on April 15, 2022 (“2021 Form 10-K”).

2. Business

The mission of the Company is to develop innovative and revolutionary treatments to combat disorders caused by disruption of neuronal signalling. We are developing treatment options that address conditions affecting millions of people, but for which there are limited or poor treatment options, including OSA, attention deficit hyperactivity disorder (“ADHD”), epilepsy, acute and chronic pain, including inflammatory and neuropathic pain, recovery from spinal cord injury (“SCI”) and certain orphan disorders. We are also considering developing treatment options for other conditions based on results of preclinical and clinical studies to date. To achieve these goals, the Company has determined that some or all of these opportunities should be licensed, sub-licensed, joint ventured or even sold and has initiated efforts to do so.

In order to facilitate our business activities and product development and to set up its programs for partnering or sale, the Company has implemented an internal restructuring plan based upon our two research platforms: pharmaceutical cannabinoids and neuromodulators. The business unit focused on pharmaceutical cannabinoids is referred to as ResolutionRx and the business unit focused on neuromodulators is referred to as EndeavourRx. It is anticipated that the Company will use, at least initially, its management personnel to provide management, operational and oversight services to these two business units.

- (i) ResolutionRx, our pharmaceutical cannabinoids platform is developing compounds that target the body’s endocannabinoid system, and in particular, the re-purposing of dronabinol, an endocannabinoid CB1 and CB2 receptor agonist, for the treatment of OSA. Dronabinol is already approved by the FDA for other indications.
- (ii) EndeavourRx, our neuromodulators platform is made up of two programs: (a) our AMPAkinase program, which is developing proprietary compounds that act as positive allosteric modulators (“PAMs”) of AMPA-type glutamate receptors to promote neuronal function and (b) our GABAkinase program, which is developing proprietary compounds that act as PAMs of GABA_A receptors, and which was established pursuant to our entry into a patent license agreement (the “UWMRF Patent License Agreement”) with the University of Wisconsin-Milwaukee Research Foundation, Inc., an affiliate of the University of Wisconsin-Milwaukee (“UWMRF”).

Management intends to organize our ResolutionRx and EndeavourRx business units into two subsidiaries: (i) a ResolutionRx subsidiary, into which we would contribute our pharmaceutical cannabinoid platform and its related tangible and intangible assets and certain of its liabilities and (ii) an EndeavourRx subsidiary, into which we would contribute our neuromodulator platform, including either or both of the AMPAkinase and GABAkinase programs and their related tangible and intangible assets and certain of their liabilities.

Management believes that there are advantages to separating these platforms formally into newly formed subsidiaries, including but not limited to optimizing their asset values by making them attractive to separate financing and strategic partnering channels.

The Company’s business development efforts (licensing, sub-licensing, joint venture and other commercial structures), if successful, would represent strategic and operational infrastructure additions, as well as cash and in-kind funding opportunities. These efforts have focused on, but have not been limited to, transacting with brand and generic pharmaceutical and biopharmaceutical companies as well as companies with potentially useful clinical development, formulation or manufacturing capabilities, significant subject matter expertise and financial resources. No assurance can be given that any transaction will come to fruition and that, if it does, the terms will be favorable to the Company.

Financing our Platforms

Our major challenge has been to raise substantial equity or equity-linked financing to support research and development plans for our cannabinoid and neuromodulator platforms, while minimizing the dilutive effect to pre-existing stockholders. At present, we believe that we are hindered primarily by our public corporate structure, our OTC Pink Markets listing, and low market capitalization as a result of our low stock price as well as the weakness of our balance sheet.

For this reason, the Company has effected an internal restructuring plan through which our two drug platforms have been reorganized into separate business units and may in the future, be organized into subsidiaries of RespireRx. We believe that by creating one or more subsidiaries to further the aims of ResolutionRx and EndeavourRx, it may be possible, through separate finance channels, to unlock the unrealized asset values of each and set up its programs for partnering or sale.

The Company is also engaged in business development efforts (licensing/sub-licensing, joint venture and other commercial structures) with a view to securing strategic partnerships that represent strategic and operational infrastructure additions, as well as cash and in-kind funding opportunities. These efforts have focused on, but have not been limited to, transacting with brand and generic pharmaceutical and biopharmaceutical companies as well as companies with potentially useful formulation or manufacturing capabilities, significant subject matter expertise and financial resources. We believe that some or all of our assets should be licensed, sub-licensed, joint ventured or even sold and have initiated efforts to do so. No assurance can be given that any transaction will come to fruition and that if it does, that the terms will be favorable to the Company.

The Company filed a Form 1-A which included an offering circular that was qualified by The Securities and Exchange Commission on December 13, 2021 and subsequently amended. The offering was of the Company’s common stock and is up to \$7.5 million at \$0.02 per share and allows for multiple closings until October 31, 2023, the pre-designated termination date unless earlier terminated by the Company. As of September 30, 2022, no closings had taken place, the Company’s stock price had been below the offering price and given that our stock price is substantially below the offering price, it would be unlikely that this particular offering will provide significant, if any, new funds, as management has suspended current efforts to raise capital under this offering.

Going Concern

The Company's condensed consolidated financial statements have been presented on the basis that it is a going concern, which contemplates the realization of assets and satisfaction of liabilities in the normal course of business. The Company has incurred net losses of \$472,578 and \$1,813,029 for the three-months and nine-months ended September 30, 2022. The Company also had a stockholders' deficiency of \$11,590,629 at September 30, 2022 and expects to continue to incur net losses and negative operating cash flows for at least the next few years. In addition, the Company had negative working capital of \$11,386,629. Additionally, all of the Company's convertible notes have either matured or have maturity dates within one year and must be paid, converted or otherwise have maturity dates extended in order to avoid a default on such convertible notes. The Company has not received any notifications of default that would trigger default provisions under the notes. In addition, the Company's obligation to the University of Illinois of \$100,000 that was due on December 31, 2021, was extended to May 31, 2022 and then further extended to an indefinite future date while discussions to amend the obligation are taking place. In the past, the Company has been successful in getting maturity dates extended or having convertible note holders repaid via conversion. In addition, the Company has been successful in having license payment due dates extended and then meeting the payment obligations on such extended dates. There can be no assurance that the Company will remain successful in those efforts. As a result of these conditions, management has concluded that there is substantial doubt about the Company's ability to continue as a going concern, and the Company's independent registered public accounting firm, in its report on the Company's consolidated financial statements for the year ended December 31, 2021, expressed substantial doubt about the Company's ability to continue as a going concern.

The Company is currently, and has for some time, been in significant financial distress. It has extremely limited cash resources and current assets and has no ongoing source of sustainable revenue. Management is continuing to address various aspects of the Company's operations and obligations, including, without limitation, outstanding accounts payable and accrued expenses, including accrued compensation, debt obligations, financing needs, intellectual property, including patent matters, licensing agreements, legal, regulatory compliance and other matters and has taken steps to continue to raise new debt and equity capital to fund the Company's business activities from both related and unrelated parties.

As an example of its efforts to address outstanding accounts payable, on August 1, 2022, the Company entered into a Payment Settlement Agreement and Release ("PSAR") with its then legal counsel. The Company and its then legal counsel agreed that prior to entry into the Agreement the Company owed \$2,608,914 to such legal counsel and that under the terms of the PSAR the amount owed and payable by wire transfer on or before December 30, 2022 shall be \$250,000 ("PSAR Settlement Amount"), a reduction of \$2,358,914. If the PSAR Settlement Amount is paid to such legal counsel on or before December 30, 2022, certain mutual releases ("Mutual Releases") shall become effective and no further amounts would be due. If the PSAR Settlement Amount is not paid by December 30, 2022, the section of the PSAR related to mutual releases shall be null and void ab initio and the amount immediately due and payable by the Company to its former legal counsel shall be adjusted to \$2,608,914.48 less any amounts paid on or after the date of the PSAR. Due to the uncertainty of our ability to pay \$250,000 by December 30, 2022, we continue to reflect the entire \$2,608,914 in our accounts payable balances. If we remit the \$250,000 on or before December 30, 2022, we will record a gain on settlement of liabilities of \$2,358,914.

The Company is continuing its efforts to raise additional capital in order to be able to pay its liabilities and fund its business activities on a going forward basis, including the pursuit of the Company's planned research and development activities. The Company regularly evaluates various measures to satisfy the Company's liquidity needs, including development and other agreements with collaborative partners and, when necessary, seeking to exchange or restructure the Company's outstanding securities. The Company is evaluating certain changes to its operations and structure to facilitate raising capital from sources that may be interested in financing only discrete aspects of the Company's development programs. Such changes could include a significant reorganization, which may include the formation of one or more subsidiaries into which one or more programs may be contributed. As a result of the Company's current financial situation, the Company has limited access to external sources of debt and equity financing. Accordingly, there can be no assurances that the Company will be able to secure additional financing in the amounts necessary to fully fund its operating and debt service requirements. If the Company is unable to access sufficient cash resources, the Company may be forced to discontinue its operations entirely and liquidate.

3. Summary of Significant Accounting Policies

Principles of Consolidation

The accompanying condensed consolidated financial statements are prepared in accordance with GAAP and include the financial statements of RespireRx and its wholly-owned subsidiary, Pier. Intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions. These estimates and assumptions affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Significant estimates include, among other things, accounting for potential liabilities, and the assumptions used in valuing stock-based compensation issued for services. Actual amounts may differ from those estimates.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents. The Company limits its exposure to credit risk by investing its cash with high quality financial institutions. The Company’s cash balances may periodically exceed federally insured limits. The Company has not experienced a loss in such accounts to date.

Value of Financial Instruments

The authoritative guidance with respect to value of financial instruments established a value hierarchy that prioritizes the inputs to valuation techniques used to measure value into three levels and requires that assets and liabilities carried at value be classified and disclosed in one of three categories, as presented below. Disclosure as to transfers into and out of Levels 1 and 2, and activity in Level 3 value measurements, is also required.

Level 1. Observable inputs such as quoted prices in active markets for an identical asset or liability that the Company has the ability to access as of the measurement date. Financial assets and liabilities utilizing Level 1 inputs include active-exchange traded securities and exchange-based derivatives.

Level 2. Inputs, other than quoted prices included within Level 1, which are directly observable for the asset or liability or indirectly observable through corroboration with observable market data. Financial assets and liabilities utilizing Level 2 inputs include fixed income securities, non-exchange based derivatives, mutual funds, and fair-value hedges.

Level 3. Unobservable inputs in which there is little or no market data for the asset or liability which requires the reporting entity to develop its own assumptions. Financial assets and liabilities utilizing Level 3 inputs include infrequently-traded, non-exchange-based derivatives and commingled investment funds, and are measured using present value pricing models.

The Company determines the level in the value hierarchy within which each value measurement falls in its entirety, based on the lowest level input that is significant to the value measurement in its entirety. In determining the appropriate levels, the Company performs an analysis of the assets and liabilities at each reporting period end.

The carrying amounts of financial instruments (consisting of cash, cash equivalents, and accounts payable and accrued expenses) are considered by the Company to be representative of the respective values of these instruments due to the short-term nature of those instruments. With respect to the note payable to SY Corporation Co., Ltd. (“SY Corporation”) and the convertible notes payable, management does not believe that the credit markets have materially changed for these types of borrowings since the original borrowing date. The Company considers the carrying amounts of the notes payable to officers, inclusive of accrued interest, to be representative of the respective values of such instruments due to the short-term nature of those instruments and their terms.

Deferred Financing Costs

Costs incurred in connection with ongoing debt and equity financings, including legal fees, are deferred until the related financing is either completed or abandoned or are unlikely to be completed.

Costs related to abandoned debt or equity financings are charged to operations in the period of abandonment. Costs related to completed equity financings are netted against the proceeds.

Debt Issuance Costs

The Company presents debt issuance costs related to debt obligations in its consolidated balance sheet as a direct deduction from the carrying amount of that debt obligation, consistent with the presentation for debt discounts.

Convertible Notes Payable

Convertible notes are evaluated to determine if they should be recorded at amortized cost. To the extent that there are associated warrants, commitment shares of Common Stock or a beneficial conversion feature, the convertible notes and equity or equity-linked securities are evaluated to determine if there are embedded derivatives to be identified, bifurcated and valued in connection with and at the time of such financing.

Extinguishment of Debt and Settlement of Liabilities

The Company accounts for the extinguishment of debt and settlement of liabilities by comparing the carrying value of the debt or liability to the value of consideration paid or assets given up and recognizing a loss or gain in the condensed consolidated statement of operations in the amount of the difference in the period in which such transaction occurs. See Note 4. Notes Payable.

Prepaid Insurance

Prepaid insurance represents the premium due in March 2022 for directors and officers insurance. The amounts of prepaid insurance amortizable in the ensuing twelve-month period are recorded as prepaid insurance in the Company's consolidated balance sheet at each reporting date and amortized to the Company's consolidated statement of operations for each reporting period.

Stock-Based Awards

The Company periodically issues common stock and stock options to officers, directors, Scientific Advisory Board members, consultants and vendors for services rendered. Such issuances vest and expire according to terms established at the issuance date of each grant.

The Company accounts for stock-based payments to officers, directors, outside consultants and vendors by measuring the cost of services received in exchange for equity awards based on the grant date fair value of the awards, with the cost recognized as compensation expense on the straight-line basis in the Company's consolidated financial statements over the vesting period of the awards.

Stock grants and stock options, which are sometimes subject to time-based vesting, are measured at the grant date fair value and charged to operations ratably over the vesting period.

The value of stock options granted as stock-based payments is determined utilizing the Black-Scholes option-pricing model, and is affected by several variables, the most significant of which are the life of the equity award, the exercise price of the stock option as compared to the fair market value of the common stock on the grant date, and the estimated volatility of the common stock over the term of the equity award. Estimated volatility is based on the historical volatility of the Company's common stock. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of grant. The fair market value of common stock is determined by reference to the quoted market price of the Company's common stock.

Stock and stock option grants and warrants issued to non-employees as compensation for services to be provided to the Company or in settlement of debt are accounted for based upon the fair value of the services provided or the estimated fair value of the stock option or warrant, whichever can be more clearly determined. Management uses the Black-Scholes option-pricing model to determine the fair value of the stock options and warrants issued by the Company. The Company recognizes this expense over the period in which the services are provided.

There were no stock or stock option grants during the nine-months ended September 30, 2022.

The Company recognizes the amortized value of stock-based payments in general and administrative costs and in research and development costs, as appropriate, in the Company's condensed consolidated statements of operations. The Company issues new shares of common stock to satisfy stock option and warrant exercises. There were no stock options exercised during the nine-months ended September 30, 2022 and 2021, respectively.

There were no warrants issued as compensation or for services during the nine-months ended September 30, 2022 and 2021. Warrants, if issued for services, are typically issued to placement agents or brokers for fund raising services, or to lenders, and are not issued from any of the Company's stock and option plans, from which options issued to non-employees for services are typically issued.

Income Taxes

The Company accounts for income taxes under an asset and liability approach for financial accounting and reporting for income taxes. Accordingly, the Company recognizes deferred tax assets and liabilities for the expected impact of differences between the financial statements and the tax basis of assets and liabilities.

The Company records a valuation allowance to reduce its deferred tax assets to the amount that is more likely than not to be realized. In the event the Company was to determine that it would be able to realize its deferred tax assets in the future in excess of its recorded amount, an adjustment to the deferred tax assets would be credited to operations in the period such determination was made. Likewise, should the Company determine that it would not be able to realize all or part of its deferred tax assets in the future, an adjustment to the deferred tax assets would be charged to operations in the period such determination was made.

Pursuant to Internal Revenue Code Sections 382 and 383, use of the Company's net operating loss and credit carry-forwards may be limited if a cumulative change in ownership of more than 50% occurs within any three-year period since the last ownership change. The Company may have had a change in control under these Sections. However, management does not anticipate performing a complete analysis of the limitation on the annual use of the net operating loss and tax credit carry-forwards until the time that it anticipates it will be able to utilize these tax attributes.

As of September 30, 2022, the Company did not have any unrecognized tax benefits related to various federal and state income tax matters and does not anticipate any material amount of unrecognized tax benefits within the next 12 months.

The Company is subject to U.S. federal income taxes and income taxes of various state tax jurisdictions. As the Company's net operating losses have yet to be utilized, all previous tax years remain open to examination by Federal authorities and other jurisdictions in which the Company currently operates or has operated in the past.

The Company accounts for uncertainties in income tax law under a comprehensive model for the financial statement recognition, measurement, presentation and disclosure of uncertain tax positions taken or expected to be taken in income tax returns as prescribed by GAAP. The tax effects of a position are recognized only if it is "more-likely-than-not" to be sustained by the taxing authority as of the reporting date. If the tax position is not considered "more-likely-than-not" to be sustained, then no benefits of the position are recognized. As of September 30, 2022, the Company had not recorded any liability for uncertain tax positions. In subsequent periods, any interest and penalties related to uncertain tax positions will be recognized as a component of income tax expense.

Foreign Currency Transactions

The note payable to SY Corporation, which is denominated in a foreign currency (the South Korean Won), is translated into the Company's functional currency (the United States Dollar) at the exchange rate on the balance sheet date. The foreign currency exchange gain or loss resulting from translation is recognized in the related condensed consolidated statements of operations.

Research and Development

Research and development costs include compensation paid to management directing the Company’s research and development activities, including but not limited to compensation paid to our Chief Scientific Officer who is also our Executive Chairman, Interim President and Interim Chief Executive Officer, and fees paid to consultants and outside service providers and organizations (including research institutes at universities), and other expenses relating to the acquisition, design, research, development and clinical testing of the Company’s treatments and product candidates.

License Agreements

Obligations incurred with respect to mandatory payments provided for in-license agreements are recognized ratably over the appropriate term, as specified in the underlying license agreement, and are recorded as liabilities in the Company’s condensed consolidated balance sheet, with a corresponding charge to research and development costs in the Company’s condensed consolidated statement of operations. Obligations incurred with respect to milestone payments provided for in-license agreements are recognized when it is probable that such milestone will be reached and are recorded as liabilities in the Company’s condensed consolidated balance sheet, with a corresponding charge to research and development expenses in the Company’s condensed consolidated statement of operations.

Patent Costs

Due to the significant uncertainty associated with the successful development of one or more commercially viable products based on the Company’s research efforts and any related patent applications, all patent costs, including patent-related legal and filing fees, are expensed as incurred and recorded as general and administrative expenses.

Earnings (Loss) per Share

The Company’s computation of earnings (loss) per common share (“EPS”) includes basic and diluted EPS. Basic EPS is measured as the income (loss) attributable to common stockholders divided by the weighted average common shares outstanding for the period. Diluted EPS is similar to basic EPS but presents the dilutive effect on a per share basis of potential common shares (e.g., warrants and options) as if they had been converted at the beginning of the periods presented, or issuance date, if later. Potential common shares that have an anti-dilutive effect (i.e., those that increase income per share or decrease loss per share) are excluded from the calculation of diluted EPS.

Net loss attributable to common stockholders consists of net loss, as adjusted for actual and deemed stock dividends declared, amortized or accumulated.

Loss per common share is computed by dividing net loss by the weighted average number of shares of common stock outstanding during the respective periods. Basic and diluted loss per common share is the same for all periods presented because all warrants and stock options outstanding are anti-dilutive.

At September 30, 2022 and 2021 the Company excluded the outstanding securities summarized below, which entitle the holders thereof to acquire shares of common stock, from its calculation of earnings per share, as their effect would have been anti-dilutive.

	September 30,	
	2022	2021
Series B convertible preferred stock	1	1
Convertible notes payable	348,938,988	40,542,856
Common stock warrants	245,030,149	59,505,140
Common stock options	9,201,032	7,111,924
Total	603,170,170	107,159,921

Reclassifications

Certain comparative figures in 2021 have been reclassified to conform to the current quarter’s presentation. These reclassifications were immaterial, both individually and in the aggregate.

Recent Accounting Pronouncements

In August 2020, the FASB issued Accounting Standards Update No. 2020-06, Debt – Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity’s Own Equity (Subtopic 815-40). The subtitle is Accounting for Convertible Instruments and Contracts in an Entity’s Own Equity. This Accounting Standard Update (“ASU”) addresses complex financial instruments that have characteristics of both debt and equity. The application of this ASU would reduce the number of accounting models for convertible debt instruments and convertible preferred stock. Limiting the accounting models would result in fewer embedded conversion features being separately recognized from the host contract as compared with current GAAP. Convertible instruments that continue to be subject to separation models are (1) those with embedded conversion features that are not clearly and closely related to the host contract, that meet the definition of a derivative, and that do not qualify for a scope exception from derivative accounting and (2) convertible debt instruments issued with substantial premiums for which the premiums are recorded as paid-in capital. The Company has historically issued complex financial instruments and has considered whether embedded conversion features have existed within those contracts or whether derivatives would appropriately be bifurcated. To date, no such bifurcation has been necessary. Management has evaluated the potential impact and has early adopted as of January 1, 2022. Management believes the adoption has simplified the accounting for convertible debt instruments and does not believe adoption has had a substantial impact on the financial statements, however, it is possible that this ASU may have a substantial impact on the Company’s financial statements from future convertible debt financings.

4. Notes Payable

Convertible Notes Payable

The Company periodically issues convertible notes with similar characteristics. As described in the table below, during the nine-months ended September 30, 2022, there were 12 such notes outstanding. Notes had fixed conversion prices after the application of certain “most favored nation clauses” (“MFNs”) in such notes that ranged from \$0.0015 to \$0.01 per share of Common Stock, subject to adjustment in certain circumstances. An adjustment to \$0.0015 per share of Common Stock was made on August 22, 2022 pursuant to the MFNs of certain convertible notes upon the issuance of three similar convertible notes (“August 22, 2022 Notes”), each with a conversion price of \$0.0015 and issued without associated warrants. In order to consummate the closing with respect to the August 22, 2022 Notes, a request was made of all prior convertible note holders to waive certain default, MFNs and to extend maturity dates. All prior convertible note holders were offered the right to participate in the August 22, 2022 offering. Three prior note holders elected to participate and waived and amended the provisions described above. Six prior note holders elected not to participate and were offered an incentive to waive and amend the provisions described above. Five of those noteholders accepted the incentive and waived and amended the requested provisions. The incentives offered were an increase in the principal amount of the convertible note equal to 20% of the outstanding principal and accrued unpaid interest as of June 30, 2022 plus incentive shares to be issued to such convertible note holders equal to 10% of the shares into which the convertible notes inclusive of accrued interest would convert, as of June 30, 2022 at \$0.01 per share of Common Stock. One convertible note holder, holding two convertible notes elected not to accept the incentive and elected not to participate in the August 22, 2022 offering, and instead agreed to a standstill for 60 days, which period expired on October 22, 2022 and which was extended to an indefinite date while discussions of incentives are ongoing. Therefore, three note holders, holding seven of the twelve notes have a conversion price of \$0.0015 and four note holders holding five of the thirteen convertible notes have a conversion price of \$0.01. An adjustment to \$0.01 per share of Common Stock was made on April 14, 2022 pursuant to the “most favored nation clauses” of such notes upon the issuance of a similar convertible note, but with a \$0.01 per share of Common Stock conversion price. As noted above, an adjustment to \$0.0015 per share of Common Stock was made on August 22, 2022 with respect to certain convertible notes upon the issuance of similar convertible notes, but with a \$0.0015 per share of Common Stock conversion price. All but one of the notes had an annual interest rate of 10% which was guaranteed in full. The note that did not have a 10% annual interest rate had an 8% rate. The convertible notes had an original issue discount (“OID”), certain notes had debt issuance costs (“DIC”) that were capitalized by the Company, a warrant (“WT”) or commitment shares (“CS”) and in ten cases a beneficial conversion feature (“BCF”). The OID, CN, WTs, CSs and BCF allocated values are amortized over the life of the notes to interest expense. All notes mature or matured nine to fifteen months from their issuance date or have had their maturity dates extended. All notes were pre-payable by the Company during the first six months, subject to prepayment premiums that range from 100% to 115% of the maturity amount plus accrued interest. If not earlier paid, the notes are convertible by the holder into the Company’s Common Stock.

The table below summarizes the convertible notes outstanding during the nine- months ended and as of September 30, 2022. There were several partial repayments made by conversion during the nine-months ended September 30, 2022:

Inception Date	Maturity date	Original Principal Amount	Interest rate	Original aggregate DIC, OID, Wts, CS and BCF	Cumulative amortization of DIC, OID, Wts, CS and BCF	Accrued coupon interest	Repayment by conversion, increase in principal amount, net where appropriate	Balance sheet carrying amount at September 30, 2022 inclusive of accrued interest
July 28, 2020	June 30, 2022 ¹	\$ 53,000	8.00%	\$ (13,000)	\$ 13,000	\$ 8,675	\$ (16,247)	\$ 45,428
February 17, 2021	June 17, 2022 ¹	112,000	10.00%	(112,000)	112,000	11,089	(80,000)	43,089
April 1, 2021	July 31, 2022 ¹	112,500	10.00%	(112,500)	112,500	16,890	-	129,390
May 3, 2021	July 31, 2022 ¹	150,000	10.00%	(150,000)	150,000	-	(150,000)	-
May 10, 2021	August 10, 2022 ¹	150,000	10.00%	(150,000)	150,000	17,953	(13,213)	154,740
June 30, 2021	June 29, 2022 ¹	115,000	10.00%	(115,000)	115,000	14,430	-	129,430
August 31, 2021	August 31, 2022	115,000	10.00%	(109,675)	109,675	12,445	-	127,445
October 7, 2021	October 7, 2022	115,000	10.00%	(96,705)	94,850	11,280	-	124,425
December 23, 2021	June 21, 2022 ¹	87,000	10.00%	(36,301)	36,301	5,745	25,621	118,366
April 14, 2022	April 14, 2023	27,778	10.00%	(15,936)	7,379	1,286	-	20,507
August 22, 2022	May 31, 2023	66,667	10.00%	(6,667)	712	713	-	61,425
August 22, 2022	May 31, 2023	22,222	10.00%	(2,222)	237	237	-	20,474
August 22, 2022	May 31, 2023	16,667	10.00%	(1,667)	178	178	-	15,356
Total		\$ 1,142,834		\$ (921,673)	\$ 901,832	\$ 100,921	\$ (233,839)	\$ 990,075

In addition to what appears in the table above, there is outstanding accrued interest of \$2,747 from a prior floating rate convertible note that has not been paid in cash or by conversion as of September 30, 2022.

As a result of the MFN triggering events that occurred on September 7, 2021, August 31, 2021, April 14, 2022 and August 22, 2022 an additional 114,380,476 shares of Common Stock would be issued upon conversion between \$0.0015 and \$0.01 per share of Common Stock of convertible notes and an additional 164,069,735 shares of Common Stock would be issued upon exercise of warrants with an exercise price between \$0.0015 and \$0.01 per share of Common Stock, Those triggering events reduced the conversion and exercise prices of certain convertible notes and warrants respectively, from \$0.02 per share to \$0.01 and then to \$0.0015 per share and adjusted the number of warrants associated with certain convertible notes from less than 100% warrant coverage to 100% coverage.

On December 31, 2018 and January 2, 2019, the Company issued convertible notes to a single investor totaling \$35,000 of maturity amount with accrued interest of \$15,459 as of September 30, 2022. The number of shares of common stock (or preferred stock) into which these notes may convert is not determinable. The warrants to purchase 19,000 shares of common stock issued in connection with the sale of these notes and other convertible notes issued December 2018 and March 2019 are exercisable at a fixed price of \$15.00 per share of common stock, provide no right to receive a cash payment, and included no reset rights or other protections based on subsequent equity transactions, equity-linked transactions or other events and expire on December 30, 2023.

Other convertible notes were also sold to investors in 2014 and 2015 (“Original Convertible Notes), which aggregated a total of \$579,500, and had a fixed interest rate of 10% per annum. The Original Convertible Notes have no reset rights or other protections based on subsequent equity transactions, equity-linked transactions or other events. The warrants to purchase shares of common stock issued in connection with the sale of the convertible notes have either been exchanged as part of April and May 2016 note and warrant exchange agreements or expired on September 15, 2016.

The remaining outstanding Original Convertible Notes (including those for which default notices have been received) consist of the following at September 30, 2022 and December 31, 2021:

	September 30, 2022	December 31, 2021
Principal amount of notes payable	\$ 75,000	\$ 75,000
Accrued interest payable	95,068	80,961
	<u>\$ 170,068</u>	<u>\$ 155,961</u>

As of September 30, 2022, principal and accrued interest on the Original Convertible Note that is subject to a default notice accrues annual interest at 12% instead of 10%, totaled \$61,160, of which \$36,160 was accrued interest. As of December 31, 2021, principal and accrued interest on Original Convertible Notes subject to default notices totaled \$57,084 of which \$32,085 was accrued interest.

As of September 30, 2022 all of the outstanding Original Convertible Notes, inclusive of accrued interest, were convertible into an aggregate of 1,481 shares of the Company’s common stock at a conversion price of approximately \$114 per share of Common Stock. Such Original Convertible Notes will continue to accrue interest until exchanged, paid or otherwise discharged. There can be no assurance that any of the additional holders of the remaining Original Convertible Notes will exchange their Original Convertible Notes.

Note Payable to SY Corporation Co., Ltd.

On June 25, 2012, the Company borrowed 465,000,000 Won (the currency of South Korea, equivalent to approximately \$400,000 United States Dollars as of that date) from and executed a secured note payable to SY Corporation Co., Ltd., (“SY Corporation”). The note accrues simple interest at the rate of 12% per annum and had a maturity date of June 25, 2013. The Company has not made any payments on the promissory note. At September 30, 2013 and subsequently, the promissory note was outstanding and in default, although SY Corporation has not issued a notice of default or a demand for repayment. Management believes that SY Corporation is in default of its obligations under its January 2012 license agreement, as amended, with the Company, but the Company has not yet issued a notice of default. The Company has in the past made several efforts towards a comprehensive resolution of the aforementioned matters involving SY Corporation. During the nine-months ended September 30, 2022, there were no further communications between the Company and SY Corporation.

The promissory note is secured by collateral that represents a lien on certain patents owned by the Company, dating back to January, August and September 2007, including composition of matter patents for certain of the Company’s high impact ampakine compounds and the low impact ampakine compounds CX2007 and CX2076, and other related compounds that the Company is no longer developing and where patent rights date back to January, August and September 2007. The security interest does not extend to the Company’s patents for its ampakine compounds CX1739 and CX1942 or certain related method of use patents.

The note payable to SY Corporation consists of the following at September 30, 2022 and December 31, 2021:

	September 30, 2022	December 31, 2021
Principal amount of note payable	\$ 399,774	\$ 399,774
Accrued interest payable	495,238	459,358
Foreign currency transaction adjustment	(172,364)	(22,028)
	<u>\$ 722,648</u>	<u>\$ 837,104</u>

Interest expense with respect to this promissory note was \$12,092 and 35,881 for the three-months and nine-months ended September 30, 2022 and for the three-months and six-months ended September 30, 2021, respectively.

Notes Payable to Officers and Former Officers

For the three-months and nine-months ended September 30, 2022, \$3,412 and \$10,123 was charged to interest expense and \$12,289 of accrued interest prior to January 1, 2022, not previously added to principal, was added to principal, and for the three-months and nine-months ended September 30, 2021, 3,096 and 9,193 was charged to interest expense and \$46,717 of accrued interest prior to January 1, 2021 was capitalized to principal, with respect to Dr. Arnold S. Lipka’s notes, respectively.

In addition, Dr. Lipka periodically makes advances to the Company which are re-payable upon demand, do not accrue interest and are included in the total of notes payable to Officers. As of September 30, 2022, such advances totaled \$217,945.

For the three-months and nine-months ended September 30, 2022 \$5,172 and \$15,349 was charged to interest expense and \$18,657 of accrued interest prior to January 1, 2022, not previously added to principal, was added to principal, and for the three-months and nine-months ended September 30, 2021 \$4,702 and \$13,954, respectively, was charged to interest expense and \$58,965 of accrued interest prior to January 1, 2021, not previously capitalized, was capitalized to principal, with respect to former executive officer, Dr. James S. Manuso’s notes.

Other Short-Term Notes Payable

Other short-term notes payable at September 30, 2022 and December 31, 2021 consisted of premium financing agreements with respect to various insurance policies. At September 30, 2022, a premium financing agreement was payable in the initial amount of \$85,457 (after payment of a deposit of \$21,364), with interest at 11% per annum, in nine monthly installments of \$9,971. In addition, there is \$4,214 of short-term financing of office and clinical trials insurance premiums. At September 30, 2022 and December 31, 2021, the aggregate amount of the short-term notes payable was \$35,345 and \$15,185 respectively.

5. Settlement and Payment Agreements

Effective August 1, 2022, the Company and the Company's former legal counsel, entered into a payment settlement agreement and release pursuant to which the Company and its former legal counsel agreed that the Company owed \$2,608,914 to such counsel and that under the terms of the agreement the amount owed and payable by wire transfer on or before December 30, 2022 shall be \$250,000. If that amount is paid on or before December 30, 2022, certain mutual releases would become effective and no further amounts would be due. If the \$250,000 amount is not paid by December 30, 2022, the section of the agreement related to mutual releases would be null and void ab initio and the amount immediately due and payable by the Company to its former counsel would be adjusted to \$2,608,914 less any amounts paid on or after the date of the agreement.

On April 29, 2021, RespireRx agreed to a payment and settlement agreement with the University of California Innovation and Entrepreneurship with respect to accounts payable in an amount that was not in dispute and is reflected in accounts payable and accrued expenses in the Company's condensed consolidated financial statements as of June 30, 2022. The total amount due is \$234,657. The agreed payment schedule is for the Company to pay \$10,000 on each of July 1, 2021, September 1, 2021, November 1, 2021, January 1, 2022 and March 31, 2022. If RespireRx paid an aggregate of \$175,000 on or before March 31, 2022, the amounts would have been considered paid in full with no further amounts due. RespireRx has not made any payments after the September, 2021 payment. According to the terms of the agreement, if an aggregate of \$175,000 was not paid by March 31, 2022, the remaining unpaid amount up to an aggregate of the original amount of \$234,657 would be due and payable. Payment was not made and the original amount of \$234,657 was been recorded in accounts payable at September 30, 2022.

On February 21, 2020, Sharp Clinical Services, Inc. ("Sharp"), a vendor of the Company, filed a complaint against the Company in the Superior Court of New Jersey Law Division, Bergen County related to a December 16, 2019 demand for payment of past due invoices inclusive of late fees totaling \$103,890. On May 29, 2020, a default was entered against the Company, and on September 4, 2020, a final judgment was entered against the Company in the amount of \$104,217. On March 3, 2021, we executed a settlement agreement with Sharp (the "Sharp Settlement Agreement"), and on March 9, 2021, Sharp requested of the Bergen (NJ) County Sheriff, the return of the Writ of Execution which resulted in a release of the lien in favor of Sharp. The Sharp Settlement Agreement calls for a payment schedule of ten \$10,000 payments due on April 1, 2021 and every other month thereafter, and permitted early settlement at \$75,000 if the Company had paid Sharp that lower total by August 1, 2021. The Company did not pay Sharp that lower amount by that date. The Company has recorded a liability to Sharp of \$53,568 as of September 30, 2022 after payments totaling \$30,000 pursuant to the Sharp Settlement Agreement. The Company has not made the October 1, 2021, December 1, 2021, February 1, 2022, April 1, 2022, June 1, 2022 and August 1, 2022 payments that were due. On March 3, 2022, Company's then counsel received a default notice from counsel to Sharp with respect to the Sharp Settlement Agreement, which stated that Sharp may exercise its remedies. Company's then counsel communicated with counsel to Sharp. On March 28, 2022, one of the Company's bank accounts was debited for the benefit of Sharp \$415 inclusive of fees about which the Company is seeking additional information but which the Company believes indicates that either a new Writ of Execution was established or the original writ was re-established.

By letter dated February 5, 2016, the Company received a demand from a law firm representing Salamandra, LLC ("Salamandra") alleging an amount due and owing for unpaid services rendered. On January 18, 2017, following an arbitration proceeding, an arbitrator awarded Salamandra the full amount sought in arbitration of \$146,082. Additionally, the arbitrator granted Salamandra attorneys' fees and costs of \$47,937. All such amounts have been accrued as of September 30, 2022, including accrued interest at 4.5% annually from February 26, 2018, the date of the judgment, through September 30, 2022, totaling \$37,609. The Company had previously entered into a settlement agreement with Salamandra that is no longer in effect. The Company has approached Salamandra seeking to negotiate a new settlement agreement. A lien with respect to the amounts owed is in effect.

On February 23, 2021 our bank received two New Jersey Superior Court Levies totaling \$320,911 related to amounts owed to two vendors (Sharp and Salamandra as defined above) which amounts were not in dispute, debited our accounts and restricted access to those accounts. Our accounts were debited for \$1,559 on February 23, 2021 which represented all of the cash in our accounts on that date.

On September 14, 2021, the Company and DNA Healthlink, Inc. ("DNA Healthlink") entered into a settlement agreement (the "DNA Healthlink Settlement Agreement") regarding \$410,000 in unpaid accounts payable owed by the Company to DNA Healthlink (the "DNA Healthlink Settlement Amount") for services provided by DNA Healthlink to the Company pursuant to an agreement by and between the Company and DNA Healthlink dated October 15, 2014. Under the terms of the DNA Healthlink Settlement Agreement, the Company is obligated to pay to DNA Healthlink the full DNA Healthlink Settlement Amount as follows: twelve monthly payments of \$8,000 each commencing on November 15, 2021, followed by twelve monthly payments of \$10,000 each commencing on November 15, 2022, followed by twelve monthly payments of \$15,000 each commencing on November 15, 2023, followed by one final payment of \$14,000 on November 15, 2024. If, prior to March 14, 2023, the Company receives one or more upfront license fee payments or any other similar fee or fees from one or more strategic partners that aggregate at least fifteen million dollars (\$15,000,000) ("Upfront Fees"), then the full DNA Healthlink Settlement Amount, less any amounts previously paid, will be accelerated and become due and payable in full within ninety (90) days of receipt of any Upfront Fees. As a result of the DNA Healthlink Settlement Agreement, the Company recorded a gain with respect to vendor settlements of \$62,548 for the fiscal year ended December 31, 2021. The Company made payments of \$8,000 in November 2021 and December 2021, but has not made payments in January through September 2022.

An annual obligation payable to the University of Illinois of \$100,000 that was originally due on December 31, 2021 pursuant to the 2014 License Agreement was extended to an indefinite future date while discussions to amend the obligation are taking place.

By email dated July 21, 2016, the Company received a demand from an investment banking consulting firm that represented the Company in 2012 in conjunction with the Pier transaction alleging that \$225,000 is due and payable for investment banking

services rendered. Such amount has been included in accrued expenses at September 30, 2022 and December 31, 2021.

The Company is periodically the subject of various pending and threatened legal actions and claims. In the opinion of management of the Company, adequate provision has been made in the Company’s consolidated financial statements as of September 30, 2022 and December 31, 2021 with respect to such matters, including, specifically, the matters noted above. The Company intends to vigorously defend itself if any of the matters described above results in the filing of a lawsuit or formal claim.

6. Stockholders’ Deficiency

Preferred Stock

RespireRx has authorized a total of 5,000,000 shares of preferred stock, par value \$0.001 per share. As of September 30, 2022 and December 31, 2021, 37,500 shares were designated as Series B Convertible Preferred Stock (non-voting, “Series B Preferred Stock”).

Series B Preferred Stock outstanding as of September 30, 2022 and December 31, 2021 consisted of 37,500 shares issued in a May 1991 private placement. The shares of Series B Preferred Stock are convertible into 1 share of common stock. RespireRx may redeem the Series B Preferred Stock for \$25,001 at any time upon 30 days prior notice.

Although other series of preferred stock have been designated, no other shares of preferred stock are outstanding. As of September 30, 2022 and December 31, 2021, 3,504,424 shares of preferred stock were undesignated and may be issued with such rights and powers as the Board of Directors may designate.

Common Stock

RespireRx has authorized 2,000,000,000 (2 billion) shares of Common Stock, par value \$0.001 (“Common Stock”). There are 119,594,276 shares of the Company’s Common Stock outstanding as of September 30, 2022. After reserving for conversions of convertible debt and convertible preferred stock, as well as exercises of common stock purchase options (granted and available for grant within the 2014 and 2015 stock and stock option plans) and warrants and the issuance of Pier contingent shares and before accounting for incremental contract excess reserves, there were 1,263,560,146 shares of the Company’s Common Stock available for future issuances as of September 30, 2022. After accounting for incremental excess reserves contractually required by the various convertible notes and certain warrants, there were 662,519,452 shares of common stock available for future issuances as of September 30, 2022. No warrants or options were exercised after September 30, 2022. Options to purchase 105,336 shares of Common Stock expired during the nine-month period ended September 30, 2022 and such shares were added back to the shares of common stock available for issuance from the 2015 Plan.

Common Stock Warrants

A summary of warrant activity for the nine-months ended September 30, 2022 is presented below.

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in Years)
Warrants outstanding at December 31, 2021	59,420,298	\$ 0.0718	3.3300
Issued or repriced as a result of most favored nation provisions	187,927,001	0.0022	3.7392
Expired	(2,317,150)	(0.5121)	-
Warrants outstanding and exercisable at September 30, 2022	245,030,149	\$ 0.0130	3.6753

The exercise prices of common stock warrants outstanding and exercisable are as follows at September 30, 2022:

Exercise Price	Warrants Outstanding (Shares)	Warrants Exercisable (Shares)	Expiration Date
\$ 0.0015	171,852,001	171,852,001	August 31, 2026-April 14, 2027
\$ 0.0100	46,450,000	46,450,000	September 30, 2023-April 14, 2027
\$ 0.0200	927,273	927,273	September 30, 2023
\$ 0.03890	208,227	208,227	May 10, 2026
\$ 0.0470	172,341	172,341	May 3, 2026
\$ 0.0700	25,377,426	25,377,426	September 30, 2023
15.0000			
\$ -15.7500	42,881	42,881	September 29, 2022-December 30, 2023
	245,030,149	245,030,149	

Based on a value of \$0.0088 per share on September 30, 2022, there were 171,852,001 exercisable in-the-money common stock warrants as of September 30, 2022.

A summary of warrant activity for the nine-months ended September 30, 2021 is presented below.

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in Years)
Warrants outstanding at December 31, 2020	28,809,352	\$ 0.1528	2.64
Issued	33,432,841	0.0200	
Expired	(8,595)		
Cancelled upon exchange	(1,062,500)	0.0700	
Exercised - cashless	(1,665,958)	0.0200	
Warrants outstanding at September 30, 2021	59,505,140	\$ 0.0721	2.12

Warrants exercisable at September 30, 2020	28,809,358	\$	0.1474	2.89
Warrants exercisable at September 30, 2021	59,505,140	\$	0.0721	2.12

The exercise prices of common stock warrants outstanding and exercisable are as follows at September 30, 2021:

Exercise Price	Warrants Outstanding and Exercisable (Shares)	Expiration Date
\$ 0.016	2,212,500	May 17, 2022
\$ 0.020	31,386,315	March 31, 2026-September 7, 2021
\$ 0.039	208,227	May 10, 2026
\$ 0.047	172,341	May 3, 2026
\$ 0.070	25,377,426	September 30, 2023
\$ 11.00 -27.50	148,331	December 31, 2021-December 30, 2023
	59,505,140	

Based on a value of \$0.0230 per share on September 30, 2021, there were 33,598,815 exercisable in-the-money common stock warrants as of September 30, 2021.

Stock Options

On March 18, 2014, the stockholders of RespireRx holding a majority of the votes to be cast on the issue approved the adoption of RespireRx’s 2014 Equity, Equity-Linked and Equity Derivative Incentive Plan (the “2014 Plan”), which had been previously adopted by the Board of Directors, subject to stockholder approval. The Plan permits the grant of options and restricted stock in addition to stock appreciation rights and phantom stock, to directors, officers, employees, consultants and other service providers of the Company. As of September 30, 2022, there are 6,325 shares available in the 2014 Plan.

On June 30, 2015, the Board of Directors adopted the 2015 Stock and Stock Option Plan (as amended, the “2015 Plan”). As of June 30, 2022, there are 13,648,021 shares available in the 2015 Plan. The Company has not and does not intend to present the 2015 Plan to stockholders for approval.

Information with respect to the Black-Scholes variables used in connection with the evaluation of the fair value of stock-based compensation costs and fees is provided at Note 3.

A summary of stock option activity for the nine-months ended September 30, 2022 is presented below.

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in Years)
Options outstanding at December 31, 2021	9,306,368	\$ 1.09	3.95
Expired	(105,336)	44.80	-
Options outstanding and exercisable at September 30, 2022	9,201,032	\$ 0.59	3.24

The exercise prices of common stock options outstanding and exercisable were as follows at September 30, 2022:

Exercise Price	Options Outstanding (Shares)	Options Exercisable (Shares)	Expiration Date
\$ 0.0190	2,194,444	2,194,444	December 31, 2026
\$ 0.0540	1,700,000	1,700,000	September 30, 2025
\$ 0.072	5,050,000	5,050,000	July 31, 2025
\$ 7.00-\$159.25	256,588	256,588	December 7, 2022 - December 9, 2027
	<u>9,201,032</u>	<u>9,201,032</u>	

There was no deferred compensation expense for the outstanding and unvested stock options at September 30, 2022.

Based on a fair value of \$0.0088 per share on September 30, 2022, there were no exercisable in-the-money common stock options as of September 30, 2022.

Reserved and Unreserved Shares of Common Stock

As of September 30, 2022, there are 2,000,000,000 shares of Common Stock, par value \$0.001 authorized, of which 119,594,276 are issued and outstanding. As of September 30, 2022, there are outstanding options to purchase 9,201,032 shares of Common Stock and 6,325 and 13,668,434 shares available for issuance under the 2014 Plan and 2015 Plan respectively. There are 649 Pier contingent shares of Common Stock that may be issued under certain circumstances. As of September 30, 2022, there are 348,938,989 issuable upon conversion of convertible notes. As of September 30, 2022, there are 245,030,149 shares that may be issued upon exercise of outstanding warrants. As of September 30, 2022, the Series B Preferred Stock may convert into 1 share of Common Stock. Therefore, the Company is reserving 616,845,578 shares of Common Stock for future issuances with respect to conversions and exercises as well as for the Pier contingent shares. In addition, certain convertible notes and related warrants impose an additional contractual reserve requirement, above the number of shares into which such convertible notes and related warrants may convert or exercise respectively. Although the Company does not anticipate having to issue such shares, such incremental additional contractual reserves total an additional 601,040,694 shares of Common Stock.

7. Related Party Transactions

Dr. Arnold S. Lipa and Jeff E. Margolis, officers and directors of RespireRx since March 22, 2013, have indirect ownership and managing membership interests in Aurora Capital LLC (“Aurora”) through interests held in its members, and Jeff. E. Margolis is also an officer of Aurora. Aurora, was a boutique investment banking firm specializing in the life sciences sector that ceased its securities related activities in April 2021 and withdraw its membership with FINRA and its registration with the SEC in July 2021. Although Aurora has not provided services to RespireRx during the nine-months ended September 30, 2022 or the fiscal year ended December 31, 2021, Aurora had previously provided services to the Company and there remains \$96,000 owed to Aurora by RespireRx which amount is included in accounts payable and accrued expenses as of September 30, 2022.

A description of advances and notes payable to officers is provided at Note 4. Notes Payable.

8. Commitments and Contingencies

Pending or Threatened Legal Action and Claims

The Company is periodically the subject of various pending and threatened legal actions and claims. In the opinion of management of the Company, adequate provision has been made in the Company’s condensed consolidated financial statements as of September 30, 2022 and December 31, 2021 with respect to such matters. See Note 5. Settlement and Payment Agreements for additional items and details.

Significant Agreements and Contracts

Consulting Agreements

Richard Purcell, the Company’s Senior Vice President of Research and Development since October 15, 2014, has provided his services to the Company on an at will and month-to-month basis. Since agreeing to a payment and settlement agreement, the Company has contracted for his services on a prepaid hourly basis at a rate of \$250 per hour, through his consulting firm, DNA Healthlink, Inc. See Note 5. Payment and Settlement Agreements for a description of the current payment terms. During the nine-months ended September 30, 2022 Mr. Purcell did not provide any services to the Company.

The Company entered into a consulting contract with David Dickason effective September 15, 2020 pursuant to which Mr. Dickason was appointed to and serves as the Company’s Senior Vice President of Pre-Clinical Product Development on an at-will basis at the rate of \$250 per hour. During the nine-months ended September 30, 2022 Mr. Dickason did not provide any services to the Company.

Employment Agreements

Effective on May 6, 2020, Timothy Jones was appointed as RespireRx’s President and Chief Executive Officer and entered into an employment agreement as of that date. Effective January 31 2022, Mr. Jones resigned as RespireRx’s President and Chief Executive Officer as well as a member of RespireRx’s Board of Directors pursuant to an Employment Agreement Termination and Separation Agreement dated February 8, 2022.

Effective January 31, 2022, Dr. Lippa was appointed as RespireRx’s Interim President and Interim Chief Executive Officer. Dr. Lippa continues to serve as RespireRx’s Executive Chairman and as a member of the Board of Directors as well as the Company’s Chief Scientific Officer.

Jeff E. Margolis currently serves as the Company’s Senior Vice President, Chief Financial Officer, Treasurer and Secretary. Mr. Margolis also serves on the Company’s Board of Directors.

The table below summarized the current cash commitments to Dr. Lippa and Mr. Margolis through the next September 30th renewal date.

	Contract year ending September 30, 2023		
	Twelve months		
	Base Salary	Benefits	Total
Arnold S. Lippa	\$ 150,000	\$ 19,800	\$ 169,800
Jeff E. Margolis	150,000	10,800	160,800
	<u>\$ 300,000</u>	<u>\$ 30,600</u>	<u>\$ 330,600</u>

Under certain circumstances base salaries may be contractually increased or the executives may become eligible for additional benefits and base salaries may be increased at the discretion of the Board of Directors. All executives are eligible for stock and stock option and similar grants at the discretion of the Board or Directors.

The payment of certain amounts reflected in the table above have been voluntarily deferred indefinitely and payments against accrued compensation may be made based upon the Company’s ability to make such payments.

UWMRF Patent License Agreement

On August 1, 2020, RespireRx exercised its option pursuant to its option agreement dated March 2, 2020, between RespireRx and UWM Research Foundation, an affiliate of the University of Wisconsin-Milwaukee (“UWMRF”). Upon exercise, RespireRx and UWMRF executed the UWMRF Patent License Agreement effective August 1, 2020 pursuant to which RespireRx licensed the identified intellectual property.

Under the UWMRF Patent License Agreement, the Company has an exclusive license to commercialize GABAkine products based on UWMRF’s rights in certain patents and patent applications, and a non-exclusive license to commercialize products based on UWMRF’s rights in certain technology that is not the subject of the patents or patent applications. UWMRF maintains the right to use, and, upon the approval of the Company, to license, these patent and technology rights for any non-commercial purpose, including research and education. The UWMRF Patent License Agreement expires upon the later of the expiration of the Company’s payment obligations to UWMRF or the expiration of the last remaining licensed patent granted thereunder, subject to early termination upon the occurrence of certain events. The License Agreement also contains a standard indemnification provision in favor of UWMRF and confidentiality provisions obligating both parties.

Under the UWMRF Patent License Agreement, in consideration for the licenses granted, the Company will pay to UWMRF the following: (i) patent filing and prosecution costs incurred by UWMRF prior to the effective date, paid in yearly installments over three years from the Effective Date; (ii) annual maintenance fees, beginning on the second anniversary of the Effective Date, which annual maintenance fees terminate upon the Company’s payment of royalties pursuant to clause (iv) below; (iii) milestone payments, paid upon the occurrence of certain dosing events of patients during clinical trials and certain approvals by the FDA; and (iv) royalties on net sales of products developed with the licenses, subject to minimum annual payments and to royalty rate adjustments based on whether separate royalty payments by the Company yield an aggregate rate beyond a stated threshold. The Company has also granted UWMRF certain stock appreciation rights with respect to the Company’s neuromodulator programs, subject to certain limitations, and will pay to UWMRF certain percentages of revenues generated from sublicenses of the licenses provided under the UWMRF Patent License Agreement by the Company to third parties.

University of Wisconsin-Milwaukee Outreach Services Agreement

On July 12, 2021, the Company and the Board of Regents of the University of Wisconsin System on behalf of the University of Wisconsin-Milwaukee (“UWM”) entered into an Outreach Services Agreement pursuant to which UWM agreed to provide, among other molecules, multiple milligram to gram quantities of KRM-II-81 (GABAKine) and the Company agreed to pay UWM an annual sum of \$75,000 payable in three installments of \$25,000 each beginning October 12, 2021, which amount was timely paid, and on a quarterly basis thereafter. The payments that were due on January 12, 2022 and April 12, 2022 have not yet been paid. The agreement terminated on June 30, 2022. Amounts due on January 12, 2022 and April 12, 2022 are recorded in accounts payable as of September 30, 2022.

University of Illinois 2014 Exclusive License Agreement

On June 27, 2014, the Company entered into an Exclusive License Agreement (the “2014 License Agreement”) with the University of Illinois, the material terms of which were similar to a License Agreement between the parties that had been previously terminated on March 21, 2013. The 2014 License Agreement became effective on September 18, 2014, upon the completion of certain conditions set forth in the 2014 License Agreement, including: (i) the payment by the Company of a \$25,000 licensing fee, (ii) the payment by the Company of outstanding patent costs aggregating \$15,840, and (iii) the assignment to the University of Illinois of rights the Company held in certain patent applications, all of which conditions were fulfilled.

The 2014 License Agreement granted the Company (i) exclusive rights to several issued and pending patents in numerous jurisdictions and (ii) the non-exclusive right to certain technical information that is generated by the University of Illinois in connection with certain clinical trials as specified in the 2014 License Agreement, all of which relate to the use of cannabinoids for the treatment of sleep related breathing disorders. The Company is developing dronabinol (Δ^9 -tetrahydrocannabinol), a cannabinoid, for the treatment of OSA, the most common form of sleep apnea.

The 2014 License Agreement provides for various commercialization and reporting requirements commencing on June 30, 2015. In addition, the 2014 License Agreement provides for various royalty payments, including a royalty on net sales of 4%, payment on sub-licensee revenues of 12.5%, and a minimum annual royalty beginning in 2015 of \$100,000, which is due and payable on December 31 of each year beginning on December 31, 2015. The minimum annual royalty obligation of \$100,000 due on December 31, 2021, was extended to May 31, 2022 and then further extended to an indefinite future date while discussions to amend the obligation are taking place. The minimum annual royalty obligation due on December 31, 2021 has not yet been paid.

One-time milestone payments may become due based upon the achievement of certain development milestones. \$75,000 will be due within 5 days of any one of the following, (a) dosing of the first patient with a dronabinol product in a Phase 2 human clinical study anywhere in the world that is not sponsored by the University of Illinois, (b) dosing of the first patient in a Phase 2 human clinical study anywhere in the world with a low dose dronabinol (defined as less than or equal to 1 mg), or (c) dosing of the first patient in a Phase 1 human clinical study anywhere in the world with a proprietary reformulation of dronabinol. \$350,000 will be due within five days after the dosing of the first patient is a Phase III human clinical trial anywhere in the world. \$500,000 will be due within five days after the first NDA filing with FDA or a foreign equivalent. \$1,000,000 will be due within twelve months of the first commercial sale. One-time royalty payments may also become due and payable. Annual royalty payments may also become due. In the year after the first application for market approval is submitted to the FDA or a foreign equivalent and until approval is obtained, the minimum annual royalty will increase to \$150,000. In the year after the first market approval is obtained from the FDA or a foreign equivalent and until the first sale of a product, the minimum annual royalty will increase to \$200,000. In the year after the first commercial sale of a product, the minimum annual royalty will increase to \$250,000.

During the nine-months and three-months ended September 30, 2022 and 2021, the Company recorded charges to operations of \$75,000 and \$25,000, respectively representing the allocated portion of the annual minimum royalty, which is included in research and development expenses in the Company’s condensed consolidated statement of operations for the nine-months and three-months ended September 30, 2022 and 2021, respectively. The Company did not pay the amount due on December 31, 2021 for which the Company was granted an extension until May 31, 2022 and then a further extension to an indefinite future date while discussions to amend the obligation are taking place.

Summary of Principal Cash Obligations and Commitments

The following table sets forth the Company’s principal cash obligations and commitments for the next five fiscal years as of September 30, 2022, aggregating \$1,166,385. License agreement amounts included in the 2022 column represent amounts contractually due from October 1, 2022 through December 31, 2022 (three months) and in each of the subsequent years, represents the full year. Employment agreement amounts included in the 2022 column represent amounts contractually due from July 1, 2022 through September 30, 2022 (three months) when such contracts expire unless extended pursuant to the terms of the contracts. Amounts with respect to these contracts that are already recorded in accounts payable and accrued expenses as of September 30, 2022 have not been included in the table below.

	Total	Payments Due By Year				
		2022	2023	2024	2025	2026
License agreements	\$ 505,185	\$ 25,000	\$125,093	\$125,092	\$115,000	\$ 115,000
Employment agreements ⁽¹⁾	661,200	165,300	495,900	-	-	-
Total	<u>\$1,166,385</u>	<u>\$190,300</u>	<u>\$620,993</u>	<u>\$125,092</u>	<u>\$115,000</u>	<u>\$115,000</u>

(1)The payment of certain of such amounts has been deferred indefinitely, as described above in “Employment Agreements”.

9. Subsequent Events

Entry into Letter of Intent

On November 14, 2022, the Company entered into a letter of intent (“LOI”) with an Australia headquartered clinical research organization (CRO”).

The LOI calls for a target execution date for a definitive contract that is 30 days from the date of the LOI, at which time RespireRx will be required to make a US\$50,000 deposit to be applied to the final studies budget and credited against the first invoice under the definitive contract. Under the definitive documents, the CRO is expected to provide full service CRO services, including regulatory, compliance, GMP (good manufacturing practices) manufacturing services in addition to human pharmacokinetic and pivotal human efficacy and safety studies of dronabinol for the treatment of obstructive sleep apnea.

Entry into Payment Settlement Agreements

Effective October 19, 2022, the Company and one of its vendors involved in shareholder related activities, entered into a payment settlement agreement pursuant to which the Company and this vendor agreed that the Company owed \$17,465 to such vendor and the Company agreed to make payments of \$1,500 per month from November 15, 2022 through September 15, 2023 and a final payment of \$965 on October 15, 2023.

Effective November 10, 2022, the Company and one of its vendors involved in digital media communications entered into a payment settlement agreement pursuant to which the Company and this vendor agreed that the total amount owed as of October 31, 2022 was \$29,322 and that \$1,991 is to be paid by November 30, 2022, \$6,000 is to be paid by December 31, 2022, \$7,000 by March 31, 2023, an additional \$7,000 by June 30, 2023 and \$7,331 by September 30, 2023.

Reinstatement of Services by American Stock Transfer & Trust Company LLC, a/k/a AST Financial

On August 2, 2022, the Company’s transfer agent, American Stock Transfer & Trust Company LLC, a/k/a AST Financial (“AST”) informed the Company that services had been suspended until AST receives payment of outstanding invoices. As of November 4, 2022, the Company and AST agreed to a payment schedule pursuant to which the Company has agreed to remit, with respect to arrears through December 31, 2022 at the rate of \$3,500 per month beginning in January 2023 for eleven months with a final payment in month twelve representing the remaining arrears amount due. In addition, the Company has agreed to remit timely payment against invoices for current services beginning with the January 2023 invoice in addition to the payment applied against the arrears. AST has agreed to reinstate services. The Company has also agreed to provide payment confirmation commencing on January 14, 2023 and with each payment thereafter. The Company and AST further agreed that any deviation from the payment schedule described above will automatically generate a termination letter by AST to the Company.

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

The following discussion and analysis should be read in conjunction with the condensed consolidated financial statements (unaudited) and notes related thereto appearing elsewhere in this document, as well as the audited consolidated financial statements, notes related thereto, and Management’s Discussion and Analysis of Financial Condition and Results of Operations in our 2021 Form 10-K.

Overview

The mission of the Company is to develop innovative and revolutionary treatments to combat disorders caused by disruption of neuronal signaling. We are developing treatment options that address OSA, ADHD, epilepsy, acute and chronic pain, including inflammatory and neuropathic pain, and recovery from SCI, which are conditions that affect millions of people but for which there are limited or poor treatment options. We are also considering developing treatment options for other conditions based on results of preclinical and clinical studies to date.

RespireRx is developing a pipeline of new drug products supported by our broad patent portfolios across two distinct drug platforms:

- (i) ResolutionRx, our pharmaceutical cannabinoids platform, is developing compounds that target the body’s endocannabinoid system, and in particular, the re-purposing of dronabinol, an endocannabinoid CB1 and CB2 receptor agonist, for the treatment of OSA. Dronabinol is already approved by the FDA for other indications.
- (ii) EndeavourRx, our neuromodulators platform, is made up of two programs: (a) our AMPAkinex program, which is developing proprietary compounds that act as PAMs of AMPA-type glutamate receptors to promote neuronal function and (b) our GABAkinex program, which is developing proprietary compounds that act as PAMs of GABA_A receptors, and which was established pursuant to our entry into a patent license agreement (the “UWMRF Patent License Agreement”) with the University of Wisconsin-Milwaukee Research Foundation, Inc., an affiliate of the University of Wisconsin-Milwaukee (“UWMRF”).

Management intends to organize our ResolutionRx and EndeavourRx business units into two subsidiaries: (i) a ResolutionRx subsidiary, into which we would contribute our pharmaceutical cannabinoid platform and its related tangible and intangible assets and certain of its liabilities and (ii) an EndeavourRx subsidiary, into which we would contribute our neuromodulator platform, including both the AMPAkinex and GABAkinex programs and their related tangible and intangible assets and certain of their liabilities.

Management believes that there are advantages to separating these platforms formally into newly formed subsidiaries, including but not limited to optimizing their asset values by making them attractive to separate financing and strategic partnering channels.

Financing our Platforms

Our major challenge has been to raise substantial equity or equity-linked financing to support research and development plans for our cannabinoid and neuromodulator platforms, while minimizing the dilutive effect to pre-existing stockholders. At present, we believe that we are hindered primarily by our public corporate structure, our OTC Pink Markets listing, and low market capitalization as a result of our low stock price, as well as the weakness of our balance sheet.

The Company is also engaged in business development efforts (licensing/sub-licensing, joint venture and other commercial structures) with a view to securing strategic partnerships that represent strategic and operational infrastructure additions, as well as cash and in-kind funding opportunities. These efforts have focused on, but have not been limited to, transacting with brand and generic pharmaceutical and biopharmaceutical companies as well as companies with potentially useful formulation or manufacturing capabilities, significant subject matter expertise and financial resources. We believe that some or all of our assets should be licensed, sub-licensed, joint ventured or even sold and have initiated efforts to do so. No assurance can be given that any transaction will come to fruition and that if it does, that the terms will be favorable to the Company.

The Company filed a Form 1-A which included an offering circular that was qualified by The Securities and Exchange Commission on December 13, 2021 and subsequently amended. The offering is of the Company's common stock and is up to \$7.5 million at \$0.02 per share and allows for multiple closings until October 31, 2023 unless earlier terminated by the Company. As of September 30, 2022, no closings had taken place, the Company's stock price had been below the offering price and given that our stock price is substantially below the offering price, it would be unlikely that this particular offering will provide significant, if any, new funds.

Recent Developments

UIC Extension

UIC has granted the Company an extension of the due date for the payment of the minimum annual royal obligation of \$100,000 that was originally due on December 31, 2021 until May 31, 2022 and then to an indefinite future date while discussions to amend the obligation are taking place.

Outreach Services Agreement with the Board of Regents of the University of Wisconsin System

On July 12, 2021, the Board of Regents of the University of Wisconsin System on behalf of the University of Wisconsin Milwaukee ("UWM") and RespireRx entered into an agreement pursuant to which UWM agreed to provide multiple milligram to gram quantities of KRM-II-81 and its salts. In addition, UWM is to supply KRM-II-81 to RespireRx within three months of the effective date. RespireRx agreed to pay \$75,000 in three installments of \$25,000 each beginning on October 12, 2021 and on a quarterly basis thereafter within thirty (30) days receipt of invoice. The payments that were due on January 12, 2022 and April 12, 2022 have not yet been paid. The agreement terminated on June 30, 2022. Amounts due on January 12, 2022 and April 12, 2022 are recorded in accounts payable as of September 30, 2022.

Sharp Settlement Agreement and related Complaint

See Note 5. Settlement and Payment Agreements for detailed information about the status of the Sharp Settlement Agreement. All amounts owed have been recorded on the Company's balance sheet as of September 30, 2022.

Salamandra

See Note 5. Settlement and Payment Agreements for detailed information about the status of the Salamandra settlement agreement. All amounts owed have been recorded on the Company's balance sheet as of September 30, 2022.

University of California Innovation and Entrepreneurship affiliated with the Regents of the University of California

See Note 5. Settlement and Payment Agreements for detailed information about the status of the University of California Innovation and Entrepreneurship payment settlement agreement. All amounts owed have been recorded on the Company's balance sheet as of September 30, 2022.

DNA Healthink Inc.

See Note 5. Settlement and Payment Agreements to the Company's condensed consolidated financial statements at September 30, 2022.

Going Concern

See Note 2. Business – *Going Concern* to our condensed consolidated financial statements at September 30, 2022.

The Company's regular efforts to raise capital and to evaluate measures to permit sustainability are time-consuming and intensive. Such efforts may not prove successful and may cause distraction, disruption or other adversity that limits the Company's development program efforts.

Recent Accounting Pronouncements

See Note 2 to the Company's condensed consolidated financial statements at September 30, 2022.

Management does not believe that any recently issued, but not yet effective, authoritative guidance, if currently adopted, would have a material impact on the Company's financial statement presentation or disclosures.

Concentration of Risk

See Note 2. Significant Accounting Policies – *Concentration of Credit Risk* to the Company's condensed consolidated financial statements at September 30, 2022.

See Note 8. Commitments and Contingencies – *University of Illinois 2014 Exclusive License Agreement* to the Company's condensed consolidated financial statements at September 30, 2022.

See Note 8. Commitments and Contingencies – *UWMRF Patent License Agreement* to the Company's condensed consolidated financial statements at September 30, 2022.

Critical Accounting Policies and Estimates

The Company prepared its condensed consolidated financial statements in accordance with GAAP. The preparation of these condensed consolidated financial statements requires the use of estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenues and expenses during the reporting period. Management periodically evaluates the estimates and judgments made. Management bases its estimates and judgments on historical experience and on various factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates as a result of different assumptions or conditions.

Critical accounting policies and estimates are described in the notes to the Company's condensed consolidated financial statements and include:

- Stock-based awards
- Research and Development Costs
- License Agreements
- Patent Costs
- Convertible Notes

See Critical Accounting Policies and Estimates in our 2021 Form 10-K for a complete description.

Results of Operations

The Company's consolidated statements of operations as discussed herein are presented below.

	Three-Months Ended September 30,		Nine-Months Ended September 30,	
	2022	2021	2022	2021
Operating expenses:				
General and administrative, including related parties	\$ 250,916	\$ 423,558	\$ 958,086	\$ 1,495,103
Research and development, including related parties	138,050	157,751	400,307	550,343
Total operating expenses	388,966	581,309	1,358,393	2,045,446
Loss from operations	(388,966)	(581,309)	(1,358,393)	(2,045,446)
Gain on warrant exchange	-	-	-	1,099
Gain/(Loss) on extinguishment or settlement or modification of debt and other liabilities	(71,161)	62,548	(71,161)	62,548
Interest expense, including related parties	(94,643)	(228,253)	(533,812)	(459,566)
Foreign currency transaction gain (loss)	82,192	38,332	150,337	70,220
Net loss	\$ (472,578)	\$ (708,682)	\$ (1,813,029)	\$ (2,371,145)
Deemed dividend associated with most favored nation provisions of convertible notes	\$ (1,271,316)	\$ (378,042)	\$ (1,623,054)	\$ (378,042)
Net loss attributable to common stockholders	\$ (1,743,894)	\$ (1,086,724)	\$ (3,436,083)	\$ (2,749,187)
Net loss per common share - basic and diluted	\$ (0.01)	\$ (0.01)	\$ (0.03)	\$ (0.03)
Weighted average common shares outstanding - basic and diluted	119,264,928	90,396,596	107,816,034	83,757,619

Three-months Ended September 30, 2022 and 2021

Revenues. The Company had no revenues during the three-months ended September 30, 2022 and 2021.

General and Administrative. For the three-months ended September 30, 2022 general and administrative expenses were \$250,916, a decrease of \$173,042, as compared to \$423,558 for the three-months ended September 30, 2021. The decrease in general and administrative expenses for the three-months ended September 30, 2022, as compared to the three-months ended September 30, 2021, is primarily due to a \$136,000 reduction in compensation and benefits during the three-months ended September 30, 2022 due to the termination of an executive officer effective January 31, 2022 and a reduction in other administrative payroll. In addition legal expenses for the three-months ended September 30, 2022 were \$43,000 less than the three-months ended September 30, 2021 which was the result of the cessation of services by our former legal counsel in 2022 and the incurrence of only nominal expenses with new counsel. Board of Directors fees declined to \$0 during the three-months ended September 30, 2022 from \$15,000 during the three-months ended September 30, 2021 as a result of the resignation of an independent director effective July 31, 2022. These were offset by an increase in accounting fees with our contract controller of approximately \$17,000 for the three-months ended September 30, 2022 to the three-months ended September 30, 2021. The balance of the difference was the net of several smaller increases and decreases.

Research and Development. For the three-months ended September 30, 2022, research and development expenses were \$138,050, a decrease of \$19,701, as compared to \$156,751 for the three-months ended September 30, 2021. The decrease in research and development expenses for the three-months ended September 30, 2022, as compared to the three-months ended September 30, 2021, is primarily a decrease in research contracts for the manufacture of research materials of \$25,000 and a share-based compensation of \$0 in the current period as compared to \$2,500 in the prior comparable period and the termination of a no-longer-necessary insurance policy resulting in savings of approximately \$1,900. This was offset by an increase in utilization of consultants of approximately \$9,700.

Interest Expense. During the three-months ended September 30, 2022, interest expense was \$94,643 as compared to \$228,253 for the three-months ended September 30, 2021. The decrease of \$133,610 is primarily the result of the completion amortization to interest expense of debt discounts and capitalized note costs associated with convertible debt during the three-months ended September 30, 2021 and the lower amortization of such debt discounts during the three-months ended September 30, 2022.

Foreign Currency Transaction (Loss) Gain. Foreign currency transaction gain was \$82,192 for the three-months ended September 30, 2022, as compared to a foreign currency transaction gain of \$38,332 for the three-months ended September 30, 2021. The foreign currency transaction (loss) gain relates to the \$399,774 loan from SY Corporation, made in June 2012, which is denominated in the South Korean Won.

Net Loss. For the three-months ended September 30, 2022, the net loss was \$472,578, compared to \$708,682 for the three-months ended September 30, 2021.

Net Loss Attributable to Common Stockholders. For the three-months ended September 30, 2022, the Company incurred a net loss attributable to common stockholders of \$1,743,894 as compared to a net loss attributable to common stockholders of \$1,086,724 for the three-months ended September 30, 2021.

Nine-months Ended September 30, 2022 and 2021

Revenues. The Company had no revenues during the nine-months ended September 30, 2022 and 2021.

General and Administrative. For the nine-months ended September 30, 2022, general and administrative expenses were \$958,086, a decrease of \$537,017, as compared to \$1,495,103 for the nine-months ended September 30, 2021. The decrease in general and administrative expenses is primarily due to the fact that the Company did not incur compensation and related benefits expenses with respect to a former executive officer effective January 31, 2022 resulting in a decrease in compensation and benefits expenses of \$514,486. There was also a decrease of \$15,000 with respect to Board of Directors fees as one independent director resigned as of July 31, 2022. General legal expenses decreased by \$166,861 as a result of the cessation of services by our former legal counsel in 2022 and the incurrence of expenses with new counsel. There was no share-based compensation during the nine-months ended September 30, 2022 as compared to \$28,000 during the comparable prior year period. In addition, there was a decrease of \$30,286 in transfer agent, various SEC and OTC market and related expenses. These decreases were offset by an increase in expenses of \$177,883 due to the write-off of deferred financing costs during the nine-months ended September 30, 2022 as compared to no write-off during the nine-months ended September 30, 2021. There was also an increase of \$16,991 in investor relations fees, \$8,333 with respect to various insurance premiums as well as smaller increases and decreases in other expense categories.

Research and Development. For the nine-months ended September 30, 2022, research and development expenses were \$400,307, a decrease of \$150,036, as compared to \$550,343 for the nine-months ended September 30, 2021. The decrease in research and development expenses for the nine-months ended September 30, 2022, as compared to the nine-months ended September 30, 2021, is primarily due to the decrease in utilization of research and development consultants resulting in a decrease of \$97,315. There was \$0 in share-based compensation expense during the nine-month period ending September 30, 2022 resulting in a decrease of \$26,250 in share-based compensation expenses. The completion of the initial phase of the new formulation research resulted in no expenses in the current period as compared to \$21,562 in the prior comparable period with respect to new product formulation development.

Interest Expense. During the nine-months ended September 30, 2022, interest expense was \$533,812 as compared to \$459,566 for the nine-months ended September 30, 2021. The increase of \$73,946 is primarily the result of increased debt balances and the amortization to interest expense of debt discounts and capitalized note costs associated with respect to new convertible debt.

Foreign Currency Transaction (Loss) Gain. Foreign currency transaction gain was \$150,337 for the nine-months ended September 30, 2022, as compared to a foreign currency transaction gain of \$70,220 for the nine-months ended September 30, 2021. The foreign currency transaction gains relate to the \$399,774 loan from SY Corporation, made in June 2012, which is denominated in the South Korean Won.

Net Loss. For the nine-months ended September 30, 2022, the net loss was \$1,813,029, compared to \$2,371,145 for the nine-months ended September 30, 2021.

Net Loss Attributable to Common Stockholders. For the nine-months ended September 30, 2022, the Company incurred a net loss attributable to common stockholders of \$3,436,083 as compared to a net loss attributable to common stockholders of \$2,749,187 for the nine-months ended September 30, 2021.

Liquidity and Capital Resources – September 30, 2022

The Company's condensed consolidated financial statements have been presented on the basis that it is a going concern, which contemplates the realization of assets and satisfaction of liabilities in the normal course of business. The Company has incurred net losses of \$1,813,029 for the nine-months ended September 30, 2022 and \$3,144,840 for the fiscal year ended December 31, 2021, and negative operating cash flows of \$155,061 for the nine-months ended September 30, 2022 and \$956,172 for the fiscal year ended December 31, 2021, had a stockholders' deficiency of \$11,590,629 at September 30, 2022, and expects to continue to incur net losses and negative operating cash flows for at least the next few years. As a result, management has concluded that there is substantial doubt about the Company's ability to continue as a going concern, and the Company's independent registered public accounting firm, in its report on the Company's consolidated financial statements for the year ended December 31, 2021, expressed substantial doubt about the Company's ability to continue as a going concern.

At September 30, 2022, the Company had a working capital deficit of \$11,386,629.

At September 30, 2022, the Company had cash of \$60, as compared to \$1,398 at December 31, 2021, reflecting a decrease in cash of \$1,338 for the nine-months ended September 30, 2022.

The limited cash of \$120,000 raised in financings with unaffiliated parties and all amounts raised from officers during the nine-months ended September 30, 2022 were utilized for working capital. The financings completed during fiscal year ended December 31, 2021 were utilized to pay general and administrative and research and development expenses or the related accounts payable, including, but not limited to, payments to our licensors, our independent registered public accounting firm, our patent and intellectual property law firm and for other patent and intellectual property services, our transfer agent, our financial printer and limited cash payments of compensation. Cash was also utilized, among other purposes, to make payments pursuant to directors and officers insurance and other insurance financings.

The Company is currently, and has for some time, been in significant financial distress. It has limited cash resources and current assets and has no ongoing source of sustainable revenue. Management is continuing to address various aspects of the Company's operations and obligations, including, without limitation, debt obligations, financing requirements, intellectual property, licensing agreements, legal and patent matters and regulatory compliance, and has continued to raise new debt and equity capital to fund the Company's general and administrative and research and development activities from both related and unrelated parties.

The Company is continuing its efforts to raise additional capital in order to be able to pay its liabilities and fund its business activities on a going forward basis, including the pursuit of the Company's planned research and development activities. The Company filed a Form 1-A which included an offering circular that was qualified by The Securities and Exchange Commission on December 13, 2021 and subsequently amended. The offering is of the Company's common stock and is up to \$7.5 million at \$0.02 per share and allows for multiple closings until October 31, 2023 unless earlier terminated by the Company. As of September 30, 2022, no closings had taken place, the Company's stock price had been below the offering price and given that our stock price is substantially below the offering price, it would be unlikely that this particular offering will provide significant, if any, new funds. Accordingly, we wrote-off the deferred financing costs related to the Reg A Offering during the nine-months ended September 30, 2022. The Company regularly evaluates various other measures to satisfy the Company's liquidity needs, including development and other agreements with collaborative partners and, when necessary, seeking to exchange or restructure the Company's outstanding securities. The Company is evaluating certain changes to its operations and structure to facilitating raising capital from sources that may be interested in financing only discrete aspects of the Company's development programs. Such changes could include a significant reorganization, which may include the formation of one or more subsidiaries into which one or more programs may be contributed. As a result of the Company's current financial situation, the Company has limited access to external sources of debt and equity financing. Accordingly, there can be no assurances that the Company will be able to secure additional financing in the amounts necessary to fully fund its operating and debt service requirements. To achieve these goals, the Company has determined that some or all of development programs should be licensed, sub-licensed, joint ventured or even sold and has initiated efforts to do so.

If the Company is unable to access sufficient cash resources, the Company may be forced to discontinue its operations entirely and liquidate.

Effective August 22, 2022, the Company and three investors entered into three separate Securities Purchase Agreements and the Company issued to those three investors, three separate convertible notes in the aggregate amount of \$105,556 and subject to original issue discount of \$10,556. The Company is received \$95,000 upon closing. The notes carry interest at 10% per annum which interest is guaranteed during the term of the note which matures on May 31, 2023. The notes inclusive of accrued interest are repayable in full at maturity or may be converted at any time until maturity at a conversion price of \$0.0015 per share of Common Stock. In addition, the Company and the three investors entered into three separate registration rights agreements similar to those associated with prior convertible notes.

Operating Activities. For the nine-months ended September 30, 2022, operating activities utilized cash of \$155,061, as compared to utilizing cash of \$800,622 for the nine-months ended September 30, 2021, to support the Company's ongoing general and administrative expenses as well as its research and development activities.

Financing Activities. For the nine-months ended September 30, 2022, financing activities consisted of \$120,000 from the issuance of a four convertible notes and \$109,412 of advances from executive officers.

Principal Commitments

Employment Agreements

See Note 8. Commitments and Contingencies – Significant Agreements and Contracts – *Employment Agreements* to our condensed consolidated financial statements at September 30, 2022.

University of Illinois 2014 Exclusive License Agreement

See Note 8. Commitments and Contingencies – Significant Agreements and Contracts – *University of Illinois 2014 Exclusive License Agreement* to our condensed consolidated financial statements at September 30, 2022.

UWM Research Foundation Patent License Agreement

See Note 8. Commitments and Contingencies – Significant Agreements and Contracts, *UWM Research Foundation Patent License Agreement* to our condensed consolidated financial statements at September 30, 2022.

A table setting forth the Company's principal cash obligations and commitments for the next five fiscal years as of September 30, 2022, aggregating \$1,166,385 is set forth in Note 8. Commitments and Contingencies – *Summary of Principal Cash Obligations and Commitments* to our condensed consolidated financial statements at September 30, 2022.

Off-Balance Sheet Arrangements

At September 30, 2022, the Company did not have any transactions, obligations or relationships that could be considered off-balance sheet arrangements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

Not applicable.

ITEM 4. CONTROLS AND PROCEDURES

(a) Evaluation of Disclosure Controls and Procedures

The Company maintains disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”) that are designed to ensure that information required to be disclosed in the reports that the Company files with the Securities and Exchange Commission (the “SEC”) 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 the Company’s management, including its Chief Executive Officer and Chief Financial Officer, to allow for timely decisions regarding required disclosures.

The Company carried out an evaluation, under the supervision and with the participation of its management, consisting of its principal executive officer and principal financial officer, of the effectiveness of the Company’s disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act). Based upon that evaluation, the Company’s principal executive officer and principal financial officer concluded that, as of the end of the period covered by this report, the Company’s disclosure controls and procedures were not effective to ensure that information required to be disclosed in reports filed under the Exchange Act is recorded, processed, summarized and reported within the required time periods and is accumulated and communicated to the Company’s management, consisting of the Company’s principal executive officer and principal financial officer, to allow timely decisions regarding required disclosure.

Management has been focusing on developing replacement controls and procedures that are adequate to ensure that information required to be disclosed in reports filed under the Exchange Act is recorded, processed, summarized and reported within the required time periods and is accumulated and communicated to the Company’s management to allow timely decisions regarding required disclosure. Although the senior executive team has been developing more formalized and regular communication and collaboration processes, thereby improving the control environment, these controls and procedures are not yet sufficient to remediate the Company’s control weaknesses. The Company is current in its SEC periodic reporting obligations, but as of the date of the filing of this Quarterly Report on Form 10-Q, the Company had not yet established adequate internal controls over financial reporting.

The Company’s management, consisting of its principal executive officer and principal financial officer, does not expect that its disclosure controls and procedures or its internal controls will prevent all error or fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Furthermore, 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. Due to 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, have been detected. In addition, as conditions change over time, so too may the effectiveness of internal controls. However, management believes that the financial information included in this Quarterly Report on Form 10-Q fairly present, in all material respects, the Company’s financial condition, results of operations and cash flows for the periods presented.

(b) Changes in Internal Controls over Financial Reporting

The Company’s management, consisting of its principal executive officer and principal financial officer, has determined that no change in the Company’s internal control over financial reporting (as that term is defined in Rules 13(a)-15(f) and 15(d)-15(f) of the Securities Exchange Act of 1934) occurred during or subsequent to the end of the period covered in this report that has materially affected, or is reasonably likely to materially affect, the Company’s internal control over financial reporting. Effective July 31, 2022, the Company’s one independent member of the Board of Directors resigned and therefore there is no independent oversight of management.

PART II - OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

We are periodically subject to various pending and threatened legal actions and claims. See Note 8. Commitments and Contingencies – *Pending or Threatened Legal Actions and Claims* to our condensed consolidated financial statements at September 30, 2022 for details regarding these matters.

ITEM 1A. RISK FACTORS

As of the date of this filing, there have been no material changes to the Risk Factors included in the Company's 2021 Form 10-K. The Risk Factors set forth in the 2021 Form 10-K should be read carefully in connection with evaluating the Company's business and in connection with the forward-looking statements contained in this Quarterly Report on Form 10-Q as well as our Quarterly Reports on Form 10-Q as of March 31, 2022 and June 30, 2022, filed with the SEC on May 23, 2022 and August 22, 2022, respectively. Any of the risks described in the 2021 Form 10-K could materially adversely affect the Company's business, financial condition or future results and the actual outcome of matters as to which forward-looking statements are made. These are not the only risks that the Company faces. Additional risks and uncertainties not currently known to the Company or that the Company currently deems to be immaterial also may materially adversely affect the Company's business, financial condition and/or operating results.

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

There were no unregistered sales of equity securities during the nine-months ended September 30, 2022 that were not disclosed by the Company on a Current Report on Form 8-K. There were conversions of convertible notes inclusive of accrued interest as disclosed in Note 4. Notes Payable – *Convertible Notes Payable* and Note 9. – *Subsequent Events* of our condensed consolidated financial statements at September 30, 2022 and Part I, Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations – *Liquidity and Capital Resources – September 30, 2022*.

Additional information with respect to the transactions described above is provided in the Notes to the Condensed Consolidated Financial Statements for the three-months and nine-months ended September 30, 2022.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

Note Payable to SY Corporation Co., Ltd.

On June 25, 2012, the Company borrowed 465,000,000 Won (the currency of South Korea, equivalent to approximately \$400,000 United States Dollars) from and executed a secured note payable to SY Corporation. The note accrues simple interest at the rate of 12% per annum and had a maturity date of June 25, 2013. The Company has not made any payments on the promissory note. At June 30, 2013 and subsequently, the promissory note was outstanding and in technical default, although SY Corporation has not issued a notice of default or a demand for repayment. The Company believes that SY Corporation is in default of its obligations under its January 2012 license agreement, as amended, with the Company, but the Company has not yet issued a notice of default. The Company has in the past made several efforts towards a comprehensive resolution of the aforementioned matters involving SY Corporation. During the nine-months ended September 30, 2022, there were no further communications between the Company and SY Corporation.

The note payable to SY Corporation consists of the following at September 30, 2022 and December 31, 2021:

	June 30, 2022	December 31, 2021
Principal amount of note payable	\$ 399,774	\$ 399,774
Accrued interest payable	495,238	459,358
Foreign currency transaction adjustment	(172,364)	(22,028)
	<u>\$ 722,648</u>	<u>\$ 837,104</u>

Interest expense with respect to this promissory note was \$12,092 for the three-months ended September 30, 2022 and 2021 respectively and \$35,881 for the nine-months ended September 30, 2022 and 2021.

Default on Convertible Notes Payable

As of September 30, 2022, principal and accrued interest on the Original Convertible Note that is subject to a default notice accrues annual interest at 12% instead of 10%, totaled \$61,160, of which \$38,062 was accrued interest.

By email confirmation, three convertible note holders agreed to waive certain provisions of their convertible notes and related documents, including but not limited to an extension of maturity dates to February 28, 2023, waiver of MFN provisions with respect to the August 2022 financing, an increase in their maturity amounts and the issuance of certain incentive restricted shares of Common Stock and certain other provisions. One convertible note holder has not agreed to the waivers and incentives, but instead has agreed, as of August 22, 2022, to a three-month standstill.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

The following documents are filed as part of this report:

Exhibit Number	Description of Document
10.1*	Securities Purchase Agreement template for August 22, 2022 three convertible note financings totaling \$105,556 in principal amount and \$95,000 of net proceeds, identical in terms except as to dollar amounts and purchaser.
10.2*	Piggy-back Registrations Rights Agreement template for August 22, 2022 three convertible note financings totaling \$105,556 in principal amount and \$95,000 of net proceeds, identical in terms except as to dollar amounts and purchaser.
10.3*	Promissory Note template for August 22, 2022 three convertible note financings totaling \$105,556 in principal amount and \$95,000 of net proceeds, identical in terms except as to dollar amounts and purchaser.
31.1*	Officer’s Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Officer’s Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	Officer’s Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2**	Officer’s Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS***	Inline XBRL Instance Document
101.SCH***	Inline XBRL Taxonomy Extension Schema Document
101.CAL***	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB***	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE***	Inline XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF***	Inline XBRL Taxonomy Extension Definition Linkbase Document
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

* Filed herewith.

** Furnished herewith.

*** In accordance with Regulation S-T, the XBRL related information on Exhibit No. 101 to this Quarterly Report on Form 10-Q shall be deemed “furnished” herewith not “filed.”

SIGNATURES

In accordance with the requirements of the Securities and 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 17, 2022

RESPIRERX PHARMACEUTICALS INC.
(Registrant)

By: /s/ Arnold S. Lippa

Arnold S. Lippa
Interim President, Interim Chief Executive Officer and Chief
Scientific Officer

Date: November 17, 2022

By: /s/ Jeff Eliot Margolis

Jeff Eliot Margolis
Senior Vice President, Chief Financial Officer, Treasurer and
Secretary

SECURITIES PURCHASE AGREEMENT

This SECURITIES PURCHASE AGREEMENT (the “Agreement”), dated as of «Closing_Date», by and between RESPIRERX PHARMACEUTICALS INC., a Delaware corporation, with headquarters located at 126 Valley Road, Suite C, Glen Rock, NJ 07452 (the “Company”), and «Investor», a «State_of_Incorp» «Type_of_Entity» (the “Buyer”).

WHEREAS:

A. The Company and the Buyer are executing and delivering this Agreement in reliance upon the exemption from securities registration afforded by Section 4(a)(2) of the Securities Act of 1933, as amended (the “1933 Act”) and Rule 506(b) promulgated by the United States Securities and Exchange Commission (the “SEC”) under the 1933 Act;

B. Buyer desires to purchase from the Company, and the Company desires to issue and sell to the Buyer, upon the terms and conditions set forth in this Agreement, a promissory note of the Company, in the aggregate principal amount of \$«Principal» (as the principal amount thereof may be increased pursuant to the terms thereof, and together with any note(s) issued in replacement thereof or as a dividend thereon or otherwise with respect thereto in accordance with the terms thereof, in the form attached hereto as Exhibit A, the “Note”), convertible into shares of common stock, \$0.001 par value per share, of the Company (the “Common Stock”), upon the terms and subject to the limitations and conditions set forth in such Note;

C. The Buyer wishes to purchase, upon the terms and conditions stated in this Agreement, such principal amount of the Note as is set forth immediately below its name on the signature pages hereto.

NOW THEREFORE, in consideration of the foregoing and of the agreements and covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Company and the Buyer hereby agree as follows:

1. Purchase and Sale of Note.

a. Purchase of Note. On the Closing Date (as defined below), the Company shall issue and sell to the Buyer, and the Buyer agrees to purchase from the Company, the Note, as further provided herein. As used in this Agreement, the term “business day” shall mean any day other than a Saturday, Sunday, or a day on which commercial banks in the city of New York, New York are authorized or required by law or executive order to remain closed.

b. Form of Payment. On the Closing Date: (i) the Buyer shall pay the purchase price of \$«Purchase» (the “Purchase Price”) for the Note, to be issued and sold to it at the Closing (as defined below), by wire transfer of immediately available funds to the Company, in accordance with the Company’s written wiring instructions, against delivery of the Note, and (ii) the Company shall deliver such duly executed Note on behalf of the Company, to the Buyer, against delivery of such Purchase Price.

c. Closing Date. Subject to the satisfaction (or written waiver) of the conditions thereto set forth in Section 6 and Section 7 below, the date and time of the issuance and sale of the Note pursuant to this Agreement (the “Closing Date”) shall be on the date that the Purchase Price is paid by Buyer pursuant to terms of this Agreement.

d. Closing. The closing of the transactions contemplated by this Agreement (the “Closing”) shall occur on the Closing Date at such location as may be agreed to by the parties (including via exchange of electronic signatures).

2. Buyer’s Representations and Warranties. The Buyer represents and warrants to the Company as of the Closing Date that:

a. Investment Purpose. As of the Closing Date, the Buyer is purchasing the Note and the shares of Common Stock issuable upon conversion of or otherwise pursuant to the Note (the “Conversion Shares”), and collectively the Note and Conversion Shares may be referred to herein as the “Securities”) for its own account and not with a present view towards the public sale or distribution thereof, except pursuant to sales registered or exempted from registration under the 1933 Act; provided, however, that by making the representations herein, the Buyer does not agree to hold any of the Securities for any minimum or other specific term and reserves the right to dispose of the Securities at any time in accordance with or pursuant to a registration statement or an exemption under the 1933 Act.

b. Accredited Investor Status. The Buyer is an “accredited investor” as that term is defined in Rule 501(a) of Regulation D (an “Accredited Investor”).

c. Reliance on Exemptions. The Buyer understands that the Securities are being offered and sold to it in reliance upon specific exemptions from the registration requirements of United States federal and state securities laws and that the Company is relying upon the truth and accuracy of, and the Buyer’s compliance with, the representations, warranties, agreements, acknowledgments and understandings of the Buyer set forth herein in order to determine the availability of such exemptions and the eligibility of the Buyer to acquire the Securities.

d. Information. The Buyer and its advisors, if any, have been, and for so long as the Note remains outstanding will continue to be, furnished with all materials relating to the business, finances and operations of the Company and materials relating to the offer and sale of the Securities which have been requested by the Buyer or its advisors. The Buyer and its advisors, if any, have been, and for so long as the Note remains outstanding will continue to be, afforded the opportunity to ask questions of the Company regarding its business and affairs. Notwithstanding the foregoing, the Company has not disclosed to the Buyer any material nonpublic information regarding the Company or otherwise and will not disclose such information unless such information is disclosed to the public prior to or promptly following such disclosure to the Buyer. Neither such inquiries nor any other due diligence investigation conducted by Buyer or any of its advisors or representatives shall modify, amend or affect Buyer’s right to rely on the Company’s representations and warranties contained in Section 3 below.

e. Governmental Review. The Buyer understands that no United States federal or state agency or any other government or governmental agency has passed upon or made any recommendation or endorsement of the Securities.

f. Transfer or Re-sale. The Buyer understands that (i) the sale or resale of the Securities has not been and is not being registered under the 1933 Act or any applicable state securities laws, and the Securities may not be transferred unless (a) the Securities are sold pursuant to an effective registration statement under the 1933 Act, (b) the Buyer shall have delivered to the Company, an opinion of counsel (which may be the Legal Counsel Opinion (as defined below)) that shall be in form, substance and scope customary for opinions of counsel in comparable transactions to the effect that the Securities to be sold or transferred may be sold or transferred pursuant to an exemption from such registration, which opinion shall be accepted by the Company, (c) the Securities are sold or transferred to an “affiliate” (as defined in Rule 144 promulgated under the 1933 Act (or a successor rule) (“Rule 144”)) of the Buyer who agrees to sell or otherwise transfer the Securities only in accordance with this Section 2(f) and who is an Accredited Investor, (d) the Securities are sold pursuant to Rule 144 or other applicable exemption, or (e) the Securities are sold pursuant to Regulation S under the 1933 Act (or a successor rule) (“Regulation S”), and the Buyer shall have delivered to the Company, at the cost of the Company, an opinion of counsel that shall be in form, substance and scope customary for opinions of counsel in corporate securities transactions, which opinion shall be accepted by the Company; (ii) any sale of such Securities made in reliance on Rule 144 may be made only in accordance with the terms of said Rule and further, if said Rule is not applicable, any re-sale of such Securities under circumstances in which the seller (or the person through whom the sale is made) may be deemed to be an underwriter (as that term is defined in the 1933 Act) may require compliance with some other exemption under the 1933 Act or the rules and regulations of the SEC thereunder; and (iii) neither the Company nor any other person is under any obligation to register such Securities under the 1933 Act or any state securities laws, except with respect to that certain Piggy- Back Registration Rights Agreement in the form attached hereto as Exhibit B (“Registration Rights Agreement”), or to comply with the terms and conditions of any exemption thereunder (in each case). Notwithstanding the foregoing or anything else contained herein to the contrary, the Securities may be pledged in connection with a bona fide margin account or other lending arrangement secured by the Securities, and such pledge of Securities shall not be deemed to be a transfer, sale or assignment of the Securities hereunder, and the Buyer in effecting such pledge of Securities shall not be required to provide the Company with any notice thereof or otherwise make any delivery to the Company pursuant to this Agreement or otherwise.

g. Legends. The Buyer understands that until such time as the Note, and, upon conversion of the Note in accordance with its terms, the Conversion Shares, as defined in the Note, have been registered under the 1933 Act or may be sold pursuant to Rule 144 under the 1933 Act, or other applicable exemption without any restriction as to the number of securities as of a particular date that can then be immediately sold, the Securities may bear a restrictive legend in substantially the following form (and a stop-transfer order may be placed against transfer of such Securities):

“NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES INTO WHICH THESE SECURITIES MAY BE CONVERTIBLE HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) AN OPINION OF COUNSEL (WHICH COUNSEL SHALL BE SELECTED BY THE HOLDER), IN A GENERALLY ACCEPTABLE FORM, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS (A) SOLD PURSUANT TO RULE 144, RULE OR OTHER APPLICABLE EXEMPTION UNDER SAID ACT AND (B) AN OPINION OF COUNSEL IS PROVIDED (WHICH COUNSEL SHALL BE SELECTED BY THE HOLDER), IN A GENERALLY ACCEPTABLE FORM, THAT SUCH SALE IS PERMITTED UNDER RULE 144, OR OTHER APPLICABLE EXEMPTION UNDER SAID ACT. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES.”

The legend set forth above shall be removed and the Company shall issue a certificate or book entry statement for the applicable shares of Common Stock without such legend to the holder of any Security upon which it is stamped or (as requested by such holder) issue the applicable shares of Common Stock to such holder by electronic delivery by crediting the account of such holder’s broker with The Depository Trust Company (“DTC”), if, unless otherwise required by applicable state securities laws, (a) such Security is registered for sale under an effective registration statement filed under the 1933 Act or otherwise may be sold pursuant to Rule 144, Rule 144A, Regulation S, or other applicable exemption without any restriction as to the number of securities as of a particular date that can then be immediately sold, or (b) the Company or the Buyer provides the Legal Counsel Opinion (as contemplated by and in accordance with Section 4(m) hereof) to the effect that a public sale or transfer of such Security may be made without registration under the 1933 Act, which opinion shall be accepted by the Company so that the sale or transfer is effected. The Company shall be responsible for the fees of its transfer agent and all DTC fees associated with any such issuance. The Buyer agrees to sell all Securities, including those represented by a certificate(s) from which the legend has been removed, in compliance with applicable prospectus delivery requirements, if any. In the event that the Company does not accept the opinion of counsel provided by the Buyer with respect to the transfer of Securities pursuant to an exemption from registration, such as Rule 144 or other applicable exemption at the Deadline (as defined in the Note), it will be considered an Event of Default pursuant to Section 3.2 of the Note.

h. Authorization; Enforcement. This Agreement has been duly and validly authorized by the Buyer and has been duly executed and delivered on behalf of the Buyer, and this Agreement constitutes a valid and binding agreement of the Buyer enforceable in accordance with its terms, except as enforcement may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting creditors' rights generally and except as may be limited by the exercise of judicial discretion in applying principles of equity.

3. Representations and Warranties of the Company. The Company represents and warrants to the Buyer as of the Closing Date that:

a. Organization and Qualification The Company and each of its Material Subsidiaries (as defined below), if any, is a corporation duly organized, validly existing and in good standing under the laws of the jurisdiction in which it is incorporated, with full power and authority (corporate and other) to own, lease, use and operate its properties and to carry on its business as and where now owned, leased, used, operated and conducted. Schedule 3(a), if attached hereto, sets forth a list of all of the Material Subsidiaries of the Company and the jurisdiction in which each is incorporated. The Company and each of its Material Subsidiaries is duly qualified as a foreign corporation to do business and is in good standing in every jurisdiction in which its ownership or use of property or the nature of the business conducted by it makes such qualification necessary except where the failure to be so qualified or in good standing would not have a Material Adverse Effect. "Material Adverse Effect" means any material adverse effect on the business, operations, assets, financial condition or prospects of the Company or its Material Subsidiaries, if any, taken as a whole, or on the transactions contemplated hereby or by the agreements or instruments to be entered into in connection herewith. "Material Subsidiaries" means any corporation or other organization, whether incorporated or unincorporated, in which the Company owns, directly or indirectly, a majority of the voting equity or otherwise controls such subsidiary and consolidates such subsidiary in its financial statements prepared in accordance with generally accepted accounting principles. Notwithstanding the foregoing, the Company has not paid its Delaware Franchise tax due on March 1, 2022 and intends to do so, inclusive of any penalties and interest as soon as practical.

b. Authorization; Enforcement. (i) The Company has all requisite corporate power and authority to enter into and perform this Agreement, the Note, and to consummate the transactions contemplated hereby and thereby and to issue the Securities, in accordance with the terms hereof and thereof, (ii) the execution and delivery of this Agreement, the Note, and the Conversion Shares, by the Company and the consummation by it of the transactions contemplated hereby and thereby (including without limitation, the issuance of the Note, as well as the issuance and reservation for issuance of the Conversion Shares issuable upon conversion of the Note) have been duly authorized by the Company's Board of Directors and no further consent or authorization of the Company, its Board of Directors, its shareholders, or its debt holders is required, (iii) this Agreement and the Note (together with any other instruments executed in connection herewith or therewith) have been duly executed and delivered by the Company by its authorized representative, and such authorized representative is the true and official representative with authority to sign this Agreement, the Note and the other instruments documents executed in connection herewith or therewith and bind the Company accordingly, and (iv) this Agreement constitutes, and upon execution and delivery by the Company of the Note, each of such instruments will constitute, a legal, valid and binding obligation of the Company, enforceable against the Company in accordance with their terms.

c. Capitalization; Governing Documents. As of August 15, 2022, the authorized capital stock of the Company consists of: 2,000,000,000 authorized shares of Common Stock, of which 119,594,276 shares were issued and outstanding, and 5,000,000 authorized shares of preferred stock (of which 1,250,000 have been designated as 9% cumulative convertible preferred stock, 37,500 as Series B convertible preferred stock, 205,000 as Series A junior participating preferred stock, 1,700 as Series G convertible preferred stock), and 3,000 shares of Series H, Voting, Non-participating, Convertible Preferred Stock, of which 37,500 (consisting of 37,500 shares of Series B convertible preferred stock) were issued and outstanding. On July 13, 2020 and September 30, 2020, RespireRx issued an aggregate of 1,624 shares of Series H Preferred Stock inclusive of 2% accrued dividends, all of which converted on September 30, 2020 into 25,377,426 shares of Common Stock and warrants to purchase 25,377,426 shares of Common Stock, and therefore as of that time on September 30, 2020 and thereafter through March 31, 2022, there were no shares of Series H Preferred Stock outstanding. Under the Certificate of Designation of the Series H Preferred Stock, shares of Series H Preferred Stock converted or redeemed by conversion are to be canceled and are not to be reissued. Therefore, as of March 31, 2022, there were 1,376 shares of Series H Preferred Stock available for issuance. All of such outstanding shares of capital stock of the Company and the Conversion Shares, are, or upon issuance will be, duly authorized, validly issued, fully paid and non-assessable. No shares of capital stock of the Company are subject to preemptive rights or any other similar rights of the shareholders of the Company or any liens or encumbrances imposed through the actions or failure to act of the Company. As of the effective date of this Agreement, other than as publicly announced prior to such date and reflected in the SEC Documents of the Company and other than contracts with consultants James Cook, Jeffrey Witkin and Roc Cerne, each of which contracts includes payment in stock or other equity-linked securities, vesting over time (i) there are no outstanding options, warrants, scrip, rights to subscribe for, puts, calls, agreements, understandings, claims or other commitments or rights of any character whatsoever relating to, or securities or rights convertible into or exchangeable for any shares of capital stock of the Company or any of its Material Subsidiaries, or arrangements by which the Company or any of its Material Subsidiaries is or may become bound to issue additional shares of capital stock of the Company or any of its Material Subsidiaries, (ii) there are no agreements or arrangements under which the Company or any of its Material Subsidiaries is obligated to register the sale of any of its or their securities under the 1933 Act and (iii) there are no anti-dilution or price adjustment provisions contained in any security issued by the Company (or in any agreement providing rights to security holders) that will be triggered by the issuance of any of the Securities except for certain most-favored-nation provisions of certain convertible notes and related documents. The Company has furnished to the Buyer true and correct copies of the Company's Certificate of Incorporation as in effect on the date hereof ("Certificate of Incorporation"), the Company's By-laws, as in effect on the date hereof (the "By-laws"), and the terms of all securities convertible into or exercisable for Common Stock of the Company and the material rights of the holders thereof in respect thereto.

d. Issuance of Conversion Shares. The Conversion Shares are duly authorized and reserved for issuance and, upon conversion of the Note in accordance with its terms, will be validly issued, fully paid and non-assessable, and free from all taxes, liens, claims and encumbrances with respect to the issue thereof and shall not be subject to preemptive rights or other similar rights of shareholders of the Company and will not impose personal liability upon the holder thereof.

e. Acknowledgment of Dilution. The Company understands and acknowledges the potentially dilutive effect of the Conversion Shares to the Common Stock upon the conversion of the Note. The Company further acknowledges that its obligation to issue, upon conversion of the Note, the Conversion Shares in accordance with this Agreement, and the Note are absolute and unconditional regardless of the dilutive effect that such issuance may have on the ownership interests of other shareholders of the Company.

f. Ranking; No Conflicts. The Note shall be pari passu in payment and performance with all unsecured indebtedness of the Company. The execution, delivery and performance of this Agreement and the Note by the Company and the consummation by the Company of the transactions contemplated hereby and thereby (including, without limitation, the issuance and reservation for issuance of the Conversion Shares) will not (i) conflict with or result in a violation of any provision of the Certificate of Incorporation or By-laws, or (ii) violate or conflict with, or result in a breach of any provision of, or constitute a default (or an event which with notice or lapse of time or both could become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, note, evidence of indebtedness, indenture, patent, patent license or instrument to which the Company or any of its Material Subsidiaries is a party, or (iii) result in a violation of any law, rule, regulation, order, judgment or decree (including federal and state securities laws and regulations and regulations of any self-regulatory organizations to which the Company or its securities is subject) applicable to the Company or any of its Material Subsidiaries or by which any property or asset of the Company or any of its Material Subsidiaries is bound or affected (except for such conflicts, defaults, terminations, amendments, accelerations, cancellations and violations as would not, individually or in the aggregate, have a Material Adverse Effect), or (iv) other than as disclosed in the SEC Documents, trigger any anti-dilution and/or ratchet provision contained in any other contract in which the Company is a party thereto or any security issued by the Company. Neither the Company nor any of its Material Subsidiaries is in violation of its Certificate of Incorporation, By-laws or other organizational documents and other than as disclosed in SEC Documents, neither the Company nor any of its Material Subsidiaries is in default (and no event has occurred which with notice or lapse of time or both could put the Company or any of its Material Subsidiaries in default), and neither the Company nor any of its Material Subsidiaries has taken any action or failed to take any action that would give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, indenture or instrument to which the Company or any of its Material Subsidiaries is a party or by which any property or assets of the Company or any of its Material Subsidiaries is bound or affected, except for possible defaults as would not, individually or in the aggregate, have a Material Adverse Effect. The businesses of the Company and its Material Subsidiaries, if any, are not being conducted, and shall not be conducted so long as the Buyer owns any of the Securities, in violation of any law, ordinance or regulation of any governmental entity. Except as specifically contemplated by this Agreement and as required under the 1933 Act and any applicable state securities laws, the Company is not required to obtain any consent, authorization or order of, or make any filing or registration with, any court, governmental agency, regulatory agency, self-regulatory organization or stock market or any third party in order for it to execute, deliver or perform any of its obligations under this Agreement and the Note in accordance with the terms hereof or thereof or to issue and sell the Note in accordance with the terms hereof and, upon conversion of the Note, issue Conversion Shares. All consents, authorizations, orders, filings and registrations which the Company is required to obtain pursuant to the preceding sentence have been obtained or effected on or prior to the date hereof. The Company is not in violation of the listing requirements of the Principal Market (as defined herein) and does not reasonably anticipate that the Common Stock will be delisted by the Principal Market in the foreseeable future. The Company and its Material Subsidiaries are unaware of any facts or circumstances which might give rise to any of the foregoing. The Principal Market shall mean any tier of the OTC Markets, including the Pink Market, any tier of the NASDAQ Stock Market (including NASDAQ Capital Market), or the New York Stock Exchange or NYSE American, or any successor to such markets.

g. SEC Documents; Financial Statements. The Company has filed all reports, schedules, forms, statements and other documents required to be filed by it with the SEC pursuant to the reporting requirements of the Securities Exchange Act of 1934, as amended (the “1934 Act”) (all of the foregoing filed prior to the date hereof and all exhibits included therein and financial statements and schedules thereto and documents (other than exhibits to such documents) incorporated by reference therein, being herein referred to as the “SEC Documents”). As of their respective dates, the SEC Documents complied in all material respects with the requirements of the 1934 Act and the rules and regulations of the SEC promulgated thereunder applicable to the SEC Documents, and none of the SEC Documents, at the time they were filed with the SEC, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. None of the statements made in any such SEC Documents is, or has been, required to be amended or updated under applicable law (except for such statements as have been amended or updated in subsequent filings prior the date hereof) and except for Form 1-A and the related offering circular filed on Form 253(g)(3) which has not been updated on Form 253(g)(2) since March 8, 2022. No offer or sale of securities has been made since the last filing of Form 253(g)(2) nor does the Company intend to make any offers or sales of securities pursuant to such offering until or unless updates or amendments are made in subsequent filings. As of their respective dates, the financial statements of the Company included in the SEC Documents complied as to form in all material respects with applicable accounting requirements and the published rules and regulations of the SEC with respect thereto. Such financial statements have been prepared in accordance with United States generally accepted accounting principles, consistently applied, during the periods involved and fairly present in all material respects the consolidated financial position of the Company and its consolidated Material Subsidiaries as of the dates thereof and the consolidated results of their operations and cash flows for the periods then ended (subject, in the case of unaudited statements, to normal year-end audit adjustments). Except as set forth in the financial statements of the Company included in the SEC Documents, the Company has no liabilities, contingent or otherwise, other than (i) liabilities incurred in the ordinary course of business subsequent to March 31, 2022, and (ii) obligations under contracts and commitments incurred in the ordinary course of business and not required under generally accepted accounting principles to be reflected in such financial statements, which, individually or in the aggregate, are not material to the financial condition or operating results of the Company. The Company is subject to the reporting requirements of the 1934 Act. The Company has never been a “shell company” as described in Rule 144(i)(1)(i).

h. Absence of Certain Changes. Since March 31, 2022, there has been no material adverse change and no material adverse development in the assets, liabilities, business, properties, operations, financial condition, results of operations, prospects or 1934 Act reporting status of the Company or any of its Material Subsidiaries.

i. Absence of Litigation. Other than as disclosed in the SEC Documents, there is no action, suit, claim, proceeding, inquiry or investigation before or by any court, public board, government agency, self-regulatory organization or body pending or, to the knowledge of the Company or any of its Material Subsidiaries, threatened against or affecting the Company or any of its Material Subsidiaries, or their officers or directors in their capacity as such, that could have a Material Adverse Effect. The SEC Documents contain a complete list and summary description of any pending or, to the knowledge of the Company, threatened proceeding against or affecting the Company or any of its Material Subsidiaries. The Company and its Material Subsidiaries are unaware of any facts or circumstances which might give rise to any of the foregoing.

j. Intellectual Property. The Company and each of its Material Subsidiaries owns or possesses the requisite licenses or rights to use all patents, patent applications, patent rights, inventions, know-how, trade secrets, trademarks, trademark applications, service marks, service names, trade names and copyrights (“Intellectual Property”) necessary to enable it to conduct its business as now operated (and, as presently contemplated to be operated in the future); there is no claim or action by any person pertaining to, or proceeding pending, or to the Company’s knowledge threatened, which challenges the right of the Company or of a Material Subsidiary with respect to any Intellectual Property necessary to enable it to conduct its business as now operated (and, as presently contemplated to be operated in the future); to the best of the Company’s knowledge, the Company’s or its Material Subsidiaries’ current and intended products, services and processes do not infringe on any Intellectual Property or other rights held by any person; and the Company is unaware of any facts or circumstances which might give rise to any of the foregoing. The Company and each of its Material Subsidiaries have taken reasonable security measures to protect the secrecy, confidentiality and value of their Intellectual Property.

k. No Materially Adverse Contracts, Etc. Neither the Company nor any of its Material Subsidiaries is subject to any charter, corporate or other legal restriction, or any judgment, decree, order, rule or regulation which in the judgment of the Company's officers has or is expected in the future to have a Material Adverse Effect. Neither the Company nor any of its Material Subsidiaries is a party to any contract or agreement which in the judgment of the Company's officers has or is expected to have a Material Adverse Effect.

l. Tax Status. Except as noted in this Section 3(l), the Company and each of its Material Subsidiaries has made or filed all federal, state and foreign income and all other tax returns, reports and declarations required by any jurisdiction to which it is subject (unless and only to the extent that the Company and each of its Material Subsidiaries has set aside on its books provisions reasonably adequate for the payment of all unpaid and unreported taxes) and has paid all taxes and other governmental assessments and charges that are material in amount, shown or determined to be due on such returns, reports and declarations, except those being contested in good faith and has set aside on its books provisions reasonably adequate for the payment of all taxes for periods subsequent to the periods to which such returns, reports or declarations apply. There are no unpaid taxes in any material amount claimed to be due by the taxing authority of any jurisdiction, and the officers of the Company know of no basis for any such claim. The Company has not executed a waiver with respect to the statute of limitations relating to the assessment or collection of any foreign, federal, state or local tax. None of the Company's tax returns is presently being audited by any taxing authority. The Company has not, as of the date of this Agreement, filed its Delaware Franchise Tax Return which was due on March 1, 2022 and intends to do so inclusive of any penalties and interest as soon as practical.

m. Transactions with Affiliates. Except for arm's length transactions pursuant to which the Company or any of its Material Subsidiaries makes payments in the ordinary course of business upon terms no less favorable than the Company or any of its Material Subsidiaries could obtain from third parties and other than transactions described in the SEC Documents and Exempt Issuances as described in the Note, none of the officers, directors, or employees of the Company is presently a party to any transaction with the Company or any of its Material Subsidiaries (other than for services as employees, officers and directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, or otherwise requiring payments to or from any officer, director or such employee or, to the knowledge of the Company, any corporation, partnership, trust or other entity in which any officer, director, or any such employee has a substantial interest or is an officer, director, trustee or partner.

n. Disclosure. All information relating to or concerning the Company or any of its Material Subsidiaries set forth in this Agreement and provided to the Buyer pursuant to Section 2(d) hereof and otherwise in connection with the transactions contemplated hereby is true and correct in all material respects and the Company has not omitted to state any material fact necessary in order to make the statements made herein or therein, in light of the circumstances under which they were made, not misleading. No event or circumstance has occurred or exists with respect to the Company or any of its Material Subsidiaries or its or their business, properties, prospects, operations or financial conditions, which, under applicable law, rule or regulation, requires public disclosure or announcement by the Company but which has not been so publicly announced or disclosed.

o. Acknowledgment Regarding Buyer's Purchase of Securities. The Company acknowledges and agrees that the Buyer is acting solely in the capacity of arm's length purchaser with respect to this Agreement and the transactions contemplated hereby. The Company further acknowledges that the Buyer is not acting as a financial advisor or fiduciary of the Company (or in any similar capacity) with respect to this Agreement and the transactions contemplated hereby and any statement made by the Buyer or any of its respective representatives or agents in connection with this Agreement and the transactions contemplated hereby is not advice or a recommendation and is merely incidental to the Buyer's purchase of the Securities. The Company further represents to the Buyer that the Company's decision to enter into this Agreement has been based solely on the independent evaluation of the Company and its representatives.

p. No Integrated Offering. Neither the Company, nor any of its affiliates, nor any person acting on its or their behalf, has directly or indirectly made any offers or sales in any security or solicited any offers to buy any security under circumstances that would require registration under the 1933 Act of the issuance of the Securities to the Buyer. The issuance of the Securities to the Buyer will not be integrated with any other issuance of the Company's securities (past, current or future) for purposes of any shareholder approval provisions applicable to the Company or its securities.

q. No Brokers; No Solicitation. The Company has taken no action which would give rise to any claim by any person for brokerage commissions, transaction fees or similar payments relating to this Agreement or the transactions contemplated hereby. The Company acknowledges and agrees that neither the Buyer nor its employee(s), member(s), beneficial owner(s), or partner(s) solicited the Company to enter into this Agreement and consummate the transactions described in this Agreement.

r. Permits; Compliance. The Company and each of its Material Subsidiaries is in possession of all franchises, grants, authorizations, licenses, permits, easements, variances, exemptions, consents, certificates, approvals and orders necessary to own, lease and operate its properties and to carry on its business as it is now being conducted (collectively, the "Company Permits"), and there is no action pending or, to the knowledge of the Company, threatened regarding suspension or cancellation of any of the Company Permits. Neither the Company nor any of its Material Subsidiaries is in conflict with, or in default or violation of, any of the Company Permits, except for any such conflicts, defaults or violations which, individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect. Since March 31, 2022, neither the Company nor any of its Material Subsidiaries has received any notification with respect to possible conflicts, defaults or violations of applicable laws, except for notices relating to possible conflicts, defaults or violations, which conflicts, defaults or violations would not have a Material Adverse Effect.

s. Environmental Matters.

(i) There are, to the Company's knowledge, with respect to the Company or any of its Material Subsidiaries or any predecessor of the Company, no past or present violations of Environmental Laws (as defined below), releases of any material into the environment, actions, activities, circumstances, conditions, events, incidents, or contractual obligations which may give rise to any common law environmental liability or any liability under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 or similar federal, state, local or foreign laws and neither the Company nor any of its Material Subsidiaries has received any notice with respect to any of the foregoing, nor is any action pending or, to the Company's knowledge, threatened in connection with any of the foregoing. The term "Environmental Laws" means all federal, state, local or foreign laws relating to pollution or protection of human health or the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata), including, without limitation, laws relating to emissions, discharges, releases or threatened releases of chemicals, pollutants contaminants, or toxic or hazardous substances or wastes (collectively, "Hazardous Materials") into the environment, or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials, as well as all authorizations, codes, decrees, demands or demand letters, injunctions, judgments, licenses, notices or notice letters, orders, permits, plans or regulations issued, entered, promulgated or approved thereunder.

(ii) Other than those that are or were stored, used or disposed of in compliance with applicable law, no Hazardous Materials are contained on or about any real property currently owned, leased or used by the Company or any of its Material Subsidiaries, and no Hazardous Materials were released on or about any real property previously owned, leased or used by the Company or any of its Material Subsidiaries during the period the property was owned, leased or used by the Company or any of its Material Subsidiaries, except in the normal course of the Company's or any of its Material Subsidiaries' business.

(iii) There are no underground storage tanks on or under any real property owned, leased or used by the Company or any of its Material Subsidiaries that are not in compliance with applicable law.

t. Title to Property. The Company and its Material Subsidiaries have good and marketable title in fee simple to all real property and good and marketable title to all personal property owned by them which is material to the business of the Company and its Material Subsidiaries, in each case free and clear of all liens, encumbrances and defects except such as are described in Schedule 3(t), if attached hereto, or such as would not have a Material Adverse Effect. Any real property and facilities held under lease by the Company and its Material Subsidiaries are held by them under valid and enforceable leases with such exceptions as would not have a Material Adverse Effect.

u. [Intentionally omitted]

v. Internal Accounting Controls. The Company and each of its Material Subsidiaries maintain a system of internal accounting controls sufficient, in the judgment of the Company's board of directors, to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain asset accountability, (iii) access to assets is permitted only in accordance with management's general or specific authorization and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

w. Foreign Corrupt Practices. Neither the Company, nor any of its Material Subsidiaries, nor any director, officer, agent, employee or other person acting on behalf of the Company or any Material Subsidiary has, in the course of his actions for, or on behalf of, the Company, used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expenses relating to political activity; made any direct or indirect unlawful payment to any foreign or domestic government official or employee from corporate funds; violated or is in violation of any provision of the U.S. Foreign Corrupt Practices Act of 1977, as amended, or made any bribe, rebate, payoff, influence payment, kickback or other unlawful payment to any foreign or domestic government official or employee.

x. [Intentionally omitted]

y. No Investment Company. The Company is not, and upon the issuance and sale of the Securities as contemplated by this Agreement will not be an "investment company" required to be registered under the Investment Company Act of 1940 (an "Investment Company"). The Company is not controlled by an Investment Company.

aa. No Off Balance Sheet Arrangements. There is no transaction, arrangement, or other relationship between the Company or any of its Material Subsidiaries and an unconsolidated or other off balance sheet entity that is required to be disclosed by the Company in its 1934 Act filings and is not so disclosed or that otherwise could be reasonably likely to have a Material Adverse Effect.

bb. No Disqualification Events. None of the Company, any of its predecessors, any affiliated issuer, any director, executive officer, other officer of the Company participating in the offering hereunder, any beneficial owner of 20% or more of the Company's outstanding voting equity securities, calculated on the basis of voting power, nor any promoter (as that term is defined in Rule 405 under the 1933 Act) connected with the Company in any capacity at the time of sale (each, an "Issuer Covered Person") is subject to any of the "Bad Actor" disqualifications described in Rule 506(d)(1)(i) to (viii) under the 1933 Act (a "Disqualification Event"), except for a Disqualification Event covered by Rule 506(d)(2) or (d)(3). The Company has exercised reasonable care to determine whether any Issuer Covered Person is subject to a Disqualification Event.

cc. Manipulation of Price. The Company has not, and to its knowledge no one acting on its behalf has: (i) taken, directly or indirectly, any action designed to cause or to result, or that could reasonably be expected to cause or result, in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of any of the Securities, (ii) sold, bid for, purchased, or paid any compensation for soliciting purchases of, any of the Securities, or (iii) paid or agreed to pay to any person any compensation for soliciting another to purchase any other securities of the Company.

dd. Bank Holding Company Act. Neither the Company nor any of its Material Subsidiaries is subject to the Bank Holding Company Act of 1956, as amended (the "BHCA") and to regulation by the Board of Governors of the Federal Reserve System (the "Federal Reserve"). Neither the Company nor any of its Material Subsidiaries or affiliates owns or controls, directly or indirectly, five percent (5%) or more of the outstanding shares of any class of voting securities or twenty-five percent (25%) or more of the total equity of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve. Neither the Company nor any of its Material Subsidiaries or affiliates exercises a controlling influence over the management or policies of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve.

ee. Illegal or Unauthorized Payments; Political Contributions. Neither the Company nor any of its Material Subsidiaries nor, to the Company's knowledge, any of the officers, directors, employees, agents or other representatives of the Company or any of its Material Subsidiaries or any other business entity or enterprise with which the Company or any Material Subsidiary is or has been affiliated or associated, has, directly or indirectly, made or authorized any payment, contribution or gift of money, property, or services, whether or not in contravention of applicable law, (i) as a kickback or bribe to any person or (ii) to any political organization, or the holder of or any aspirant to any elective or appointive public office except for personal political contributions not involving the direct or indirect use of funds of the Company or any of its Material Subsidiaries.

ff. Breach of Representations and Warranties by the Company. The Company agrees that if the Company breaches any of the representations or warranties set forth in this Section 3 or the Note, then in addition to any other remedies available to the Buyer pursuant to this Agreement, it will be considered an Event of Default under Section 3.4 of the Note.

4. ADDITIONAL COVENANTS, AGREEMENTS AND ACKNOWLEDGEMENTS.

a. Best Efforts. The parties shall use their reasonable best efforts to satisfy timely each of the conditions described in Section 6 and 7 of this Agreement.

b. Form D; Blue Sky Laws. The Company agrees to file a Form D with respect to the Securities as required under Regulation D and to provide a copy thereof to the Buyer promptly after such filing. The Company shall, on or before the Closing Date, take such action as the Company shall reasonably determine is necessary to qualify the Securities for sale to the Buyer at the applicable closing pursuant to this Agreement under applicable securities or "blue sky" laws of the states of the United States (or to obtain an exemption from such qualification), and shall provide evidence of any such action so taken to the Buyer on or prior to the Closing Date.

c. Use of Proceeds. The Company shall use the proceeds for business development, and not for (i) the repayment of any indebtedness owed to officers, directors or employees of the Company or their affiliates other than accrued compensation or other short-term advances made to the Company, repayment of which is considered to be in the ordinary course of business, (ii) the repayment of any debt issued in corporate finance transactions, (iii) any loan to or investment in any other corporation, partnership, enterprise or other person (except in connection with the Company's currently existing operations or plans disclosed in SEC documents), (iv) any loan, credit, or advance to any officers, directors, employees, or affiliates of the Company, or (v) in violation or contravention of any applicable law, rule or regulation.

d. Right of Participation and First Refusal.

(i) Other than arrangements that are in place or disclosed or the intent to enter into such arrangements are disclosed in SEC Documents prior to the date of this Agreement, from the date first written above until the Note is extinguished in its entirety, the Company will not, (i) directly or indirectly, offer, sell, grant any option to purchase, or otherwise dispose of (or announce any offer, sale, grant or any option to purchase or other disposition of) any of its or its Material Subsidiaries' debt, equity or equity equivalent securities, including without limitation any debt, preferred shares or other instrument or security that is, at any time during its life and/or under any circumstances, convertible into, exchangeable, or exercisable for Common Stock (any such offer, sale, grant, disposition or announcement being referred to as a "Subsequent Placement") or (ii) enter into any definitive agreement with regard to the foregoing, in each case unless the Company shall have first complied with this Section 4(d).

(ii) The Company shall deliver to the Buyer an irrevocable written notice (the "Offer Notice") of any proposed or intended Subsequent Placement, which shall (w) identify and describe the Subsequent Placement, (x) describe the price and other terms upon which they are to be issued, sold or exchanged, and the number or amount of the securities in the Subsequent Placement to be issued, sold, or exchanged and (y) offer to issue and sell to or exchange with the Buyer at least \$20,000.00 of the securities in the Subsequent Placement (in each case, an "Offer").

(iii) To accept an Offer, in whole or in part, the Buyer must deliver a written notice (the "Notice of Acceptance") to the Company prior to the end of the second (2nd) Trading Day (as defined in the Note) after the Buyer's receipt of the Offer Notice (the "Offer Period"), setting forth the portion of the amount that the Buyer elects to purchase (the "Subscription Amount"). The Company shall complete the Subsequent Placement and issue and sell the Subscription Amount to the Buyer but only upon terms and conditions (including, without limitation, unit prices and interest rates) set forth in the Offer Notice.

(iv) Notwithstanding anything to the contrary contained herein, if the Company desires to modify or amend the terms or conditions of a Subsequent Placement at any time after the Offer Notice is given to Buyer, the Company shall deliver to the Buyer a new Offer Notice and the Offer Period of such new Offer shall expire at the end of the second (2nd) Trading Day after the Buyer's receipt of such new Offer Notice.

e. Usury. To the extent it may lawfully do so, the Company hereby agrees not to insist upon or plead or in any manner whatsoever claim and will resist any and all efforts to be compelled to take the benefit or advantage of, usury laws wherever enacted, now or at any time hereafter in force, in connection with any action or proceeding that may be brought by the Buyer in order to enforce any right or remedy under this Agreement, the Note and any document, agreement or instrument contemplated thereby. Notwithstanding any provision to the contrary contained in this Agreement, the Note and any document, agreement or instrument contemplated thereby, it is expressly agreed and provided that the total liability of the Company under this Agreement, the Note or any document, agreement or instrument contemplated thereby for payments which under applicable law are in the nature of interest shall not exceed the maximum lawful rate authorized under applicable law (the "Maximum Rate"), and, without limiting the foregoing, in no event shall any rate of interest or default interest, or both of them, when aggregated with any other sums which under applicable law in the nature of interest that the Company may be obligated to pay under this Agreement, the Note and any document, agreement or instrument contemplated thereby exceed such Maximum Rate. It is agreed that if the maximum contract rate of interest allowed by law applicable to this Agreement, the Note and any document, agreement or instrument contemplated thereby is increased or decreased by statute or any official governmental action subsequent to the date hereof, the new maximum contract rate of interest allowed by law will be the Maximum Rate applicable to this Agreement, the Note and any document, agreement or instrument contemplated thereby from the effective date thereof forward, unless such application is precluded by applicable law. If under any circumstances whatsoever, interest in excess of the Maximum Rate is paid by the Company to the Buyer with respect to indebtedness evidenced by this Agreement, the Note and any document, agreement or instrument contemplated thereby, such excess shall be applied by the Buyer to the unpaid principal balance of any such indebtedness or be refunded to the Company, the manner of handling such excess to be at the Buyer's election.

f. Restriction on Activities. Commencing as of the date first above written, and until the earlier of payment of the Note in full or full conversion of the Note, the Company shall not, directly or indirectly, without the Buyer's prior written consent, which consent shall not be unreasonably withheld: (a) change the nature of its business or (b) sell, divest, acquire, change the structure of any material assets other than in the ordinary course of business or as previously disclosed in the SEC Documents as being contemplated as of the date of this Agreement.

g. Listing. The Company will, so long as the Buyer owns any of the Securities, maintain the listing and trading of its Common Stock on the Principal Market or any equivalent replacement exchange or electronic quotation system (including but not limited to the Pink Sheets electronic quotation system) and will comply in all respects with the Company's reporting, filing and other obligations under the bylaws or rules of the Financial Industry Regulatory Authority ("FINRA") and such exchanges, as applicable. The Company shall promptly provide to the Buyer copies of any notices it receives from the Principal Market and any other exchanges or electronic quotation systems on which the Common Stock is then traded regarding the continued eligibility of the Common Stock for listing on such exchanges and quotation systems.

h. Corporate Existence. The Company will, until the date that is six (6) months after the date on which the Note is repaid in its entirety, maintain its corporate existence and shall not, except as may be disclosed in the SEC documents, sell all or substantially all of the Company's assets, except in the event of a merger or consolidation or sale of all or substantially all of the Company's assets, where the surviving or successor entity in such transaction (i) assumes the Company's obligations hereunder and under the agreements and instruments entered into in connection herewith.

i. No Integration. The Company shall not make any offers or sales of any security (other than the Securities) under circumstances that would require registration of the Securities being offered or sold hereunder under the 1933 Act or cause the offering of the Securities to be integrated with any other offering of securities by the Company for the purpose of any stockholder approval provision applicable to the Company or its securities.

j. Breach of Covenants. The Company acknowledges and agrees that if the Company breaches any of the covenants set forth in this Section 4, in addition to any other remedies available to the Buyer pursuant to this Agreement, it will be considered an Event of Default under Section 3.3 of the Note.

k. Compliance with 1934 Act; Public Information Failures. Until the date that is six (6) months after the date on which the Note is repaid in its entirety, the Company shall comply with the reporting requirements of the 1934 Act; and the Company shall continue to be subject to the reporting requirements of the 1934 Act. During the period that the Buyer beneficially owns the Note, if the Company shall (i) fail for any reason to satisfy the requirements of Rule 144(c)(1), including, without limitation, the failure to satisfy the current public information requirements under Rule 144(c) or (ii) if the Company has ever been an issuer described in Rule 144(i)(1)(i) or becomes such an issuer in the future, and the Company shall fail to satisfy any condition set forth in Rule 144(i)(2) (each, a “Public Information Failure”) then, as partial relief for the damages to the Buyer by reason of any such delay in or reduction of its ability to sell the Securities (which remedy shall not be exclusive of any other remedies available pursuant to this Agreement, the Note, or at law or in equity), the Company shall pay to the Buyer an amount in cash equal to three percent (3%) of the Purchase Price on the day of a Public Information Failure and on every thirtieth day (prorated for periods totaling less than thirty days) thereafter until the date such Public Information Failure is cured. The payments to which a holder shall be entitled pursuant to this Section 4(k) are referred to herein as “Public Information Failure Payments.” Public Information Failure Payments shall be paid on the earlier of (i) the last day of the calendar month during which such Public Information Failure Payments are incurred and (iii) the third business day after the event or failure giving rise to the Public Information Failure Payments is cured. In the event the Company fails to make Public Information Failure Payments in a timely manner, such Public Information Failure Payments shall bear interest at the rate of 2% per month (prorated for partial months) until paid in full.

l. Acknowledgement Regarding Buyer’s Trading Activity. Until the Note is fully repaid or fully converted, the Buyer shall not effect any “short sale” (as such term is defined in Rule 200 of Regulation SHO of the 1934 Act) of the Common Stock which establishes a net short position with respect to the Common Stock.

m. [Intentionally Omitted].

n. Legal Counsel Opinions. Upon the request of the Buyer from to time to time, the Company shall be responsible (at its cost) for promptly supplying to the Company’s transfer agent and the Buyer a customary legal opinion letter of its counsel (the “Legal Counsel Opinion”) to the effect that the resale of the Conversion Shares by the Buyer or its affiliates, successors and assigns is exempt from the registration requirements of the 1933 Act pursuant to Rule 144 (provided the requirements of Rule 144 are satisfied and provided the Conversion Shares are not then registered under the 1933 Act for resale pursuant to an effective registration statement) or other applicable exemption (provided the requirements of such other applicable exemption are satisfied). In addition, the Buyer may (at the Company’s cost) at any time secure its own legal counsel to issue the Legal Counsel Opinion, and the Company will instruct its transfer agent to accept such opinion as well as promptly supply to the Company’s transfer agent and the Buyer a reliance letter (which reliance letter shall indicate that the transfer agent may rely on the opinion of Buyer’s counsel). The Company hereby agrees that it may never take the position that it is a “shell company” in connection with its obligations under this Agreement or otherwise.

o. Registration Rights. The Company has granted the Buyer the piggy-back registration rights set forth on Registration Rights Agreement that is Exhibit B hereto.

p. Most Favored Nation. So long as the Note is outstanding, upon any issuance by the Company of any security, or amendment to a security that was originally issued before the date of this Agreement, with any term that the Buyer reasonably believes is more favorable to the holder of such security or with a term in favor of the holder of such security that the Buyer reasonably believes was not similarly provided to the Buyer in this Agreement or the Note, then (i) the Company shall notify the Buyer of such additional or more favorable term within one (1) business day of the issuance and/or amendment (as applicable) of the respective security, and (ii) such term, at Buyer’s option, shall become a part of the transaction documents with the Buyer (regardless of whether the Borrower complied with the notification provision of this Section 4(p)). The types of terms contained in another security that may be more favorable to the holder of such security include, but are not limited to, terms addressing prepayment rate, interest rates, and original issue discounts.

q. Subsequent Variable Rate Transactions. From the date hereof until such time as the Note is fully converted or fully repaid, the Company shall be permitted to effect or enter into an agreement involving a Variable Rate Transaction. “Variable Rate Transaction” means a transaction in which the Company (i) issues or sells any debt or equity securities that are convertible into, exchangeable or exercisable for, or include the right to receive, additional shares of Common Stock either (A) at a conversion price, exercise price or exchange rate or other price that is based upon, and/or varies with, the trading prices of or quotations for the shares of Common Stock at any time after the initial issuance of such debt or equity securities or (B) with a conversion, exercise or exchange price that is subject to being reset at some future date after the initial issuance of such debt or equity security or upon the occurrence of specified or contingent events directly or indirectly related to the business of the Company or the market for the Common Stock or (ii) enters into any agreement, including, but not limited to, an equity line of credit, whereby the Company may issue securities at a future determined price. If the Company enters into a Variable Rate Transaction, the Buyer shall be entitled to amend the terms of this Agreement and the Note and other transaction documents to the same terms as the Variable Rate Transaction including the commencement of a new six month holding period prior to first conversion.

r. [Intentionally Omitted].

s. Non-Public Information. The Company covenants and agrees that neither it, nor any other person acting on its behalf will provide the Buyer or its agents or counsel with any information that constitutes, or the Company reasonably believes constitutes, material non-public information, unless prior thereto the Buyer shall have consented to the receipt of such information and agreed with the Company to keep such information confidential. The Company understands and confirms that the Buyer shall be relying on the foregoing covenant in effecting transactions in securities of the Company. To the extent that the Company delivers any material, non-public information to the Buyer without such Buyer’s consent, the Company hereby covenants and agrees that such Buyer shall not have any duty of confidentiality to the Company, any of its Material Subsidiaries, or any of their respective officers, directors, agents, employees or affiliates, not to trade on the basis of, such material, non- public information, provided that the Buyer shall remain subject to applicable law. To the extent that any notice provided, information provided, or any other communications made by the Company, to the Buyer, constitutes or contains material non-public information regarding the Company or any Material Subsidiaries, the Company shall simultaneously file such notice or other material information with the SEC pursuant to a Current Report on Form 8-K. In addition to any other remedies provided by this Agreement or the related transaction documents, if the Company provides any material non-public information to the Buyer without their prior written consent, and it fails to immediately (no later than that business day) file a Form 8-K disclosing this material non-public information, it shall pay the Buyer as partial liquidated damages and not as a penalty a sum equal to \$3,000 per day beginning with the day after the information is disclosed to the Buyer and ending and including the day the Form 8-K disclosing this information is filed.

t. D&O Insurance. The Company shall have or shall reasonably attempt to purchase, within six months from the Closing date, director and officer insurance on behalf of the Company’s (including its Material Subsidiaries) officers and directors for a period of 12 months with respect to any losses, claims, damages, liabilities, costs and expense in connection with any actual or threatened claim or proceeding that is based on or arises out of their status as a director or officer of the Company.

5. Transfer Agent Instructions. The Company shall, as soon as practical after the Closing Date, issue irrevocable instructions to the Company's transfer agent to issue certificates, registered in the name of the Buyer or its nominee, upon conversion of the Note, the Conversion Shares, in such amounts as specified from time to time by the Buyer to the Company in accordance with the terms thereof (the "Irrevocable Transfer Agent Instructions"). In the event that the Company proposes to replace its transfer agent, the Company shall provide, prior to the effective date of such replacement, a fully executed Irrevocable Transfer Agent Instructions in a form as initially delivered pursuant to this Agreement (including but not limited to the provision to irrevocably reserve shares of Common Stock in the Reserved Amount (as defined in the Note)) signed by the successor transfer agent to the Company and the Company. Prior to registration of the Conversion Shares under the 1933 Act or the date on which the Conversion Shares may be sold pursuant to Rule 144, Rule 144A, Regulation S, or other applicable exemption without any restriction as to the number of Securities as of a particular date that can then be immediately sold, all such certificates shall bear the restrictive legend specified in Section 2(g) of this Agreement. The Company warrants that: (i) no instruction other than the Irrevocable Transfer Agent Instructions referred to in this Section 5 will be given by the Company to its transfer agent and that the Securities shall otherwise be freely transferable on the books and records of the Company as and to the extent provided in this Agreement and the Note; (ii) it will not direct its transfer agent not to transfer or delay, impair, and/or hinder its transfer agent in transferring (or issuing) electronically or in certificated form any certificate for Securities to be issued to the Buyer upon conversion of or otherwise pursuant to the Note as and when required by the Note and this Agreement; (iii) it will not fail to remove (or directs its transfer agent not to remove or impairs, delays, and/or hinders its transfer agent from removing) any restrictive legend (or to withdraw any stop transfer instructions in respect thereof) on any certificate for any Securities issued to the Buyer upon conversion of or otherwise pursuant to the Note as and when required by the Note and this Agreement and (iv) it will provide any required corporate resolutions and issuance approvals to its transfer agent within 6 hours of each conversion of the Note. Nothing in this Section shall affect in any way the Buyer's obligations and agreement set forth in Section 2(g) hereof to comply with all applicable prospectus delivery requirements, if any, upon re-sale of the Securities. If the Buyer provides the Company, at the cost of the Company, with (i) an opinion of counsel in form, substance and scope customary for opinions in comparable transactions, to the effect that a public sale or transfer of such Securities may be made without registration under the 1933 Act and such sale or transfer is effected or (ii) the Buyer provides reasonable assurances that the Securities can be sold pursuant to 144, Rule 144A, Regulation S, or other applicable exemption, the Company shall permit the transfer, and, in the case of the Securities, promptly instruct its transfer agent to issue one or more certificates, free from restrictive legend, in such name and in such denominations as specified by the Buyer. The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Buyer, by vitiating the intent and purpose of the transactions contemplated hereby. Accordingly, the Company acknowledges that the remedy at law for a breach of its obligations under this Section 5 may be inadequate and agrees, in the event of a breach or threatened breach by the Company of the provisions of this Section, that the Buyer shall be entitled, in addition to all other available remedies, to an injunction restraining any breach and requiring immediate transfer, without the necessity of showing economic loss and without any bond or other security being required.

6. Conditions to the Company's Obligation to Sell. The obligation of the Company hereunder to issue and sell the Note to the Buyer at the Closing is subject to the satisfaction, at or before the Closing Date, of each of the following conditions thereto, provided that these conditions are for the Company's sole benefit and may be waived by the Company at any time in its sole discretion:

a. The Buyer shall have executed this Agreement and delivered the same to the Company.

b. The Buyer shall have delivered the Purchase Price in accordance with Section 1(b) above.

c. The representations and warranties of the Buyer shall be true and correct in all material respects as of the date when made and as of the Closing Date, as though made at that time (except for representations and warranties that speak as of a specific date), and the Buyer shall have performed, satisfied and complied in all material respects with the covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Buyer at or prior to the Closing Date.

d. No litigation, statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed by or in any court or governmental authority of competent jurisdiction or any self-regulatory organization having authority over the matters contemplated hereby which prohibits the consummation of any of the transactions contemplated by this Agreement.

7. Conditions to The Buyer's Obligation to Purchase. The obligation of the Buyer hereunder to purchase the Note, on the Closing Date, is subject to the satisfaction, at or before the Closing Date, of each of the following conditions, provided that these conditions are for the Buyer's sole benefit and may be waived by the Buyer at any time in its sole discretion:

a. The Company shall have executed this Agreement and delivered the same to the Buyer.

b. The Company shall have delivered to the Buyer the duly executed Note in such denominations as the Buyer shall request and in accordance with Section 1(b) above.

c. [Intentionally Omitted].

d. [Intentionally Omitted]

e. The representations and warranties of the Company shall be true and correct in all material respects as of the date when made and as of Closing Date, as though made at such time (except for representations and warranties that speak as of a specific date) and the Company shall have performed, satisfied and complied in all material respects with the covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Company at or prior to the Closing Date.

f. No litigation, statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed by or in any court or governmental authority of competent jurisdiction or any self-regulatory organization having authority over the matters contemplated hereby which prohibits the consummation of any of the transactions contemplated by this Agreement.

g. No event shall have occurred which could reasonably be expected to have a Material Adverse Effect on the Company including but not limited to a change in the 1934 Act reporting status of the Company or the failure of the Company to be timely in its 1934 Act reporting obligations.

h. Trading in the Common Stock on the Principal Market shall not have been suspended by the SEC, FINRA or the Principal Market.

i. [Intentionally Omitted]

8. Governing Law; Miscellaneous.

a. Governing Law; Venue. This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware without regard to principles of conflicts of laws. Any action brought by either party against the other concerning the transactions contemplated by this Agreement, the Note, or any other agreement, certificate, instrument or document contemplated hereby shall be brought only in the state courts located in New York, New York or in the federal courts located in New York, New York. The parties to this Agreement hereby irrevocably waive any objection to jurisdiction and venue of any action instituted hereunder and shall not assert any defense based on lack of jurisdiction or venue or based upon *forum non conveniens*. **EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTIONS CONTEMPLATED HEREBY.** The prevailing party shall be entitled to recover from the other party its reasonable attorney's fees and costs. Each party hereby irrevocably waives personal service of process and consents to process being served in any suit, action or proceeding in connection with this Agreement, the Note, or any other agreement, certificate, instrument or document contemplated hereby or thereby by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any other manner permitted by law.

b. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original but all of which shall constitute one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party. A facsimile or pdf signature shall be considered due execution and shall be binding upon the signatory thereto with the same force and effect as if the signature were an original, not a facsimile or .pdf signature. Delivery of a counterpart signature hereto by facsimile or email/.pdf transmission shall be deemed validly delivery thereof.

c. Construction; Headings. This Agreement shall be deemed to be jointly drafted by the Company and the Buyer and shall not be construed against any person as the drafter hereof. The headings of this Agreement are for convenience of reference only and shall not form part of, or affect the interpretation of, this Agreement.

d. Severability. In the event that any provision of this Agreement, the Note, or any other agreement or instrument delivered in connection herewith is invalid or unenforceable under any applicable statute or rule of law, then such provision shall be deemed inoperative to the extent that it may conflict therewith and shall be deemed modified to conform with such statute or rule of law. Any such provision which may prove invalid or unenforceable under any law shall not affect the validity or enforceability of any other provision of this Agreement, the Note, or any other agreement, certificate, instrument or document contemplated hereby or thereby.

e. Entire Agreement; Amendments. This Agreement, the Note, and the instruments referenced herein contain the entire understanding of the parties with respect to the matters covered herein and therein and, except as specifically set forth herein or therein, neither the Company nor the Buyer makes any representation, warranty, covenant or undertaking with respect to such matters. No provision of this Agreement or any agreement or instrument contemplated hereby may be waived or amended other than by an instrument in writing signed by the Buyer.

f. Notices. All notices, demands, requests, consents, approvals, and other communications required or permitted hereunder shall be in writing and, unless otherwise specified herein, shall be (i) personally served, (ii) deposited in the mail, registered or certified, return receipt requested, postage prepaid, (iii) delivered by reputable air courier service with charges prepaid, or (iv) transmitted by hand delivery, telegram, e-mail or facsimile, addressed as set forth below or to such other address as such party shall have specified most recently by written notice. Any notice or other communication required or permitted to be given hereunder shall be deemed effective (a) upon hand delivery or delivery by e-mail or facsimile, with accurate confirmation generated by the transmitting facsimile machine, at the address or number designated below (if delivered on a business day during normal business hours where such notice is to be received), or the first business day following such delivery (if delivered other than on a business day during normal business hours where such notice is to be received) or (b) on the second business day following the date of mailing by express courier service, fully prepaid, addressed to such address, or upon actual receipt of such mailing, whichever shall first occur. The addresses for such communications shall be:

If to the Company, to:

RESPIRERX PHARMACEUTICALS INC.
126 Valley Road, Suite C
Glen Rock, NJ 07452
Attention: Jeff Margolis
e-mail: jmargolis@respirerx.com

If to the Buyer:

«Investor»
«Investor_Address»
«Investor_City», «Investor_State» «Investor_Zip»
Attention: «Investor_Attn»
e-mail: «Investor_email»

g. Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their successors and assigns. Neither the Company nor the Buyer shall assign this Agreement or any rights or obligations hereunder without the prior written consent of the other. Notwithstanding the foregoing, subject to Section 2(f), the Buyer may assign its rights hereunder to any person that purchases Securities in a private transaction from the Buyer or to any of its “affiliates,” as that term is defined under the 1934 Act, without the consent of the Company.

h. Third Party Beneficiaries. This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other person.

i. Survival. The representations and warranties of the Company and the Buyer and the agreements and covenants set forth in this Agreement shall survive the closing hereunder notwithstanding any due diligence investigation conducted by or on behalf of the Buyer. The Company agrees to indemnify and hold harmless the Buyer and all its officers, directors, employees and agents for loss or damage arising as a result of or related to any breach or alleged breach by the Company of any of its representations, warranties and covenants set forth in this Agreement or any of its covenants and obligations under this Agreement, including advancement of expenses as they are incurred.

j. Publicity. The Company, and the Buyer shall have the right to review a reasonable period of time before issuance of any press releases, SEC, Principal Market or FINRA filings, or any other public statements with respect to the transactions contemplated hereby; provided, however, that the Company shall be entitled, without the prior approval of the Buyer, to make any press release or SEC, Principal Market (or other applicable trading market) or FINRA filings with respect to such transactions as is required by applicable law and regulations (although the Buyer shall be consulted by the Company in connection with any such press release prior to its release and shall be provided with a copy thereof and be given an opportunity to comment thereon). Notwithstanding the foregoing, the Company shall have no obligation to provide material non-public information in advance of issuance or filings.

k. Further Assurances. Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as the other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

l. No Strict Construction. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent, and no rules of strict construction will be applied against any party.

m. Indemnification. In consideration of the Buyer's execution and delivery of this Agreement and acquiring the Securities hereunder, and in addition to all of the Company's other obligations under this Agreement or the Note, the Company shall defend, protect, indemnify and hold harmless the Buyer and its stockholders, partners, members, officers, directors, employees and direct or indirect investors and any of the foregoing persons' agents or other representatives (including, without limitation, those retained in connection with the transactions contemplated by this Agreement) (collectively, the "Indemnitees") from and against any and all actions, causes of action, suits, claims, losses, costs, penalties, fees, liabilities and damages, and expenses in connection therewith (irrespective of whether any such Indemnitee is a party to the action for which indemnification hereunder is sought), and including reasonable attorneys' fees and disbursements (the "Indemnified Liabilities"), incurred by any Indemnitee as a result of, or arising out of, or relating to (a) any misrepresentation or breach of any representation or warranty made by the Company in this Agreement, the Note or any other agreement, certificate, instrument or document contemplated hereby or thereby, (b) any breach of any covenant, agreement or obligation of the Company contained in this Agreement, the Note or any other agreement, certificate, instrument or document contemplated hereby or thereby or (c) any cause of action, suit or claim brought or made against such Indemnitee by a third party (including for these purposes a derivative action brought on behalf of the Company) and arising out of or resulting from (i) the execution, delivery, performance or enforcement of this Agreement, the Note or any other agreement, certificate, instrument or document contemplated hereby or thereby, (ii) any transaction financed or to be financed in whole or in part, directly or indirectly, with the proceeds of the issuance of the Securities, or (iii) the status of the Buyer or holder of the Securities as an investor in the Company pursuant to the transactions contemplated by this Agreement. To the extent that the foregoing undertaking by the Company may be unenforceable for any reason, the Company shall make the maximum contribution to the payment and satisfaction of each of the Indemnified Liabilities that is permissible under applicable law.

n. Remedies. The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Buyer by vitiating the intent and purpose of the transaction contemplated hereby. Accordingly, the Company acknowledges that the remedy at law for a breach of its obligations under this Agreement, the Note or any other agreement, certificate, instrument or document contemplated hereby or thereby will be inadequate and agrees, in the event of a breach or threatened breach by the Company of the provisions of this Agreement, the Note or any other agreement, certificate, instrument or document contemplated hereby or thereby, that the Buyer shall be entitled, in addition to all other available remedies at law or in equity, and in addition to the penalties assessable herein, to an injunction or injunctions restraining, preventing or curing any breach of this Agreement, the Note or any other agreement, certificate, instrument or document contemplated hereby or thereby, and to enforce specifically the terms and provisions hereof and thereof, without the necessity of showing economic loss and without any bond or other security being required.

o. Payment Set Aside. To the extent that the Company makes a payment or payments to the Buyer hereunder or pursuant to the Note or any other agreement, certificate, instrument or document contemplated hereby or thereby, or the Buyer enforces or exercises its rights hereunder or thereunder, and such payment or payments or the proceeds of such enforcement or exercise or any part thereof are subsequently invalidated, declared to be fraudulent or preferential, or set aside, recovered from, or disgorged by the Buyer, or are required to be refunded, repaid or otherwise restored to the Company, a trustee, receiver or any other person or entity under any law (including, without limitation, any bankruptcy law, foreign, state or federal law, common law or equitable cause of action), then to the extent of any such restoration the obligation or part thereof originally intended to be satisfied shall be revived and continued in full force and effect as if such payment had not been made or such enforcement or setoff had not occurred.

p. Failure or Indulgence Not Waiver. No failure or delay on the part of the Buyer in the exercise of any power, right or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude other or further exercise thereof or of any other right, power or privileges. All rights and remedies of the Buyer existing hereunder are cumulative to, and not exclusive of, any rights or remedies otherwise available. No failure or delay on the part of the Company in the exercise of any power, right or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude other or further exercise thereof or of any other right, power or privileges. All rights and remedies of the Company existing hereunder are cumulative to, and not exclusive of, any rights or remedies otherwise available.

[Signature Page Follows]

IN WITNESS WHEREOF, the undersigned Buyer and the Company have caused this Agreement to be duly executed as of the date first above written.

RESPIRERX PHARMACEUTICALS INC.

By: _____
Name: JEFF MARGOLIS
Title: CHIEF FINANCIAL OFFICER

«Investor»

By: _____
Name: «Investor_Attn»
Title: «Investor_title»

SUBSCRIPTION AMOUNT:

Principal Amount of Note: \$«Principal»
Actual Amount of Purchase Price of Note: \$«Purchase»

GUARANTY

The undersigned subsidiary of RESPIRERX PHARMACEUTICALS INC., a Delaware corporation (the “Company”), jointly and severally, absolutely, unconditionally and irrevocably, guarantees to «Investor», a «State_of_Incorp» «Type_of_Entity» (the “Buyer”) and their respective successors, endorsees, transferees and assigns, the prompt and complete payment and performance by the Company when due (whether at the stated maturity, by acceleration or otherwise) of all amounts due under, and all other obligations under, the 10% promissory note in the principal amount of \$«Principal» issued by the Company to the Buyer on «Closing_Date». The undersigned subsidiary’s liability under this guaranty shall be unlimited, open, and continuous for so long as this guaranty remains in force.

PIER PHARMACEUTICALS, INC.

By: _____ Print Name: JEFF MARGOLIS
Title: Chief Financial Officer

EXHIBIT A TO SECURITIES PURCHASE AGREEMENT

NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES INTO WHICH THESE SECURITIES ARE CONVERTIBLE HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) AN OPINION OF COUNSEL (WHICH MAY BE THE LEGAL COUNSEL OPINION (AS DEFINED IN THE PURCHASE AGREEMENT)), IN A GENERALLY ACCEPTABLE FORM, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS (A) SOLD PURSUANT TO RULE 144 OR OTHER APPLICABLE EXEMPTION UNDER SAID ACT AND (B) AN OPINION OF COUNSEL IS PROVIDED (WHICH COUNSEL SHALL BE SELECTED BY THE HOLDER), IN A GENERALLY ACCEPTABLE FORM, THAT SUCH SALE IS PERMITTED UNDER RULE 144 OR OTHER APPLICABLE EXEMPTION UNDER SAID ACT. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES.”

Principal Amount: \$«Principal» **Issue Date: «Closing_Date»**
Actual Amount of Purchase Price: \$«Purchase»

PROMISSORY NOTE

FOR VALUE RECEIVED, RESPIRERX PHARMACEUTICALS INC., a Delaware corporation (hereinafter called the “Borrower” or the “Company”) (Trading Symbol: RSPI), hereby promises to pay to the order of «Investor», a «State_of_Incorp» «Type_of_Entity», or registered assigns (the “Holder”), in the form of lawful money of the United States of America, the principal sum of \$«Principal», which amount is the \$«Purchase» actual amount of the purchase price (the “Consideration”) hereof plus an original issue discount in the amount of \$«OID» (the “OID”) (subject to adjustment herein) (the “Principal Amount”) and to pay interest on the unpaid Principal Amount hereof at the rate of ten percent (10%) (the “Interest Rate”) per annum with interest calculated on the basis of a 365-day year (with the understanding that the first nine months of interest shall be guaranteed and earned in full as of the Issue Date) from the date hereof (the “Issue Date”) until the same becomes due and payable, whether at maturity or upon acceleration or by prepayment or otherwise, as further provided herein. The maturity date shall be May 31, 2023 (the “Maturity Date”), and is the date upon which the principal sum, the OID, as well as any accrued and unpaid interest and other fees, shall be due and payable.

This Note may not be prepaid or repaid in whole or in part except as otherwise explicitly set forth herein.

Any Principal Amount or interest on this Note which is not paid when due shall bear interest at the rate of the lesser of (i) twenty-four percent (24%) per annum and (ii) the maximum amount permitted by law from the due date thereof until the same is paid (“Default Interest”).

All payments due hereunder (to the extent not converted into shares of common stock, \$0.001 par value per share, of the Borrower (the “Common Stock”) in accordance with the terms hereof) shall be made in lawful money of the United States of America. All payments shall be made at such address as the Holder shall hereafter give to the Borrower by written notice made in accordance with the provisions of this Note. Whenever any amount expressed to be due by the terms of this Note is due on any day which is not a business day, the same shall instead be due on the next succeeding day which is a business day and, in the case of any interest payment date which is not the date on which this Note is paid in full, the extension of the due date thereof shall not be taken into account for purposes of determining the amount of interest due on such date.

Each capitalized term used herein, and not otherwise defined, shall have the meaning ascribed thereto in that certain Securities Purchase Agreement, dated as of the Issue Date, pursuant to which this Note was originally issued (the “Purchase Agreement”). As used in this Note, the term “business day” shall mean any day other than a Saturday, Sunday or a day on which commercial banks in the city of New York, New York are authorized or required by law or executive order to remain closed. As used herein, the term “Trading Day” means any day that shares of Common Stock are listed for trading or quotation on the Principal Market (as defined in the Purchase Agreement), any tier of the OTC Markets, NASDAQ Stock Market, the New York Stock Exchange, or the NYSE American.

This Note is free from all taxes, liens, claims and encumbrances with respect to the issue thereof and shall not be subject to preemptive rights or other similar rights of shareholders of the Borrower and will not impose personal liability upon the holder thereof.

The following terms shall also apply to this Note:

ARTICLE I. CONVERSION RIGHTS

1.1 Conversion Right. The Holder shall have the right, at any time on or following the Issue Date, to convert all or any portion of the then outstanding and unpaid Principal Amount and interest (including any Default Interest) into fully paid and non-assessable shares of Common Stock, as such Common Stock exists on the Issue Date, or any shares of capital stock or other securities of the Borrower into which such Common Stock shall hereafter be changed or reclassified, at the Conversion Price (as defined below) determined as provided herein (a “Conversion”); *provided, however*, that notwithstanding anything to the contrary contained herein, the Holder shall not have the right to convert any portion of this Note, pursuant to Section 1 or otherwise, to the extent that after giving effect to such issuance after conversion as set forth on the applicable Notice of Conversion, the Holder (together with the Holder’s affiliates (the “Affiliates”), and any other Persons (as defined below) acting as a group together with the Holder or any of the Holder’s Affiliates (such Persons, “Attribution Parties”)), would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by the Holder and Attribution Parties shall, subject to the Beneficial Ownership Limitation, include the number of shares of Common Stock issuable upon conversion of this Note with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (i) conversion of the remaining, nonconverted portion of this Note beneficially owned by the Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 1.1, beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Holder is solely responsible for any schedules required to be filed in accordance therewith. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 1.1, in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as reflected in (A) the Company’s most recent periodic or annual report filed with the Commission, as the case may be, (B) a more recent public announcement by the Company or (C) a more recent written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding. “Trading Day” shall mean any day on which the Common Stock is tradable for any period on the Principal Market. Upon the written or oral request of a Holder, the Company shall within two Trading Days confirm orally and in writing to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Note, by the Holder or its Affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The “Beneficial Ownership Limitation” shall be 4.99% of the number of shares of the Common Stock outstanding at the time of the respective calculation hereunder. “Person” and “Persons” means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and any governmental entity or any department or agency thereof. The limitations contained in this paragraph shall apply to a successor holder of this Note. The number of Conversion Shares to be issued upon each conversion of this Note shall be determined by dividing the Conversion Amount (as defined below) by the applicable Conversion Price then in effect on the date specified in the notice of conversion, in the form attached hereto as Exhibit A (the “Notice of Conversion”), delivered to the Borrower or Borrower’s transfer agent by the Holder in accordance with Section 1.4 below; provided that the Notice of Conversion is submitted by facsimile or e-mail (or by other means resulting in, or reasonably expected to result in, notice) to the Borrower or Borrower’s transfer agent before 11:59 p.m., New York, New York time on such conversion date (the “Conversion Date”). The term “Conversion Amount” means, with respect to any conversion of this Note, the sum of (1) the Principal Amount of this Note to be converted in such conversion plus (2) at the Holder’s option, accrued and unpaid interest, if any, on such Principal Amount at the Interest Rate to the Conversion Date, plus (3) at the Holder’s option, Default Interest, if any, on the amounts referred to in the immediately preceding clauses (1) and/or (2).

1.2 Conversion Price.

(a) Calculation of Conversion Price. The per share conversion price into which Principal Amount and interest (including any Default Interest) under this Note shall be convertible into shares of Common Stock hereunder (the “Conversion Price”) shall equal \$0.0015. If at any time the Conversion Price as determined hereunder for any conversion would be less than the par value of the Common Stock, then at the sole discretion of the Holder, the Conversion Price hereunder may equal such par value for such conversion and the Conversion Amount for such conversion may be increased to include Additional Principal, where “Additional Principal” means such additional amount to be added to the Conversion Amount to the extent necessary to cause the number of conversion shares issuable upon such conversion to equal the same number of conversion shares as would have been issued had the Conversion Price not been adjusted by the Holder to the par value price. The Conversion Price is subject to equitable adjustments for stock splits (including reverse stock splits and forward stock splits), stock dividends or rights offerings by the Borrower relating to the Borrower’s securities or the securities of any subsidiary of the Borrower, combinations, recapitalization, reclassifications, extraordinary distributions and similar events. Holder shall be entitled but not required to deduct \$500.00 from the conversion amount in each Notice of Conversion to cover Holder’s fees associated with each Notice of Conversion.

1.3 Authorized and Reserved Shares. The Borrower covenants that at all times until the Note is satisfied in full, the Borrower will reserve from its authorized and unissued Common Stock a sufficient number of shares, free from preemptive rights, to provide for the issuance of a number of Conversion Shares equal to (i) the number of Conversion Shares issuable upon the full conversion of this Note (assuming no payment of Principal Amount or interest) as of any issue date (taking into consideration any adjustments to the Conversion Price pursuant to Section 2 hereof or otherwise) multiplied by (ii) one (1.0) (the “Reserved Amount”) up to a maximum Reserved Amount that is equal to or less than the authorized number of shares that remain available for issuance and are otherwise available for issuance. By purchasing this Note, Holder agrees to amend the reserve requirements as defined in any notes currently outstanding that were also outstanding prior to the issuance of this Note to conform to the reserve requirements of this Note. The Borrower represents that upon issuance, the Conversion Shares will be duly and validly issued, fully paid and non-assessable. The Borrower (i) acknowledges that it has irrevocably instructed its transfer agent to issue certificates for the Conversion Shares or instructions to have the Conversion Shares issued as contemplated by Section 1.4(f) hereof, and (ii) agrees that its issuance of this Note shall constitute full authority to its officers and agents who are charged with the duty of executing stock certificates or cause the Company to electronically issue shares of Common Stock to execute and issue the necessary certificates for the Conversion Shares or cause the Conversion Shares to be issued as contemplated by Section 1.4(f) hereof in accordance with the terms and conditions of this Note.

If, at any time the Borrower does not maintain the Reserved Amount it will be considered an Event of Default under this Note.

1.4 Method of Conversion.

(a) Mechanics of Conversion. This Note may be converted by the Holder in whole or in part, on any Trading Day, at any time on or following the Issue Date, by submitting to the Borrower or Borrower’s transfer agent a Notice of Conversion (by facsimile, e-mail or other reasonable means of communication dispatched on the Conversion Date prior to 11:59 p.m., New York, New York time). Any Notice of Conversion submitted after 11:59 p.m., New York, New York time, shall be deemed to have been delivered and received on the next Trading Day.

(b) Surrender of Note Upon Conversion. Notwithstanding anything to the contrary set forth herein, upon conversion of this Note in accordance with the terms hereof, the Holder shall not be required to physically surrender this Note to the Borrower unless the entire unpaid Principal Amount is so converted. The Holder and the Borrower shall maintain records showing the Principal Amount so converted and the dates of such conversions or shall use such other method, reasonably satisfactory to the Holder and the Borrower, so as not to require physical surrender of this Note upon each such conversion. In the event of any dispute or discrepancy, such records of the Borrower shall, *prima facie*, be controlling and determinative in the absence of manifest error. Notwithstanding the foregoing, if any portion of this Note is converted as aforesaid, the Holder may not transfer this Note unless the Holder first physically surrenders this Note to the Borrower, whereupon the Borrower will forthwith issue and deliver upon the order of the Holder a new Note of like tenor, registered as the Holder (upon payment by the Holder of any applicable transfer taxes) may request, representing in the aggregate the remaining unpaid Principal Amount of this Note. The Holder and any assignee, by acceptance of this Note, acknowledge and agree that, by reason of the provisions of this paragraph, following conversion of a portion of this Note, the unpaid and unconverted Principal Amount of this Note represented by this Note may be less than the amount stated on the face hereof.

(c) Payment of Taxes. The Borrower shall not be required to pay any tax which may be payable in respect of any transfer involved in the issue and delivery of shares of Common Stock or other securities or property on conversion of this Note in a name other than that of the Holder (or in street name), and the Borrower shall not be required to issue or deliver any such shares or other securities or property unless and until the person or persons (other than the Holder or the custodian in whose street name such shares are to be held for the Holder's account) requesting the issuance thereof shall have paid to the Borrower the amount of any such tax or shall have established to the satisfaction of the Borrower that such tax has been paid.

(d) Delivery of Common Stock Upon Conversion. Upon receipt by the Borrower from the Holder of a facsimile transmission or e-mail (or other reasonable means of communication) of a Notice of Conversion meeting the requirements for conversion as provided in this Section 1.4, the Borrower shall issue and deliver or cause to be issued and delivered to or upon the order of the Holder certificates for the Conversion Shares (or cause the electronic delivery of the Conversion Shares as contemplated by Section 1.4(f) hereof) within one (1) Trading Day after such receipt (the "Deadline") (and, solely in the case of conversion of the entire unpaid Principal Amount and interest (including any Default Interest) under this Note, surrender of this Note). If the Company shall fail for any reason or for no reason to issue to the Holder on or prior to the Deadline a certificate for the number of Conversion Shares or to which the Holder is entitled hereunder and register such Conversion Shares on the Company's share register or to credit the Holder's balance account with DTC (as defined below) for such number of Conversion Shares to which the Holder is entitled upon the Holder's conversion of this Note (a "Conversion Failure"), then, in addition to all other remedies available to the Holder, (i) the Company shall pay in cash to the Holder on each day after the Deadline and during such Conversion Failure an amount equal to 2.0% of the product of (A) the sum of the number of Conversion Shares not issued to the Holder on or prior to the Deadline and to which the Holder is entitled and (B) the closing sale price of the Common Stock on the Trading Day immediately preceding the last possible date which the Company could have issued such Conversion Shares to the Holder without violating this Section 1.4(d); and (ii) the Holder, upon written notice to the Company, may void its Notice of Conversion with respect to, and retain or have returned, as the case may be, any portion of this Note that has not been converted pursuant to such Notice of Conversion; provided that the voiding of a Notice of Conversion shall not affect the Company's obligations to make any payments which have accrued prior to the date of such notice. In addition to the foregoing, if on or prior to the Deadline the Company shall fail to issue and deliver a certificate to the Holder and register such Conversion Shares on the Company's share register or credit the Holder's balance account with DTC for the number of Conversion Shares to which the Holder is entitled upon the Holder's conversion hereunder or pursuant to the Company's obligation pursuant to clause (ii) below, and if on or after such Trading Day the Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of shares of Common Stock issuable upon such exercise that the Holder anticipated receiving from the Company, then the Company shall, within two (2) Trading Days after the Holder's request and in the Holder's discretion, either (i) pay cash to the Holder in an amount equal to the Holder's total purchase price (including brokerage commissions and other reasonable and customary out-of-pocket expenses, if any) for the shares of Common Stock so purchased (the "Buy-In Price"), at which point the Company's obligation to deliver such certificate (and to issue such Conversion Shares) or credit such Holder's balance account with DTC for such Conversion Shares shall terminate, or (ii) promptly honor its obligation to deliver to the Holder a certificate or certificates representing such Conversion Shares or credit such Holder's balance account with DTC and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock, times (B) the closing sales price of the Common Stock on the date of exercise. Nothing shall limit the Holder's right to pursue any other remedies available to it hereunder, at law or in equity, including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing the Conversion Shares (or to electronically deliver such Conversion Shares) upon the conversion of this Note as required pursuant to the terms hereof.

(e) Obligation of Borrower to Deliver Common Stock. At the time that the Holder submits the Notice of Conversion to the Borrower or Borrower's transfer agent, the Holder shall be deemed to be the holder of record of the Conversion Shares issuable upon such conversion, the outstanding Principal Amount and the amount of accrued and unpaid interest (including any Default Interest) under this Note shall be reduced to reflect such conversion, and, unless the Borrower defaults on its obligations under this Article I, all rights with respect to the portion of this Note being so converted shall forthwith terminate except the right to receive the Common Stock or other securities, cash or other assets, as herein provided, on such conversion. If the Holder shall have given a Notice of Conversion as provided herein, the Borrower's obligation to issue and deliver the certificates for the Conversion Shares (or cause the electronic delivery of the Conversion Shares as contemplated by Section 1.4(f) hereof) shall be absolute and unconditional, irrespective of the absence of any action by the Holder to enforce the same, any waiver or consent with respect to any provision thereof, the recovery of any judgment against any person or any action to enforce the same, any failure or delay in the enforcement of any other obligation of the Borrower to the holder of record, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by the Holder of any obligation to the Borrower, and irrespective of any other circumstance which might otherwise limit such obligation of the Borrower to the Holder in connection with such conversion. The Conversion Date specified in the Notice of Conversion shall be the Conversion Date so long as the Notice of Conversion is sent to the Borrower or Borrower's transfer agent before 11:59 p.m., New York, New York time, on such date.

(f) Delivery of Conversion Shares by Electronic Transfer. In lieu of delivering physical certificates representing the Conversion Shares issuable upon conversion hereof, provided the Borrower is participating in the Depository Trust Company (“DTC”) Fast Automated Securities Transfer or Deposit/Withdrawal at Custodian programs, upon request of the Holder and its compliance with the provisions contained in Section 1.1 and in this Section 1.4, the Borrower shall use its best efforts to cause its transfer agent to electronically transmit the Conversion Shares issuable upon conversion hereof to the Holder by crediting the account of Holder’s Prime Broker with DTC through its Deposit Withdrawal Agent Commission system.

1.5 Concerning the Shares. The Conversion Shares issuable upon conversion of this Note may not be sold or transferred unless (i) such shares are sold pursuant to an effective registration statement under the 1933 Act or are qualified for sale under Regulation A, or (ii) the Borrower or its transfer agent shall have been furnished with an opinion of counsel (which opinion shall be the Legal Counsel Opinion (as defined in the Purchase Agreement)) to the effect that the shares to be sold or transferred may be sold or transferred pursuant to an exemption from such registration or (iii) such shares are sold or transferred pursuant to Rule 144, Rule 144A, Regulation S, or other applicable exemption, or (iv) such shares are transferred to an “affiliate” (as defined in Rule 144) of the Borrower who agrees to sell or otherwise transfer the shares only in accordance with this Section 1.5 and who is an Accredited Investor (as defined in the Purchase Agreement). Except as otherwise provided in the Purchase Agreement (and subject to the removal provisions set forth below), until such time as the Conversion Shares have been registered under the 1933 Act or otherwise may be sold pursuant to Rule 144, Rule 144A, Regulation S, or other applicable exemption without any restriction as to the number of securities as of a particular date that can then be immediately sold, each certificate for the Conversion Shares that has not been so included in an effective registration statement or that has not been sold pursuant to an effective registration statement or an exemption that permits removal of the legend, shall bear a legend substantially in the following form, as appropriate:

“NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES INTO WHICH THESE SECURITIES MAY BE CONVERTIBLE HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) AN OPINION OF COUNSEL (WHICH COUNSEL SHALL BE SELECTED BY THE HOLDER, IN A GENERALLY ACCEPTABLE FORM, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS (A) SOLD PURSUANT TO RULE 144 OR OTHER APPLICABLE EXEMPTION UNDER SAID ACT AND (B) AN OPINION OF COUNSEL IS PROVIDED (WHICH COUNSEL SHALL BE SELECTED BY THE HOLDER), IN A GENERALLY ACCEPTABLE FORM, THAT SUCH SALE IS PERMITTED UNDER RULE 144 OR OTHER APPLICABLE EXEMPTION UNDER SAID ACT. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES.”

The legend set forth above shall be removed and the Company shall issue to the Holder a certificate for the applicable Conversion Shares without such legend upon which it is stamped or (as requested by the Holder) issue the applicable Conversion Shares by electronic delivery by crediting the account of such holder’s broker with DTC, if, unless otherwise required by applicable state securities laws: (a) such Conversion Shares are registered for sale under an effective registration statement filed under the 1933 Act or otherwise may be sold pursuant to Rule 144, Rule 144A, Regulation S, or other applicable exemption without any restriction as to the number of securities as of a particular date that can then be immediately sold, or (b) the Company or the Holder provides the Legal Counsel Opinion (as contemplated by and in accordance with Section 4(m) of the Purchase Agreement) to the effect that a public sale or transfer of such Conversion Shares may be made without registration under the 1933 Act, which opinion shall be accepted by the Company so that the sale or transfer is effected. The Company shall be responsible for the fees of its transfer agent and all DTC fees associated with any such issuance. The Holder agrees to sell all Conversion Shares, including those represented by a certificate(s) from which the legend has been removed, in compliance with applicable prospectus delivery requirements, if any. In the event that the Company does not accept the opinion of counsel provided by the Holder with respect to the transfer of Conversion Shares pursuant to an exemption from registration, such as Rule 144, Rule 144A, Regulation S, or other applicable exemption, at the Deadline, notwithstanding that the conditions of Rule 144, Rule 144A, Regulation S, or other applicable exemption, as applicable, have been met, it will be considered an Event of Default under this Note.

1.6 Effect of Certain Events.

(a) Effect of Merger, Consolidation, Etc. At the option of the Holder, the sale, conveyance or disposition of all or substantially all of the assets of the Borrower, or the consolidation, merger or other business combination of the Borrower with or into any other Person (as defined below) or Persons when the Borrower is not the survivor shall either: (i) be deemed to be an acceleration event pursuant to which the Borrower shall be required to pay to the Holder upon the consummation of and as a condition to such transaction an amount equal to the Principal Amount then outstanding plus accrued interest (including any Default Interest) multiplied by 125% , or (ii) be treated pursuant to Section 1.6(b) hereof. "Person" shall mean any individual, corporation, limited liability company, partnership, association, trust or other entity or organization.

(b) Adjustment Due to Merger, Consolidation, Etc. If, at any time when this Note is issued and outstanding and prior to conversion of all of this Note, there shall be any merger, consolidation, exchange of shares, recapitalization, reorganization, or other similar event, as a result of which shares of Common Stock of the Borrower shall be changed into the same or a different number of shares of another class or classes of stock or securities of the Borrower or another entity, or in case of any sale or conveyance of all or substantially all of the assets of the Borrower other than in connection with a plan of complete liquidation of the Borrower, then the Holder of this Note shall thereafter have the right to receive upon conversion of this Note, upon the basis and upon the terms and conditions specified herein and in lieu of the shares of Common Stock immediately theretofore issuable upon conversion, such stock, securities or assets which the Holder would have been entitled to receive in such transaction had this Note been converted in full immediately prior to such transaction (without regard to any limitations on conversion set forth herein), and in any such case appropriate provisions shall be made with respect to the rights and interests of the Holder of this Note to the end that the provisions hereof (including, without limitation, provisions for adjustment of the Conversion Price and of the number of shares issuable upon conversion of the Note) shall thereafter be applicable, as nearly as may be practicable in relation to any securities or assets thereafter deliverable upon the conversion hereof. The Borrower shall not effectuate any transaction described in this Section 1.6(b) unless (a) it first gives, to the extent practicable, at least thirty (30) days prior written notice (but in any event at least seven (7) days prior written notice) of the record date of the special meeting of shareholders to approve, or if there is no such record date, the consummation of, such merger, consolidation, exchange of shares, recapitalization, reorganization or other similar event or sale of assets (during which time the Holder shall be entitled to convert this Note) and (b) the resulting successor or acquiring entity (if not the Borrower) assumes by written instrument the obligations of this Section 1.6(b). The above provisions shall similarly apply to successive consolidations, mergers, sales, transfers or share exchanges.

(c) Adjustment Due to Distribution. If the Borrower shall declare or make any distribution of its assets (or rights to acquire its assets) to holders of Common Stock as a dividend, stock repurchase, by way of return of capital or otherwise (including any dividend or distribution to the Borrower's shareholders in cash or shares (or rights to acquire shares) of capital stock of a subsidiary (i.e., a spin-off)) (a "Distribution"), then the Holder of this Note shall be entitled, upon any conversion of this Note after the date of record for determining shareholders entitled to such Distribution, to receive the amount of such assets which would have been payable to the Holder with respect to the shares of Common Stock issuable upon such conversion had such Holder been the holder of such shares of Common Stock on the record date for the determination of shareholders entitled to such Distribution.

(d) Purchase Rights. If, at any time when all or any portion of this Note is issued and outstanding, the Borrower issues any convertible securities or rights to purchase stock, warrants, securities or other property (the "Purchase Rights") pro rata to the record holders of any class of Common Stock, then the Holder of this Note will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which such Holder could have acquired if such Holder had held the number of shares of Common Stock acquirable upon complete conversion of this Note (without regard to any limitations on conversion contained herein) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights or, if no such record is taken, the date as of which the record holders of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights.

(e) Dilutive Issuance. If the Borrower, at any time while this Note or any amounts due hereunder are outstanding, issues, sells or grants any option to purchase, or sells or grants any right to reprice, or otherwise disposes of, or issues (or announces any sale, grant or any option to purchase or other disposition), any Common Stock or other securities convertible into, exercisable for, or otherwise entitle any person or entity the right to acquire, shares of Common Stock (including, without limitation, upon conversion of this Note, and any convertible notes or warrants outstanding as of or following the Issue Date), in each or any case at an effective price per share that is lower than the then Conversion Price (such lower price, the “Base Conversion Price” and such issuances, collectively, a “Dilutive Issuance”) (it being agreed that if the holder of the Common Stock or other securities so issued shall at any time, whether by operation of purchase price adjustments, reset provisions, floating conversion, exercise or exchange prices or otherwise, or due to warrants, options or rights per share which are issued in connection with such issuance, be entitled to receive shares of Common Stock at an effective price per share that is lower than the Conversion Price, such issuance shall be deemed to have occurred for less than the Conversion Price on such date of the Dilutive Issuance), then the Conversion Price shall be reduced, at the option of the Holder, to a price equal to the Base Conversion Price. Such adjustment shall be made whenever such Common Stock or other securities are issued. By way of example, and for the avoidance of doubt, if the Company issues a convertible promissory note (including but not limited to a Variable Rate Transaction), and the holder of such convertible promissory note has the right to convert it into Common Stock at an effective price per share that is lower than the then Conversion Price (including but not limited to a conversion price with a discount that varies with the trading prices of or quotations for the Common Stock), then the Holder has the right to reduce the Conversion Price to such Base Conversion Price (including but not limited to a conversion price with a discount that varies with the trading prices of or quotations for the Common Stock) in perpetuity regardless of whether the holder of such convertible promissory note ever effectuated a conversion at the Base Conversion Price. In the event of an issuance of securities involving multiple tranches or closings, any adjustment pursuant to this Section 1.6(e) shall be calculated as if all such securities were issued at the initial closing. Notwithstanding the foregoing, no adjustment will be made under this Section 1.6(e) in respect of an Exempt Issuance.

An “Exempt Issuance” shall mean the issuance of (a) shares of Common Stock or other securities to officers or directors of the Borrower pursuant to any stock or option or similar equity incentive plan duly adopted for such purpose by a majority of the members of the Borrower’s Board of Directors or a majority of the members of a committee of directors (“Plan”) established for such purpose in a manner which is consistent with the Borrower’s prior business practices, including, but not limited to granting of such as bonuses; (b) securities pursuant to a merger, consolidation, acquisition or similar business combination approved by a majority of the disinterested directors of the Borrower, provided that any such issuance shall only be to a Person (or to the equity holders of a Person) which is, itself or through its subsidiaries, an operating company or an owner of an asset in a business synergistic with the business of the Borrower and shall provide to the Borrower additional benefits in addition to, or in lieu of, an investment of funds, but shall not include a transaction in which the Borrower is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities; (c) securities issued pursuant to any equipment loan or leasing arrangement, real property leasing arrangement or debt financing from a bank or similar financial institution approved by a majority of the disinterested directors of the Borrower; (d) securities issued with respect to which the Holder waives its rights in writing under this Section 1.6(e); and/or (e) the Borrower’s issuance of prepaid common stock purchase warrants so long as (i) the exercise price of such warrant is \$0.0011 or greater per share (and not subject to anti-dilution adjustments) and (ii) the prepaid purchase price to be paid by the recipient of the prepaid common stock purchase warrants is \$0.0015 or greater per share (and not subject to reduction for any reason).

(f) Notice of Adjustments. Upon the occurrence of each adjustment or readjustment of the Conversion Price as a result of the events described in this Section 1.6, the Borrower shall, at its expense and within one (1) calendar day after the occurrence of each respective adjustment or readjustment of the Conversion Price, compute such adjustment or readjustment and prepare and furnish to the Holder a certificate setting forth (i) the Conversion Price in effect at such time based upon the Dilutive Issuance, (ii) the number of shares of Common Stock and the amount, if any, of other securities or property which at the time would be received upon conversion of the Note, (iii) the detailed facts upon which such adjustment or readjustment is based, and (iv) copies of the documentation (including but not limited to relevant transaction documents) that evidences the adjustment or readjustment. The Borrower shall, within one (1) calendar day after each written request from the Holder, furnish to such Holder a like certificate setting forth (i) the Conversion Price in effect at such time based upon the Dilutive Issuance, (ii) the number of shares of Common Stock and the amount, if any, of other securities or property which at the time would be received upon conversion of the Note, (iii) the detailed facts upon which such adjustment or readjustment is based, and (iv) copies of the documentation (including but not limited to relevant transaction documents) that evidences the adjustment or readjustment.

1.7 [RESERVED].

1.8 Status as Shareholder. Upon submission of a Notice of Conversion by a Holder, (i) the Conversion Shares covered thereby (other than the Conversion Shares, if any, which cannot be issued because their issuance would exceed such Holder's allocated portion of the Reserved Amount or Maximum Share Amount) shall be deemed converted into shares of Common Stock and (ii) the Holder's rights as a Holder of such converted portion of this Note shall cease and terminate, excepting only the right to receive certificates for such shares of Common Stock and to any remedies provided herein or otherwise available at law or in equity to such Holder because of a failure by the Borrower to comply with the terms of this Note. Notwithstanding the foregoing, if a Holder has not received certificates for all shares of Common Stock prior to the tenth (10th) business day after the expiration of the Deadline with respect to a conversion of any portion of this Note for any reason, then (unless the Holder otherwise elects to retain its status as a holder of Common Stock by so notifying the Borrower) the Holder shall regain the rights of a Holder of this Note with respect to such unconverted portions of this Note and the Borrower shall, as soon as practicable, return such unconverted Note to the Holder or, if the Note has not been surrendered, adjust its records to reflect that such portion of this Note has not been converted. In all cases, the Holder shall retain all of its rights and remedies for the Borrower's failure to convert this Note.

1.9 Prepayment. The Company may prepay this Note at any time by providing Holder notice of its intent to prepay the outstanding amounts due under the Note (the "Prepayment Notice"). The Company shall tender the full amount in the Prepayment Notice by paying one hundred percent (100%) of the total outstanding balance to the Holder within five (5) calendar days of delivering the Prepayment Notice to the Holder. If the Holder has previously provided a notice of conversion to the Company, the Company may not prepay any amounts included in the notice of conversion.

1.10 [Intentionally Omitted].

ARTICLE II. RANKING AND CERTAIN COVENANTS

2.1 Ranking and Security. The obligations of the Borrower under this Note shall rank pari passu with respect to any and all unsecured Indebtedness of the Borrower.

2.2 Other Indebtedness. So long as the Borrower shall have any obligation under this Note, the Borrower shall not (directly or indirectly through any Subsidiary or affiliate) incur or suffer to exist or guarantee any unsecured Indebtedness that is senior to (in priority of payment and performance) the Borrower's obligations hereunder unless the proceeds of such Indebtedness are used to pay off all amounts owed under this Note. As used in this Section 2.2, the term "Borrower" means the Borrower and any Subsidiary of the Borrower. As used herein, the term "Indebtedness" means (a) all indebtedness of the Borrower for borrowed money or for the deferred purchase price of property or services, including any type of letters of credit, but not including deferred purchase price obligations in place as of the Issue Date and as disclosed in the SEC Documents (as defined in the Purchase Agreement), or obligations to trade creditors incurred in the ordinary course of business, (b) all obligations of the Borrower evidenced by notes, bonds, debentures or other similar instruments, (c) purchase money indebtedness hereafter incurred by the Borrower to finance the purchase of fixed or capital assets, including all capital lease obligations of the Borrower which do not exceed the purchase price of the assets funded, (d) all guarantee obligations of the Borrower in respect of obligations of the kind referred to in clauses (a) through (c) above that the Borrower would not be permitted to incur or enter into, and (e) all obligations of the kind referred to in clauses (a) through (d) above that the Borrower is not permitted to incur or enter into that are secured and/or unsecured by (or for which the holder of such obligation has an existing right, contingent or otherwise, to be secured and/or unsecured by) any lien or encumbrance on property (including accounts and contract rights) owned by the Borrower, whether or not the Borrower has assumed or become liable for the payment of such obligation.

2.3 Distributions on Capital Stock. So long as the Borrower shall have any obligation under this Note, the Borrower shall not without the Holder's written consent (a) pay, declare or set apart for such payment, any dividend or other distribution (whether in cash, property or other securities) on shares of capital stock other than dividends on shares of Common Stock solely in the form of additional shares of Common Stock or (b) directly or indirectly or through any subsidiary make any other payment or distribution in respect of its capital stock except for distributions pursuant to any shareholders' rights plan which is approved by a majority of the Borrower's disinterested directors.

2.4 Restriction on Stock Repurchases. So long as the Borrower shall have any obligation under this Note, the Borrower shall not without the Holder's written consent redeem, repurchase or otherwise acquire (whether for cash or in exchange for property or other securities or otherwise) in any one transaction or series of related transactions any shares of capital stock of the Borrower or any warrants, rights or options to purchase or acquire any such shares.

2.5 Sale of Assets. So long as the Borrower shall have any obligation under this Note, the Borrower shall not, without the Holder's written consent, sell, lease or otherwise dispose of any significant portion of its assets outside the ordinary course of business. Any consent to the disposition of any assets may be conditioned on a specified use of the proceeds of disposition.

2.6 Advances and Loans; Affiliate Transactions. So long as the Borrower shall have any obligation under this Note, the Borrower shall not, without the Holder's written consent, lend money, give credit, make advances to or enter into any transaction with any person, firm, joint venture or corporation, including, without limitation, officers, directors, employees, subsidiaries and affiliates of the Borrower, except loans, credits or advances (a) in existence or committed or publicly stated as contemplated in SEC Documents on the Issue Date and which the Borrower has informed Holder in writing prior to the Issue Date, (b) in regard to transactions with unaffiliated third parties, made in the ordinary course of business or (c) in regard to transactions with unaffiliated third parties, not in excess of \$250,000.00. Except as disclosed in the SEC Documents prior to the Issue Date, so long as the Borrower shall have any obligation under this Note, the Borrower shall not, without the Holder's written consent, repay any affiliate (as defined in Rule 144) of the Borrower in connection with any indebtedness or accrued amounts owed to any such party outside the ordinary course of business.

2.7 Section 3(a)(9) or 3(a)(10) Transaction. So long as this Note is outstanding, the Borrower shall not enter into any transaction or arrangement structured in accordance with, based upon, or related or pursuant to, in whole or in part, either Section 3(a)(9) of the Securities Act (a "3(a)(9) Transaction") or Section 3(a)(10) of the Securities Act (a "3(a)(10) Transaction"). In the event that the Borrower does enter into, or makes any issuance of Common Stock related to a 3(a)(9) Transaction or a 3(a)(10) Transaction while this note is outstanding, a liquidated damages charge of 25% of the outstanding principal balance of this Note, but not less than \$5,000.00, will be assessed and will become immediately due and payable to the Holder at its election in the form of a cash payment or added to the balance of this Note (under Holder's and Borrower's expectation that this amount will tack back to the Issue Date). Notwithstanding the forgoing, transactions contemplated by subsection (a) of the definition of "Exempt Issuance" in Section 1.6(e) that are considered Section 3(a)(9) or 3(a)(10) Transactions will not cause a liquidated damage charge under this Section 2.7.

2.8 Preservation of Business and Existence, etc. So long as the Borrower shall have any obligation under this Note, the Borrower shall not, without the Holder's written consent, (a) change the nature of its business; or (b) sell, divest, change the structure of any material assets other than in the ordinary course of business. In addition, so long as the Borrower shall have any obligation under this Note, the Borrower shall maintain and preserve, and cause each of its Subsidiaries to maintain and preserve, its existence, rights and privileges, and become or remain, and cause each of its Subsidiaries (other than dormant Subsidiaries that have no or minimum assets) to become or remain, duly qualified and in good standing in each jurisdiction in which the character of the properties owned or leased by it or in which the transaction of its business makes such qualification necessary.

2.9 Noncircumvention. The Company hereby covenants and agrees that the Company will not, by amendment of its Certificate or Articles of Incorporation or Bylaws, or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Note, and will at all times in good faith carry out all the provisions of this Note and take all action as may be required to protect the rights of the Holder.

2.10 Lost, Stolen or Mutilated Note. Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Note, and, in the case of loss, theft or destruction, of any indemnification undertaking by the Holder to the Company in customary form and, in the case of mutilation, upon surrender and cancellation of this Note, the Company shall execute and deliver to the Holder a new Note.

ARTICLE III. EVENTS OF DEFAULT

It shall be considered an event of default if any of the following events listed in this Article III (each, an “Event of Default”) shall occur:

3.1 Failure to Pay Principal or Interest. The Borrower fails to pay the Principal Amount hereof or interest thereon when due on this Note, whether at maturity, upon acceleration or otherwise, or fails to fully comply with Section 1.10 of this Note.

3.2 Conversion and the Shares. The Borrower (i) fails to issue Conversion Shares to the Holder (or announces or threatens in writing that it will not honor its obligation to do so) upon exercise by the Holder of the conversion rights of the Holder in accordance with the terms of this Note, (ii) fails to transfer or cause its transfer agent to transfer (issue) (electronically or in certificated form) any certificate for the Conversion Shares issuable to the Holder upon conversion of or otherwise pursuant to this Note as and when required by this Note, (iii) fails to reserve the Reserved Amount at all times, or (iii) the Borrower directs its transfer agent not to transfer or delays, impairs, and/or hinders its transfer agent in transferring (or issuing) (electronically or in certificated form) any certificate for the Conversion Shares issuable to the Holder upon conversion of or otherwise pursuant to this Note as and when required by this Note, or fails to remove (or directs its transfer agent not to remove or impairs, delays, and/or hinders its transfer agent from removing) any restrictive legend (or to withdraw any stop transfer instructions in respect thereof) on any certificate for any Conversion Shares issued to the Holder upon conversion of or otherwise pursuant to this Note as and when required by this Note (or makes any written announcement, statement or threat that it does not intend to honor the obligations described in this paragraph) and any such failure shall continue uncured (or any written announcement, statement or threat not to honor its obligations shall not be rescinded in writing) for two (2) Trading Days after the Holder shall have delivered a Notice of Conversion. It is an obligation of the Borrower to remain current in its obligations to its transfer agent. It shall be an Event of Default of this Note, if a conversion of this Note is delayed, hindered or frustrated due to a balance owed by the Borrower to its transfer agent. If at the option of the Holder, the Holder advances any funds to the Borrower’s transfer agent in order to process a conversion, such advanced funds shall be added to the principal balance of the Note.

3.3 Breach of Agreements and Covenants. The Borrower breaches any covenant, material agreement, or other material term or condition contained in the Purchase Agreement, this Note, Irrevocable Transfer Agent Instructions, Warrant (as defined in the Purchase Agreement) (the “Warrant”), or in any agreement, statement or certificate given in writing pursuant hereto or in connection herewith or therewith.

3.4 Breach of Representations and Warranties. Any representation or warranty of the Borrower made in the Purchase Agreement, this Note, the Irrevocable Transfer Agent Instructions or in any agreement, statement or certificate given in writing pursuant hereto or in connection herewith or therewith shall be false or misleading in any material respect when made and the breach of which has (or with the passage of time will have) a material adverse effect on the rights of the Holder with respect to this Note or the Purchase Agreement.

3.5 Receiver or Trustee. The Borrower or any subsidiary of the Borrower shall make an assignment for the benefit of creditors or apply for or consent to the appointment of a receiver or trustee for it or for a substantial part of its property or business, or such a receiver or trustee shall otherwise be appointed.

3.6 Judgments. Any money judgment, writ or similar process shall be entered or filed against the Borrower or any subsidiary of the Borrower or any of its property or other assets for more than \$500,000, and shall remain unvacated, unbonded or unstayed for a period of twenty (20) days unless otherwise consented to by the Holder, which consent will not be unreasonably withheld.

3.7 Bankruptcy. Bankruptcy, insolvency, reorganization or liquidation proceedings or other proceedings, voluntary or involuntary, for relief under any bankruptcy law or any law for the relief of debtors shall be instituted by or against the Borrower or any subsidiary of the Borrower.

3.8 Failure to Comply with the 1934 Act. At any time after the Issue Date, the Borrower shall fail to comply with the reporting requirements of the 1934 Act and/or the Borrower shall cease to be subject to the reporting requirements of the 1934 Act.

3.9 Liquidation. Any dissolution, liquidation, or winding up of Borrower or any substantial portion of its business.

3.10 Cessation of Operations. Any cessation of operations by Borrower or Borrower admits it is otherwise generally unable to pay its debts as such debts become due, provided, however, that any disclosure of the Borrower's ability to continue as a "going concern" shall not be an admission that the Borrower cannot pay its debts as they become due.

3.11 Maintenance of Assets. The failure by Borrower to maintain any material intellectual property rights, personal, real property or other assets which are necessary to conduct its business (whether now or in the future).

3.12 Financial Statement Restatement. The restatement of any financial statements filed by the Borrower with the SEC for any date or period from two years prior to the Issue Date of this Note and until this Note is no longer outstanding, if the result of such restatement would, by comparison to the unrestated financial statement, have constituted a material adverse effect on the rights of the Holder with respect to this Note or the Purchase Agreement.

3.13 Replacement of Transfer Agent. In the event that the Borrower proposes to replace its transfer agent, the Borrower fails to provide, prior to the effective date of such replacement, a fully executed Irrevocable Transfer Agent Instructions in a form as initially delivered pursuant to the Purchase Agreement (including but not limited to the provision to irrevocably reserve shares of Common Stock in the Reserved Amount) signed by the successor transfer agent to Borrower and the Borrower.

3.14 [RESERVED]

3.15 [Intentionally Omitted].

3.16 Inside Information. Any attempt by the Borrower or its officers, directors, and/or affiliates to transmit, convey, disclose, or any actual transmittal, conveyance, or disclosure by the Borrower or its officers, directors, and/or affiliates of, material non-public information concerning the Borrower, to the Holder or its successors and assigns, which is not immediately cured by Borrower's filing of a Form 8-K pursuant to Regulation FD on that same date.

3.17 Unavailability of Rule 144. If, at any time on or after the date that is six (6) calendar months after the Issue Date, the Holder is unable to (i) obtain a standard "144 legal opinion letter" from an attorney reasonably acceptable to the Holder, the Holder's brokerage firm (and respective clearing firm), and the Borrower's transfer agent in order to facilitate the Holder's conversion of any portion of the Note into free trading shares of the Borrower's Common Stock pursuant to Rule 144, and/or (ii) thereupon deposit such shares into the Holder's brokerage account.

3.18 Delisting or Suspension of Trading of Common Stock. If, at any time on or after the Issue Date, the Borrower's Common Stock (i) is suspended from trading, (ii) halted from trading, and/or (iii) fails to be quoted or listed (as applicable) on any level of the OTC Markets, any tier of the NASDAQ Stock Market, the New York Stock Exchange, or the NYSE American.

3.19 Rights and Remedies Upon an Event of Default. Upon the occurrence of any Event of Default specified in this Article III, this Note shall become immediately due and payable, and the Borrower shall pay to the Holder, in full satisfaction of its obligations hereunder, the greater of (i) an amount equal to the Principal Amount then outstanding plus accrued interest (including any Default Interest) through the date of full repayment multiplied by 125% (collectively the "Default Amount") or (ii) the "parity value" of the Default Amount, where parity value means (a) the highest number of shares of Common Stock issuable upon conversion of such Default Amount in accordance with the terms of this Note (without giving effect to any beneficial ownership limitations contained in this Note), treating the date that the respective Event of Default occurs as the "Conversion Date" for purposes of determining the Conversion Price, multiplied by (b) the volume weighted average price for the Common Stock on the date that the respective Event of Default occurs (the "Default Parity Amount"), plus, in each such case, all costs, including, without limitation, legal fees and expenses, of collection, all without demand, presentment or notice, all of which hereby are expressly waived by the Borrower. The Holder may convert the greater of the (i) Default Amount or (ii) Default Parity Amount into Common Stock pursuant to the terms of this Note (including but not limited to the conversion formula set forth in this Note as well as all other provisions of this Note). The Holder shall be entitled to exercise all other rights and remedies available at law or in equity.

ARTICLE IV. MISCELLANEOUS

4.1 Failure or Indulgence Not Waiver. No failure or delay on the part of the Holder in the exercise of any power, right or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude other or further exercise thereof or of any other right, power or privileges. All rights and remedies of the Holder existing hereunder are cumulative to, and not exclusive of, any rights or remedies otherwise available.

4.2 Notices. All notices, demands, requests, consents, approvals, and other communications required or permitted hereunder shall be in writing and, unless otherwise specified herein, shall be (i) personally served, (ii) deposited in the mail, registered or certified, return receipt requested, postage prepaid, (iii) delivered by reputable air courier service with charges prepaid, or (iv) transmitted by hand delivery, telegram, e-mail or facsimile, addressed as set forth below or to such other address as such party shall have specified most recently by written notice. Any notice or other communication required or permitted to be given hereunder shall be deemed effective (a) upon hand delivery or delivery by e-mail or facsimile, with accurate confirmation generated by the transmitting facsimile machine, at the address or number designated below (if delivered on a business day during normal business hours where such notice is to be received), or the first business day following such delivery (if delivered other than on a business day during normal business hours where such notice is to be received) or (b) on the second business day following the date of mailing by express courier service, fully prepaid, addressed to such address, or upon actual receipt of such mailing, whichever shall first occur. The addresses for such communications shall be:

If to the Borrower, to:

RESPIRERX PHARMACEUTICALS INC.

126 Valley Road, Suite C
Glen Rock, NJ 07452
Attention: Jeff Margolis
e-mail: jmargolis@respirerx.com

If to the Holder:

«Investor»

«Investor_Address»
«Investor_City», «Investor_State» «Investor_Zip»
Attention: «Investor_Attn»
e-mail: «Investor_email»

4.3 Amendments. This Note and any provision hereof may only be amended by an instrument in writing signed by the Borrower and the Holder. The term “Note” and all reference thereto, as used throughout this instrument, shall mean this instrument as originally executed, or if later amended or supplemented, then as so amended or supplemented.

4.4 Assignability. This Note shall be binding upon the Borrower and its successors and assigns and shall inure to be the benefit of the Holder and its successors and assigns. The Borrower shall not assign this Note or any rights or obligations hereunder without the prior written consent of the Holder. The Holder may assign its rights hereunder to any “accredited investor” (as defined in Rule 501(a) of the 1933 Act) in a private transaction from the Holder or to any of its “affiliates”, as that term is defined under the 1934 Act, without the consent of the Borrower. Notwithstanding anything in this Note to the contrary, this Note may be pledged as collateral in connection with a bona fide margin account or other lending arrangement. The Holder and any assignee, by acceptance of this Note, acknowledge and agree that following conversion of a portion of this Note, the unpaid and unconverted principal amount of this Note represented by this Note may be less than the amount stated on the face hereof.

4.5 Cost of Collection. If default is made in the payment of this Note, the Borrower shall pay the Holder hereof costs of collection, including reasonable attorneys' fees.

4.6 Governing Law; Venue; Attorney's Fees. This Note shall be governed by and construed in accordance with the laws of the State of Delaware without regard to principles of conflicts of laws. Any action brought by either party against the other concerning the transactions contemplated by this Note or any other agreement, certificate, instrument or document contemplated hereby shall be brought only in the state courts located in New York, New York or federal courts located in New York, New York. The Borrower hereby irrevocably waives any objection to jurisdiction and venue of any action instituted hereunder and shall not assert any defense based on lack of jurisdiction or venue or based upon *forum non conveniens*. **THE BORROWER HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS NOTE OR ANY TRANSACTIONS CONTEMPLATED HEREBY.** Each party hereby irrevocably waives personal service of process and consents to process being served in any suit, action or proceeding in connection with this Note or any other agreement, certificate, instrument or document contemplated hereby or thereby by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Note and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any other manner permitted by law. The prevailing party in any action or dispute brought in connection with this the Note or any other agreement, certificate, instrument or document contemplated hereby or thereby shall be entitled to recover from the other party its reasonable attorney's fees and costs.

4.7 Certain Amounts. Whenever pursuant to this Note the Borrower is required to pay an amount in excess of the outstanding Principal Amount (or the portion thereof required to be paid at that time) plus accrued and unpaid interest plus Default Interest on such interest, the Borrower and the Holder agree that the actual damages to the Holder from the receipt of cash payment on this Note may be difficult to determine and the amount to be so paid by the Borrower represents stipulated damages and not a penalty and is intended to compensate the Holder in part for loss of the opportunity to convert this Note and to earn a return from the sale of shares of Common Stock acquired upon conversion of this Note at a price in excess of the price paid for such shares pursuant to this Note. The Borrower and the Holder hereby agree that such amount of stipulated damages is not plainly disproportionate to the possible loss to the Holder from the receipt of a cash payment without the opportunity to convert this Note into shares of Common Stock.

4.8 Purchase Agreement. The Company and the Holder shall be bound by the applicable terms of the Purchase Agreement and the documents entered into in connection herewith and therewith.

4.9 Notice of Corporate Events. Except as otherwise provided below, the Holder of this Note shall have no rights as a Holder of Common Stock unless and only to the extent that it converts this Note into Common Stock. The Borrower shall provide the Holder with prior notification of any meeting of the Borrower's shareholders (and copies of proxy materials and other information sent to shareholders). In the event of any taking by the Borrower of a record of its shareholders for the purpose of determining shareholders who are entitled to receive payment of any dividend or other distribution, any right to subscribe for, purchase or otherwise acquire (including by way of merger, consolidation, reclassification or recapitalization) any share of any class or any other securities or property, or to receive any other right, or for the purpose of determining shareholders who are entitled to vote in connection with any change in control or any proposed liquidation, dissolution or winding up of the Borrower, the Borrower shall mail a notice to the Holder, at least twenty (20) days prior to the record date specified therein (or thirty (30) days prior to the consummation of the transaction or event, whichever is earlier), of the date on which any such record is to be taken for the purpose of such dividend, distribution, right or other event, and a brief statement regarding the amount and character of such dividend, distribution, right or other event to the extent known at such time. The Borrower shall make a public announcement of any event requiring notification to the Holder hereunder substantially simultaneously with the notification to the Holder in accordance with the terms of this Section 4.9.

4.10 Remedies. The Borrower acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Holder, by vitiating the intent and purpose of the transaction contemplated hereby. Accordingly, the Borrower acknowledges that the remedy at law for a breach of its obligations under this Note will be inadequate and agrees, in the event of a breach or threatened breach by the Borrower of the provisions of this Note, that the Holder shall be entitled, in addition to all other available remedies at law or in equity, and in addition to the penalties assessable herein, to an injunction or injunctions restraining, preventing or curing any breach of this Note and to enforce specifically the terms and provisions thereof, without the necessity of showing economic loss and without any bond or other security being required.

4.11 Construction; Headings. This Note shall be deemed to be jointly drafted by the Company and all the Holder and shall not be construed against any person as the drafter hereof. The headings of this Note are for convenience of reference and shall not form part of, or affect the interpretation of, this Note.

4.12 Usury. To the extent it may lawfully do so, the Company hereby agrees not to insist upon or plead or in any manner whatsoever claim and will resist any and all efforts to be compelled to take the benefit or advantage of, usury laws wherever enacted, now or at any time hereafter in force, in connection with any action or proceeding that may be brought by the Holder in order to enforce any right or remedy under this Note. Notwithstanding any provision to the contrary contained in this Note, it is expressly agreed and provided that the total liability of the Company under this Note for payments which under the applicable law are in the nature of interest shall not exceed the maximum lawful rate authorized under applicable law (the "Maximum Rate"), and, without limiting the foregoing, in no event shall any rate of interest or default interest, or both of them, when aggregated with any other sums which under the applicable law in the nature of interest that the Company may be obligated to pay under this Note exceed such Maximum Rate. It is agreed that if the maximum contract rate of interest allowed by applicable law and applicable to this Note is increased or decreased by statute or any official governmental action subsequent to the Issue Date, the new maximum contract rate of interest allowed by law will be the Maximum Rate applicable to this Note from the effective date thereof forward, unless such application is precluded by applicable law. If under any circumstances whatsoever, interest in excess of the Maximum Rate is paid by the Company to the Holder with respect to indebtedness evidenced by this the Note, such excess shall be applied by the Holder to the unpaid principal balance of any such indebtedness or be refunded to the Company, the manner of handling such excess to be at the Holder's election.

4.13 Severability. In the event that any provision of this Note is invalid or unenforceable under any applicable statute or rule of law (including any judicial ruling), then such provision shall be deemed inoperative to the extent that it may conflict therewith and shall be deemed modified to conform with such statute or rule of law. Any such provision which may prove invalid or unenforceable under any law shall not affect the validity or enforceability of any other provision of this Note.

4.14 Terms of Future Financings. So long as this Note is outstanding, upon any issuance by the Borrower or any of its subsidiaries of any security, or amendment to a security that was originally issued before the Issue Date, with any term that the Holder reasonably believes is more favorable to the holder of such security or with a term in favor of the holder of such security that the Holder reasonably believes was not similarly provided to the Holder in this Note, then (i) the Borrower shall notify the Holder of such additional or more favorable term within one (1) business day of the issuance and/or amendment (as applicable) of the respective security, and (ii) such term, at Holder's option, shall become a part of the transaction documents with the Holder (regardless of whether the Borrower complied with the notification provision of this Section 4.14). The types of terms contained in another security that may be more favorable to the holder of such security include, but are not limited to, terms addressing prepayment rate, interest rates, and original issue discounts.

4.15 Dispute Resolution. In the case of a dispute as to the determination of the Conversion Price, Conversion Amount, any prepayment amount or Default Amount, Issue, Closing or Maturity Date, the closing bid price, or fair market value (as the case may be) or the arithmetic calculation of the Conversion Price or the applicable prepayment amount(s) (as the case may be), the Borrower or the Holder shall submit the disputed determinations or arithmetic calculations via facsimile (i) within one (1) Trading Day after receipt of the applicable notice giving rise to such dispute to the Borrower or the Holder or (ii) if no notice gave rise to such dispute, at any time after the Holder learned of the circumstances giving rise to such dispute. If the Holder and the Borrower are unable to agree upon such determination or calculation within one (1) Trading Day of such disputed determination or arithmetic calculation (as the case may be) being submitted to the Borrower or the Holder, then the Borrower shall, within one (1) Trading Day, submit (a) the disputed determination of the Conversion Price, the closing bid price, the or fair market value (as the case may be) to an independent, reputable investment bank selected by the Borrower and approved by the Holder or (b) the disputed arithmetic calculation of the Conversion Price, Conversion Amount, any prepayment amount or Default Amount, to an independent, outside accountant selected by the Holder that is reasonably acceptable to the Borrower. The Borrower shall cause at its expense the investment bank or the accountant to perform the determinations or calculations and notify the Borrower and the Holder of the results no later than one (1) Trading Day from the time it receives such disputed determinations or calculations. Such investment bank's or accountant's determination or calculation shall be binding upon all parties absent demonstrable error.

[signature page follows]

IN WITNESS WHEREOF, Borrower has caused this Note to be signed in its name by its duly authorized officer on «Closing_Date».

RESPIRERX PHARMACEUTICALS INC.

By: _____
Name: Jeff Margolis
Title: Senior Vice President, Chief Financial Officer, Treasurer
and Secretary

EXHIBIT A — NOTICE OF CONVERSION

The undersigned hereby elects to convert \$ _____ principal amount of the Note (defined below) into that number of shares of Common Stock to be issued pursuant to the conversion of the Note (“Common Stock”) as set forth below, of **RESPIRERX PHARMACEUTICALS INC.**, a Delaware corporation (the “Borrower”), according to the conditions of the promissory note of the Borrower dated as of «Closing_Date» (the “Note”), as of the date written below. No fee will be charged to the Holder for any conversion, except for transfer taxes, if any.

Box Checked as to applicable instructions:

- ☐
- The Borrower shall electronically transmit the Common Stock issuable pursuant to this Notice of Conversion to the account of the undersigned or its nominee with DTC through its Deposit Withdrawal Agent Commission system (“DWAC Transfer”).

Name of DTC Prime Broker:
Account Number:

- ☐
- The undersigned hereby requests that the Borrower issue a certificate or certificates for the number of shares of Common Stock set forth below (which numbers are based on the Holder’s calculation attached hereto) in the name(s) specified immediately below or, if additional space is necessary, on an attachment hereto:

Date of Conversion:

Applicable Conversion Price:

Number of Shares of Common Stock to be
Issued Pursuant to Conversion of the Note:

Amount of Principal Balance Due remaining
Under the Note after this conversion:

\$ _____

By:
Name:
Title:
Date:

EXHIBIT B TO SECURITIES PURCHASE AGREEMENT

PIGGY-BACK REGISTRATION RIGHTS AGREEMENT

THIS PIGGY-BACK REGISTRATION RIGHTS AGREEMENT (this “Agreement”), dated as «Closing_Date» is made by and between RespireRx Pharmaceuticals Inc., a Delaware corporation (the “Company”), and «Investor» a «State_of_Incorp» «Type_of_Entity» (the “Holder”). The Company and the Holder are hereinafter sometimes collectively referred to as the “Parties” and each a “Party” to this Agreement.

RECITALS

WHEREAS, the Company’s Board of Directors (the “Board”) has unanimously approved, upon the terms and subject to the conditions of, that certain Securities Purchase Agreement, of even date herewith, by and between the Holder and the Company (the “Securities Purchase Agreement”), the Company has agreed to issue and sell to Holder the Note (as defined in the Securities Purchase Agreement) (the “Note”) and Warrant (as defined in the Securities Purchase Agreement) (the “Warrant”), to the Holder; and

WHEREAS, to induce the Holder to execute and deliver the Securities Purchase Agreement and this Agreement, the Company has agreed to provide certain piggy-back registration rights under the Securities Act of 1933, as amended (the “Securities Act”) and the rules and regulations promulgated thereunder, and applicable state securities laws, with respect to the Piggy-Back Registrable Securities (as defined herein).

NOW, THEREFORE, for and in consideration of the foregoing premises, the agreements and covenants herein contained, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company and the Holder, intending to be legally bound, hereby agree as follows:

1. Definitions. As used in this Agreement, the following terms shall have the following meanings:

- a. [Intentionally Omitted].
- b. “Effective Date” shall mean the date the SEC declares the Registration Statement effective and the Company has filed all necessary amendments, including the letter to request accelerated effectiveness and the Prospectus covering the resale of Piggy-Back Registrable Securities.
- c. “Filing Date” shall mean the date the Registration Statement has been filed with the SEC (as determined by EDGAR) and no stop order of acceptance has been issued by the SEC.
- d. “Person” means a corporation, a limited liability company, an association, a partnership, an organization, a business, an individual, a governmental or political subdivision thereof or a governmental agency.
- e. “Principal Market” means either the NYSE American, the Nasdaq Global Select Market, the Nasdaq Global Market, the Nasdaq Stock Capital Market, OTCQX® Best Market, the OTCQB® Venture Market or the OTC Pink Market, whichever is the principal market on which the Securities is listed or quoted.
- f. “Purchase Amount” means the Purchase Price, as such term is defined in the Securities Purchase Agreement.
- g. “Register”, “Registered” and “Registration” refer to a registration effected by preparing and filing with the SEC one or more Registration Statements in compliance with the Securities Act and/or pursuant to Rule 415 under the Securities Act or any successor rule providing for among other securities, the Piggy-Back Registrable Securities.
- h. “Piggy-Back Registrable Securities” means the Conversion Shares (as defined in the Securities Purchase Agreement) (the “Conversion Share”), Warrant Shares (as defined in the Securities Purchase Agreement) (the “Warrant Shares”), all other shares of Common Stock issued or issuable pursuant to the Securities Purchase Agreement, and any shares of capital stock issued or issuable with respect to such Note, Conversion Shares, Warrant, or Warrant Shares as a result of any stock split, stock dividend, recapitalization, exchange or similar event or otherwise, which have not been (x) included in a Registration Statement that has been declared effective by the SEC, (y) sold under circumstances meeting all of the applicable conditions of Rule 144, promulgated under the Securities Act or (z) saleable without limitation as to time, manner and volume pursuant to Rule 144(k) (or any similar provision then in force) under the Securities Act.

i. “Registration Statement” means a registration statement of the Company filed with the SEC under the Securities Act.

j. “SEC” means the United States Securities and Exchange Commission.

All capitalized terms used but not defined in this Agreement shall have the meaning ascribed to them in the Securities Purchase Agreement; provided however, that any references to Conversion Price shall have the meaning ascribed to it in the Note (the “Conversion Price”).

2. Registration.

a. Piggy-Back Registration. With respect to only one of the first three times the Company files a Registration Statement under the Securities Act, and at the request of the Holder, the Company shall use its commercially reasonable efforts, to the extent permissible under U.S. securities laws and the rules and regulations thereunder, to include the Piggy-Back Registrable Securities in such Registration Statement with the intention of covering the resale of all of the Piggy-Back Registrable Securities at prevailing market prices (and not fixed prices). The Company shall, to the extent permissible by U.S. securities laws and the rules and regulations thereunder initially register for resale all of the Piggy-Back Registrable Securities, or an amount equal to the maximum amount allowed under the applicable rule or rules as interpreted by the SEC. In the event the Company cannot register the Piggy-Back Registrable Securities, due to the remaining number of authorized shares (including shares held in the share reservation established for the benefit of the Holder) of Common Stock being insufficient, the Company will use its best efforts to register the maximum number of shares it can, based upon the remaining balance of authorized shares (including shares held in the share reservation established for the benefit of the Holder) and will use its best efforts to increase the number of its authorized shares as soon as reasonably practicable.

b. The Company shall use its commercially reasonable efforts, if it elects to file a Registration Statement and to the extent permissible under U.S. securities laws, to have the Registration Statement filed with the SEC within forty-five (45) days following Holder’s request for the inclusion of the Piggy-Back Registrable Securities in such Registration Statement (the “Filing Deadline”).

Notwithstanding the foregoing, failure to file by the Filing Deadline shall not constitute an event of default under the Note to the extent any delay in the filing of the Registration Statement occurs because of an act of, or a failure to act or to act timely by the Holder or is otherwise solely attributable to the Holder.

The Company acknowledges that its failure to have the Registration Statement filed by the Filing Deadline will cause the Holder to suffer irreparable harm, and, that damages will be difficult to ascertain. Accordingly, the Parties agree that it is appropriate that the failure to file by the Filing Deadline shall constitute an event of default under Section 3.3 of the Note. The availability of any remedies hereunder and thereunder shall not relieve the Company from its obligations to register the Piggy-Back Registrable Securities and deliver the Piggy-Back Registrable Securities pursuant to the terms of this Agreement and the Securities Purchase Agreement.

c. The Company shall use its efforts and take all available steps to have the Registration Statement declared effective by the SEC within ninety (90) calendar days after the Filing Date (the “Effective Deadline”). If the Registration Statement covering the Piggy-Back Registrable Securities to be filed by the Company pursuant to Section 2(a) hereof has not become effective by the Effective Deadline, then it shall constitute an event of default under Section 3.3 of the Note.

If the Registration Statement covering the Piggy-Back Registrable Securities to be filed by the Company pursuant to Section 2(a) hereof has become effective, and, thereafter, the Holder’s right to sell is suspended, for any reason, then the Company shall pay the Holder the sum of one percent (1%) of the Purchase Amount plus interest and penalties due to the Holder under the Note for each thirty (30) calendar day period, pro rata, compounded annually, following the suspension, until such suspension ceases (the “Suspension Damages”). The Suspension Damages shall continue until the obligation is fulfilled and shall be paid within five (5) business days after each thirty (30) day period, or portion thereof, until such suspension is released. The Suspension Damages shall be paid, at the Holder’s option, in cash or shares of the Company’s common stock, par value \$0.001, priced at the Conversion Price (as defined in the Note), or portion thereof. Failure of the Company to make payment within said five (5) business days after each thirty (30) day period shall be considered a breach of this Agreement and an event of default under Section 3.3 of the Note.

Notwithstanding the foregoing, the amounts payable by the Company pursuant to this Section 2(c) shall not be payable to the extent any delay in the effectiveness of the Registration Statement or any suspension of the effectiveness occurs because of an act of, or a failure to act or to act timely by the Holder or is otherwise solely attributable to the Holder.

The Company acknowledges that its failure to have the Registration Statement become effective by the Effective Deadline or to permit the suspension of the effectiveness of the Registration Statement, will cause the Holder to suffer irreparable harm and, that damages will be difficult to ascertain. Accordingly, the Parties agree that it is appropriate to include in this Agreement a provision for liquidated damages. The Parties acknowledge and agree that the liquidated damages provision set forth in this Section 2(c) represents the Parties' good faith effort to quantify such damages and, as such, agree that the form and amount of such liquidated damages are reasonable and will not constitute a penalty. The payment of liquidated damages shall not relieve the Company from its obligations to register the Piggy-Back Registrable Securities and deliver the Piggy-Back Registrable Securities pursuant to the terms of this Agreement and the Securities Purchase Agreement.

3. Related Obligations.

At such time as the Company is obligated to prepare and file a Registration Statement with the SEC pursuant to Section 2(a) hereof, the Company will use its best efforts to effect the registration of the Piggy-Back Registrable Securities in accordance with the intended method of disposition thereof and, with respect thereto, the Company shall have the following obligations:

a. The Company shall use its best efforts to cause such Registration Statement relating to the Piggy-Back Registrable Securities to become effective within ninety (90) calendar days after the Filing Date and shall keep such Registration Statement effective pursuant to Rule 415 under the Securities Act until the date on which the Holder shall have sold all the Piggy-Back Registrable Securities (the "Registration Period"), which Registration Statement (including any amendments or supplements thereto and prospectuses contained therein) shall, as of the date thereof, not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein, or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading.

b. The Company shall prepare and file with the SEC such amendments (including post-effective amendments) and supplements to a Registration Statement and the prospectus used in connection with such Registration Statement, which prospectus is to be filed pursuant to Rule 424 under the Securities Act, as may be necessary to keep such Registration Statement effective during the Registration Period, and, during such period, comply with the provisions of the Securities Act with respect to the disposition of all Piggy-Back Registrable Securities of the Company covered by such Registration Statement until such time as all of such Piggy-Back Registrable Securities shall have been disposed of in accordance with the intended methods of disposition by the Holder as set forth in such Registration Statement (which shall be at prevailing market prices, and not fixed prices). In the event the number of shares available under a Registration Statement filed pursuant to this Agreement is at any time insufficient to cover all of the Piggy-Back Registrable Securities, the Company shall amend such Registration Statement, or file a new Registration Statement (on the short form available therefor, if applicable), or both, so as to cover all of the Piggy-Back Registrable Securities, in each case, as soon as practicable, but in any event within thirty (30) calendar days after the necessity therefor arises (based on the total number of Piggy-Back Registrable Securities). The Company shall use its best efforts to cause such amendment and/or new Registration Statement to become effective as soon as practicable following the filing thereof.

c. The Company shall furnish to the Holder whose Piggy-Back Registrable Securities are included in any Registration Statement and its legal counsel without charge and upon request (i) promptly after the same is prepared and filed with the SEC at least one copy of such Registration Statement and any amendment(s) thereto, including financial statements and schedules, all documents incorporated therein by reference and all exhibits, the prospectus included in such Registration Statement (including each preliminary prospectus) and, with regards to such Registration Statement(s), any correspondence by or on behalf of the Company to the SEC or the staff of the SEC and any correspondence from the SEC or the staff of the SEC to the Company or its representatives, (ii) upon the effectiveness of any Registration Statement, a copy of the prospectus included in such Registration Statement and all amendments and supplements thereto (or such other number of copies as the Holder may reasonably request) and (iii) such other documents, including copies of any preliminary or final prospectus, as the Holder may reasonably request from time to time in order to facilitate the disposition of the Piggy-Back Registrable Securities. The Company filing the documents described in this paragraph through EDGAR shall constitute delivery.

d. The Company shall use reasonable efforts to (i) register and qualify the Piggy-Back Registrable Securities covered by a Registration Statement under the applicable securities or “blue sky” laws of such states of the United States as reasonably specified by the Holder; (ii) prepare and file in those jurisdictions, such amendments (including post-effective amendments) and supplements to such registrations and qualifications as may be necessary to maintain the effectiveness thereof during the Registration Period; (iii) take such other actions as may be necessary to maintain such registrations and qualifications in effect at all times during the Registration Period; and (iv) take all other actions reasonably necessary or advisable to qualify the Piggy-Back Registrable Securities for sale in such jurisdictions; provided, however, that the Company shall not be required in connection therewith or as a condition thereto to (x) qualify to do business in any jurisdiction where it would not otherwise be required to qualify but for this Section 3(d), (y) subject itself to general taxation in any such jurisdiction, or (z) file a general consent to service of process in any such jurisdiction. The Company shall promptly notify the Holder who holds Piggy-Back Registrable Securities of the receipt by the Company of any notification with respect to the suspension of the registration or qualification of any of the Piggy-Back Registrable Securities for sale under the securities or “blue sky” laws of any jurisdiction in the United States or its receipt of actual notice of the initiation or threatening of any proceeding for such purpose.

e. Upon the happening of any event as a result of which the prospectus included in a Registration Statement, as then in effect, would then contain an untrue statement of a material fact or omission to state a material fact, which would otherwise be required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading; and, as a result, the prospectus is required to be supplemented or as a result of which the Registration Statement is required to be amended (“Registration Default”), the Company shall use all diligent efforts to promptly prepare any necessary supplement to such prospectus or amendment to such Registration Statement and take any other necessary steps to cure the Registration Default, and deliver one (1) copy of such supplement or amendment to Holder (or such other number of copies as Holder may reasonably request; delivery via EDGAR shall constitute delivery). Failure to cure the Registration Default within five (5) business days shall result in the Company paying liquidated damages of one percent (1%) of the Purchase Amount for each thirty (30) calendar day period or portion thereof, beginning on the date of suspension. The Company shall also promptly notify Holder in writing (i) when a prospectus or any prospectus supplement or post-effective amendment has been filed, and when a Registration Statement or any post-effective amendment has become effective (notification of such effectiveness shall be delivered to Holder by facsimile on the same day of such effectiveness and by overnight mail); (ii) in the event the Registration Statement is no longer effective; or (iii) the Registration Statement is stale for a period of more than five (5) trading days as a result of the Company’s failure to timely file its financials with the SEC.

The Company acknowledges that its failure to cure the Registration Default within five (5) business days will cause the Holder irreparable harm, and that damages will be difficult to ascertain. Accordingly, the Parties agree that it is appropriate to include in this Agreement a provision for liquidated damages. The Parties acknowledge and agree that the liquidated damages provision set forth in this Section 3(e) represents the Parties’ good faith effort to quantify such damages and, as such, agree that the form and amount of such liquidated damages are reasonable and will not constitute a penalty.

It is the intention of the Parties that interest payable under any of the terms of this Agreement shall not exceed the maximum amount permitted under any applicable law. If a law, which applies to this Agreement which sets the maximum interest amount, is finally interpreted so that the interest in connection with this Agreement exceeds the permitted limits, then: (1) any such interest shall be reduced by the amount necessary to reduce the interest to the permitted limit; and (2) any sums already collected (if any) from the Company which exceed the permitted limits will be refunded to the Company. The Holder may choose to make this refund by reducing the amount that the Company owes under this Agreement or by making a direct payment to the Company. If a refund reduces the amount that the Company owes the Holder, the reduction will be treated as a partial payment. In the event that any provision of this Agreement is held by a court of competent jurisdiction to be excessive in scope or otherwise invalid or unenforceable, such provision shall be adjusted rather than voided, if possible, so that it is enforceable to the maximum extent possible, and the validity and enforceability of the remaining provisions of this Agreement will not in any way be affected or impaired thereby.

f. The Company shall use its best efforts to prevent the issuance of any stop order or other suspension of effectiveness of a Registration Statement, or the suspension of the qualification of any of the Piggy-Back Registrable Securities for sale in any jurisdiction and, if such an order or suspension is issued, to obtain the withdrawal of such order or suspension at the earliest possible moment and to notify the Holder of the issuance of such order and the resolution thereof. The Company will immediately notify the Holder of a proceeding, or threat of proceeding, the result of which could affect the effectiveness of the registration statement.

g. [RESERVED]

h. [RESERVED]

i. The Company shall hold in confidence and not make any disclosure of information concerning the Holder unless (i) disclosure of such information is necessary to comply with federal or state securities laws, (ii) the disclosure of such information is necessary to avoid or correct a misstatement or omission in any Registration Statement, (iii) the release of such information is ordered pursuant to a subpoena or other final, non-appealable order from a court or governmental body of competent jurisdiction, or (iv) such information has been made generally available to the public other than by disclosure in violation of this Agreement or any other agreement. The Company agrees that it shall, upon learning that disclosure of such information concerning a Holder is sought in or by a court or governmental body of competent jurisdiction or through other means, give prompt written notice to the Holder and allow the Holder, at the Holder's expense, to undertake appropriate action to prevent disclosure of, or to obtain a protective order for, such information.

j. The Company shall use its best efforts to secure designation and quotation of all the Piggy-Back Registrable Securities covered by any Registration Statement on the Principal Market, to the extent such is necessary for the Piggy-Back Registrable Securities to trade on such market. If, despite the Company's best efforts, the Company is unsuccessful in satisfying this obligation, it shall use its best efforts to cause all the Piggy-Back Registrable Securities covered by any Registration Statement to be listed on each other national securities exchange and automated quotation system, if any, on which securities of the same class or series issued by the Company are then listed, if any, if the listing of such Piggy-Back Registrable Securities is then permitted under the rules of such exchange or system. If, despite the Company's best efforts, the Company is unsuccessful in satisfying its obligation in this Section, it will use its best efforts to secure the inclusion for quotation with the OTC Pink Sheets. The Company shall pay all fees and expenses in connection with satisfying its obligation under this Section 3(j).

k. The Company shall cooperate with the Holder to facilitate the timely preparation and delivery of book-entry or street name shares(not bearing any restrictive legend) representing the Piggy-Back Registrable Securities to be offered pursuant to a Registration Statement and enable such certificates to be in such denominations or amounts, as the case may be, as the Holder may reasonably request and registered in such names of the Persons who shall acquire such Piggy-Back Registrable Securities from the Holder, as the Holder may request.

l. The Company shall provide a transfer agent for all the Piggy-Back Registrable Securities not later than the Effective Date of the first Registration Statement filed pursuant hereto.

m. If requested by the Holder, the Company shall (i) as soon as reasonably practical, incorporate in a prospectus supplement or post-effective amendment such information as Holder reasonably determines should be included therein relating to the sale and distribution of Piggy-Back Registrable Securities, including, without limitation, information with respect to the Note, Conversion Shares, Warrant, and Warrant Shares; (ii) make all required filings of such prospectus supplement or post-effective amendment as soon as notified of the matters to be incorporated in such prospectus supplement or post-effective amendment; and (iii) supplement or make amendments to any Registration Statement if reasonably requested by Holder.

n. The Company shall use its best efforts to cause the Piggy-Back Registrable Securities covered by the applicable Registration Statement to be registered with or approved by such other governmental agencies or authorities as may be necessary to consummate the disposition of such Piggy-Back Registrable Securities.

o. [RESERVED]

p. The Company shall otherwise use its best efforts to comply with all applicable rules and regulations of the SEC in connection with any registration hereunder.

q. Within five (5) business days after the Registration Statement which includes the Piggy-Back Registrable Securities is declared effective by the SEC, the Company shall deliver to the Holder confirmation that such Registration Statement has been declared effective by the SEC.

r. After the SEC declares the Registration Statement cleared of all comments and the Company's acceptance of the effectiveness of the Registration Statement, the Company shall file a prospectus covering the resale of the Piggy-Back Registrable Securities (the "Prospectus") within five (5) trading days.

s. The Company shall take all other reasonable actions necessary to expedite and facilitate disposition by the Holder of the Piggy-Back Registrable Securities pursuant to a Registration Statement.

4. Obligations Of The Holder.

a. At least five (5) calendar days prior to the first anticipated filing date of a Registration Statement, the Company shall notify the Holder in writing of the information the Company requires from the Holder. The Holder covenants and agrees that, in connection with any resale of Piggy-Back Registrable Securities by it pursuant to a Registration Statement, it shall comply with the “Plan of Distribution” section of the current prospectus relating to such Registration Statement, and such “Plan of Distribution” shall include Holder’s resale of the Piggy-Back Registrable Securities at prevailing market prices (and not fixed prices).

b. The Holder, by the Holder’s acceptance of the Piggy-Back Registrable Securities, agrees to cooperate with the Company as reasonably requested by the Company in connection with the preparation and filing of any Registration Statement hereunder and in responding to SEC comments in connection therewith.

c. The Holder agrees that, upon receipt of any notice from the Company of the happening of any event of the kind described in Section 3(f) hereof or the first sentence of Section 3(e) hereof, the Holder will immediately discontinue disposition of Piggy-Back Registrable Securities pursuant to any Registration Statement(s) covering such Piggy-Back Registrable Securities until Holder’s receipt of the copies of the supplemented or amended prospectus contemplated by Section 3(f) hereof or the first sentence of Section 3(e) hereof.

5. Expenses Of Registration.

All expenses, including, without limitation, all registration, listing and qualifications fees, printing and accounting fees, and reasonable fees and disbursements of counsel for the Company shall be paid by, and are the sole obligation of, the Company.

6. Indemnification.

In the event any Piggy-Back Registrable Securities are included in a Registration Statement under this Agreement:

a. To the fullest extent permitted by law, the Company will, and hereby agrees to, indemnify, hold harmless and defend the Holder who holds such Piggy-Back Registrable Securities, the directors, officers, partners, employees, agents, representatives of, and each Person, if any, who controls Holder within the meaning of the Securities Act or the Exchange Act) (each, an “Indemnified Person”), against any losses, claims, damages, liabilities, judgments, fines, penalties, charges, costs, reasonable attorneys’ fees, amounts paid in settlement or reasonable expenses, joint or several (collectively, “Claims”), incurred in investigating, preparing or defending any action, claim, suit, inquiry, proceeding, investigation or appeal taken from the foregoing by or before any court or governmental, administrative or other regulatory agency, body or the SEC, whether pending or threatened, whether or not an indemnified party is or may be a party thereto (Indemnified Damages”), to which any of them may become subject insofar as such Claims (or actions or proceedings, whether commenced or threatened, in respect thereof) arise out of or are based upon: (i) any untrue statement or alleged untrue statement of a material fact in a Registration Statement or any post-effective amendment thereto or in any filing made in connection with the qualification of the Note under the securities or other “blue sky” laws of any jurisdiction in which Piggy-Back Registrable Securities are offered (“Blue Sky Filing”), or the omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which the statements therein were made, not misleading, (ii) any untrue statement or alleged untrue statement of a material fact contained in the final prospectus (as amended or supplemented, if the Company files any amendment thereof or supplement thereto with the SEC) or the omission or alleged omission to state therein any material fact necessary to make the statements made therein, in light of the circumstances under which the statements therein were made, not misleading, or (iii) any violation or alleged violation by the Company of the Securities Act, the Exchange Act, any other law, including, without limitation, any state securities law, or any rule or regulation thereunder relating to the offer or sale of the Piggy-Back Registrable Securities pursuant to a Registration Statement (the matters in the foregoing clauses (i) through (iii) being, collectively, “Violations”). Subject to the restrictions set forth in Section 6(c) hereof with respect to the number of legal counsel, the Company shall reimburse the Holder and each such controlling person, promptly as such expenses are incurred and are due and payable, for any reasonable legal fees or other reasonable expenses incurred by them in connection with investigating or defending any such Claim. Notwithstanding anything to the contrary contained herein, the indemnification agreement contained in this Section 6(a): (i) shall not apply to a Claim arising out of or based upon a Violation committed by any Indemnified Person or which occurs in reliance upon and in conformity with information furnished in writing to the Company by any Indemnified Person expressly for use in connection with the preparation of the Registration Statement or any such amendment thereof or supplement thereto, if such prospectus were timely made available by the Company pursuant to Section 3(c) hereof; (ii) shall not be available to the extent such Claim is based on (a) a failure of the Holder to deliver or to cause to be delivered the prospectus made available by the Company or (b) the Indemnified Person’s use of an incorrect prospectus despite being promptly advised in advance by the Company in writing not to use such incorrect prospectus; and (iii) shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of the Company, which consent shall not be unreasonably withheld. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of the Indemnified Person and shall survive the resale of the Piggy-Back Registrable Securities by the Holder pursuant to the Registration Statement.

b. Promptly after receipt by an Indemnified Person or Indemnified Party under this Section 6 of notice of the commencement of any action or proceeding (including any governmental action or proceeding) involving a Claim, such Indemnified Person or Indemnified Party shall, if a Claim in respect thereof is to be made against any indemnifying party under this Section 6, deliver to the indemnifying party a written notice of the commencement thereof, and the indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume control of the defense thereof with counsel mutually satisfactory to the indemnifying party and the Indemnified Person or the Indemnified Party, as the case may be; provided, however, that an Indemnified Person or Indemnified Party shall have the right to retain its own counsel with the fees and expenses to be paid by the indemnifying party, if, in the reasonable opinion of counsel retained by the indemnifying party, the representation by such counsel of the Indemnified Person or Indemnified Party and the indemnifying party would be inappropriate due to actual or potential differing interests between such Indemnified Person or Indemnified Party and any other party represented by such counsel in such proceeding. The indemnifying party shall pay for only one separate legal counsel for the Indemnified Persons or the Indemnified Parties, as applicable. Such counsel shall be selected by the Company if the Company is the indemnifying party. The Indemnified Party or Indemnified Person shall cooperate fully with the indemnifying party in connection with any negotiation or defense of any such action or claim by the indemnifying party and shall furnish to the indemnifying party all information reasonably available to the Indemnified Party or Indemnified Person which relates to such action or claim. The indemnifying party shall keep the Indemnified Party or Indemnified Person fully apprised at all times as to the status of the defense or any settlement negotiations with respect thereto. No indemnifying party shall be liable for any settlement of any action, claim or proceeding effected without its written consent, provided, however, that the indemnifying party shall not unreasonably withhold, delay or condition its consent. No indemnifying party shall, without the consent of the Indemnified Party or Indemnified Person, consent to entry of any judgment or enter into any settlement or other compromise which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party or Indemnified Person of a release from all liability in respect to such Claim. Following indemnification as provided for hereunder, the indemnifying party shall be subrogated to all rights of the Indemnified Party or Indemnified Person with respect to all third parties, firms or corporations relating to the matter for which indemnification has been made. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action shall not relieve such indemnifying party of any liability to the Indemnified Person or Indemnified Party under this Section 6, except to the extent that the indemnifying party is actually prejudiced in its ability to defend such action.

c. The indemnification required by this Section 6 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received or Indemnified Damages are incurred.

d. The indemnity agreements contained herein shall be in addition to (i) any cause of action or similar right of the Indemnified Party or Indemnified Person against the indemnifying party or others, and (ii) any liabilities the indemnifying party may be subject to pursuant to the law.

7. Contribution.

To the extent any indemnification by an indemnifying party is prohibited or limited by law, the indemnifying party agrees to make the maximum contribution with respect to any amounts for which it would otherwise be liable under Section 6 hereof to the fullest extent permitted by law; provided, however, that: (i) no contribution shall be made under circumstances where the maker would not have been liable for indemnification under the fault standards set forth in Section 6 hereof; (ii) no seller of Piggy-Back Registrable Securities guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any seller of Piggy-Back Registrable Securities who was not guilty of fraudulent misrepresentation; and (iii) contribution by any seller of Piggy-Back Registrable Securities shall be limited in amount to the net amount of proceeds received by such seller from the sale of such Piggy-Back Registrable Securities.

8. Reports Under The Exchange Act.

With a view to making available to the Holder the benefits of Rule 144 under the Securities Act or any similar rule or regulation of the SEC that may at any time permit the Investors to sell securities of the Company to the public without registration (“Rule 144”) the Company agrees to take commercially reasonable efforts to:

- a. make and keep public information available, as those terms are understood and defined in Rule 144;
- b. file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act so long as the Company remains subject to such requirements and the filing of such reports and other documents as are required by the applicable provisions of Rule 144; and
- c. furnish to the Holder so long as the Holder owns Piggy-Back Registrable Securities, promptly upon request, (i) a written statement by the Company that it has complied with the reporting requirements of Rule 144, the Securities Act and the Exchange Act, (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company, and (iii) such other information as may be reasonably requested to permit the Investors to sell such securities pursuant to Rule 144 without registration.

9. No Assignment Of Registration Rights.

The registration rights and obligations under this Agreement shall not be assignable.

10. Amendment Of Registration Rights.

Provisions of this Agreement may be amended and the observance thereof may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of both the Company and the Holder of the Piggy-Back Registrable Securities. Any amendment or waiver effected in accordance with this Section 10 shall be binding upon the Holder and the Company.

11. Miscellaneous.

- a. Any notices, consents, waivers or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered (i) upon receipt, when delivered personally; (ii) upon receipt, when sent by facsimile (provided a confirmation of transmission is mechanically or electronically generated and kept on file by the sending Party); or (iii) one (1) day after deposit with a nationally recognized overnight delivery service, in each case properly addressed to the Party to receive the same. The addresses for such communications are as set forth on the signature page to this Agreement. Each Party shall provide five (5) business days prior notice to the other Party of any change in address, phone number or facsimile number.
- b. Failure of any Party to exercise any right or remedy under this Agreement or otherwise, or delay by a Party in exercising such right or remedy, shall not operate as a waiver thereof.
- c. This Agreement and all acts and transactions pursuant hereto and the rights and obligations of the Parties hereto shall be governed, construed and interpreted in accordance with the laws of the State of Delaware, without giving effect to principles of conflicts of law. The Parties submit to the jurisdiction of the state and federal courts in San Diego, California, and agree that any legal action or proceeding relating to this Agreement may be brought in those courts.
- d. This Agreement and the Securities Purchase Agreement, Note, Warrant, and any other documents entered into between in connection with the aforementioned documents constitute the entire set of agreements among the Parties hereto with respect to the subject matter hereof and thereof.
- e. [Intentionally Omitted].
- f. The headings in this Agreement are for convenience of reference only and shall not limit or otherwise affect the meaning hereof.
- g. This Agreement may be executed in two or more counterparts, all of which taken together shall constitute one instrument. Execution and delivery of this Agreement by exchange of facsimile copies bearing the facsimile signature of a Party shall constitute a valid and binding execution and delivery of this Agreement by such Party. Such facsimile copies shall constitute enforceable original documents.

h. Each Party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as the other Party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

i. All consents and other determinations to be made by the Holder pursuant to this Agreement shall be made, unless otherwise specified in this Agreement, by the Holder holding a majority of the Piggy-Back Registrable Securities.

j. The language used in this Agreement will be deemed to be the language chosen by the Parties to express their mutual intent and no rules of strict construction will be applied against any Party.

k. The Company hereby represents to the Holder that: (i) it has voluntarily entered into this Agreement of its own freewill, (ii) it is not entering into this Agreement under economic duress, (iii) the terms of this Agreement are reasonable and fair to the Company, and (iv) the Company has had independent legal counsel of its own choosing review this Agreement, advise the Company with respect to this Agreement, and represent the Company in connection with its entering into this Agreement.

l. Notwithstanding anything in this Agreement to the contrary, the Parties hereto hereby acknowledge and agree to the following: (i) the Holder makes no representations or covenants that it will not engage in trading in the securities of the Company; (ii) the Company has not and shall not provide material non-public information to the Holder unless prior thereto the Holder shall have executed a written agreement regarding the confidentiality and use of such information; and (iii) the Company understands and confirms that the Holder will be relying on the acknowledgements set forth in clauses (i) through (iii) above if the Holder effects any transactions in the securities of the Company.

12. Waiver.

The Holder’s delay or failure at any time or times hereafter to require strict performance by Company of any undertakings, agreements or covenants shall not waive, affect, or diminish any right of the Holder under this Agreement to demand strict compliance and performance herewith. Any waiver by the Holder of any breach under this Agreement (a “RRA Breach”) shall not waive or affect any other RRA Breach, whether such RRA Breach is prior or subsequent thereto and whether of the same or a different type. None of the undertakings, agreements and covenants of the Company contained in this Agreement, and no RRA Breach, shall be deemed to have been waived by the Holder, nor may this Agreement be amended, changed or modified, unless such waiver, amendment, change or modification is evidenced by an instrument in writing specifying such waiver, amendment, change or modification and signed by the Holder.

13. Payment Of Liquidated Damages.

With respect to any liquidated damages or other fees incurred herein by the Company for failure to act in a timely manner, the Holder reserves the rights to take payment of such amounts in cash or in Common Stock priced at the Conversion Price (as defined in the Note).

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties hereto have caused this Registration Rights Agreement to be duly executed on the day and year first above written.

THE COMPANY:

RESPIRERX PHARMACEUTICALS INC.

By: _____
Name: Jeff Margolis
Title: Senior Vice President, Chief Financial Officer, Treasurer
and Secretary
Address: 126 Valley Road, Suite C
Glen Rock, New Jersey 07452

HOLDER:

«Investor»

(entity name, if applicable)

By: _____
Name: «Investor_Signator»
Title: «Investor_title»
Address:«Investor_Address»
«Investor_City», «Investor_State» «Investor_Zip»

[End of Exhibit B]

PIGGY-BACK REGISTRATION RIGHTS AGREEMENT

THIS PIGGY-BACK REGISTRATION RIGHTS AGREEMENT (this “Agreement”), dated as «Closing_Date» is made by and between RespireRx Pharmaceuticals Inc., a Delaware corporation (the “Company”), and «Investor» a «State_of_Incorp» «Type_of_Entity» (the “Holder”). The Company and the Holder are hereinafter sometimes collectively referred to as the “Parties” and each a “Party” to this Agreement.

RECITALS

WHEREAS, the Company’s Board of Directors (the “Board”) has unanimously approved, upon the terms and subject to the conditions of, that certain Securities Purchase Agreement, of even date herewith, by and between the Holder and the Company (the “Securities Purchase Agreement”), the Company has agreed to issue and sell to Holder the Note (as defined in the Securities Purchase Agreement) (the “Note”) and Warrant (as defined in the Securities Purchase Agreement) (the “Warrant”), to the Holder; and

WHEREAS, to induce the Holder to execute and deliver the Securities Purchase Agreement and this Agreement, the Company has agreed to provide certain piggy-back registration rights under the Securities Act of 1933, as amended (the “Securities Act”) and the rules and regulations promulgated thereunder, and applicable state securities laws, with respect to the Piggy-Back Registrable Securities (as defined herein).

NOW, THEREFORE, for and in consideration of the foregoing premises, the agreements and covenants herein contained, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company and the Holder, intending to be legally bound, hereby agree as follows:

1. Definitions. As used in this Agreement, the following terms shall have the following meanings:

- a. [Intentionally Omitted].
- b. “Effective Date” shall mean the date the SEC declares the Registration Statement effective and the Company has filed all necessary amendments, including the letter to request accelerated effectiveness and the Prospectus covering the resale of Piggy-Back Registrable Securities.
- c. “Filing Date” shall mean the date the Registration Statement has been filed with the SEC (as determined by EDGAR) and no stop order of acceptance has been issued by the SEC.
- d. “Person” means a corporation, a limited liability company, an association, a partnership, an organization, a business, an individual, a governmental or political subdivision thereof or a governmental agency.
- e. “Principal Market” means either the NYSE American, the Nasdaq Global Select Market, the Nasdaq Global Market, the Nasdaq Stock Capital Market, OTCQX® Best Market, the OTCQB® Venture Market or the OTC Pink Market, whichever is the principal market on which the Securities is listed or quoted.
- f. “Purchase Amount” means the Purchase Price, as such term is defined in the Securities Purchase Agreement.
- g. “Register”, “Registered” and “Registration” refer to a registration effected by preparing and filing with the SEC one or more Registration Statements in compliance with the Securities Act and/or pursuant to Rule 415 under the Securities Act or any successor rule providing for among other securities, the Piggy-Back Registrable Securities.
- h. “Piggy-Back Registrable Securities” means the Conversion Shares (as defined in the Securities Purchase Agreement) (the “Conversion Share”), Warrant Shares (as defined in the Securities Purchase Agreement) (the “Warrant Shares”), all other shares of Common Stock issued or issuable pursuant to the Securities Purchase Agreement, and any shares of capital stock issued or issuable with respect to such Note, Conversion Shares, Warrant, or Warrant Shares as a result of any stock split, stock dividend, recapitalization, exchange or similar event or otherwise, which have not been (x) included in a Registration Statement that has been declared effective by the SEC, (y) sold under circumstances meeting all of the applicable conditions of Rule 144, promulgated under the Securities Act or (z) saleable without limitation as to time, manner and volume pursuant to Rule 144(k) (or any similar provision then in force) under the Securities Act.

i. “Registration Statement” means a registration statement of the Company filed with the SEC under the Securities Act.

j. “SEC” means the United States Securities and Exchange Commission.

All capitalized terms used but not defined in this Agreement shall have the meaning ascribed to them in the Securities Purchase Agreement; provided however, that any references to Conversion Price shall have the meaning ascribed to it in the Note (the “Conversion Price”).

2. Registration.

a. Piggy-Back Registration. With respect to only one of the first three times the Company files a Registration Statement under the Securities Act, and at the request of the Holder, the Company shall use its commercially reasonable efforts, to the extent permissible under U.S. securities laws and the rules and regulations thereunder, to include the Piggy-Back Registrable Securities in such Registration Statement with the intention of covering the resale of all of the Piggy-Back Registrable Securities at prevailing market prices (and not fixed prices). The Company shall, to the extent permissible by U.S. securities laws and the rules and regulations thereunder initially register for resale all of the Piggy-Back Registrable Securities, or an amount equal to the maximum amount allowed under the applicable rule or rules as interpreted by the SEC. In the event the Company cannot register the Piggy-Back Registrable Securities, due to the remaining number of authorized shares (including shares held in the share reservation established for the benefit of the Holder) of Common Stock being insufficient, the Company will use its best efforts to register the maximum number of shares it can, based upon the remaining balance of authorized shares (including shares held in the share reservation established for the benefit of the Holder) and will use its best efforts to increase the number of its authorized shares as soon as reasonably practicable.

b. The Company shall use its commercially reasonable efforts, if it elects to file a Registration Statement and to the extent permissible under U.S. securities laws, to have the Registration Statement filed with the SEC within forty-five (45) days following Holder’s request for the inclusion of the Piggy-Back Registrable Securities in such Registration Statement (the “Filing Deadline”).

Notwithstanding the foregoing, failure to file by the Filing Deadline shall not constitute an event of default under the Note to the extent any delay in the filing of the Registration Statement occurs because of an act of, or a failure to act or to act timely by the Holder or is otherwise solely attributable to the Holder.

The Company acknowledges that its failure to have the Registration Statement filed by the Filing Deadline will cause the Holder to suffer irreparable harm, and, that damages will be difficult to ascertain. Accordingly, the Parties agree that it is appropriate that the failure to file by the Filing Deadline shall constitute an event of default under Section 3.3 of the Note. The availability of any remedies hereunder and thereunder shall not relieve the Company from its obligations to register the Piggy-Back Registrable Securities and deliver the Piggy-Back Registrable Securities pursuant to the terms of this Agreement and the Securities Purchase Agreement.

c. The Company shall use its efforts and take all available steps to have the Registration Statement declared effective by the SEC within ninety (90) calendar days after the Filing Date (the “Effective Deadline”). If the Registration Statement covering the Piggy-Back Registrable Securities to be filed by the Company pursuant to Section 2(a) hereof has not become effective by the Effective Deadline, then it shall constitute an event of default under Section 3.3 of the Note.

If the Registration Statement covering the Piggy-Back Registrable Securities to be filed by the Company pursuant to Section 2(a) hereof has become effective, and, thereafter, the Holder’s right to sell is suspended, for any reason, then the Company shall pay the Holder the sum of one percent (1%) of the Purchase Amount plus interest and penalties due to the Holder under the Note for each thirty (30) calendar day period, pro rata, compounded annually, following the suspension, until such suspension ceases (the “Suspension Damages”). The Suspension Damages shall continue until the obligation is fulfilled and shall be paid within five (5) business days after each thirty (30) day period, or portion thereof, until such suspension is released. The Suspension Damages shall be paid, at the Holder’s option, in cash or shares of the Company’s common stock, par value \$0.001, priced at the Conversion Price (as defined in the Note), or portion thereof. Failure of the Company to make payment within said five (5) business days after each thirty (30) day period shall be considered a breach of this Agreement and an event of default under Section 3.3 of the Note.

Notwithstanding the foregoing, the amounts payable by the Company pursuant to this Section 2(c) shall not be payable to the extent any delay in the effectiveness of the Registration Statement or any suspension of the effectiveness occurs because of an act of, or a failure to act or to act timely by the Holder or is otherwise solely attributable to the Holder.

The Company acknowledges that its failure to have the Registration Statement become effective by the Effective Deadline or to permit the suspension of the effectiveness of the Registration Statement, will cause the Holder to suffer irreparable harm and, that damages will be difficult to ascertain. Accordingly, the Parties agree that it is appropriate to include in this Agreement a provision for liquidated damages. The Parties acknowledge and agree that the liquidated damages provision set forth in this Section 2(c) represents the Parties' good faith effort to quantify such damages and, as such, agree that the form and amount of such liquidated damages are reasonable and will not constitute a penalty. The payment of liquidated damages shall not relieve the Company from its obligations to register the Piggy-Back Registrable Securities and deliver the Piggy-Back Registrable Securities pursuant to the terms of this Agreement and the Securities Purchase Agreement.

3. Related Obligations.

At such time as the Company is obligated to prepare and file a Registration Statement with the SEC pursuant to Section 2(a) hereof, the Company will use its best efforts to effect the registration of the Piggy-Back Registrable Securities in accordance with the intended method of disposition thereof and, with respect thereto, the Company shall have the following obligations:

a. The Company shall use its best efforts to cause such Registration Statement relating to the Piggy-Back Registrable Securities to become effective within ninety (90) calendar days after the Filing Date and shall keep such Registration Statement effective pursuant to Rule 415 under the Securities Act until the date on which the Holder shall have sold all the Piggy-Back Registrable Securities (the "Registration Period"), which Registration Statement (including any amendments or supplements thereto and prospectuses contained therein) shall, as of the date thereof, not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein, or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading.

b. The Company shall prepare and file with the SEC such amendments (including post-effective amendments) and supplements to a Registration Statement and the prospectus used in connection with such Registration Statement, which prospectus is to be filed pursuant to Rule 424 under the Securities Act, as may be necessary to keep such Registration Statement effective during the Registration Period, and, during such period, comply with the provisions of the Securities Act with respect to the disposition of all Piggy-Back Registrable Securities of the Company covered by such Registration Statement until such time as all of such Piggy-Back Registrable Securities shall have been disposed of in accordance with the intended methods of disposition by the Holder as set forth in such Registration Statement (which shall be at prevailing market prices, and not fixed prices). In the event the number of shares available under a Registration Statement filed pursuant to this Agreement is at any time insufficient to cover all of the Piggy-Back Registrable Securities, the Company shall amend such Registration Statement, or file a new Registration Statement (on the short form available therefor, if applicable), or both, so as to cover all of the Piggy-Back Registrable Securities, in each case, as soon as practicable, but in any event within thirty (30) calendar days after the necessity therefor arises (based on the total number of Piggy-Back Registrable Securities). The Company shall use its best efforts to cause such amendment and/or new Registration Statement to become effective as soon as practicable following the filing thereof.

c. The Company shall furnish to the Holder whose Piggy-Back Registrable Securities are included in any Registration Statement and its legal counsel without charge and upon request (i) promptly after the same is prepared and filed with the SEC at least one copy of such Registration Statement and any amendment(s) thereto, including financial statements and schedules, all documents incorporated therein by reference and all exhibits, the prospectus included in such Registration Statement (including each preliminary prospectus) and, with regards to such Registration Statement(s), any correspondence by or on behalf of the Company to the SEC or the staff of the SEC and any correspondence from the SEC or the staff of the SEC to the Company or its representatives, (ii) upon the effectiveness of any Registration Statement, a copy of the prospectus included in such Registration Statement and all amendments and supplements thereto (or such other number of copies as the Holder may reasonably request) and (iii) such other documents, including copies of any preliminary or final prospectus, as the Holder may reasonably request from time to time in order to facilitate the disposition of the Piggy-Back Registrable Securities. The Company filing the documents described in this paragraph through EDGAR shall constitute delivery.

d. The Company shall use reasonable efforts to (i) register and qualify the Piggy-Back Registrable Securities covered by a Registration Statement under the applicable securities or “blue sky” laws of such states of the United States as reasonably specified by the Holder; (ii) prepare and file in those jurisdictions, such amendments (including post-effective amendments) and supplements to such registrations and qualifications as may be necessary to maintain the effectiveness thereof during the Registration Period; (iii) take such other actions as may be necessary to maintain such registrations and qualifications in effect at all times during the Registration Period; and (iv) take all other actions reasonably necessary or advisable to qualify the Piggy-Back Registrable Securities for sale in such jurisdictions; provided, however, that the Company shall not be required in connection therewith or as a condition thereto to (x) qualify to do business in any jurisdiction where it would not otherwise be required to qualify but for this Section 3(d), (y) subject itself to general taxation in any such jurisdiction, or (z) file a general consent to service of process in any such jurisdiction. The Company shall promptly notify the Holder who holds Piggy-Back Registrable Securities of the receipt by the Company of any notification with respect to the suspension of the registration or qualification of any of the Piggy-Back Registrable Securities for sale under the securities or “blue sky” laws of any jurisdiction in the United States or its receipt of actual notice of the initiation or threatening of any proceeding for such purpose.

e. Upon the happening of any event as a result of which the prospectus included in a Registration Statement, as then in effect, would then contain an untrue statement of a material fact or omission to state a material fact, which would otherwise be required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading; and, as a result, the prospectus is required to be supplemented or as a result of which the Registration Statement is required to be amended (“Registration Default”), the Company shall use all diligent efforts to promptly prepare any necessary supplement to such prospectus or amendment to such Registration Statement and take any other necessary steps to cure the Registration Default, and deliver one (1) copy of such supplement or amendment to Holder (or such other number of copies as Holder may reasonably request; delivery via EDGAR shall constitute delivery). Failure to cure the Registration Default within five (5) business days shall result in the Company paying liquidated damages of one percent (1%) of the Purchase Amount for each thirty (30) calendar day period or portion thereof, beginning on the date of suspension. The Company shall also promptly notify Holder in writing (i) when a prospectus or any prospectus supplement or post-effective amendment has been filed, and when a Registration Statement or any post-effective amendment has become effective (notification of such effectiveness shall be delivered to Holder by facsimile on the same day of such effectiveness and by overnight mail); (ii) in the event the Registration Statement is no longer effective; or (iii) the Registration Statement is stale for a period of more than five (5) trading days as a result of the Company’s failure to timely file its financials with the SEC.

The Company acknowledges that its failure to cure the Registration Default within five (5) business days will cause the Holder irreparable harm, and that damages will be difficult to ascertain. Accordingly, the Parties agree that it is appropriate to include in this Agreement a provision for liquidated damages. The Parties acknowledge and agree that the liquidated damages provision set forth in this Section 3(e) represents the Parties’ good faith effort to quantify such damages and, as such, agree that the form and amount of such liquidated damages are reasonable and will not constitute a penalty.

It is the intention of the Parties that interest payable under any of the terms of this Agreement shall not exceed the maximum amount permitted under any applicable law. If a law, which applies to this Agreement which sets the maximum interest amount, is finally interpreted so that the interest in connection with this Agreement exceeds the permitted limits, then: (1) any such interest shall be reduced by the amount necessary to reduce the interest to the permitted limit; and (2) any sums already collected (if any) from the Company which exceed the permitted limits will be refunded to the Company. The Holder may choose to make this refund by reducing the amount that the Company owes under this Agreement or by making a direct payment to the Company. If a refund reduces the amount that the Company owes the Holder, the reduction will be treated as a partial payment. In the event that any provision of this Agreement is held by a court of competent jurisdiction to be excessive in scope or otherwise invalid or unenforceable, such provision shall be adjusted rather than voided, if possible, so that it is enforceable to the maximum extent possible, and the validity and enforceability of the remaining provisions of this Agreement will not in any way be affected or impaired thereby.

f. The Company shall use its best efforts to prevent the issuance of any stop order or other suspension of effectiveness of a Registration Statement, or the suspension of the qualification of any of the Piggy-Back Registrable Securities for sale in any jurisdiction and, if such an order or suspension is issued, to obtain the withdrawal of such order or suspension at the earliest possible moment and to notify the Holder of the issuance of such order and the resolution thereof. The Company will immediately notify the Holder of a proceeding, or threat of proceeding, the result of which could affect the effectiveness of the registration statement.

g. [RESERVED]

h. [RESERVED]

i. The Company shall hold in confidence and not make any disclosure of information concerning the Holder unless (i) disclosure of such information is necessary to comply with federal or state securities laws, (ii) the disclosure of such information is necessary to avoid or correct a misstatement or omission in any Registration Statement, (iii) the release of such information is ordered pursuant to a subpoena or other final, non-appealable order from a court or governmental body of competent jurisdiction, or (iv) such information has been made generally available to the public other than by disclosure in violation of this Agreement or any other agreement. The Company agrees that it shall, upon learning that disclosure of such information concerning a Holder is sought in or by a court or governmental body of competent jurisdiction or through other means, give prompt written notice to the Holder and allow the Holder, at the Holder's expense, to undertake appropriate action to prevent disclosure of, or to obtain a protective order for, such information.

j. The Company shall use its best efforts to secure designation and quotation of all the Piggy-Back Registrable Securities covered by any Registration Statement on the Principal Market, to the extent such is necessary for the Piggy-Back Registrable Securities to trade on such market. If, despite the Company's best efforts, the Company is unsuccessful in satisfying this obligation, it shall use its best efforts to cause all the Piggy-Back Registrable Securities covered by any Registration Statement to be listed on each other national securities exchange and automated quotation system, if any, on which securities of the same class or series issued by the Company are then listed, if any, if the listing of such Piggy-Back Registrable Securities is then permitted under the rules of such exchange or system. If, despite the Company's best efforts, the Company is unsuccessful in satisfying its obligation in this Section, it will use its best efforts to secure the inclusion for quotation with the OTC Pink Sheets. The Company shall pay all fees and expenses in connection with satisfying its obligation under this Section 3(j).

k. The Company shall cooperate with the Holder to facilitate the timely preparation and delivery of book-entry or street name shares(not bearing any restrictive legend) representing the Piggy-Back Registrable Securities to be offered pursuant to a Registration Statement and enable such certificates to be in such denominations or amounts, as the case may be, as the Holder may reasonably request and registered in such names of the Persons who shall acquire such Piggy-Back Registrable Securities from the Holder, as the Holder may request.

l. The Company shall provide a transfer agent for all the Piggy-Back Registrable Securities not later than the Effective Date of the first Registration Statement filed pursuant hereto.

m. If requested by the Holder, the Company shall (i) as soon as reasonably practical, incorporate in a prospectus supplement or post-effective amendment such information as Holder reasonably determines should be included therein relating to the sale and distribution of Piggy-Back Registrable Securities, including, without limitation, information with respect to the Note, Conversion Shares, Warrant, and Warrant Shares; (ii) make all required filings of such prospectus supplement or post-effective amendment as soon as notified of the matters to be incorporated in such prospectus supplement or post-effective amendment; and (iii) supplement or make amendments to any Registration Statement if reasonably requested by Holder.

n. The Company shall use its best efforts to cause the Piggy-Back Registrable Securities covered by the applicable Registration Statement to be registered with or approved by such other governmental agencies or authorities as may be necessary to consummate the disposition of such Piggy-Back Registrable Securities.

o. [RESERVED]

p. The Company shall otherwise use its best efforts to comply with all applicable rules and regulations of the SEC in connection with any registration hereunder.

q. Within five (5) business days after the Registration Statement which includes the Piggy-Back Registrable Securities is declared effective by the SEC, the Company shall deliver to the Holder confirmation that such Registration Statement has been declared effective by the SEC.

r. After the SEC declares the Registration Statement cleared of all comments and the Company's acceptance of the effectiveness of the Registration Statement, the Company shall file a prospectus covering the resale of the Piggy-Back Registrable Securities (the "Prospectus") within five (5) trading days.

s. The Company shall take all other reasonable actions necessary to expedite and facilitate disposition by the Holder of the Piggy-Back Registrable Securities pursuant to a Registration Statement.

4. Obligations Of The Holder.

a. At least five (5) calendar days prior to the first anticipated filing date of a Registration Statement, the Company shall notify the Holder in writing of the information the Company requires from the Holder. The Holder covenants and agrees that, in connection with any resale of Piggy-Back Registrable Securities by it pursuant to a Registration Statement, it shall comply with the "Plan of Distribution" section of the current prospectus relating to such Registration Statement, and such "Plan of Distribution" shall include Holder's resale of the Piggy-Back Registrable Securities at prevailing market prices (and not fixed prices).

b. The Holder, by the Holder's acceptance of the Piggy-Back Registrable Securities, agrees to cooperate with the Company as reasonably requested by the Company in connection with the preparation and filing of any Registration Statement hereunder and in responding to SEC comments in connection therewith.

c. The Holder agrees that, upon receipt of any notice from the Company of the happening of any event of the kind described in Section 3(f) hereof or the first sentence of Section 3(e) hereof, the Holder will immediately discontinue disposition of Piggy-Back Registrable Securities pursuant to any Registration Statement(s) covering such Piggy-Back Registrable Securities until Holder's receipt of the copies of the supplemented or amended prospectus contemplated by Section 3(f) hereof or the first sentence of Section 3(e) hereof.

5. Expenses Of Registration.

All expenses, including, without limitation, all registration, listing and qualifications fees, printing and accounting fees, and reasonable fees and disbursements of counsel for the Company shall be paid by, and are the sole obligation of, the Company.

6. Indemnification.

In the event any Piggy-Back Registrable Securities are included in a Registration Statement under this Agreement:

a. To the fullest extent permitted by law, the Company will, and hereby agrees to, indemnify, hold harmless and defend the Holder who holds such Piggy-Back Registrable Securities, the directors, officers, partners, employees, agents, representatives of, and each Person, if any, who controls Holder within the meaning of the Securities Act or the Exchange Act) (each, an "Indemnified Person"), against any losses, claims, damages, liabilities, judgments, fines, penalties, charges, costs, reasonable attorneys' fees, amounts paid in settlement or reasonable expenses, joint or several (collectively, "Claims"), incurred in investigating, preparing or defending any action, claim, suit, inquiry, proceeding, investigation or appeal taken from the foregoing by or before any court or governmental, administrative or other regulatory agency, body or the SEC, whether pending or threatened, whether or not an indemnified party is or may be a party thereto (Indemnified Damages"), to which any of them may become subject insofar as such Claims (or actions or proceedings, whether commenced or threatened, in respect thereof) arise out of or are based upon: (i) any untrue statement or alleged untrue statement of a material fact in a Registration Statement or any post-effective amendment thereto or in any filing made in connection with the qualification of the Note under the securities or other "blue sky" laws of any jurisdiction in which Piggy-Back Registrable Securities are offered ("Blue Sky Filing"), or the omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which the statements therein were made, not misleading, (ii) any untrue statement or alleged untrue statement of a material fact contained in the final prospectus (as amended or supplemented, if the Company files any amendment thereof or supplement thereto with the SEC) or the omission or alleged omission to state therein any material fact necessary to make the statements made therein, in light of the circumstances under which the statements therein were made, not misleading, or (iii) any violation or alleged violation by the Company of the Securities Act, the Exchange Act, any other law, including, without limitation, any state securities law, or any rule or regulation thereunder relating to the offer or sale of the Piggy-Back Registrable Securities pursuant to a Registration Statement (the matters in the foregoing clauses (i) through (iii) being, collectively, "Violations"). Subject to the restrictions set forth in Section 6(c) hereof with respect to the number of legal counsel, the Company shall reimburse the Holder and each such controlling person, promptly as such expenses are incurred and are due and payable, for any reasonable legal fees or other reasonable expenses incurred by them in connection with investigating or defending any such Claim. Notwithstanding anything to the contrary contained herein, the indemnification agreement contained in this Section 6(a): (i) shall not apply to a Claim arising out of or based upon a Violation committed by any Indemnified Person or which occurs in reliance upon and in conformity with information furnished in writing to the Company by any Indemnified Person expressly for use in connection with the preparation of the Registration Statement or any such amendment thereof or supplement thereto, if such prospectus were timely made available by the Company pursuant to Section 3(c) hereof; (ii) shall not be available to the extent such Claim is based on (a) a failure of the Holder to deliver or to cause to be delivered the prospectus made available by the Company or (b) the Indemnified Person's use of an incorrect prospectus despite being promptly advised in advance by the Company in writing not to use such incorrect prospectus; and (iii) shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of the Company, which consent shall not be unreasonably withheld. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of the Indemnified Person and shall survive the resale of the Piggy-Back Registrable Securities by the Holder pursuant to the Registration Statement.

b. Promptly after receipt by an Indemnified Person or Indemnified Party under this Section 6 of notice of the commencement of any action or proceeding (including any governmental action or proceeding) involving a Claim, such Indemnified Person or Indemnified Party shall, if a Claim in respect thereof is to be made against any indemnifying party under this Section 6, deliver to the indemnifying party a written notice of the commencement thereof, and the indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume control of the defense thereof with counsel mutually satisfactory to the indemnifying party and the Indemnified Person or the Indemnified Party, as the case may be; provided, however, that an Indemnified Person or Indemnified Party shall have the right to retain its own counsel with the fees and expenses to be paid by the indemnifying party, if, in the reasonable opinion of counsel retained by the indemnifying party, the representation by such counsel of the Indemnified Person or Indemnified Party and the indemnifying party would be inappropriate due to actual or potential differing interests between such Indemnified Person or Indemnified Party and any other party represented by such counsel in such proceeding. The indemnifying party shall pay for only one separate legal counsel for the Indemnified Persons or the Indemnified Parties, as applicable. Such counsel shall be selected by the Company if the Company is the indemnifying party. The Indemnified Party or Indemnified Person shall cooperate fully with the indemnifying party in connection with any negotiation or defense of any such action or claim by the indemnifying party and shall furnish to the indemnifying party all information reasonably available to the Indemnified Party or Indemnified Person which relates to such action or claim. The indemnifying party shall keep the Indemnified Party or Indemnified Person fully apprised at all times as to the status of the defense or any settlement negotiations with respect thereto. No indemnifying party shall be liable for any settlement of any action, claim or proceeding effected without its written consent, provided, however, that the indemnifying party shall not unreasonably withhold, delay or condition its consent. No indemnifying party shall, without the consent of the Indemnified Party or Indemnified Person, consent to entry of any judgment or enter into any settlement or other compromise which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party or Indemnified Person of a release from all liability in respect to such Claim. Following indemnification as provided for hereunder, the indemnifying party shall be subrogated to all rights of the Indemnified Party or Indemnified Person with respect to all third parties, firms or corporations relating to the matter for which indemnification has been made. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action shall not relieve such indemnifying party of any liability to the Indemnified Person or Indemnified Party under this Section 6, except to the extent that the indemnifying party is actually prejudiced in its ability to defend such action.

c. The indemnification required by this Section 6 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received or Indemnified Damages are incurred.

d. The indemnity agreements contained herein shall be in addition to (i) any cause of action or similar right of the Indemnified Party or Indemnified Person against the indemnifying party or others, and (ii) any liabilities the indemnifying party may be subject to pursuant to the law.

7. Contribution.

To the extent any indemnification by an indemnifying party is prohibited or limited by law, the indemnifying party agrees to make the maximum contribution with respect to any amounts for which it would otherwise be liable under Section 6 hereof to the fullest extent permitted by law; provided, however, that: (i) no contribution shall be made under circumstances where the maker would not have been liable for indemnification under the fault standards set forth in Section 6 hereof; (ii) no seller of Piggy-Back Registrable Securities guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any seller of Piggy-Back Registrable Securities who was not guilty of fraudulent misrepresentation; and (iii) contribution by any seller of Piggy-Back Registrable Securities shall be limited in amount to the net amount of proceeds received by such seller from the sale of such Piggy-Back Registrable Securities.

8. Reports Under The Exchange Act.

With a view to making available to the Holder the benefits of Rule 144 under the Securities Act or any similar rule or regulation of the SEC that may at any time permit the Investors to sell securities of the Company to the public without registration (“Rule 144”) the Company agrees to take commercially reasonable efforts to:

- a. make and keep public information available, as those terms are understood and defined in Rule 144;
- b. file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act so long as the Company remains subject to such requirements and the filing of such reports and other documents as are required by the applicable provisions of Rule 144; and
- c. furnish to the Holder so long as the Holder owns Piggy-Back Registrable Securities, promptly upon request, (i) a written statement by the Company that it has complied with the reporting requirements of Rule 144, the Securities Act and the Exchange Act, (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company, and (iii) such other information as may be reasonably requested to permit the Investors to sell such securities pursuant to Rule 144 without registration.

9. No Assignment Of Registration Rights.

The registration rights and obligations under this Agreement shall not be assignable.

10. Amendment Of Registration Rights.

Provisions of this Agreement may be amended and the observance thereof may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of both the Company and the Holder of the Piggy-Back Registrable Securities. Any amendment or waiver effected in accordance with this Section 10 shall be binding upon the Holder and the Company.

11. Miscellaneous.

- a. Any notices, consents, waivers or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered (i) upon receipt, when delivered personally; (ii) upon receipt, when sent by facsimile (provided a confirmation of transmission is mechanically or electronically generated and kept on file by the sending Party); or (iii) one (1) day after deposit with a nationally recognized overnight delivery service, in each case properly addressed to the Party to receive the same. The addresses for such communications are as set forth on the signature page to this Agreement. Each Party shall provide five (5) business days prior notice to the other Party of any change in address, phone number or facsimile number.
- b. Failure of any Party to exercise any right or remedy under this Agreement or otherwise, or delay by a Party in exercising such right or remedy, shall not operate as a waiver thereof.
- c. This Agreement and all acts and transactions pursuant hereto and the rights and obligations of the Parties hereto shall be governed, construed and interpreted in accordance with the laws of the State of Delaware, without giving effect to principles of conflicts of law. The Parties submit to the jurisdiction of the state and federal courts in San Diego, California, and agree that any legal action or proceeding relating to this Agreement may be brought in those courts.

d. This Agreement and the Securities Purchase Agreement, Note, Warrant, and any other documents entered into between in connection with the aforementioned documents constitute the entire set of agreements among the Parties hereto with respect to the subject matter hereof and thereof.

e. [Intentionally Omitted].

f. The headings in this Agreement are for convenience of reference only and shall not limit or otherwise affect the meaning hereof.

g. This Agreement may be executed in two or more counterparts, all of which taken together shall constitute one instrument. Execution and delivery of this Agreement by exchange of facsimile copies bearing the facsimile signature of a Party shall constitute a valid and binding execution and delivery of this Agreement by such Party. Such facsimile copies shall constitute enforceable original documents.

h. Each Party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as the other Party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

i. All consents and other determinations to be made by the Holder pursuant to this Agreement shall be made, unless otherwise specified in this Agreement, by the Holder holding a majority of the Piggy-Back Registrable Securities.

j. The language used in this Agreement will be deemed to be the language chosen by the Parties to express their mutual intent and no rules of strict construction will be applied against any Party.

k. The Company hereby represents to the Holder that: (i) it has voluntarily entered into this Agreement of its own freewill, (ii) it is not entering into this Agreement under economic duress, (iii) the terms of this Agreement are reasonable and fair to the Company, and (iv) the Company has had independent legal counsel of its own choosing review this Agreement, advise the Company with respect to this Agreement, and represent the Company in connection with its entering into this Agreement.

l. Notwithstanding anything in this Agreement to the contrary, the Parties hereto hereby acknowledge and agree to the following: (i) the Holder makes no representations or covenants that it will not engage in trading in the securities of the Company; (ii) the Company has not and shall not provide material non-public information to the Holder unless prior thereto the Holder shall have executed a written agreement regarding the confidentiality and use of such information; and (iii) the Company understands and confirms that the Holder will be relying on the acknowledgements set forth in clauses (i) through (iii) above if the Holder effects any transactions in the securities of the Company.

12. Waiver.

The Holder’s delay or failure at any time or times hereafter to require strict performance by Company of any undertakings, agreements or covenants shall not waive, affect, or diminish any right of the Holder under this Agreement to demand strict compliance and performance herewith. Any waiver by the Holder of any breach under this Agreement (a “RRA Breach”) shall not waive or affect any other RRA Breach, whether such RRA Breach is prior or subsequent thereto and whether of the same or a different type. None of the undertakings, agreements and covenants of the Company contained in this Agreement, and no RRA Breach, shall be deemed to have been waived by the Holder, nor may this Agreement be amended, changed or modified, unless such waiver, amendment, change or modification is evidenced by an instrument in writing specifying such waiver, amendment, change or modification and signed by the Holder.

13. Payment Of Liquidated Damages.

With respect to any liquidated damages or other fees incurred herein by the Company for failure to act in a timely manner, the Holder reserves the rights to take payment of such amounts in cash or in Common Stock priced at the Conversion Price (as defined in the Note).

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties hereto have caused this Registration Rights Agreement to be duly executed on the day and year first above written.

THE COMPANY:

RESPIRERX PHARMACEUTICALS INC.

By: _____
Name: Jeff Margolis
Title: Senior Vice President, Chief Financial Officer, Treasurer
and Secretary
Address: 126 Valley Road, Suite C
Glen Rock, New Jersey 07452

HOLDER:

«Investor»

(entity name, if applicable)

By: _____
Name: «Investor_Signator»
Title: «Investor_title»
Address: «Investor_Address»
«Investor_City», «Investor_State» «Investor_Zip»

[End of Exhibit B]

NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES INTO WHICH THESE SECURITIES ARE CONVERTIBLE HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) AN OPINION OF COUNSEL (WHICH MAY BE THE LEGAL COUNSEL OPINION (AS DEFINED IN THE PURCHASE AGREEMENT)), IN A GENERALLY ACCEPTABLE FORM, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS (A) SOLD PURSUANT TO RULE 144 OR OTHER APPLICABLE EXEMPTION UNDER SAID ACT AND (B) AN OPINION OF COUNSEL IS PROVIDED (WHICH COUNSEL SHALL BE SELECTED BY THE HOLDER), IN A GENERALLY ACCEPTABLE FORM, THAT SUCH SALE IS PERMITTED UNDER RULE 144 OR OTHER APPLICABLE EXEMPTION UNDER SAID ACT. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES.”

Principal Amount: \$«Principal»

Issue Date: «Closing_Date»

Actual Amount of Purchase Price: \$«Purchase»

PROMISSORY NOTE

FOR VALUE RECEIVED, RESPIRERX PHARMACEUTICALS INC., a Delaware corporation (hereinafter called the “Borrower” or the “Company”) (Trading Symbol: RSPI), hereby promises to pay to the order of «Investor», a «State_of_Incorp» «Type_of_Entity», or registered assigns (the “Holder”), in the form of lawful money of the United States of America, the principal sum of \$«Principal», which amount is the \$«Purchase» actual amount of the purchase price (the “Consideration”) hereof plus an original issue discount in the amount of \$«OID» (the “OID”) (subject to adjustment herein) (the “Principal Amount”) and to pay interest on the unpaid Principal Amount hereof at the rate of ten percent (10%) (the “Interest Rate”) per annum with interest calculated on the basis of a 365-day year (with the understanding that the first nine months of interest shall be guaranteed and earned in full as of the Issue Date) from the date hereof (the “Issue Date”) until the same becomes due and payable, whether at maturity or upon acceleration or by prepayment or otherwise, as further provided herein. The maturity date shall be May 31, 2023 (the “Maturity Date”), and is the date upon which the principal sum, the OID, as well as any accrued and unpaid interest and other fees, shall be due and payable.

This Note may not be prepaid or repaid in whole or in part except as otherwise explicitly set forth herein.

Any Principal Amount or interest on this Note which is not paid when due shall bear interest at the rate of the lesser of (i) twenty-four percent (24%) per annum and (ii) the maximum amount permitted by law from the due date thereof until the same is paid (“Default Interest”).

All payments due hereunder (to the extent not converted into shares of common stock, \$0.001 par value per share, of the Borrower (the “Common Stock”) in accordance with the terms hereof) shall be made in lawful money of the United States of America. All payments shall be made at such address as the Holder shall hereafter give to the Borrower by written notice made in accordance with the provisions of this Note. Whenever any amount expressed to be due by the terms of this Note is due on any day which is not a business day, the same shall instead be due on the next succeeding day which is a business day and, in the case of any interest payment date which is not the date on which this Note is paid in full, the extension of the due date thereof shall not be taken into account for purposes of determining the amount of interest due on such date.

Each capitalized term used herein, and not otherwise defined, shall have the meaning ascribed thereto in that certain Securities Purchase Agreement, dated as of the Issue Date, pursuant to which this Note was originally issued (the “Purchase Agreement”). As used in this Note, the term “business day” shall mean any day other than a Saturday, Sunday or a day on which commercial banks in the city of New York, New York are authorized or required by law or executive order to remain closed. As used herein, the term “Trading Day” means any day that shares of Common Stock are listed for trading or quotation on the Principal Market (as defined in the Purchase Agreement), any tier of the OTC Markets, NASDAQ Stock Market, the New York Stock Exchange, or the NYSE American.

This Note is free from all taxes, liens, claims and encumbrances with respect to the issue thereof and shall not be subject to preemptive rights or other similar rights of shareholders of the Borrower and will not impose personal liability upon the holder thereof.

The following terms shall also apply to this Note:

ARTICLE I. CONVERSION RIGHTS

1.1 Conversion Right. The Holder shall have the right, at any time on or following the Issue Date, to convert all or any portion of the then outstanding and unpaid Principal Amount and interest (including any Default Interest) into fully paid and non-assessable shares of Common Stock, as such Common Stock exists on the Issue Date, or any shares of capital stock or other securities of the Borrower into which such Common Stock shall hereafter be changed or reclassified, at the Conversion Price (as defined below) determined as provided herein (a “Conversion”); *provided, however*, that notwithstanding anything to the contrary contained herein, the Holder shall not have the right to convert any portion of this Note, pursuant to Section 1 or otherwise, to the extent that after giving effect to such issuance after conversion as set forth on the applicable Notice of Conversion, the Holder (together with the Holder’s affiliates (the “Affiliates”), and any other Persons (as defined below) acting as a group together with the Holder or any of the Holder’s Affiliates (such Persons, “Attribution Parties”)), would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by the Holder and Attribution Parties shall, subject to the Beneficial Ownership Limitation, include the number of shares of Common Stock issuable upon conversion of this Note with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (i) conversion of the remaining, nonconverted portion of this Note beneficially owned by the Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 1.1, beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Holder is solely responsible for any schedules required to be filed in accordance therewith. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 1.1, in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as reflected in (A) the Company’s most recent periodic or annual report filed with the Commission, as the case may be, (B) a more recent public announcement by the Company or (C) a more recent written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding. “Trading Day” shall mean any day on which the Common Stock is tradable for any period on the Principal Market. Upon the written or oral request of a Holder, the Company shall within two Trading Days confirm orally and in writing to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Note, by the Holder or its Affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The “Beneficial Ownership Limitation” shall be 4.99% of the number of shares of the Common Stock outstanding at the time of the respective calculation hereunder. “Person” and “Persons” means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and any governmental entity or any department or agency thereof. The limitations contained in this paragraph shall apply to a successor holder of this Note. The number of Conversion Shares to be issued upon each conversion of this Note shall be determined by dividing the Conversion Amount (as defined below) by the applicable Conversion Price then in effect on the date specified in the notice of conversion, in the form attached hereto as Exhibit A (the “Notice of Conversion”), delivered to the Borrower or Borrower’s transfer agent by the Holder in accordance with Section 1.4 below; provided that the Notice of Conversion is submitted by facsimile or e-mail (or by other means resulting in, or reasonably expected to result in, notice) to the Borrower or Borrower’s transfer agent before 11:59 p.m., New York, New York time on such conversion date (the “Conversion Date”). The term “Conversion Amount” means, with respect to any conversion of this Note, the sum of (1) the Principal Amount of this Note to be converted in such conversion plus (2) at the Holder’s option, accrued and unpaid interest, if any, on such Principal Amount at the Interest Rate to the Conversion Date, plus (3) at the Holder’s option, Default Interest, if any, on the amounts referred to in the immediately preceding clauses (1) and/or (2).

1.2 Conversion Price.

(a) Calculation of Conversion Price. The per share conversion price into which Principal Amount and interest (including any Default Interest) under this Note shall be convertible into shares of Common Stock hereunder (the “Conversion Price”) shall equal \$0.0015. If at any time the Conversion Price as determined hereunder for any conversion would be less than the par value of the Common Stock, then at the sole discretion of the Holder, the Conversion Price hereunder may equal such par value for such conversion and the Conversion Amount for such conversion may be increased to include Additional Principal, where “Additional Principal” means such additional amount to be added to the Conversion Amount to the extent necessary to cause the number of conversion shares issuable upon such conversion to equal the same number of conversion shares as would have been issued had the Conversion Price not been adjusted by the Holder to the par value price. The Conversion Price is subject to equitable adjustments for stock splits (including reverse stock splits and forward stock splits), stock dividends or rights offerings by the Borrower relating to the Borrower’s securities or the securities of any subsidiary of the Borrower, combinations, recapitalization, reclassifications, extraordinary distributions and similar events. Holder shall be entitled but not required to deduct \$500.00 from the conversion amount in each Notice of Conversion to cover Holder’s fees associated with each Notice of Conversion.

1.3 Authorized and Reserved Shares. The Borrower covenants that at all times until the Note is satisfied in full, the Borrower will reserve from its authorized and unissued Common Stock a sufficient number of shares, free from preemptive rights, to provide for the issuance of a number of Conversion Shares equal to (i) the number of Conversion Shares issuable upon the full conversion of this Note (assuming no payment of Principal Amount or interest) as of any issue date (taking into consideration any adjustments to the Conversion Price pursuant to Section 2 hereof or otherwise) multiplied by (ii) one (1.0) (the “Reserved Amount”) up to a maximum Reserved Amount that is equal to or less than the authorized number of shares that remain available for issuance and are otherwise available for issuance. By purchasing this Note, Holder agrees to amend the reserve requirements as defined in any notes currently outstanding that were also outstanding prior to the issuance of this Note to conform to the reserve requirements of this Note. The Borrower represents that upon issuance, the Conversion Shares will be duly and validly issued, fully paid and non-assessable. The Borrower (i) acknowledges that it has irrevocably instructed its transfer agent to issue certificates for the Conversion Shares or instructions to have the Conversion Shares issued as contemplated by Section 1.4(f) hereof, and (ii) agrees that its issuance of this Note shall constitute full authority to its officers and agents who are charged with the duty of executing stock certificates or cause the Company to electronically issue shares of Common Stock to execute and issue the necessary certificates for the Conversion Shares or cause the Conversion Shares to be issued as contemplated by Section 1.4(f) hereof in accordance with the terms and conditions of this Note.

If, at any time the Borrower does not maintain the Reserved Amount it will be considered an Event of Default under this Note.

1.4 Method of Conversion.

(a) Mechanics of Conversion. This Note may be converted by the Holder in whole or in part, on any Trading Day, at any time on or following the Issue Date, by submitting to the Borrower or Borrower’s transfer agent a Notice of Conversion (by facsimile, e-mail or other reasonable means of communication dispatched on the Conversion Date prior to 11:59 p.m., New York, New York time). Any Notice of Conversion submitted after 11:59 p.m., New York, New York time, shall be deemed to have been delivered and received on the next Trading Day.

(b) Surrender of Note Upon Conversion. Notwithstanding anything to the contrary set forth herein, upon conversion of this Note in accordance with the terms hereof, the Holder shall not be required to physically surrender this Note to the Borrower unless the entire unpaid Principal Amount is so converted. The Holder and the Borrower shall maintain records showing the Principal Amount so converted and the dates of such conversions or shall use such other method, reasonably satisfactory to the Holder and the Borrower, so as not to require physical surrender of this Note upon each such conversion. In the event of any dispute or discrepancy, such records of the Borrower shall, *prima facie*, be controlling and determinative in the absence of manifest error. Notwithstanding the foregoing, if any portion of this Note is converted as aforesaid, the Holder may not transfer this Note unless the Holder first physically surrenders this Note to the Borrower, whereupon the Borrower will forthwith issue and deliver upon the order of the Holder a new Note of like tenor, registered as the Holder (upon payment by the Holder of any applicable transfer taxes) may request, representing in the aggregate the remaining unpaid Principal Amount of this Note. The Holder and any assignee, by acceptance of this Note, acknowledge and agree that, by reason of the provisions of this paragraph, following conversion of a portion of this Note, the unpaid and unconverted Principal Amount of this Note represented by this Note may be less than the amount stated on the face hereof.

(c) Payment of Taxes. The Borrower shall not be required to pay any tax which may be payable in respect of any transfer involved in the issue and delivery of shares of Common Stock or other securities or property on conversion of this Note in a name other than that of the Holder (or in street name), and the Borrower shall not be required to issue or deliver any such shares or other securities or property unless and until the person or persons (other than the Holder or the custodian in whose street name such shares are to be held for the Holder's account) requesting the issuance thereof shall have paid to the Borrower the amount of any such tax or shall have established to the satisfaction of the Borrower that such tax has been paid.

(d) Delivery of Common Stock Upon Conversion. Upon receipt by the Borrower from the Holder of a facsimile transmission or e-mail (or other reasonable means of communication) of a Notice of Conversion meeting the requirements for conversion as provided in this Section 1.4, the Borrower shall issue and deliver or cause to be issued and delivered to or upon the order of the Holder certificates for the Conversion Shares (or cause the electronic delivery of the Conversion Shares as contemplated by Section 1.4(f) hereof) within one (1) Trading Day after such receipt (the "Deadline") (and, solely in the case of conversion of the entire unpaid Principal Amount and interest (including any Default Interest) under this Note, surrender of this Note). If the Company shall fail for any reason or for no reason to issue to the Holder on or prior to the Deadline a certificate for the number of Conversion Shares or to which the Holder is entitled hereunder and register such Conversion Shares on the Company's share register or to credit the Holder's balance account with DTC (as defined below) for such number of Conversion Shares to which the Holder is entitled upon the Holder's conversion of this Note (a "Conversion Failure"), then, in addition to all other remedies available to the Holder, (i) the Company shall pay in cash to the Holder on each day after the Deadline and during such Conversion Failure an amount equal to 2.0% of the product of (A) the sum of the number of Conversion Shares not issued to the Holder on or prior to the Deadline and to which the Holder is entitled and (B) the closing sale price of the Common Stock on the Trading Day immediately preceding the last possible date which the Company could have issued such Conversion Shares to the Holder without violating this Section 1.4(d); and (ii) the Holder, upon written notice to the Company, may void its Notice of Conversion with respect to, and retain or have returned, as the case may be, any portion of this Note that has not been converted pursuant to such Notice of Conversion; provided that the voiding of a Notice of Conversion shall not affect the Company's obligations to make any payments which have accrued prior to the date of such notice. In addition to the foregoing, if on or prior to the Deadline the Company shall fail to issue and deliver a certificate to the Holder and register such Conversion Shares on the Company's share register or credit the Holder's balance account with DTC for the number of Conversion Shares to which the Holder is entitled upon the Holder's conversion hereunder or pursuant to the Company's obligation pursuant to clause (ii) below, and if on or after such Trading Day the Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of shares of Common Stock issuable upon such exercise that the Holder anticipated receiving from the Company, then the Company shall, within two (2) Trading Days after the Holder's request and in the Holder's discretion, either (i) pay cash to the Holder in an amount equal to the Holder's total purchase price (including brokerage commissions and other reasonable and customary out-of-pocket expenses, if any) for the shares of Common Stock so purchased (the "Buy-In Price"), at which point the Company's obligation to deliver such certificate (and to issue such Conversion Shares) or credit such Holder's balance account with DTC for such Conversion Shares shall terminate, or (ii) promptly honor its obligation to deliver to the Holder a certificate or certificates representing such Conversion Shares or credit such Holder's balance account with DTC and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock, times (B) the closing sales price of the Common Stock on the date of exercise. Nothing shall limit the Holder's right to pursue any other remedies available to it hereunder, at law or in equity, including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing the Conversion Shares (or to electronically deliver such Conversion Shares) upon the conversion of this Note as required pursuant to the terms hereof.

(e) Obligation of Borrower to Deliver Common Stock. At the time that the Holder submits the Notice of Conversion to the Borrower or Borrower's transfer agent, the Holder shall be deemed to be the holder of record of the Conversion Shares issuable upon such conversion, the outstanding Principal Amount and the amount of accrued and unpaid interest (including any Default Interest) under this Note shall be reduced to reflect such conversion, and, unless the Borrower defaults on its obligations under this Article I, all rights with respect to the portion of this Note being so converted shall forthwith terminate except the right to receive the Common Stock or other securities, cash or other assets, as herein provided, on such conversion. If the Holder shall have given a Notice of Conversion as provided herein, the Borrower's obligation to issue and deliver the certificates for the Conversion Shares (or cause the electronic delivery of the Conversion Shares as contemplated by Section 1.4(f) hereof) shall be absolute and unconditional, irrespective of the absence of any action by the Holder to enforce the same, any waiver or consent with respect to any provision thereof, the recovery of any judgment against any person or any action to enforce the same, any failure or delay in the enforcement of any other obligation of the Borrower to the holder of record, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by the Holder of any obligation to the Borrower, and irrespective of any other circumstance which might otherwise limit such obligation of the Borrower to the Holder in connection with such conversion. The Conversion Date specified in the Notice of Conversion shall be the Conversion Date so long as the Notice of Conversion is sent to the Borrower or Borrower's transfer agent before 11:59 p.m., New York, New York time, on such date.

(f) Delivery of Conversion Shares by Electronic Transfer. In lieu of delivering physical certificates representing the Conversion Shares issuable upon conversion hereof, provided the Borrower is participating in the Depository Trust Company (“DTC”) Fast Automated Securities Transfer or Deposit/Withdrawal at Custodian programs, upon request of the Holder and its compliance with the provisions contained in Section 1.1 and in this Section 1.4, the Borrower shall use its best efforts to cause its transfer agent to electronically transmit the Conversion Shares issuable upon conversion hereof to the Holder by crediting the account of Holder’s Prime Broker with DTC through its Deposit Withdrawal Agent Commission system.

1.5 Concerning the Shares. The Conversion Shares issuable upon conversion of this Note may not be sold or transferred unless (i) such shares are sold pursuant to an effective registration statement under the 1933 Act or are qualified for sale under Regulation A, or (ii) the Borrower or its transfer agent shall have been furnished with an opinion of counsel (which opinion shall be the Legal Counsel Opinion (as defined in the Purchase Agreement)) to the effect that the shares to be sold or transferred may be sold or transferred pursuant to an exemption from such registration or (iii) such shares are sold or transferred pursuant to Rule 144, Rule 144A, Regulation S, or other applicable exemption, or (iv) such shares are transferred to an “affiliate” (as defined in Rule 144) of the Borrower who agrees to sell or otherwise transfer the shares only in accordance with this Section 1.5 and who is an Accredited Investor (as defined in the Purchase Agreement). Except as otherwise provided in the Purchase Agreement (and subject to the removal provisions set forth below), until such time as the Conversion Shares have been registered under the 1933 Act or otherwise may be sold pursuant to Rule 144, Rule 144A, Regulation S, or other applicable exemption without any restriction as to the number of securities as of a particular date that can then be immediately sold, each certificate for the Conversion Shares that has not been so included in an effective registration statement or that has not been sold pursuant to an effective registration statement or an exemption that permits removal of the legend, shall bear a legend substantially in the following form, as appropriate:

“NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES INTO WHICH THESE SECURITIES MAY BE CONVERTIBLE HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) AN OPINION OF COUNSEL (WHICH COUNSEL SHALL BE SELECTED BY THE HOLDER, IN A GENERALLY ACCEPTABLE FORM, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS (A) SOLD PURSUANT TO RULE 144 OR OTHER APPLICABLE EXEMPTION UNDER SAID ACT AND (B) AN OPINION OF COUNSEL IS PROVIDED (WHICH COUNSEL SHALL BE SELECTED BY THE HOLDER), IN A GENERALLY ACCEPTABLE FORM, THAT SUCH SALE IS PERMITTED UNDER RULE 144 OR OTHER APPLICABLE EXEMPTION UNDER SAID ACT. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES.”

The legend set forth above shall be removed and the Company shall issue to the Holder a certificate for the applicable Conversion Shares without such legend upon which it is stamped or (as requested by the Holder) issue the applicable Conversion Shares by electronic delivery by crediting the account of such holder's broker with DTC, if, unless otherwise required by applicable state securities laws: (a) such Conversion Shares are registered for sale under an effective registration statement filed under the 1933 Act or otherwise may be sold pursuant to Rule 144, Rule 144A, Regulation S, or other applicable exemption without any restriction as to the number of securities as of a particular date that can then be immediately sold, or (b) the Company or the Holder provides the Legal Counsel Opinion (as contemplated by and in accordance with Section 4(m) of the Purchase Agreement) to the effect that a public sale or transfer of such Conversion Shares may be made without registration under the 1933 Act, which opinion shall be accepted by the Company so that the sale or transfer is effected. The Company shall be responsible for the fees of its transfer agent and all DTC fees associated with any such issuance. The Holder agrees to sell all Conversion Shares, including those represented by a certificate(s) from which the legend has been removed, in compliance with applicable prospectus delivery requirements, if any. In the event that the Company does not accept the opinion of counsel provided by the Holder with respect to the transfer of Conversion Shares pursuant to an exemption from registration, such as Rule 144, Rule 144A, Regulation S, or other applicable exemption, at the Deadline, notwithstanding that the conditions of Rule 144, Rule 144A, Regulation S, or other applicable exemption, as applicable, have been met, it will be considered an Event of Default under this Note.

1.6 Effect of Certain Events.

(a) Effect of Merger, Consolidation, Etc. At the option of the Holder, the sale, conveyance or disposition of all or substantially all of the assets of the Borrower, or the consolidation, merger or other business combination of the Borrower with or into any other Person (as defined below) or Persons when the Borrower is not the survivor shall either: (i) be deemed to be an acceleration event pursuant to which the Borrower shall be required to pay to the Holder upon the consummation of and as a condition to such transaction an amount equal to the Principal Amount then outstanding plus accrued interest (including any Default Interest) multiplied by 125% , or (ii) be treated pursuant to Section 1.6(b) hereof. "Person" shall mean any individual, corporation, limited liability company, partnership, association, trust or other entity or organization.

(b) Adjustment Due to Merger, Consolidation, Etc. If, at any time when this Note is issued and outstanding and prior to conversion of all of this Note, there shall be any merger, consolidation, exchange of shares, recapitalization, reorganization, or other similar event, as a result of which shares of Common Stock of the Borrower shall be changed into the same or a different number of shares of another class or classes of stock or securities of the Borrower or another entity, or in case of any sale or conveyance of all or substantially all of the assets of the Borrower other than in connection with a plan of complete liquidation of the Borrower, then the Holder of this Note shall thereafter have the right to receive upon conversion of this Note, upon the basis and upon the terms and conditions specified herein and in lieu of the shares of Common Stock immediately theretofore issuable upon conversion, such stock, securities or assets which the Holder would have been entitled to receive in such transaction had this Note been converted in full immediately prior to such transaction (without regard to any limitations on conversion set forth herein), and in any such case appropriate provisions shall be made with respect to the rights and interests of the Holder of this Note to the end that the provisions hereof (including, without limitation, provisions for adjustment of the Conversion Price and of the number of shares issuable upon conversion of the Note) shall thereafter be applicable, as nearly as may be practicable in relation to any securities or assets thereafter deliverable upon the conversion hereof. The Borrower shall not effectuate any transaction described in this Section 1.6(b) unless (a) it first gives, to the extent practicable, at least thirty (30) days prior written notice (but in any event at least seven (7) days prior written notice) of the record date of the special meeting of shareholders to approve, or if there is no such record date, the consummation of, such merger, consolidation, exchange of shares, recapitalization, reorganization or other similar event or sale of assets (during which time the Holder shall be entitled to convert this Note) and (b) the resulting successor or acquiring entity (if not the Borrower) assumes by written instrument the obligations of this Section 1.6(b). The above provisions shall similarly apply to successive consolidations, mergers, sales, transfers or share exchanges.

(c) Adjustment Due to Distribution. If the Borrower shall declare or make any distribution of its assets (or rights to acquire its assets) to holders of Common Stock as a dividend, stock repurchase, by way of return of capital or otherwise (including any dividend or distribution to the Borrower's shareholders in cash or shares (or rights to acquire shares) of capital stock of a subsidiary (i.e., a spin-off)) (a "Distribution"), then the Holder of this Note shall be entitled, upon any conversion of this Note after the date of record for determining shareholders entitled to such Distribution, to receive the amount of such assets which would have been payable to the Holder with respect to the shares of Common Stock issuable upon such conversion had such Holder been the holder of such shares of Common Stock on the record date for the determination of shareholders entitled to such Distribution.

(d) Purchase Rights. If, at any time when all or any portion of this Note is issued and outstanding, the Borrower issues any convertible securities or rights to purchase stock, warrants, securities or other property (the “Purchase Rights”) pro rata to the record holders of any class of Common Stock, then the Holder of this Note will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which such Holder could have acquired if such Holder had held the number of shares of Common Stock acquirable upon complete conversion of this Note (without regard to any limitations on conversion contained herein) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights or, if no such record is taken, the date as of which the record holders of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights.

(e) Dilutive Issuance. If the Borrower, at any time while this Note or any amounts due hereunder are outstanding, issues, sells or grants any option to purchase, or sells or grants any right to reprice, or otherwise disposes of, or issues (or announces any sale, grant or any option to purchase or other disposition), any Common Stock or other securities convertible into, exercisable for, or otherwise entitle any person or entity the right to acquire, shares of Common Stock (including, without limitation, upon conversion of this Note, and any convertible notes or warrants outstanding as of or following the Issue Date), in each or any case at an effective price per share that is lower than the then Conversion Price (such lower price, the “Base Conversion Price” and such issuances, collectively, a “Dilutive Issuance”) (it being agreed that if the holder of the Common Stock or other securities so issued shall at any time, whether by operation of purchase price adjustments, reset provisions, floating conversion, exercise or exchange prices or otherwise, or due to warrants, options or rights per share which are issued in connection with such issuance, be entitled to receive shares of Common Stock at an effective price per share that is lower than the Conversion Price, such issuance shall be deemed to have occurred for less than the Conversion Price on such date of the Dilutive Issuance), then the Conversion Price shall be reduced, at the option of the Holder, to a price equal to the Base Conversion Price. Such adjustment shall be made whenever such Common Stock or other securities are issued. By way of example, and for the avoidance of doubt, if the Company issues a convertible promissory note (including but not limited to a Variable Rate Transaction), and the holder of such convertible promissory note has the right to convert it into Common Stock at an effective price per share that is lower than the then Conversion Price (including but not limited to a conversion price with a discount that varies with the trading prices of or quotations for the Common Stock), then the Holder has the right to reduce the Conversion Price to such Base Conversion Price (including but not limited to a conversion price with a discount that varies with the trading prices of or quotations for the Common Stock) in perpetuity regardless of whether the holder of such convertible promissory note ever effectuated a conversion at the Base Conversion Price. In the event of an issuance of securities involving multiple tranches or closings, any adjustment pursuant to this Section 1.6(e) shall be calculated as if all such securities were issued at the initial closing. Notwithstanding the foregoing, no adjustment will be made under this Section 1.6(e) in respect of an Exempt Issuance.

An “Exempt Issuance” shall mean the issuance of (a) shares of Common Stock or other securities to officers or directors of the Borrower pursuant to any stock or option or similar equity incentive plan duly adopted for such purpose by a majority of the members of the Borrower’s Board of Directors or a majority of the members of a committee of directors (“Plan”) established for such purpose in a manner which is consistent with the Borrower’s prior business practices, including, but not limited to granting of such as bonuses; (b) securities pursuant to a merger, consolidation, acquisition or similar business combination approved by a majority of the disinterested directors of the Borrower, provided that any such issuance shall only be to a Person (or to the equity holders of a Person) which is, itself or through its subsidiaries, an operating company or an owner of an asset in a business synergistic with the business of the Borrower and shall provide to the Borrower additional benefits in addition to, or in lieu of, an investment of funds, but shall not include a transaction in which the Borrower is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities; (c) securities issued pursuant to any equipment loan or leasing arrangement, real property leasing arrangement or debt financing from a bank or similar financial institution approved by a majority of the disinterested directors of the Borrower; (d) securities issued with respect to which the Holder waives its rights in writing under this Section 1.6(e); and/or (e) the Borrower’s issuance of prepaid common stock purchase warrants so long as (i) the exercise price of such warrant is \$0.0011 or greater per share (and not subject to anti-dilution adjustments) and (ii) the prepaid purchase price to be paid by the recipient of the prepaid common stock purchase warrants is \$0.0015 or greater per share (and not subject to reduction for any reason).

(f) Notice of Adjustments. Upon the occurrence of each adjustment or readjustment of the Conversion Price as a result of the events described in this Section 1.6, the Borrower shall, at its expense and within one (1) calendar day after the occurrence of each respective adjustment or readjustment of the Conversion Price, compute such adjustment or readjustment and prepare and furnish to the Holder a certificate setting forth (i) the Conversion Price in effect at such time based upon the Dilutive Issuance, (ii) the number of shares of Common Stock and the amount, if any, of other securities or property which at the time would be received upon conversion of the Note, (iii) the detailed facts upon which such adjustment or readjustment is based, and (iv) copies of the documentation (including but not limited to relevant transaction documents) that evidences the adjustment or readjustment. The Borrower shall, within one (1) calendar day after each written request from the Holder, furnish to such Holder a like certificate setting forth (i) the Conversion Price in effect at such time based upon the Dilutive Issuance, (ii) the number of shares of Common Stock and the amount, if any, of other securities or property which at the time would be received upon conversion of the Note, (iii) the detailed facts upon which such adjustment or readjustment is based, and (iv) copies of the documentation (including but not limited to relevant transaction documents) that evidences the adjustment or readjustment.

1.7 [RESERVED].

1.8 Status as Shareholder. Upon submission of a Notice of Conversion by a Holder, (i) the Conversion Shares covered thereby (other than the Conversion Shares, if any, which cannot be issued because their issuance would exceed such Holder's allocated portion of the Reserved Amount or Maximum Share Amount) shall be deemed converted into shares of Common Stock and (ii) the Holder's rights as a Holder of such converted portion of this Note shall cease and terminate, excepting only the right to receive certificates for such shares of Common Stock and to any remedies provided herein or otherwise available at law or in equity to such Holder because of a failure by the Borrower to comply with the terms of this Note. Notwithstanding the foregoing, if a Holder has not received certificates for all shares of Common Stock prior to the tenth (10th) business day after the expiration of the Deadline with respect to a conversion of any portion of this Note for any reason, then (unless the Holder otherwise elects to retain its status as a holder of Common Stock by so notifying the Borrower) the Holder shall regain the rights of a Holder of this Note with respect to such unconverted portions of this Note and the Borrower shall, as soon as practicable, return such unconverted Note to the Holder or, if the Note has not been surrendered, adjust its records to reflect that such portion of this Note has not been converted. In all cases, the Holder shall retain all of its rights and remedies for the Borrower's failure to convert this Note.

1.9 Prepayment. The Company may prepay this Note at any time by providing Holder notice of its intent to prepay the outstanding amounts due under the Note (the "Prepayment Notice"). The Company shall tender the full amount in the Prepayment Notice by paying one hundred percent (100%) of the total outstanding balance to the Holder within five (5) calendar days of delivering the Prepayment Notice to the Holder. If the Holder has previously provided a notice of conversion to the Company, the Company may not prepay any amounts included in the notice of conversion.

1.10 [Intentionally Omitted].

ARTICLE II. RANKING AND CERTAIN COVENANTS

2.1 Ranking and Security. The obligations of the Borrower under this Note shall rank pari passu with respect to any and all unsecured Indebtedness of the Borrower.

2.2 Other Indebtedness. So long as the Borrower shall have any obligation under this Note, the Borrower shall not (directly or indirectly through any Subsidiary or affiliate) incur or suffer to exist or guarantee any unsecured Indebtedness that is senior to (in priority of payment and performance) the Borrower's obligations hereunder unless the proceeds of such Indebtedness are used to pay off all amounts owed under this Note. As used in this Section 2.2, the term "Borrower" means the Borrower and any Subsidiary of the Borrower. As used herein, the term "Indebtedness" means (a) all indebtedness of the Borrower for borrowed money or for the deferred purchase price of property or services, including any type of letters of credit, but not including deferred purchase price obligations in place as of the Issue Date and as disclosed in the SEC Documents (as defined in the Purchase Agreement), or obligations to trade creditors incurred in the ordinary course of business, (b) all obligations of the Borrower evidenced by notes, bonds, debentures or other similar instruments, (c) purchase money indebtedness hereafter incurred by the Borrower to finance the purchase of fixed or capital assets, including all capital lease obligations of the Borrower which do not exceed the purchase price of the assets funded, (d) all guarantee obligations of the Borrower in respect of obligations of the kind referred to in clauses (a) through (c) above that the Borrower would not be permitted to incur or enter into, and (e) all obligations of the kind referred to in clauses (a) through (d) above that the Borrower is not permitted to incur or enter into that are secured and/or unsecured by (or for which the holder of such obligation has an existing right, contingent or otherwise, to be secured and/or unsecured by) any lien or encumbrance on property (including accounts and contract rights) owned by the Borrower, whether or not the Borrower has assumed or become liable for the payment of such obligation.

2.3 Distributions on Capital Stock. So long as the Borrower shall have any obligation under this Note, the Borrower shall not without the Holder's written consent (a) pay, declare or set apart for such payment, any dividend or other distribution (whether in cash, property or other securities) on shares of capital stock other than dividends on shares of Common Stock solely in the form of additional shares of Common Stock or (b) directly or indirectly or through any subsidiary make any other payment or distribution in respect of its capital stock except for distributions pursuant to any shareholders' rights plan which is approved by a majority of the Borrower's disinterested directors.

2.4 Restriction on Stock Repurchases. So long as the Borrower shall have any obligation under this Note, the Borrower shall not without the Holder's written consent redeem, repurchase or otherwise acquire (whether for cash or in exchange for property or other securities or otherwise) in any one transaction or series of related transactions any shares of capital stock of the Borrower or any warrants, rights or options to purchase or acquire any such shares.

2.5 Sale of Assets. So long as the Borrower shall have any obligation under this Note, the Borrower shall not, without the Holder's written consent, sell, lease or otherwise dispose of any significant portion of its assets outside the ordinary course of business. Any consent to the disposition of any assets may be conditioned on a specified use of the proceeds of disposition.

2.6 Advances and Loans; Affiliate Transactions. So long as the Borrower shall have any obligation under this Note, the Borrower shall not, without the Holder's written consent, lend money, give credit, make advances to or enter into any transaction with any person, firm, joint venture or corporation, including, without limitation, officers, directors, employees, subsidiaries and affiliates of the Borrower, except loans, credits or advances (a) in existence or committed or publicly stated as contemplated in SEC Documents on the Issue Date and which the Borrower has informed Holder in writing prior to the Issue Date, (b) in regard to transactions with unaffiliated third parties, made in the ordinary course of business or (c) in regard to transactions with unaffiliated third parties, not in excess of \$250,000.00. Except as disclosed in the SEC Documents prior to the Issue Date, so long as the Borrower shall have any obligation under this Note, the Borrower shall not, without the Holder's written consent, repay any affiliate (as defined in Rule 144) of the Borrower in connection with any indebtedness or accrued amounts owed to any such party outside the ordinary course of business.

2.7 Section 3(a)(9) or 3(a)(10) Transaction. So long as this Note is outstanding, the Borrower shall not enter into any transaction or arrangement structured in accordance with, based upon, or related or pursuant to, in whole or in part, either Section 3(a)(9) of the Securities Act (a "3(a)(9) Transaction") or Section 3(a)(10) of the Securities Act (a "3(a)(10) Transaction"). In the event that the Borrower does enter into, or makes any issuance of Common Stock related to a 3(a)(9) Transaction or a 3(a)(10) Transaction while this note is outstanding, a liquidated damages charge of 25% of the outstanding principal balance of this Note, but not less than \$5,000.00, will be assessed and will become immediately due and payable to the Holder at its election in the form of a cash payment or added to the balance of this Note (under Holder's and Borrower's expectation that this amount will tack back to the Issue Date). Notwithstanding the forgoing, transactions contemplated by subsection (a) of the definition of "Exempt Issuance" in Section 1.6(e) that are considered Section 3(a)(9) or 3(a)(10) Transactions will not cause a liquidated damage charge under this Section 2.7.

2.8 Preservation of Business and Existence, etc. So long as the Borrower shall have any obligation under this Note, the Borrower shall not, without the Holder's written consent, (a) change the nature of its business; or (b) sell, divest, change the structure of any material assets other than in the ordinary course of business. In addition, so long as the Borrower shall have any obligation under this Note, the Borrower shall maintain and preserve, and cause each of its Subsidiaries to maintain and preserve, its existence, rights and privileges, and become or remain, and cause each of its Subsidiaries (other than dormant Subsidiaries that have no or minimum assets) to become or remain, duly qualified and in good standing in each jurisdiction in which the character of the properties owned or leased by it or in which the transaction of its business makes such qualification necessary.

2.9 Noncircumvention. The Company hereby covenants and agrees that the Company will not, by amendment of its Certificate or Articles of Incorporation or Bylaws, or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Note, and will at all times in good faith carry out all the provisions of this Note and take all action as may be required to protect the rights of the Holder.

2.10 Lost, Stolen or Mutilated Note. Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Note, and, in the case of loss, theft or destruction, of any indemnification undertaking by the Holder to the Company in customary form and, in the case of mutilation, upon surrender and cancellation of this Note, the Company shall execute and deliver to the Holder a new Note.

ARTICLE III. EVENTS OF DEFAULT

It shall be considered an event of default if any of the following events listed in this Article III (each, an “Event of Default”) shall occur:

3.1 Failure to Pay Principal or Interest. The Borrower fails to pay the Principal Amount hereof or interest thereon when due on this Note, whether at maturity, upon acceleration or otherwise, or fails to fully comply with Section 1.10 of this Note.

3.2 Conversion and the Shares. The Borrower (i) fails to issue Conversion Shares to the Holder (or announces or threatens in writing that it will not honor its obligation to do so) upon exercise by the Holder of the conversion rights of the Holder in accordance with the terms of this Note, (ii) fails to transfer or cause its transfer agent to transfer (issue) (electronically or in certificated form) any certificate for the Conversion Shares issuable to the Holder upon conversion of or otherwise pursuant to this Note as and when required by this Note, (iii) fails to reserve the Reserved Amount at all times, or (iii) the Borrower directs its transfer agent not to transfer or delays, impairs, and/or hinders its transfer agent in transferring (or issuing) (electronically or in certificated form) any certificate for the Conversion Shares issuable to the Holder upon conversion of or otherwise pursuant to this Note as and when required by this Note, or fails to remove (or directs its transfer agent not to remove or impairs, delays, and/or hinders its transfer agent from removing) any restrictive legend (or to withdraw any stop transfer instructions in respect thereof) on any certificate for any Conversion Shares issued to the Holder upon conversion of or otherwise pursuant to this Note as and when required by this Note (or makes any written announcement, statement or threat that it does not intend to honor the obligations described in this paragraph) and any such failure shall continue uncured (or any written announcement, statement or threat not to honor its obligations shall not be rescinded in writing) for two (2) Trading Days after the Holder shall have delivered a Notice of Conversion. It is an obligation of the Borrower to remain current in its obligations to its transfer agent. It shall be an Event of Default of this Note, if a conversion of this Note is delayed, hindered or frustrated due to a balance owed by the Borrower to its transfer agent. If at the option of the Holder, the Holder advances any funds to the Borrower’s transfer agent in order to process a conversion, such advanced funds shall be added to the principal balance of the Note.

3.3 Breach of Agreements and Covenants. The Borrower breaches any covenant, material agreement, or other material term or condition contained in the Purchase Agreement, this Note, Irrevocable Transfer Agent Instructions, Warrant (as defined in the Purchase Agreement) (the “Warrant”), or in any agreement, statement or certificate given in writing pursuant hereto or in connection herewith or therewith.

3.4 Breach of Representations and Warranties. Any representation or warranty of the Borrower made in the Purchase Agreement, this Note, the Irrevocable Transfer Agent Instructions or in any agreement, statement or certificate given in writing pursuant hereto or in connection herewith or therewith shall be false or misleading in any material respect when made and the breach of which has (or with the passage of time will have) a material adverse effect on the rights of the Holder with respect to this Note or the Purchase Agreement.

3.5 Receiver or Trustee. The Borrower or any subsidiary of the Borrower shall make an assignment for the benefit of creditors or apply for or consent to the appointment of a receiver or trustee for it or for a substantial part of its property or business, or such a receiver or trustee shall otherwise be appointed.

3.6 Judgments. Any money judgment, writ or similar process shall be entered or filed against the Borrower or any subsidiary of the Borrower or any of its property or other assets for more than \$500,000, and shall remain unvacated, unbonded or unstayed for a period of twenty (20) days unless otherwise consented to by the Holder, which consent will not be unreasonably withheld.

3.7 Bankruptcy. Bankruptcy, insolvency, reorganization or liquidation proceedings or other proceedings, voluntary or involuntary, for relief under any bankruptcy law or any law for the relief of debtors shall be instituted by or against the Borrower or any subsidiary of the Borrower.

3.8 Failure to Comply with the 1934 Act. At any time after the Issue Date, the Borrower shall fail to comply with the reporting requirements of the 1934 Act and/or the Borrower shall cease to be subject to the reporting requirements of the 1934 Act.

3.9 Liquidation. Any dissolution, liquidation, or winding up of Borrower or any substantial portion of its business.

3.10 Cessation of Operations. Any cessation of operations by Borrower or Borrower admits it is otherwise generally unable to pay its debts as such debts become due, provided, however, that any disclosure of the Borrower's ability to continue as a "going concern" shall not be an admission that the Borrower cannot pay its debts as they become due.

3.11 Maintenance of Assets. The failure by Borrower to maintain any material intellectual property rights, personal, real property or other assets which are necessary to conduct its business (whether now or in the future).

3.12 Financial Statement Restatement. The restatement of any financial statements filed by the Borrower with the SEC for any date or period from two years prior to the Issue Date of this Note and until this Note is no longer outstanding, if the result of such restatement would, by comparison to the unrestated financial statement, have constituted a material adverse effect on the rights of the Holder with respect to this Note or the Purchase Agreement.

3.13 Replacement of Transfer Agent. In the event that the Borrower proposes to replace its transfer agent, the Borrower fails to provide, prior to the effective date of such replacement, a fully executed Irrevocable Transfer Agent Instructions in a form as initially delivered pursuant to the Purchase Agreement (including but not limited to the provision to irrevocably reserve shares of Common Stock in the Reserved Amount) signed by the successor transfer agent to Borrower and the Borrower.

3.14 [RESERVED]

3.15 [Intentionally Omitted].

3.16 Inside Information. Any attempt by the Borrower or its officers, directors, and/or affiliates to transmit, convey, disclose, or any actual transmittal, conveyance, or disclosure by the Borrower or its officers, directors, and/or affiliates of, material non-public information concerning the Borrower, to the Holder or its successors and assigns, which is not immediately cured by Borrower's filing of a Form 8-K pursuant to Regulation FD on that same date.

3.17 Unavailability of Rule 144. If, at any time on or after the date that is six (6) calendar months after the Issue Date, the Holder is unable to (i) obtain a standard "144 legal opinion letter" from an attorney reasonably acceptable to the Holder, the Holder's brokerage firm (and respective clearing firm), and the Borrower's transfer agent in order to facilitate the Holder's conversion of any portion of the Note into free trading shares of the Borrower's Common Stock pursuant to Rule 144, and/or (ii) thereupon deposit such shares into the Holder's brokerage account.

3.18 Delisting or Suspension of Trading of Common Stock. If, at any time on or after the Issue Date, the Borrower's Common Stock (i) is suspended from trading, (ii) halted from trading, and/or (iii) fails to be quoted or listed (as applicable) on any level of the OTC Markets, any tier of the NASDAQ Stock Market, the New York Stock Exchange, or the NYSE American.

3.19 Rights and Remedies Upon an Event of Default. Upon the occurrence of any Event of Default specified in this Article III, this Note shall become immediately due and payable, and the Borrower shall pay to the Holder, in full satisfaction of its obligations hereunder, the greater of (i) an amount equal to the Principal Amount then outstanding plus accrued interest (including any Default Interest) through the date of full repayment multiplied by 125% (collectively the “Default Amount”) or (ii) the “parity value” of the Default Amount, where parity value means (a) the highest number of shares of Common Stock issuable upon conversion of such Default Amount in accordance with the terms of this Note (without giving effect to any beneficial ownership limitations contained in this Note), treating the date that the respective Event of Default occurs as the “Conversion Date” for purposes of determining the Conversion Price, multiplied by (b) the volume weighted average price for the Common Stock on the date that the respective Event of Default occurs (the “Default Parity Amount”), plus, in each such case, all costs, including, without limitation, legal fees and expenses, of collection, all without demand, presentment or notice, all of which hereby are expressly waived by the Borrower. The Holder may convert the greater of the (i) Default Amount or (ii) Default Parity Amount into Common Stock pursuant to the terms of this Note (including but not limited to the conversion formula set forth in this Note as well as all other provisions of this Note). The Holder shall be entitled to exercise all other rights and remedies available at law or in equity.

ARTICLE IV. MISCELLANEOUS

4.1 Failure or Indulgence Not Waiver. No failure or delay on the part of the Holder in the exercise of any power, right or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude other or further exercise thereof or of any other right, power or privileges. All rights and remedies of the Holder existing hereunder are cumulative to, and not exclusive of, any rights or remedies otherwise available.

4.2 Notices. All notices, demands, requests, consents, approvals, and other communications required or permitted hereunder shall be in writing and, unless otherwise specified herein, shall be (i) personally served, (ii) deposited in the mail, registered or certified, return receipt requested, postage prepaid, (iii) delivered by reputable air courier service with charges prepaid, or (iv) transmitted by hand delivery, telegram, e-mail or facsimile, addressed as set forth below or to such other address as such party shall have specified most recently by written notice. Any notice or other communication required or permitted to be given hereunder shall be deemed effective (a) upon hand delivery or delivery by e-mail or facsimile, with accurate confirmation generated by the transmitting facsimile machine, at the address or number designated below (if delivered on a business day during normal business hours where such notice is to be received), or the first business day following such delivery (if delivered other than on a business day during normal business hours where such notice is to be received) or (b) on the second business day following the date of mailing by express courier service, fully prepaid, addressed to such address, or upon actual receipt of such mailing, whichever shall first occur. The addresses for such communications shall be:

If to the Borrower, to:

RESPIRERX PHARMACEUTICALS INC.
126 Valley Road, Suite C
Glen Rock, NJ 07452
Attention: Jeff Margolis
e-mail: jmargolis@respirerx.com

If to the Holder:

«Investor»
«Investor_Address»
«Investor_City», «Investor_State» «Investor_Zip»
Attention: «Investor_Attn»
e-mail: «Investor_email»

4.3 Amendments. This Note and any provision hereof may only be amended by an instrument in writing signed by the Borrower and the Holder. The term “Note” and all reference thereto, as used throughout this instrument, shall mean this instrument as originally executed, or if later amended or supplemented, then as so amended or supplemented.

4.4 Assignability. This Note shall be binding upon the Borrower and its successors and assigns and shall inure to be the benefit of the Holder and its successors and assigns. The Borrower shall not assign this Note or any rights or obligations hereunder without the prior written consent of the Holder. The Holder may assign its rights hereunder to any “accredited investor” (as defined in Rule 501(a) of the 1933 Act) in a private transaction from the Holder or to any of its “affiliates”, as that term is defined under the 1934 Act, without the consent of the Borrower. Notwithstanding anything in this Note to the contrary, this Note may be pledged as collateral in connection with a bona fide margin account or other lending arrangement. The Holder and any assignee, by acceptance of this Note, acknowledge and agree that following conversion of a portion of this Note, the unpaid and unconverted principal amount of this Note represented by this Note may be less than the amount stated on the face hereof.

4.5 Cost of Collection. If default is made in the payment of this Note, the Borrower shall pay the Holder hereof costs of collection, including reasonable attorneys’ fees.

4.6 Governing Law; Venue; Attorney’s Fees. This Note shall be governed by and construed in accordance with the laws of the State of Delaware without regard to principles of conflicts of laws. Any action brought by either party against the other concerning the transactions contemplated by this Note or any other agreement, certificate, instrument or document contemplated hereby shall be brought only in the state courts located in New York, New York or federal courts located in New York, New York. The Borrower hereby irrevocably waives any objection to jurisdiction and venue of any action instituted hereunder and shall not assert any defense based on lack of jurisdiction or venue or based upon *forum non conveniens*. **THE BORROWER HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS NOTE OR ANY TRANSACTIONS CONTEMPLATED HEREBY.** Each party hereby irrevocably waives personal service of process and consents to process being served in any suit, action or proceeding in connection with this Note or any other agreement, certificate, instrument or document contemplated hereby or thereby by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Note and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any other manner permitted by law. The prevailing party in any action or dispute brought in connection with this the Note or any other agreement, certificate, instrument or document contemplated hereby or thereby shall be entitled to recover from the other party its reasonable attorney’s fees and costs.

4.7 Certain Amounts. Whenever pursuant to this Note the Borrower is required to pay an amount in excess of the outstanding Principal Amount (or the portion thereof required to be paid at that time) plus accrued and unpaid interest plus Default Interest on such interest, the Borrower and the Holder agree that the actual damages to the Holder from the receipt of cash payment on this Note may be difficult to determine and the amount to be so paid by the Borrower represents stipulated damages and not a penalty and is intended to compensate the Holder in part for loss of the opportunity to convert this Note and to earn a return from the sale of shares of Common Stock acquired upon conversion of this Note at a price in excess of the price paid for such shares pursuant to this Note. The Borrower and the Holder hereby agree that such amount of stipulated damages is not plainly disproportionate to the possible loss to the Holder from the receipt of a cash payment without the opportunity to convert this Note into shares of Common Stock.

4.8 Purchase Agreement. The Company and the Holder shall be bound by the applicable terms of the Purchase Agreement and the documents entered into in connection herewith and therewith.

4.9 Notice of Corporate Events. Except as otherwise provided below, the Holder of this Note shall have no rights as a Holder of Common Stock unless and only to the extent that it converts this Note into Common Stock. The Borrower shall provide the Holder with prior notification of any meeting of the Borrower’s shareholders (and copies of proxy materials and other information sent to shareholders). In the event of any taking by the Borrower of a record of its shareholders for the purpose of determining shareholders who are entitled to receive payment of any dividend or other distribution, any right to subscribe for, purchase or otherwise acquire (including by way of merger, consolidation, reclassification or recapitalization) any share of any class or any other securities or property, or to receive any other right, or for the purpose of determining shareholders who are entitled to vote in connection with any change in control or any proposed liquidation, dissolution or winding up of the Borrower, the Borrower shall mail a notice to the Holder, at least twenty (20) days prior to the record date specified therein (or thirty (30) days prior to the consummation of the transaction or event, whichever is earlier), of the date on which any such record is to be taken for the purpose of such dividend, distribution, right or other event, and a brief statement regarding the amount and character of such dividend, distribution, right or other event to the extent known at such time. The Borrower shall make a public announcement of any event requiring notification to the Holder hereunder substantially simultaneously with the notification to the Holder in accordance with the terms of this Section 4.9.

4.10 Remedies. The Borrower acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Holder, by vitiating the intent and purpose of the transaction contemplated hereby. Accordingly, the Borrower acknowledges that the remedy at law for a breach of its obligations under this Note will be inadequate and agrees, in the event of a breach or threatened breach by the Borrower of the provisions of this Note, that the Holder shall be entitled, in addition to all other available remedies at law or in equity, and in addition to the penalties assessable herein, to an injunction or injunctions restraining, preventing or curing any breach of this Note and to enforce specifically the terms and provisions thereof, without the necessity of showing economic loss and without any bond or other security being required.

4.11 Construction; Headings. This Note shall be deemed to be jointly drafted by the Company and all the Holder and shall not be construed against any person as the drafter hereof. The headings of this Note are for convenience of reference and shall not form part of, or affect the interpretation of, this Note.

4.12 Usury. To the extent it may lawfully do so, the Company hereby agrees not to insist upon or plead or in any manner whatsoever claim and will resist any and all efforts to be compelled to take the benefit or advantage of, usury laws wherever enacted, now or at any time hereafter in force, in connection with any action or proceeding that may be brought by the Holder in order to enforce any right or remedy under this Note. Notwithstanding any provision to the contrary contained in this Note, it is expressly agreed and provided that the total liability of the Company under this Note for payments which under the applicable law are in the nature of interest shall not exceed the maximum lawful rate authorized under applicable law (the "Maximum Rate"), and, without limiting the foregoing, in no event shall any rate of interest or default interest, or both of them, when aggregated with any other sums which under the applicable law in the nature of interest that the Company may be obligated to pay under this Note exceed such Maximum Rate. It is agreed that if the maximum contract rate of interest allowed by applicable law and applicable to this Note is increased or decreased by statute or any official governmental action subsequent to the Issue Date, the new maximum contract rate of interest allowed by law will be the Maximum Rate applicable to this Note from the effective date thereof forward, unless such application is precluded by applicable law. If under any circumstances whatsoever, interest in excess of the Maximum Rate is paid by the Company to the Holder with respect to indebtedness evidenced by this the Note, such excess shall be applied by the Holder to the unpaid principal balance of any such indebtedness or be refunded to the Company, the manner of handling such excess to be at the Holder's election.

4.13 Severability. In the event that any provision of this Note is invalid or unenforceable under any applicable statute or rule of law (including any judicial ruling), then such provision shall be deemed inoperative to the extent that it may conflict therewith and shall be deemed modified to conform with such statute or rule of law. Any such provision which may prove invalid or unenforceable under any law shall not affect the validity or enforceability of any other provision of this Note.

4.14 Terms of Future Financings. So long as this Note is outstanding, upon any issuance by the Borrower or any of its subsidiaries of any security, or amendment to a security that was originally issued before the Issue Date, with any term that the Holder reasonably believes is more favorable to the holder of such security or with a term in favor of the holder of such security that the Holder reasonably believes was not similarly provided to the Holder in this Note, then (i) the Borrower shall notify the Holder of such additional or more favorable term within one (1) business day of the issuance and/or amendment (as applicable) of the respective security, and (ii) such term, at Holder's option, shall become a part of the transaction documents with the Holder (regardless of whether the Borrower complied with the notification provision of this Section 4.14). The types of terms contained in another security that may be more favorable to the holder of such security include, but are not limited to, terms addressing prepayment rate, interest rates, and original issue discounts.

4.15 Dispute Resolution. In the case of a dispute as to the determination of the Conversion Price, Conversion Amount, any prepayment amount or Default Amount, Issue, Closing or Maturity Date, the closing bid price, or fair market value (as the case may be) or the arithmetic calculation of the Conversion Price or the applicable prepayment amount(s) (as the case may be), the Borrower or the Holder shall submit the disputed determinations or arithmetic calculations via facsimile (i) within one (1) Trading Day after receipt of the applicable notice giving rise to such dispute to the Borrower or the Holder or (ii) if no notice gave rise to such dispute, at any time after the Holder learned of the circumstances giving rise to such dispute. If the Holder and the Borrower are unable to agree upon such determination or calculation within one (1) Trading Day of such disputed determination or arithmetic calculation (as the case may be) being submitted to the Borrower or the Holder, then the Borrower shall, within one (1) Trading Day, submit (a) the disputed determination of the Conversion Price, the closing bid price, the or fair market value (as the case may be) to an independent, reputable investment bank selected by the Borrower and approved by the Holder or (b) the disputed arithmetic calculation of the Conversion Price, Conversion Amount, any prepayment amount or Default Amount, to an independent, outside accountant selected by the Holder that is reasonably acceptable to the Borrower. The Borrower shall cause at its expense the investment bank or the accountant to perform the determinations or calculations and notify the Borrower and the Holder of the results no later than one (1) Trading Day from the time it receives such disputed determinations or calculations. Such investment bank's or accountant's determination or calculation shall be binding upon all parties absent demonstrable error.

[signature page follows]

IN WITNESS WHEREOF, Borrower has caused this Note to be signed in its name by its duly authorized officer on «Closing_Date».

RESPIRERX PHARMACEUTICALS INC.

By: _____
Name: Jeff Margolis
Title: Senior Vice President,
Chief Financial Officer,
Treasurer and Secretary

EXHIBIT A — NOTICE OF CONVERSION

The undersigned hereby elects to convert \$ _____ principal amount of the Note (defined below) into that number of shares of Common Stock to be issued pursuant to the conversion of the Note (“Common Stock”) as set forth below, of **RESPIRERX PHARMACEUTICALS INC.**, a Delaware corporation (the “Borrower”), according to the conditions of the promissory note of the Borrower dated as of «Closing_Date» (the “Note”), as of the date written below. No fee will be charged to the Holder for any conversion, except for transfer taxes, if any.

Box Checked as to applicable instructions:

- ☐The Borrower shall electronically transmit the Common Stock issuable pursuant to this Notice of Conversion to the account of the undersigned or its nominee with DTC through its Deposit Withdrawal Agent Commission system (“DWAC Transfer”).
Name of DTC Prime Broker:
Account Number:

- ☐The undersigned hereby requests that the Borrower issue a certificate or certificates for the number of shares of Common Stock set forth below (which numbers are based on the Holder’s calculation attached hereto) in the name(s) specified immediately below or, if additional space is necessary, on an attachment hereto:

Date of Conversion:

Applicable Conversion Price:

Number of Shares of Common Stock to
be Issued Pursuant to Conversion of the Note:

Amount of Principal Balance Due remaining
Under the Note after this conversion:

\$

By:

Name:

Title:

Date:

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER
UNDER SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Arnold S. Lippa, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of RespireRx Pharmaceuticals Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)), for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's Board of Directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 17, 2022

By: /s/ Arnold S. Lippa

Arnold S. Lippa
Interim President, Interim Chief Executive Officer and Chief
Scientific Officer

**CERTIFICATION OF CHIEF FINANCIAL OFFICER
UNDER SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Jeff Eliot Margolis, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of RespireRx Pharmaceuticals Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)), for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's Board of Directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 17, 2022

By: /s/ Jeff Eliot Margolis

Jeff Eliot Margolis

Senior Vice President Chief Financial Officer, Treasurer and Secretary

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER
UNDER SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

I, Arnold S. Lippa, the Chief Executive Officer of RespireRx Pharmaceuticals Inc. (the “Company”), certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that:

- (i) The Quarterly Report on Form 10-Q of the Company for the quarterly period ended September 30, 2022, as filed with the Securities and Exchange Commission on the date hereof (the “Report”) fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934; and
- (ii) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

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

Date: November 17, 2022

By: /s/ Arnold S. Lippa

Arnold S. Lippa
Interim President, Interim Chief Executive Officer and Chief
Scientific Officer

**CERTIFICATION OF CHIEF FINANCIAL OFFICER
UNDER SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

I, Jeff Eliot Margolis, the Senior Vice President, Chief Financial Officer, Treasurer and Secretary of RespireRx Pharmaceuticals Inc. (the “Company”), certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that:

- (i) The Quarterly Report on Form 10-Q of the Company for the quarterly period ended September 30, 2022, as filed with the Securities and Exchange Commission on the date hereof (the “Report”) fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934; and
- (ii) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

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

Date: November 17, 2022

By: /s/ Jeff Eliot Margolis

Jeff Eliot Margolis
Senior Vice President Chief Financial Officer, Treasurer and
Secretary
