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

FORM 10-Q

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

For the quarterly period ended March 31, 2023

☐ 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	**33-0303583**
(State or other jurisdiction of incorporation or organization)	(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 May 18, 2023, the Company had 157,026,672 shares of common stock, $0.001 par value, issued and outstanding.

RESPIRERX PHARMACEUTICALS INC.
AND SUBSIDIARIES

TABLE OF CONTENTS

In this Quarterly Report on Form 10-Q, the terms "RespireRx," the "Company," "we," "us" and "our" refer to RespireRx Pharmaceuticals Inc. a Delaware corporation, and, unless the context indicates otherwise, its consolidated subsidiaries.

INTRODUCTORY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q of RespireRx Pharmaceuticals Inc., referred to herein as our "Q1 2023 Quarterly Report" ("RespireRx" and together with RespireRx's wholly-owned subsidiaries, ResolutionRx Pharmaceuticals Ltd ("ResolutionRx") and Pier Pharmaceuticals, Inc. ("Pier"), the "Company," "we," 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 Q1 2023 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, 2022 as filed with the SEC on April 17, 2023 (the "2022 Form 10-K") and as may be included in in this Q1 2023 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 Q1 2023 Quarterly Report. We cannot assure you that the forward-looking statements in this Q1 2023 Quarterly Report or in our 2022 Annual Report in our Form 10-K will prove to be accurate and therefore prospective investors are encouraged not to place undue reliance on forward-looking statements. You should read this Q1 2023 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 this Q1 2023 Quarterly Report and our Annual Report in our 2022 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 this Q1 2023 Quarterly Report and our Annual Report in our 2022 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 (UNAUDITED)

RESPIRERX PHARMACEUTICALS INC.
AND SUBSIDIARIES

CONDENSED CONSOLIDATED BALANCE SHEETS
(unaudited)

	March 31, 2023	December 31, 2022
Current assets:		
Cash and cash equivalents	$ 138	$ 88
Prepaid expenses	95,749	22,693
Total current assets	95,887	22,781
Total assets	$ 95,887	$ 22,781
LIABILITIES AND STOCKHOLDERS' DEFICIENCY		
Current liabilities:		
Accounts payable and accrued expenses, including amounts owed to related parties (Notes 4, 5 and 7)	$ 5,952,016	$ 5,724,390
Accrued compensation and related expenses	3,481,308	3,296,008
Convertible notes payable, currently due and payable on demand, including accrued interest of $288,302 and $252,881 at March 31, 2023 and December 31, 2022, respectively (Note 4)	1,300,278	1,258,315
Note payable to SY Corporation, including accrued interest of $519,159 and $507,330 at March 31, 2023 and December 31, 2022, respectively, payment obligation currently in default (Note 4)	817,707	833,463
Notes and advances payable to officers, including accrued interest of $88,499 and 71,292 as of March 31, 2023 and December 31, 2022, respectively (Note 4)	408,243	375,334
Notes payable to former officer, including accrued interest (Note 4)	231,310	225,744
Other short-term notes payable	96,408	15,847
Total current liabilities	12,287,270	11,729,101
Long-term liabilities		
Payable associated with payment settlement agreements, net of current portion included in accounts payable and accrued expenses at March 31, 2023 and December 31, 2022 (Note 5)	119,000	174,000
Total long-term liabilities	119,000	174,000
Total liabilities	12,406,270	11,903,101
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: 144,326,672 March 31, 2023 and 125,544,276 at December 31, 2022, respectively	144,327	125,544
Additional paid-in capital	164,011,506	164,030,289
Accumulated deficit	(176,487,919)	(176,057,856)
Total stockholders' deficiency	(12,310,383)	(11,880,320)
Total liabilities and stockholders' deficiency	$ 95,887	$ 22,781

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

RESPIRERX PHARMACEUTICALS INC.
AND SUBSIDIARIES

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)

	Three-months Ended March 31,	
	2023	**2022**
Operating expenses:		
General and administrative	$ 291,949	$ 495,793
Research and development	98,425	121,159
Total operating costs and expenses	390,374	616,952
Loss from operations	(390,374)	(616,952)
Interest expense, including related parties	(67,272)	(259,647)
Foreign currency transaction gain	27,583	16,436
Net loss attributable to common stockholders	$ (430,063)	$ (860,163)
Net loss per common share - basic and diluted	$ (0.01)	$ (0.01)
Weighted average common shares outstanding - basic and diluted	137,182,491	97,894,276

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

RESPIRERX PHARMACEUTICALS INC.
AND SUBSIDIARIES

CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' DEFICIENCY
(Unaudited)

Three-months Ended March 31, 2023

	Series B Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Deficiency
	Shares	Amount	Shares	Par Value			
Balance, December 31, 2022	37,500	$ 21,703	125,544,276	$125,544	$164,030,289	$(176,057,856)	$ (11,880,320)
Common stock issued upon cashless warrant exercises	-	-	18,782,396	18,783	(18,783)	-	-
Net loss	-	-	-	-	-	(430,063)	(430,063)
Balance, March 31, 2023	37,500	$ 21,703	144,326,672	$144,327	$164,011,506	$(176,487,919)	$ (12,310,383)

Three-months Ended March 31, 2022

	Series B Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Deficiency
	Shares	Amount	Shares	Par Value			
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)

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

RESPIRERX PHARMACEUTICALS INC.
AND SUBSIDIARIES

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

	Three-months Ended March 31,	
	2023	**2022**
Cash flows from operating activities:		
Net loss	$ (430,063)	$ (860,163)
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	6,540	209,772
Foreign currency transaction gain	(27,583)	(16,436)
Changes in operating assets and liabilities:		
(Increase) decrease in -		
Deferred financing costs	-	177,883
Prepaid expenses	7,502	22,227
Increase (decrease) in -		
Accounts payable and accrued expenses	172,626	213,719
Accrued compensation and related expenses	185,300	179,800
Accrued interest payable	56,490	50,065
Net cash used in operating activities	(29,188)	(23,133)
Cash flows from financing activities:		
Proceeds from net of repayment of officer advances	29,238	21,987
Net cash provided by financing activities	29,238	21,987
Cash and cash equivalents:		
Net increase/(decrease)	50	(1,146)
Balance at beginning of period	88	1,398
Balance at end of period	$ 138	$ 252

(Continued)

RESPIRERX PHARMACEUTICALS INC.
AND SUBSIDIARIES

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

(Continued)

	Three-months Ended March 31,	
	2023	**2022**
Supplemental disclosures of cash flow information:		
Cashless warrant exercises	$ 18,783	$ -
Cash paid for -		
Interest	$ 2,341	$ 1,712
Income taxes	$ -	$ -

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

RESPIRERX PHARMACEUTICALS INC.
AND SUBSIDIARIES

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. On January 11, 2023, RespireRx formed what is initially a wholly-owned subsidiary, ResolutionRx Ltd ("ResolutionRx"), an unlisted public company in Australia, into which the Company is in the process of contributing its cannabinoid platform described below.

Basis of Presentation

The condensed consolidated financial statements are of RespireRx and its wholly-owned subsidiaries, Pier and ResolutionRx (collectively referred to herein as the "Company," "we" or "our," unless the context indicates otherwise).

The condensed consolidated financial statements and related notes are unaudited and 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 in our Form 10-K for the fiscal year ended December 31, 2022 as filed with the SEC on April 17, 2023 ("2022 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 signaling. 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 contributed to what could be, wholly-owned subsidiaries, joint ventures, licenses or sub-licenses, or even sold and has initiated efforts to do so.

In order to facilitate our business activities and product development and to set up our programs for development by subsidiaries, partnering or sale, we have implemented an internal restructuring plan based upon our two research platforms: pharmaceutical cannabinoids and neuromodulators. As of January 11, 2023, the Company formed ResolutionRx Ltd, initially a wholly-owned subsidiary focused on pharmaceutical cannabinoids and EndeavourRx, the business unit focused on neuromodulators. It is anticipated that the Company will use, at least initially, its management personnel to provide management, operational and oversight services to these two lines of business.

(i) ResolutionRx, our pharmaceutical cannabinoids subsidiary 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 AMPAkines 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 GABAkines 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").

Like ResolutionRx, which as of January 11, 2023, was organized as a wholly-owned subsidiary, of the Company, management also intends to organize our EndeavourRx business unit, in part or in whole, into a subsidiary which would conduct research and development of our neuromodulator platform, including either or both of the AMPAkine and GABAkine programs and their related tangible and intangible assets and certain of their liabilities.

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, seeking transactions 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 Market listing and our 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 affected an internal restructuring plan described above that we believe will further the aims of ResolutionRx and EndeavourRx, and may make it 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. 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.

On January 11, 2023, RespireRx established ResolutionRx Ltd, initially a wholly-owned subsidiary and an unlisted public company in Australia. On February 27, 2023, ResolutionRx entered into a services agreement ("Australian CRO Agreement") with iNGENu CRO Pty Ltd ("iNGENu"), a contract research organization ("CRO"), pursuant to which iNGENu is to act as a full service CRO in support of ResolutionRx's research and development ("R&D") program, including but not limited to conducting laboratory experiments to determine a final optimum dronabinol formulation, scaling up and manufacturing the chosen formulation for clinical use, preparing and submitting regulatory documents and designing and conducting clinical trials.

On January 27, 2023 ResolutionRx entered into a letter of intent and term sheet with Radium Capital ("Radium") for a series of debt financings secured by the Australian Research and Development Tax Incentive ("R&DTI"), a tax credit or rebate available for the component of R&D activities that are qualified core and supporting activities. In the case of ResolutionRx, this is anticipated to be a 43.5% tax rebate, with up to, and at the discretion of ResolutionRx, 80% to be financed by Radium and collateralized by the rebate. The Company believes that these are two of the first steps taken in a series of anticipated transactions that will enable the debt and equity or equity-linked financing of ResolutionRx, to support its R&D efforts over the next approximately two and half to three years. RespireRx is in the process of entering into a Master Intercompany Services Agreement ("Master Services Agreement") with ResolutionRx pursuant to which the Company will provide certain services to ResolutionRx for which RespireRx will be paid.

On May 18, 2023, ResolutionRx entered into a Letter of Intent with Cantheon Capital ("Cantheon" and "Cantheon LOI") that describes an intended investment of US$3,125,000 by Cantheon in Australian Series A Preference Shares to be issued by ResolutionRx to support clinical trial research and development over the R&D period equal to 25% of the clinical trial costs of the cannabinoid program that are the subject of the Australian CRO Agreement with iNGENu. See Note 9. Subsequent Events.

On May 11, 2023, RespireRx entered into a Letter Agreement ("Letter Agreement") with Viridian Capital Advisors ("VCA") pursuant to which, VCA will perform the following services ("Valuation Services"): (i) review the Company's intellectual property assets and licensing agreements as they relate to Company's cannabinoid program, net of any associated liabilities, (ii) review the Company's financial models and forecasts as they relate to the Company's cannabinoid program and (iii) prepare the data, analytics and Company valuation report ("Valuation Report") specifically with respect to the Company's cannabinoid program. The Letter Agreement becomes effective upon payment by the Company of a minimum of the required deposit of $35,000. The Company entered this Letter Agreement as part of the process that began with the establishment of ResolutionRx, into which the net assets of the Company's cannabinoid program are to be contributed. See Note 9. Subsequent Events.

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 $430,063 for the three-months ended March 31, 2023 and a net loss attributable to common stockholders of $2,102,720, and after accounting for deemed dividends, a total net loss of $3,972,993 for the fiscal year ended December 31, 2022, as well as negative operating cash flows of $29,188 for the three-months ended March 31, 2023 and $143,905 for the fiscal year ended December 31, 2022. The Company also had a stockholders' deficiency of $12,310,383 at March 31, 2023 and expects to continue to incur net losses and negative operating cash flows for at least the next few years. Additionally, as of March 31, 2023, the Company has, with respect to ten of fourteen similar convertible notes outstanding, $930,907 maturity amount inclusive of accrued interest which have matured, but for which no notices of default have been received which must be paid or converted. The remaining four similar convertible notes outstanding as of March 31, 2023 have maturity dates that range from April 14, 2023 to May 31, 2023 and have maturity amounts inclusive of accrued interest as of March 31, 2023 of $137,630. See Note 4. Notes Payable. The Company will seek to have maturity dates extended in order to avoid a default on such convertible notes, which the Company has achieved in the past, but with respect to which, the Company can provide no assurance. The Company has also not met its payment obligations to the UWM Research Foundation ("UWMRF") of the University of Wisconsin-Milwaukee, but has not received a notice of default and is in regular communication with the UWMRF regarding the establishment of a payment schedule. 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, 2022, 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, debt obligations, financing requirements, intellectual property, licensing agreements, legal and patent matters and regulatory compliance, 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.

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 and liabilities. 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 and, in that regard, has formed an Australian subsidiary, ResolutionRx. In addition to the formation of ResolutionRx, such changes could include additional significant reorganizations, which may include the formation of one or more additional 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 subsidiaries, Pier and ResolutionRx. Intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of condensed consolidated 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 for companies like the Company. 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.

Capitalized Financing Costs

The Company presents debt issuance costs related to debt obligations in its condensed 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 or commitment shares of Common Stock, 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.

Debt and Other Liability Exchanges

In cases where debt or other liabilities are exchanged for equity, the Company compares the carrying value of debt, inclusive of accrued interest, if applicable, being exchanged, to the fair value of the equity issued and records any loss or gain as a result of such exchange. See Note 4. Notes Payable.

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.

Prepaid Insurance

Prepaid insurance represents the premium due in March 2023 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 condensed consolidated balance sheet at each reporting date and amortized to the Company's condensed 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 other 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 and directors, outside consultants and vendors 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 or condensed consolidated financial statements, as appropriate, over the vesting period of the awards.

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

Stock options granted to members of the Company's outside consultants and other vendors are valued on the grant date. As the stock options vest, the Company recognizes this expense over the period in which the services are provided.

The value of stock options granted as stock-based compensation 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 value of the common stock on the grant date, and the estimated volatility of the common stock over the estimated life 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 value of common stock is determined by reference to the quoted market price of the Company's common stock.

Stock options 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.

The Company recognizes the value of stock-based payments in general and administrative costs and in research and development costs, as appropriate, in the Company's consolidated or condensed consolidated statements of operations, as appropriate. The Company issues new shares of common stock to satisfy stock option and warrant exercises.

There were no stock or stock option grants during the three-months ended March 31, 2023.

There were no stock options exercised during the three-months ended March 31, 2023 and 2022.

There were no warrants issued as compensation or for services during the three-months ended March 31, 2023 and 2022. 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 carryforwards 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, the Company does not anticipate performing a complete analysis of the limitation on the annual use of the net operating loss and tax credit carryforwards until the time that it anticipates it will be able to utilize these tax attributes.

As of March 31, 2023, 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 March 31, 2023, 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 accounts for ResolutionRx are maintained in Australian dollars and are converted to U.S. dollars at the exchange rate on the balance sheet. In both cases, 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, our Interim President and our 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, 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 per Share

The Company's computation of earnings per 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 preferred stock dividends declared, amortized or accumulated.

Net 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 March 31, 2023 and 2022 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.

	March 31,	
	2023	**2022**
Series B convertible preferred stock	1	1
Convertible notes payable	661,179,985	49,287,033
Common stock warrants	395,383,183	66,345,298
Common stock options	9,199,356	9,266,868
Total	1,065,762,525	124,899,200

Reclassifications

Certain comparative figures in 2022 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 table below summarizes all convertible notes outstanding as of March 31, 2023. Those with similar characteristics outstanding as of March 31, 2023 are grouped separately. The following abbreviations are used in the column headings: DIC is Debt Issuance Cost, OID is Original Issue Discount, Wts are warrants, CNC is Capitalized Note Cost and BCF is Beneficial Conversion Feature. Also included are repayments by conversion, exchange or otherwise during or prior to the three-month period ended March 31, 2023:

Inception Date	Maturity date	Original Principal Amount	Interest rate	Original aggregate DIC, OID, Wts, CNC and BCF	Cumulative amortization of DIC, OID, Wts, CNC and BCF	Accrued coupon interest	Repayment by conversion, increase in principal amount, net where appropriate	Balance sheet carrying amount at March 31, 2023 inclusive
November 5, 2014	September 15, 2016[1]	$ 25,000	10%	$ -	$ -	$ 31,619	$ -	$ 56,619
November 5, 2014	September 15, 2016[1]	25,000	10%	-	-	31,619	-	56,619
November 5, 2014	September 15, 2016[1]	25,000	12%	-	-	40,264	-	65,264
Sub-total		75,000		-	-	103,502	$ -	178,502
December 31, 2018	February 28, 2019[2]	25,000	10%	-	-	12,995	-	37,995
January 2, 2019	February 28, 2019[2]	10,000	10%	-	-	5,243	-	15,243
Sub-total		35,000		-	$ -	18,238	-	53,238
May 17, 2019	May 17, 2020[3]	50,000	10.00%	(50,000)	50,000	5,001	(52,253)	2,748
July 28, 2020	June 30, 2022[3]	53,000	8.00%	(13,000)	13,000	10,463	(16,247)	47,216
February 17, 2021	June 17, 2022[3]	112,000	10.00%	(112,000)	112,000	12,685	(80,000)	44,685
April 1, 2021	July 31, 2022[3]	112,500	10.00%	(112,500)	112,500	30,353	-	142,853
May 3, 2021	July 31, 2022[3]	150,000	10.00%	(150,000)	150,000	-	(150,000)	-
May 10, 2021	August 10, 2022[3]	150,000	10.00%	(150,000)	150,000	24,107	(13,213)	160,894
June 30, 2021	June 29, 2022[3]	115,000	10.00%	(115,000)	115,000	28,192	-	143,192
August 31, 2021	August 31, 2022[3]	115,000	10.00%	(109,675)	109,675	18,180	-	133,180
October 7, 2021	October 7, 2022[3]	115,000	10.00%	(96,705)	96,705	17,014	-	132,014
December 23, 2021	June 21, 2022[3]	87,000	10.00%	(36,301)	36,301	11,505	25,621	124,126
April 14, 2022	April 14, 2023[3]	27,778	10.00%	(15,936)	15,325	2,671	-	29,838
August 22, 2022	May 31, 2023[3]	66,667	10.00%	(6,667)	4,037	4,036	-	68,073
August 22, 2022	May 31, 2023[3]	22,222	10.00%	(2,222)	1,345	1,346	-	22,691
August 22, 2022	May 31, 2023[3]	16,667	10.00%	(1,667)	1,019	1,009	-	17,028
Sub-total		1,192,834		(971,673)	966,907	166,562	(286,092)	1,068,538
Total		$ 1,302,834		$ (971,673)	$ 966,907	$ 288,302	$ (286,092)	$1,300,278

1 These convertible notes were sold to investors in 2014 and 2015 (“Original Convertible Notes) and have a fixed interest rate of 10% per annum and in the case of the one note for which a notice of default has been received, 12%. The Original Convertible Notes have no reset rights or other protections based on subsequent equity transactions, equity-linked transactions or other events and are convertible into an aggregate of 1,545 shares of Common Stock as of March 31, 2023. As of March 31,

2023, principal and accrued interest on the Original Convertible Note that is subject to a default notice totaled $65,264, of which $40,264 was accrued interest.

2 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 $18,238 as of March 31, 2023. The number of shares of common stock (or preferred stock) into which these notes may convert is not determinable.

3 These fourteen convertible notes were issued between May 17, 2019 and August 22, 2022. They all currently have similar terms including conversion prices that generally are or are likely to be $0.0015 per share of Common Stock. Ten matured prior to March 31, 2023 and four have or will expire between April 14, 2023 and May 31, 2023.The Company has initiated discussions with all note holders regarding maturity date extensions. The Company has not received any notices of default with respect to these notes. These notes contain, among other provisions, most favored nation provisions, reserve requirements and default interest rates.

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 three-months ended March 31, 2023, 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 March 31, 2023 and December 31, 2022:

	March 31, 2023	December 31, 2022
Principal amount of note payable	$ 399,774	$ 399,774
Accrued interest payable	519,159	507,330
Foreign currency transaction adjustment	(101,226)	(73,641)
	$ 817,707	$ 833,463

Interest expense with respect to this promissory note was $11,829 for each of the three-months ended March 31, 2023 and 2022, respectively.

Notes Payable to Officers and Former Officers

For the three-months ended March 31, 2023 and 2022, $3,671 and $3,338 was charged to interest expense with respect to Dr. Arnold S. Lippa's notes, respectively. At March 31, 2023, amounts owed to Dr. Lippa, including notes payable, advances and accrued interest were $408,243.

In addition, Dr. Lippa 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.

For the three-months ended March 31, 2023 and 2022, $5,566 and $5,060, respectively, was charged to interest expense with respect to former executive officer, Dr. James S. Manuso's notes. At March 31, 2023, amounts owed to Dr. Manuso, including one note payable and accrued interest were $231,310.

Other Short-Term Notes Payable

Other short-term notes payable at March 31, 2023 and December 31, 2022 consisted primarily of premium financing agreements with respect to the Company's directors and officers liability insurance policies. At March 31, 2023, a premium financing agreement was payable in the initial amount of $96,408 (prior to payment of a deposit of $19,228 which was paid in May 2023), with interest at 8.99% per annum, in nine monthly installments of $8,900. At March 31, 2023 and December 31, 2022, the aggregate amount of the short-term notes payable was $96,408 and $15,847 respectively.

5. Settlement and Payment Agreements

Effective December 15, 2022, the Company and the Board of Trustees of the University of Illinois ("UIL") entered into the Second Amendment to RespireRx -University of Illinois Exclusive License Agreement. The parties entered into the Second Amendment in order to eliminate accrued financial obligations to UIL and reduce future obligations. Annual $100,000 payments by the Company to UIL are eliminated and the unpaid amount of $200,000 for calendar years 2021 and 2022 are no longer due and payable. Among other changes, the $75,000 payment that was due after the dosing of the 1st patient in a Phase II study anywhere in the world is now reduced to $10,000 and UIL has been given an extension in the term of the License and a deferred compensation obligation of RespireRx including the 4% royalty on net sales due to UIL has been extended for up to 8 years after the original patent rights expire by including a royalty on the net sales protected by a patent application submitted by the Company describing a new formulation of dronabinol. See Note 8. Commitments and Contingencies-Significant Agreements and Contracts-University of Illinois Exclusive License Agreement for more details.

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 was 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 was 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. The amount due by December 30, 2022 was not paid and the payment settlement agreement was amended to call for a payment of $350,000 by February 15, 2023, which amount was also not paid. The Company and its former legal counsel are in discussions regarding further revised payment settlement terms. The amount due to the Company and its former legal counsel included in accounts payable as of March 31, 2023 is $2,608,914.

Effective January 31, 2022, the Company's former President and Chief Executive Officer and Member of the Board of Directors, Timothy Jones, resigned his officer positions as well as from the Board of Directors pursuant to an Employment Agreement Termination and Separation Agreement ("SA") dated February 8, 2022. Pursuant to the terms of the SA, the Company has agreed to pay Mr. Jones up to a maximum of $789,267 in accordance with a schedule set forth in the SA based on amounts of funding raised by the Company, all in payment for Mr. Jones' service to the Company as President and Chief Executive Officer prior to January 31, 2022. All such amounts are included in accrued compensation as of March 31, 2023 and December 31, 2022. Mr. Jones did not resign because of any disagreement with the Company relating to the Company's operations, policies or practices.

On April 29, 2021, RespireRx agreed to a payment and settlement agreement with the University of California Innovation and Entrepreneurship ("UIC") 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 December 31, 2022 and March 31, 2023. 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 has been recorded in accounts payable at March 31, 2023. The Company remains in discussions with an agent on behalf of UIC to establish a new payment settlement schedule.

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 March 31, 2023 after payments totaling $30,000 pursuant to the Sharp Settlement Agreement in August, October and December 2021. The Company has not made the any of the payments due on or after October 1, 2021. 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 management 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 December 31, 2022, including accrued interest at 4.5% annually from February 26, 2018, the date of the judgment, through December 31, 2022, totaling $39,552. 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 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 commenced on November 15, 2021, followed by twelve monthly payments of $10,000 which commenced on November 15, 2022, followed by twelve monthly payments of $15,000 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 had received 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 ($15,000,000.00) ("Upfront Fees"), then the full DNA Healthlink Settlement Amount, less any amounts previously paid, would have been 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 during 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 thereafter. Of the $390,000 total amount due, $174,000 has been reflected as long-term liabilities and the remaining amount has been reflected in accounts payable and accrued expenses in the Company's condensed consolidated balance sheet as of March 31, 2023.

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 March 31, 2023 and December 31, 2022.

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 March 31, 2023 and consolidated financial statements as of December 31, 2022 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 March 31, 2023 and December 31, 2022, 37,500 shares were designated as Series B Convertible Preferred Stock (non-voting, "Series B Preferred Stock").

Series B Preferred Stock outstanding as of March 31, 2023 and December 31, 2022 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.

As of March 31, 2023, there were 1,376 shares of Series H Preferred Stock designated and available for issuance.

Although other series of preferred stock have been designated, no other shares of preferred stock are outstanding. As of March 31, 2023 and December 31, 2022, 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.

On April 3, 2023 and April 12, 2023, the Company filed a Certificate of Designation, Preferences, Rights and Limitations of its Series I Preferred Stock and a Certificate of Designation of Series J 8% Redeemable Preferred Stock with the Secretary of State of the state of Delaware, respectively, and amended the Company's certificate of incorporation on each date. See Note 9. Subsequent Events.

Common Stock

RespireRx has authorized 2,000,000,000 shares of Common Stock, par value $0.001 ("Common Stock"). There are 144,326,672 shares of the Company's Common Stock outstanding as of March 31, 2023. 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 776,233,719 shares of the Company's Common Stock available for future issuances as of March 31, 2023. No options were exercised during the three-month period ended March 31, 2023. During that period, warrants exercisable into 24,300,000 shares of Common Stock if exercised on a cash basis were exercised on a cashless basis resulting in the issuance of 18,782,396 shares of Common Stock. No warrants or options were exercised after March 31, 2023. No warrants or options expired during the three-month period ended March 31, 2023. In April, 2023, 23,881 warrants and 31,039 options expired. See Note 9. Subsequent Events.

Common Stock Warrants

A summary of warrant activity for the three-months ended March 31, 2023 is presented below.

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in Years)
Warrants outstanding and exercisable at December 31, 2022	419,683,183	$ 0.0074	3.28
Exercised	(24,300,000)	0.0015	-
Issued	-	-	
Expired	-	-	
Warrants outstanding and exercisable at March 31, 2023	395,383,183	$ 0.0076	3.17

The exercise prices of common stock warrants outstanding and exercisable are as follows at March 31, 2023:

Exercise Price	Warrants Outstanding and Exercisable (Shares)	Expiration Dates
$ 0.0015	369,582,308	September 30, 2023-April 14, 2027
$ 0.0389	208,227	May 10, 2026
$ 0.0470	172,341	May 3, 2026
$ 0.0700	25,377,426	September 30, 2023
$ 15.0000	19,000	December 30, 2023
$ 15.7500	23,881	April 30, 2023
$		
	395,383,183	

Based on a value of $0.0039 per share on March 31, 2023, there were 369,582,308 exercisable in-the-money common stock warrants as of March 31, 2023.

A summary of warrant activity for the three-months ended March 31, 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	-	-	
Expired	-	-	
Warrants outstanding and exercisable at March 31, 2022	59,420,298	$ 0.0718	3.0721

The exercise prices of common stock warrants outstanding and exercisable are as follows at March 31, 2022:

Exercise Price	Warrants Outstanding (Shares)	Warrants Exercisable (Shares)	Expiration Date
$ 0.016	2,212,500	2,212,500	May 17, 2022
$ 0.020	31,302,273	31,302,273	September 30, 2023-October 7, 2026
$ 0.0389	208,227	208,227	May 10, 2026
$ 0.047	172,341	172,341	May 3, 2026
$ 0.070	25,377,426	25,377,426	September 30, 2023
$ 11.00 -15.750	147,531	147,531	September 29, 2022-December 30, 2023
	59,420,298	59,420,298	

Based on a value of $0.01 per share on March 31, 2022, there were no exercisable in-the-money common stock warrants as of March 31, 2022.

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 March 31, 2023, there are 6,325 share 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 March 31, 2023, there are 13,670,110 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 three-months ended March 31, 2023 is presented below.

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in Years)
Options outstanding at December 31, 2022	9,199,356	$ 0.592	3.74
Granted	-	-	-
Expired	-	-	-
Options outstanding and exercisable at March 31, 2023	9,199,356	$ 0.592	2.74

The exercise prices of common stock options outstanding and exercisable were as follows at March 31, 2023:

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	254,912	254,912	April 5, 2023 - December 9, 2027
	9,199,356	9,199,356	

There was no deferred compensation expense for the outstanding and unvested stock options at March 31, 2023.

Based on a fair value of $0.0039 per share on March 31, 2023, there were no exercisable in-the-money common stock options as of March 31, 2023.

Reserved and Unreserved Shares of Common Stock

As of March 31, 2023, there are 2,000,000,000 shares of Common Stock, par value $0.001 authorized, of which 144,326,672 are issued and outstanding. As of March 31, 2023, there were outstanding options to purchase 9,199,356 shares of Common Stock and 6,325 and 13,670,110 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 March 31, 2023, there are 661,179,985 issuable upon conversion of convertible notes. As of March 31, 2023, there are 395,383,183 shares that may be issued upon exercise of outstanding warrants. As of March 31, 2023, the Series B Preferred Stock may convert into 1 share of Common Stock. Therefore, the Company is reserving 1,079,439,609 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.

7. Related Party Transactions

Dr. Arnold S. Lippa 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 withdrew its membership with FINRA and its registration with the SEC in July 2021. Although Aurora has not provided services to RespireRx during the three-months ended March 31, 2023 or the fiscal year ended December 31, 2022, 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 March 31, 2023.

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 March 31, 2023, consolidated financial statements as of December 31, 2022 and condensed consolidated financial statements as of March 31, 2022 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 three-month period ended March 31, 2023 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 three-month periods ended March 31, 2023 and 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. See Note 5. Payment and Settlement Agreements.

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		
	Six months		
	Base Salary	Benefits	Total
Arnold S. Lippa	$ 150,000	$ 19,800	$ 169,800
Jeff E. Margolis	150,000	10,800	160,800
	$ 300,000	$ 30,600	$ 330,600

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 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.

Certain payments under the UWMRF Patent License Agreement have not been paid by the Company. The Company is in regular discussions with UWMRF regarding when the Company may be able to commence making payments. The Company has not received a notification of default either during or before the three-month period ended March 31, 2023 or in any subsequent periods. All amounts due under the UWMRF Patent License Agreement are reflected in the Company's condensed consolidated financial statements as of March 31, 2023 in accounts payable and accrued expenses.

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 totaling $50,000 on January 12, 2022 and April 12, 2022 are recorded in accounts payable as of March 31, 2023.

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 was amended on July 25, 2017 and effective December 15, 2022, the first amendment was to extend certain timeframes and the second amendment represented an extensive set of modifications ("2nd Amendment").

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 (Δ9-tetrahydrocannabinol), a cannabinoid, for the treatment of OSA, the most common form of sleep apnea.

Among other things, the 2nd Amendment redefined the term "Product" primarily to include in the definition, any product or process that would be enforceable under the licensed patent rights after the patent rights have expired. In addition, new definitions were added for "Deferred Compensation Annual Net Sales Payments" and "Deferred Compensation Minimum Payment(s)," both of which only become due and payable after the expiration of the patent rights and shall not be due and payable while any of the patent rights have not yet expired. These deferred compensation arrangements were in consideration for deferment of certain financial obligations. The deferred payments are due for eight years from the first commercial of a regulatory approved product but after the patent rights have expired. The 2nd Amendment also modified the term to the period of time from the effective date until the later of the date: (a) of the last to lapse, expire or terminate of the patent rights or (b) when the licensee (the Company) provides notice of that the use of technical information as defined in the 2014 License Agreement as amended has ceased or (c) of the expiration of the last form of market exclusivity or (d) of the last date in which the Licensee (the Company) owes payments to the University. The 2nd Amendment amended and clarified Schedule 2 to the 2014 License Agreement, as amended by among other things, by (i) including a 4% royalty on Net Sales by the Licensee or sublicensee as Deferred Compensation Annual License Payments

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. What was the $100,000 annual minimum that existed from inception through December 31, 2020 was eliminated and therefore the amounts previously recorded in accounts payable and accrued expenses, were reduced to $0. The annual minimum amount due the first year with a market approval from the US FDA (United States Food and Drug Administration) or a foreign equivalent and every year thereafter until the first commercial sale of a product of $350,000 replaced two similarly timed payments of $150,000 and $200,000. The first year with a commercial sale of a product and every year thereafter is now $400,000 whereas it was previously $250,000 after the first year of commercial sale. One time milestone payments have been changed to read as follows:

(i) $10,000 due within 5 days after dosing of the first patient with a product in a Phase II human clinical study anywhere in the world.
(ii) $150,000 due within 5 days after dosing of the first patient with a product in a Phase III human clinical study anywhere in the world.
(iii) $350,000 due within 5 days after the earlier date of the following (a) enrolling 80% of the patients with a product in the Phase III human clinical study anywhere in the world, (b) one year after the initiation of the Phase III human clinical study anywhere in the world, or (c) termination of the Phase III human clinical study anywhere in the world.
(iv) $500,000 due within 5 days after the first NDA (New Drug Application) filed with the US FDA or any other foreign equivalent regulatory agency for a product anywhere in the world.
(v) $1,000,000 due within twelve (12) months after the first commercial sale of a product anywhere in the world.

There are reporting requirements by the Licensee to the University.

Royalty stacking provisions remained unchanged in the 2nd Amendment.

The concept of reduced royalties upon expiration of the patent rights, but while technical information was being used, was eliminated with the 2nd Amendment.

During the three-months ended March 31, 2023 and 2022, the Company recorded charges to operations of $0 and $25,000, respectively representing the annual minimum royalty, which is included in research and development expenses in the Company's condensed consolidated statement of operations. The $100,000 from the fiscal year ended December 31, 2021 was reversed as a result of the effectiveness of the 2nd Amendment as of December 15, 2022 and the estimate for the fiscal year ended December 31, 2022 was $0.

Noramco Inc. - Dronabinol Development and Supply Agreement

On September 4, 2018, RespireRx entered into a dronabinol Development and Supply Agreement with Noramco Inc., one of the world's major dronabinol manufacturers, which Noramco subsequently assigned to its subsidiary, Purisys LLC (the "Purisys Agreement"). Under the terms of the Purisys Agreement, Purisys agreed to (i) provide all of the active pharmaceutical ingredient ("API") estimated to be needed for the clinical development process for both the first- and second-generation products (each a "Product" and collectively, the "Products"), three validation batches for New Drug Application ("NDA") filing(s) and adequate supply for the initial inventory stocking for the wholesale and retail channels, subject to certain limitations, (ii) maintain or file valid drug master files ("DMFs") with the FDA or any other regulatory authority and provide the Company with access or a right of reference letter entitling the Company to make continuing reference to the DMFs during the term of the agreement in connection with any regulatory filings made with the FDA by the Company, (iii) participate on a development committee, and (iv) make available its regulatory consultants, collaborate with any regulatory consulting firms engaged by the Company and participate in all FDA or Drug Enforcement Agency ("DEA") meetings as appropriate and as related to the API. We now refer to the second-generation product as our proprietary formulation or proprietary product and have de-emphasized the first-generation product.

In consideration for these supplies and services, the Company has agreed to purchase exclusively from Noramco during the commercialization phase all API for its Products as defined in the Development and Supply Agreement at a pre-determined price subject to certain producer price adjustments and agreed to Noramco's participation in the economic success of the commercialized Product or Products up to the earlier of the achievement of a maximum dollar amount or the expiration of a period of time.

There was no activity during the three-month periods ended March 31, 2023 or 2022 with respect to the Purisys Agreement.

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 March 31, 2023, aggregating $423,285. License agreement amounts included in the 2023 column represent amounts contractually due from April 1, 2023 through December 31, 2023 (nine months) and in each of the subsequent years, represents the full year. Employment agreement amounts included in the 2023 column represent amounts contractually due from April 1, 2023 through September 30, 2023 (six months) when such contracts expire unless extended pursuant to the terms of the contracts.

		Payments Due By Year				
	Total	2023	2024	2025	2026	2027
License agreements	$ 92,685	$ 37,685	$ 10,000	$ 15,000	$ 15,000	$ 15,000
Employment agreements (1)	330,600	330,600	-	-	-	-
Total	$423,285	$368,285	$ 10,000	$ 15,000	$ 15,000	$15,0000

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

9. Subsequent Events

Establishment of Series I Preferred Stock and Series J Preferred Stock

On April 3, 2023, the Company filed a Certificate of Designation, Preferences, Rights and Limitations of its Series I Preferred Stock ("Series I Certificate of Designation") with the Secretary of State of the State of Delaware to amend the Company's certificate of incorporation. The filing of the Series I Certificate of Designation was approved by the Company's Board of Directors. The Series I Certificate of Designation sets forth the preferences, rights and limitations of the Series I Preferred Stock, a brief summary of which is as follows:

The number of shares designated as Series I 8% Redeemable Preferred Stock ("Series I Preferred Stock") is 3,500 (which is not subject to increase without the written consent of a majority of the holders (each a "Series I Holder") of the Series I Preferred Stock or as otherwise set forth in the Certificate of Designation). The Series I Preferred Stock Par Value is $0.001 and the Series I Preferred Stock Stated Value is $100.00. The dividend rate is 8% per annum based on a 365 day year, payable in-kind.

Redemption shall happen upon the payment of a Series I "Eligible Payment" which takes place upon the occurrence of an Eligible Payment Event, as both terms are defined in the Certificate. The Series I Eligible Payment is calculated as the Series I Maximum Appreciated Price, which is $0.02, subject to certain adjustments (unless a lesser price is agreed by the Corporation and the Series I Holder) multiplied by the number of shares of Common Stock corresponding to the number of Series I Preferred Shares divided by the Series I Base Measurement Price ($0.0015), multiplied by the Series I Preferred Stock Stated Value. A Series I Eligible Payment Event shall include: (i) any license, sublicense, joint venture or similar transaction resulting in an upfront payment of at least $15,000,000.00, or (ii) any milestone payment with respect to research and development of at least $15,000,000.00, or (iii) receipt of royalties in any one year of at least $15,000,000.00 or (iv) any event resulting in the Company's receipt of an amount deemed by the Company's Board of Directors to be establish a Series I Eligible Payment Event. Certain Fundamental Transactions as defined in the Series I Certificate of Designation may be Series I Eligible Payment Events.

For a detailed description the Series Certificate of Designation and the Series I Preferred Stock to be issued, please refer to our Current Report on Form 8-K, filed with the SEC on April 6, 2023, including but not limited to Exhibit 3.1 to the Current Report of Form 8-K.

On April 12, 2023, the Company filed the Series J Certificate of Designation with the Secretary of State of the state of Delaware.

The Series J Certificate of Designation sets forth the preferences, rights and limitations of the Series J Preferred Stock, a summary of which is as follows:

The number of shares designated as Series J 8% Redeemable Preferred Stock ("Series J Preferred Stock") is 15,000 (which is not subject to increase without the written consent of a majority of the holders (each a "Series J Holder") of the Series J Preferred Stock or as otherwise set forth in the Series J Certificate of Designation). The Series J Preferred Stock Par Value is $0.001 and the Series J Preferred Stock Stated Value is $100.00. The dividend rate is 8% per annum based on a 365 day year, payable in-kind.

Redemption shall happen upon the payment of an Series J "Eligible Payment" which takes place upon the occurrence of a Series J Eligible Payment Event, as both terms are defined in the Series J Certificate. The Series J Eligible Payment is calculated as the Maximum Appreciated Price, which is closing price per share of Common Stock or its equivalent on the day that is the trading day on which an Series J Eligible Payment Event is publicly announced prior to the opening of financial markets, or the trading day following the public announcement of the Series J Eligible Payment Event if announced after the opening of the financial markets on the date of the Series J Eligible Payment Event (unless a lesser price is agreed by the Company and the Series I Holder) multiplied by the number of shares of Common Stock corresponding to the number of Series J Preferred Shares divided by the Series J Base Measurement Price ($0.006), subject to certain adjustments, multiplied by the Series J Preferred Stock Stated Value. A Series J Eligible Payment Event shall include: (i) any license, sublicense, joint venture or similar transaction resulting in an upfront payment of at least $20,000,000.00, or (ii) any milestone payment with respect to research and development of at least $20,000,000.00, or (iii) receipt of royalties in any one year of at least $20,000,000.00 or (iv) any event resulting in the Corporation's receipt of an amount deemed by the Corporation's Board of Directors to be establish a Series J Eligible Payment Event. Certain Fundamental Transactions as defined in the Series J Certificate of Designation may be Series J Eligible Payment Events.

Each share of Series J Preferred Stock shall be entitled to that number of votes, which shall be eligible to vote along with the Common Stockholders, or, as the case may be, when voting as a class, that is equal to one hundred (100x) times number calculated by dividing the number of shares of Series J Preferred Stock by the Base Measurement Price as of the record date for such vote or written consent or, if there is no specified record date, as of the date of such vote or written consent.

Upon any liquidation, dissolution or winding-up of the Company, no distribution shall be made to the holders of any shares of capital stock of the Company unless, prior thereto, the Series J Holders receive (i) an amount equal to 100% of the stated value, plus any accrued and unpaid dividends plus (ii) an amount equal to a pro rata portion of the Series J Eligible Payment Amount less the Series J Preferred Stock Stated Value paid pursuant to (i) above, plus (iii) the pro rata amount when considered with all outstanding shares of Common Stock and any securities that may be convertible into, exercisable for or exchanged for Common Stock that have similar rites, of any remaining distribution. The distribution shall result in a Redemption. If the assets of the Company are insufficient to pay in full such amounts due the Series J Holders or any holders of another class that is parri pasu with the Series J Holders ("Series J Pari Passu Holders"), then the entire assets shall be distributed ratably among the Series J Holders and Series J Pari Passu Holders in accordance with the respective amounts that would be payable on such shares if all amounts payable thereon were paid in full and such distribution shall result in a Redemption. A Fundamental Transaction, or a Change of Control Transaction, each as defined in the Certificate, shall be deemed to be Liquidations.

Exchange and Exchange and Settlement Agreements

On April 12, 2023, RespireRx entered into an exchange agreement and two exchange and settlement agreements with two executive officers and one vendor collectively, the "Series J Settlement Agreements" and the executive officers and vendor are referred to herein as the "Series J Exchangers."

Pursuant to the terms of the Settlement Agreements, the Company, in exchange for the issuance of Series J Preferred Stock to the Exchangers, the Exchangers exchanged or settled their rights to receive an aggregate of $570,000 of accrued compensation or debt, advances or other liabilities owed to them. The Series J Preferred Stock is transferrable to Affiliates as such term is defined in the Series J Certificate of Designation. The two executives immediately transferred all of their shares of Series J Preferred Stock to separate trusts of which each is separately the grantor and that are Affiliates of each. The vendor immediately transferred its shares to an individual Affiliate of the vendor.

The Settlement Agreements, the transfer requests and the Series J Certificate of Designation and the delivery of the Series J Preferred Stock was approved by the Company's Board of Directors.

Convertible Note Conversion

On April 17, 2023 and May 10, 2023, a convertible note holder converted as partial conversions, an aggregate of $18,050 of principal, and $1,000 of conversion fees for a total of $19,050 at a conversion price of $0.015 resulting in the issuance of 12,700,000 shares of Common Stock.

Advance from Officer

On May 16, 2023 and May 17, 2023, the Company's Interim President, Interim Chief Executive Officer and Chief Scientific Officer advanced $81,500 to the Company which funds were used to pay certain accounts payable. This advance is identical in nature to several advances made in prior periods by the same officer for similar purposes. It is anticipated that additional advances will be made and exchanged for a demand promissory note payable and warrants.

Advance from Controller

On April 28, 2023, Marc M. Radin, the Company's controller, advanced $28,128 which funds were used to remit the deposit and the first monthly installment with respect to the directors and officers liability insurance policy. It is anticipated that $25,000 of this advance will be exchanged for a demand promissory note payable and warrants.

Warrant and Option Expirations

In April, 2023, 23,881 warrants and 31,039 options expired. The warrants had an exercise price of $15.75 per share of Common Stock and the options had an exercise price of $11.20 per share of Common Stock.

Letter Agreement for Valuation Report

On May 11, 2023, RespireRx entered into a Letter Agreement ("Letter Agreement") with Viridian Capital Advisors ("VCA") pursuant to which, VCA will perform the following services ("Valuation Services"): (i) review the Company's intellectual property assets and licensing agreements as they relate to Company's cannabinoid program, net of any associated liabilities, (ii) review the Company's financial models and forecasts as they relate to the Company's cannabinoid program and (iii) prepare the data, analytics and Company valuation report ("Valuation Report") specifically with respect to the Company's cannabinoid program. The Letter Agreement becomes effective upon payment by the Company of at least a minimum of the required deposit of $35,000. The Company entered this Letter Agreement as part of the process that began with the establishment of ResolutionRx, into which the net assets of the Company's cannabinoid program are to be contributed.

Letter of Intent for Financing ResolutionRx

On May 18, 2023, ResolutionRx entered into a Letter of Intent with Cantheon Capital ("Cantheon" and "Cantheon LOI") that describes an intended investment of US$3,125,000 by Cantheon in Australian Series A Preference Shares to be issued by ResolutionRx, to support, over the R&D period, 25% of the clinical trial costs of the cannabinoid program that are the subject of the Australian CRO Agreement with iNGENu. The Cantheon LOI calls for the initial pricing of the Series A Preference Shares at 90% of the value of the net assets of the Company's cannabinoid program in the Valuation Report with a price on a per Series A Preference Share basis of 90% of a maximum value for the cannabinoid program net of any associated liabilities of US$25,000,000. Among other provisions, the Series A Preference Shares have broad-based anti-dilution protections, are convertible at the option of the holder into Ordinary Shares of ResolutionRx on a 1:1 basis, subject to adjustment, and are also mandatorily convertible under certain circumstances. The Series A Preference Shares may be offered to sophisticated or professional investors in Australia and to accredited investors in the United States.

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 2022 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 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 contributed to what could be, wholly-owned subsidiaries, joint ventures, licenses or sub-licenses, or even sold and has initiated efforts to do so.

In order to facilitate our business activities and product development and to set up our programs for development by subsidiaries, partnering or sale, we have implemented an internal restructuring plan based upon our two research platforms: pharmaceutical cannabinoids and neuromodulators. As of January 11, 2023, the Company formed ResolutionRx Ltd, initially a wholly-owned subsidiary focused on pharmaceutical cannabinoids and EndeavourRx, a the business unit focused on neuromodulators. It is anticipated that the Company will use, at least initially, its management personnel to provide management, operational and oversight services to these two lines of business.

(i) ResolutionRx, our pharmaceutical cannabinoids subsidiary 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 AMPAkines 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 GABAkines 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").

Like ResolutionRx, which as of January 11, 2023, was organized as a wholly-owned subsidiary, of the Company, management also intends to organize our EndeavourRx business unit, in part or in whole, into a subsidiary which would conduct research and development of our neuromodulator platform, including either or both of the AMPAkine and GABAkine programs and their related tangible and intangible assets and certain of their liabilities.

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, seeking transactions 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 Market listing and our 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 affected an internal restructuring plan described above that we believe will further the aims of ResolutionRx and EndeavourRx, and may make it 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. 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.

On January 11, 2023, the Company established ResolutionRx Ltd, initially a wholly-owned subsidiary of RespireRx, as an unlisted public company in Australia an. On February 27, 2023, ResolutionRx entered into a services agreement ("Australian CRO Agreement) with iNGENu CRO Pty Ltd (iNGENu), a contract research organization ("CRO"), pursuant to which iNGENu is to act as a full service CRO in support of ResolutionRx's research and development ("R&D") program, including but not limited to conducting laboratory experiments to determine a final optimum dronabinol formulation, scaling up and manufacturing the chosen formulation for clinical use, preparing and submitting regulatory documents and designing and conducting clinical trials. In addition, on January 27, 2023 ResolutionRx entered into a letter of intent and term sheet with Radium Capital ("Radium") for a series of debt financings secured by the Australian Research and Development Tax Incentive ("R&DTI"), a tax credit or rebate available for the component of R&D activities that are qualified core and supporting activities. In the case of ResolutionRx, this is anticipated to be a 43.5% tax rebate, with up to, and at the discretion of ResolutionRx, 80% to be financed by Radium and collateralized by the rebate. The Company and ResolutionRx believe that these are two of the first steps taken in a series of anticipated transactions that will enable the debt and equity or equity-linked financing of ResolutionRx, to support its R&D efforts over the next approximately two and half to three years. RespireRx is in the process of entering into a Master Services Agreement ("Master Services Agreement") with ResolutionRx pursuant to which the Company will provide certain services to ResolutionRx for which the Company will be paid.

Recent Developments

University of Illinois at Chicago 2014 License Agreement Second Amendment

See Note 8. Commitments and Contingencies – Significant Agreements and Contracts – University of Illinois 2014 Exclusive License Agreement in the notes to condensed consolidated financial statements for the three-months ended March 31, 2023, included in this report.

GRIA UIL collaboration

The Company entered into a material transfer agreement with University College London (UCL) as part of a collaborative research effort involving Dr. Ian Coombs and Prof. Mark Farrant, founder members of the GRIA Scientific Advisory Board of the CureGRIN Foundation ("CureGRIN") and from the UCL Department of Neuroscience, Physiology, and Pharmacology. The UCL group, which also includes Prof, Stuart Cull-Candy F.R.S., has been awarded funding from CureGRIN, and will be working with the RespireRx research team to study the possibility of using CX1739, RespireRx's lead clinical AMPAkine, for the treatment of a major class of GRIA disorders. GRIA Disorder refers to a family of rare genetic diseases caused by mutations in the AMPA glutamate receptor genes that cause either a loss or gain in the functioning of these receptors, which are the site of action of RespireRx's AMPAkines and which play an important role in learning and memory as well as other critical biological functions.

Series I Preferred Stock and Series J Preferred Stock

See Note 9. Subsequent Events - *Establishment of Series I Preferred Stock and Series J Preferred Stock* to our condensed consolidated financial statements at March 31, 2023.

Going Concern

See Note 2. Business – *Going Concern* to our condensed consolidated financial statements at March 31, 2023.

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 3 to the Company's condensed consolidated financial statements at March 31, 2023.

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 3. Significant Accounting Policies – *Concentration of Credit Risk* to the Company's condensed consolidated financial statements at March 31, 2023.

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:

- Research and Development Costs
- License Agreements
- Patent Costs
- Convertible Notes

See Critical Accounting Policies and Estimates in our 2022 Form 10-K for a complete description.

Results of Operations

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

	Three-months Ended March 31,	
	2023	**2022**
Operating expenses:		
General and administrative	$ 291,949	$ 495,793
Research and development	98,425	121,159
Total operating costs and expenses	390,374	616,952
Loss from operations	(390,374)	(616,952)
Interest expense, including related parties	(67,272)	(259,647)
Foreign currency transaction gain	27,583	16,436
Net loss attributable to common stockholders	$ (430,063)	$ (860,163)
Net loss per common share - basic and diluted	$ (0.01)	$ (0.01)
Weighted average common shares outstanding - basic and diluted	137,182,491	97,894,276

Three-months Ended March 31, 2023 and 2022

Revenues. The Company had no revenues during the three-months ended March 31, 2023 and 2022.

General and Administrative. For the three-months ended March 31, 2023 general and administrative expenses were $291,949, a decrease of $203,844, as compared to $495,793 for the three-months ended March 31, 2022. The decrease in general and administrative expenses for the three-months ended March 31, 2023, as compared to the three-months ended March 31, 2022, is primarily due to the write off of $177,883 of deferred financing costs during the three-months ended March 31, 2022 without a similar item during the three-month period ended March 31, 2023 and a decrease of $23,591 in legal fees, a decrease of $8,926 in insurance costs, a decrease of $14,713 in financial market listing fees due to the Company's downlisting to the OTC Pink Market and smaller increases and decreases in other general and administrative expense categories.

Research and Development. For the three-months ended March 31, 2023, research and development expenses were $98,425, a decrease of $22,734, as compared to $121,159 for the three-months ended March 31, 2022. The decrease in license fees of $25,000 related to research and development associated with the 2nd Amendment to the 2014 Patent Agreement, offset by an increase in consulting fees of $3,925 and a decrease is research and development insurance related expenses of $1,659 for the three-months ended March 31, 2023, as compared to the three-months ended March 31, 2022.

Interest Expense. During the three-months ended March 31, 2023, interest expense was $67,272 as compared to $259,647 for the three-months ended March 31, 2022. The decrease of $192,375 is primarily the result of a full quarter of interest and the amortization to interest expense of debt discounts and capitalized note costs associated with new convertible debt that achieved nearly full amortization for most of the convertible debt discounts during the three-month period ended March 31, 2022 leaving a smaller amortization during the three-months ended March 31, 2023.

Foreign Currency Transaction Gain. Foreign currency transaction gain was $27,583 for the three-months ended March 31, 2023, as compared to a foreign currency transaction gain of $16,436 for the three-months ended March 31, 2022. The foreign currency transaction gain relates to the $399,774 loan from SY Corporation, made in June 2012, which is denominated in the South Korean Won.

Net Loss Attributable to Common Stockholders. For the three-months ended March 31, 2023, the Company incurred a net loss of $430,063 as compared to a net loss of $860,163 for the three-months ended March 31, 2022.

Liquidity and Capital Resources - March 31, 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 $430,063 and net losses from operations of $390,374 for the three-months ended March 31, 2023 and a net loss attributable to common stockholders after deemed dividends of $3,972,993, a net loss of $2,102,720 and a net loss from operations of $1,579,355 for the fiscal year ended December 31, 2022, and negative operating cash flows of $29,188 for the three-months ended March 31, 2023 and $143,905 for the fiscal year ended December 31, 2022, had a stockholders' deficiency of $12,191,383 at March 31, 2023, 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, 2022, expressed substantial doubt about the Company's ability to continue as a going concern.

At March 31, 2023, the Company had a working capital deficit of $12,191,383, as compared to a working capital deficit of $11,706,321 at December 31, 2022 reflecting an increase in the working capital deficit of $485,062 for the three-months ended March 31, 2023. The increase in the working capital deficit is primarily due to an increase accounts payable and accrued expenses of $227,626, an increase in accrued compensation and benefits of $185,300 and an increase in convertible notes payable of $41,963. There was also a net increase in current assets of $73,106 primarily as a result of in an increase in prepaid insurance of $73,056. There was an increase in short-term financings of insurance premiums payable of $80,561.

At March 31, 2023, the Company had cash of $138, as compared to $88 at December 31, 2022, reflecting an increase in cash of $50 for the three-months ended March 31, 2023.

The limited cash of $29,238 raised in financings during the three-months ended March 31, 2023 were utilized for working capital. The financings completed during fiscal year ended December 31, 2022 were utilized to pay general and administrative and research and development expenses or the related accounts payable, including, but not limited to, 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 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 have included and could include, in the future, significant reorganizations, which has included the formation of one subsidiary and may include in the future, the formation of one or more additional subsidiaries into which one of the programs is in the process of being contributed and additional 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.

Operating Activities. For the three-months ended March 31, 2023, operating activities utilized cash of $29,188, as compared to utilizing cash of $23,133 for the three-months ended March 31, 2022, to support the Company's ongoing general and administrative expenses as well as its research and development activities.

Financing Activities. For the three-months ended March 31, 2023, financing activities consisted of $29,238 of advances from an executive officer.

Principal Commitments

Employment Agreements

See Note 8. Commitments and Contingencies – Significant Agreements and Contracts – *Employment Agreements* to our condensed consolidated financial statements at March 31, 2023.

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 March 31, 2023.

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 March 31, 2023.

A table setting forth the Company's principal cash obligations and commitments for the next five fiscal years as of March 31, 2023, aggregating $423,285 is set forth in Note 8. Commitments and Contingencies – *Summary of Principal Cash Obligations and Commitments* to our condensed consolidated financial statements at March 31, 2023.

Off-Balance Sheet Arrangements

At March 31, 2023, 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

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 in 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. The Company is current in its SEC periodic reporting obligations, but as of the date of the filing of this Report, 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 statements included in this Report fairly present, in all material respects, the Company's financial condition, results of operations and cash flows for the periods presented.

Changes in Internal Control 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 by this report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

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 March 31, 2023 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 2022 Form 10-K. The Risk Factors set forth in the 2022 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. Any of the risks described in the 2022 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 three-months ended March 31, 2023 that were not disclosed by the Company on a Current Report on Form 8-K. There were exercises of warrants as disclosed in Note 6. Stockholders' Deficiency – Common Stock of our condensed consolidated financial statements at March 31, 2023.

Additional information with respect to the transactions described above is provided in the Notes to the condensed consolidated financial Statements for the three-months ended March 31, 2023.

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 September 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 three-months ended March 31, 2023, there were no further communications between the Company and SY Corporation.

The note payable to SY Corporation consists of the following at March 31, 2023 and December 31, 2022:

	March 31, 2023	December 31, 2022
Principal amount of note payable	$ 399,774	$ 399,774
Accrued interest payable	519,159	507,330
Foreign currency transaction adjustment	(101,226)	(73,641)
	$ 817,707	$ 833,463

Interest expense with respect to this promissory note was $11,829 for the three-months ended March 31, 2023 and 2022, respectively.

Default on Convertible Notes Payable

As of March 31, 2023, 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 $65,264, of which $40,264 was accrued interest.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

INDEX TO EXHIBITS

The following documents are filed as part of this report:

Exhibit Number	Description of Document
10.1	Certificate of Designation, Preferences, Rights and Limitations of Series J 8% Redeemable Preferred Stock (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K (file no. 1-16467) filed April 13, 2023).
10.2	Exchange Agreement with Jeff Eliot Margolis dated April 12, 2023 (incorporated by reference to Exhibit 99.1 to the Company's Current Report on Form 8-K (file no. 1-16467) filed April 13, 2023).
10.3	Exchange and Settlement Agreement with Arnold Lippa dated April 12, 2023 (incorporated by reference to Exhibit 99.2 to the Company's Current Report on Form 8-K (file no. 1-16467) filed April 13, 2023).
10.4	Exchange and Settlement Agreement with Marc M Radin, PC dated April 12, 2023 (incorporated by reference to Exhibit 99.3 to the Company's Current Report on Form 8-K (file no. 1-16467) filed April 13, 2023).
10.5	Transfer Letter Agreement with Jeff Eliot Margolis dated April 12, 2023 (incorporated by reference to Exhibit 99.4 to the Company's Current Report on Form 8-K (file no. 1-16467) filed April 13, 2023).
10.6	Transfer Letter Agreement with Arnold Lippa dated April 12, 2023 (incorporated by reference to Exhibit 99.5 to the Company's Current Report on Form 8-K (file no. 1-16467) filed April 13, 2023).
10.7	Transfer Letter Agreement with Marc M Radin, PC dated April 12, 2023 (incorporated by reference to Exhibit 99.6 to the Company's Current Report on Form 8-K (file no. 1-16467) filed April 13, 2023).
10.8	Certificate of Designation, Preferences, Rights and Limitations of Series I 8% Redeemable Preferred Stock (incorporated by reference to Exhibits 3.1 to the Company's Current Report on Form 8-K (file no. 1-16467) filed April 6, 2023).
10.9	Form of Securities Purchase Agreement (incorporated by reference to Exhibits 99.1 to the Company's Current Report on Form 8-K (file no. 1-16467) filed April 6, 2023).
99.1	ResolutionRx Ltd Constitution dated 24 April 2023 with Schedule 1, ResolutionRx Ltd Certificate of Designation of Series A Preference Shares Terms as lodged in Australia 1 May 2023 (incorporated by reference to Exhibit 99.1 of the Company's Current Report on Form 8-K (file no. 1-16467) filed May 5, 2023).
99.2	ResolutionRx Ltd and iNGENu CRO Pty Ltd Services Agreement dated 27 Februay 2023 (incorporated by reference to Exhibit 99.2 of the Company's Current Report on Form 8-K (file no. 1-16467) filed March 1, 2023).
99.3	Letter of Intent dated January 27, 2023 by ResolutionRx Ltd. and Radium Capital (incorporated by reference to Exhibits 99.2 of the Company's Current Report on Form 8-K (file no. 1-16467) filed February 1, 2023).
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.

RESPIRERX PHARMACEUTICALS INC.
(Registrant)

Date: May 22, 2023

By: */s/ Arnold S. Lippa*
Arnold S. Lippa
Interim President, Interim Chief Executive Officer and Chief Scientific Officer

Date: May 22, 2023

By: */s/ Jeff Eliot Margolis*
Jeff Eliot Margolis
Senior Vice President, Chief Financial Officer, Treasurer and Secretary

EXHIBIT 31.1

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: May 22, 2023

By: */s/ Arnold S. Lippa*
Arnold S. Lippa
Interim President, Interim Chief Executive Officer and Chief Scientific Officer

EXHIBIT 31.2

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: May 22, 2023

By: */s/ Jeff Eliot Margolis*
Jeff Eliot Margolis
Senior Vice President Chief Financial Officer, Treasurer and Secretary

EXHIBIT 32.1

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

I, Arnold S. Lippa, the Interim 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 March 31, 2023, 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: May 22, 2023

By: */s/ Arnold S. Lippa*
Arnold S. Lippa
Interim President, Interim Chief Executive Officer and Chief Scientific Officer

EXHIBIT 32.2

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 March 31, 2023, 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: May 22, 2023

By: */s/ Jeff Eliot Margolis*
Jeff Eliot Margolis
Senior Vice President Chief Financial Officer, Treasurer and Secretary