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

FORM 10-Q

(MARK ONE)

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

For the quarterly period ended September 30, 2019

OR

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

For the transition period from ___________ to___________

Commission File No. 333-181719

CARDAX, INC.
(Exact name of registrant as specified in its charter)

Delaware	**45-4484428**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

2800 Woodlawn Drive, Suite 129, Honolulu, Hawaii 96822
(Address of principal executive offices, zip code)

(808) 457-1400
(Registrant's telephone number, including area code)

(Former name, former address and former fiscal year,
if changed since last report)

Indicate by check mark whether the issuer (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 **[X]** No [ ]

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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. (check one):

Large accelerated filer **[ ]**	Accelerated filer **[ ]**
Non-accelerated filer [ ] (Do not check if a smaller reporting company)	Smaller reporting company **[X]**
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 Exchange Act Rule 12b-2 of the Exchange Act): Yes**[ ]** No **[X]**

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

Title of each class	Trading Symbol(s)	Name of exchange on which registered
Common	CDXI	OTC

As of November 14, 2019, there were 137,261,594 shares of common stock, $0.001 par value per share ("Common Stock"), of the registrant outstanding.

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SPECIAL NOTE REGARDING FORWARD LOOKING STATEMENTS

There are statements in this quarterly report that are not historical facts. These “forward-looking statements” can be identified by use of terminology such as “anticipate,” “believe,” “estimate,” “expect,” “hope,” “intend,” “may,” “plan,” “positioned,” “project,” “propose,” “should,” “strategy,” “will,” or any similar expressions. You should be aware that these forward-looking statements are subject to risks and uncertainties that are beyond our control. Although we believe that our assumptions underlying such forward-looking statements are reasonable, we do not guarantee our future performance, and our actual results may differ materially from those contemplated by these forward-looking statements. Our assumptions used for the purposes of the forward-looking statements specified in the following information represent estimates of future events and are subject to uncertainty as to possible changes in economic, legislative, industry, and other circumstances, including the development, acceptance and sales of our products and our ability to raise additional funding sufficient to implement our strategy. As a result, the identification and interpretation of data and other information and their use in developing and selecting assumptions from and among reasonable alternatives require the exercise of judgment. In light of these numerous risks and uncertainties, we cannot provide any assurance that the results and events contemplated by our forward-looking statements contained in this quarterly report will in fact transpire. **These forward-looking statements are not guarantees of future performance. You are cautioned to not place undue reliance on these forward-looking statements, which speak only as of their dates.** We do not undertake any obligation to update or revise any forward-looking statements.

PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS.

Condensed Consolidated Financial Statements

Cardax, Inc., and Subsidiary

September 30, 2019 and 2018

Contents

Cardax, Inc., and Subsidiary

CONDENSED CONSOLIDATED BALANCE SHEETS

As of

ASSETS	September 30, 2019 (Unaudited)	December 31, 2018
CURRENT ASSETS		
Cash	$ 7,470	$ 243,753
Accounts receivable	185,419	157,082
Inventories	1,307,727	1,480,380
Deposits and other assets	119,066	119,066
Prepaid expenses	45,096	24,083
Total current assets	1,664,778	2,024,364
INTANGIBLE ASSETS, net	427,621	434,534
RIGHT TO USE LEASED ASSETS	22,015	-
TOTAL ASSETS	$ 2,114,414	$ 2,458,898
LIABILITIES AND STOCKHOLDERS' DEFICIT		
CURRENT LIABILITIES		
Accrued payroll and payroll related expenses, current portion	$ 3,471,812	$ 3,428,011
Accounts payable and accrued expenses	1,706,117	1,996,097
Fees payable to directors	418,546	418,546
Accrued separation costs, current portion	9,000	9,000
Current portion of related party notes payable	575,000	-
Related party convertible note payable	$ 537,848	-
Convertible notes payable, net of discount	$ 256,698	-
Employee settlement	50,000	50,000
Lease liability, current portion	17,129	-
Derivative liability on convertible note payable	246,414	-
Total current liabilities	7,288,564	5,901,654
NON-CURRENT LIABILITIES		
Related party notes payable, net of current portion	1,000,000	-
Accrued separation costs, less current portion	85,885	92,635
Lease liability, less current portion	4,886	-
Total non-current liabilities	1,090,771	92,635
COMMITMENTS AND CONTINGENCIES	-	-
Total liabilities	8,379,335	5,994,289
STOCKHOLDERS' DEFICIT		
Preferred Stock - $0.001 par value; 50,000,000 shares authorized, 0 shares issued and outstanding as of September 30, 2019 and December 31, 2018, respectively	-	-
Common stock - $0.001 par value; 400,000,000 shares authorized, 137,261,594 and 133,888,573 shares issued and outstanding as of September 30, 2019 and December 31, 2018, respectively	137,262	133,889
Additional paid-in-capital	59,191,875	58,274,038
Accumulated deficit	(65,594,058)	(61,943,318)
Total stockholders' deficit	(6,264,921)	(3,535,391)
TOTAL LIABILITIES AND STOCKHOLDERS' DEFICIT	$ 2,114,414	$ 2,458,898

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

Cardax, Inc., and Subsidiary

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

	For the three-months ended September 30,		For the nine-months ended September 30,	
	2019	2018	2019	2018
	(Unaudited)	*(Unaudited)*	*(Unaudited)*	*(Unaudited)*
REVENUES, net	$ 229,142	$ 549,540	$ 439,505	$ 1,134,899
COST OF GOODS SOLD	120,818	240,152	254,479	521,353
GROSS PROFIT	108,324	309,388	185,026	613,546
OPERATING EXPENSES:				
Salaries and wages	387,636	387,119	1,177,362	1,202,576
Professional fees	375,298	225,875	817,546	637,042
Selling, general, and administrative expenses	206,042	350,630	731,487	1,168,747
Stock based compensation	175,712	180,562	534,774	443,249
Research and development	145,273	86,115	250,141	214,093
Depreciation and amortization	10,074	6,718	29,102	23,853
Total operating expenses	1,300,035	1,237,019	3,540,412	3,689,560
Loss from operations	(1,191,711)	(927,631)	(3,355,386)	(3,076,014)
OTHER INCOME (EXPENSE):				
Interest income	3	7	5	1,941
Other income	-	-	-	556
Change in fair value of derivative liability	(20,524)	-	(3,139)	-
Loss on abandonment of patents	(36,205)	-	(36,205)	-
Interest expense	(185,189)	(1,264)	(256,015)	(3,356)
Total other (expense) income, net	(241,915)	(1,257)	(295,354)	(859)
Loss before the provision for income taxes	(1,433,626)	(928,888)	(3,650,740)	(3,076,873)
PROVISION FOR INCOME TAXES	-	-	-	-
NET LOSS	$ (1,433,626)	$ (928,888)	$ (3,650,740)	$ (3,076,873)
NET LOSS PER SHARE				
Basic	$ (0.01)	$ (0.01)	$ (0.03)	$ (0.02)
Diluted	$ (0.01)	$ (0.01)	$ (0.03)	$ (0.02)
SHARES USED IN CALCULATION OF NET LOSS PER SHARE				
Basic	136,640,761	130,083,598	135,516,490	125,271,516
Diluted	136,640,761	130,083,598	135,516,490	125,271,516

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

Cardax, Inc., and Subsidiary

CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN STOCKHOLDER DEFICIT

For the nine-months ended September 30, 2018 and 2019

	Common Stock		Additional			
	Shares	Amount	Paid-In-Capital	Deferred Compensation	Accumulated Deficit	Total
Balance at January 1, 2018	122,674,516	$ 122,675	$ 56,401,069	$ (10,125)	$ (57,919,096)	$ (1,405,477)
Common stock grants to independent directors	906,774	907	199,093	-	-	200,000
Deferred compensation	-	-	-	10,125	-	10,125
Cardax 2018 Warrant Exchange Offering	9,600,286	9,600	1,234,437	-	-	1,244,037
Stock option exercises - cashless	156,997	157	(157)	-	-	-
Stock based compensation - options	-	-	233,124	-	-	233,124
Net loss	-	-	-	-	(3,076,873)	(3,076,873)
Balance at September 30, 2018	133,338,573	$ 133,339	$ 58,067,566	$ -	$ (60,995,969)	$ (2,795,064)
Balance at January 1, 2019	133,888,573	$ 133,889	$ 58,274,038	$ -	$ (61,943,318)	$ (3,535,391)
Common stock grants to independent directors	1,627,191	1,627	260,873	-	-	262,500
Common stock grant to service providers	112,500	113	14,287	-	-	14,400
Stock based compensation - options	-	-	257,875	-	-	257,875
Restricted stock issuances	1,633,330	1,633	243,367	-	-	245,000
Issuance of warrants attached to a convertible note	-	-	141,435	-	-	141,435
Net loss	-	-	-	-	(3,650,740)	(3,650,740)
Balance at September 30, 2019	137,261,594	$ 137,262	$ 59,191,875	$ -	$ (65,594,058)	$ (6,264,921)

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

Cardax, Inc., and Subsidiary

CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN STOCKHOLDER DEFICIT
(continued)

For the three-months ended September 30, 2018 and 2019

	Common Stock		Additional Paid-In-Capital	Deferred Compensation	Accumulated Deficit	Total
	Shares	Amount				
Balance at July 1, 2018	123,300,787	$ 123,301	$ 56,653,005	$ -	$ (60,067,081)	$ (3,290,775)
Common stock grants to independent directors	437,500	438	87,062	-	-	87,500
Cardax 2018 Warrant Exchange Offering	9,600,286	9,600	1,234,437	-	-	1,244,037
Deferred compensation	-	-	-	-	-	-
Stock based compensation - options	-	-	93,062	-	-	93,062
Net loss	-	-	-	-	(928,888)	(928,888)
Balance at September 30, 2018	133,338,573	$ 133,339	$ 58,067,566	$ -	$ (60,995,969)	$ (2,795,064)
Balance at July 1, 2019	136,640,761	$ 136,641	$ 58,908,648	$ -	$ (64,160,432)	$ (5,115,143)
Common stock grants to independent directors	583,333	583	86,917	-	-	87,500
Common stock grant to service providers	37,500	38	3,300	-	-	3,338
Stock based compensation - options	-	-	84,875	-	-	84,875
Issuance of warrants attached to a convertible note	-	-	108,135	-	-	108,135
Net loss	-	-	-	-	(1,433,626)	(1,433,626)
Balance at September 30, 2019	137,261,594	$ 137,262	$ 59,191,875	$ -	$ (65,594,058)	$ (6,264,921)

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

Cardax, Inc., and Subsidiary

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

For the nine-months ended September 30, 2018 and 2019

	2019	2018
	(Unaudited)	*(Unaudited)*
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$ (3,650,740)	$ (3,076,873)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	29,102	23,853
Amortization of debt discount	129,256	-
Stock based compensation	534,775	443,249
Bad debt expense on note receivable and accrued interest	-	89,933
Loss on abandonment of patents	36,205	-
Change in fair value of derivative liability	3,139	
Changes in assets and liabilities:		
Accounts receivable	32,333	(193,168)
Inventories	172,653	14,251
Deposits and other assets	-	(118,168)
Prepaid expenses	(21,013)	(1,214)
Accrued payroll and payroll related expenses	43,801	55,230
Accounts payable and accrued expenses	(350,650)	50,752
Accrued separation costs	(6,750)	-
Net cash used in operating activities	(3,047,889)	(2,712,155)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Increase in intangible assets	(58,394)	(30,483)
Net cash used in investing activities	(58,394)	(30,483)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from the issuances of related party notes payable	1,575,000	-
Proceeds from the issuance of a related party convertible note payable	750,000	-
Proceeds from the issuances of convertible notes payable	300,000	-
Proceeds from the issuance of common stock	245,000	704,375
Net cash provided by financing activities	2,870,000	704,375
NET DECREASE IN CASH	(236,283)	(2,038,263)
BEGINNING OF THE PERIOD	243,753	2,236,837
END OF THE PERIOD	$ 7,470	$ 198,574
SUPPLEMENTAL DISCLOSURES:		
Cash paid for interest	$ 13,937	$ 3,356
Cash paid for income taxes	$ -	$ -
NON-CASH INVESTING AND FINANCING ACTIVITIES:		
Discount recognized on notes payable at issuance	$ 384,710	$ -
Settlement of receivables with payables	$ 60,670	$ 221,814
Right to use assets funded through leases	$ 22,015	$ 539,662

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

NOTES TO THE CONDENSED CONSOLIDATED
FINANCIAL STATEMENTS

NOTE 1 – COMPANY BACKGROUND

The Company's predecessor, Cardax Pharmaceuticals, Inc. ("Holdings"), was incorporated in the State of Delaware on March 23, 2006.

Cardax, Inc. (the "Company") (OTCQB:CDXI) is a development stage biopharmaceutical company primarily focused on the development of pharmaceuticals for chronic diseases driven by inflammation. The Company also has a commercial business unit that markets dietary supplements for inflammatory health. CDX-101, the Company's astaxanthin pharmaceutical candidate, is being developed for cardiovascular inflammation and dyslipidemia, with a target initial indication of severe hypertriglyceridemia. CDX-301, the Company's zeaxanthin pharmaceutical candidate, is being developed for macular degeneration, with a target initial indication of Stargardt disease. The Company's pharmaceutical candidates are currently in pre-clinical development, including the planning of IND enabling studies. ZanthoSyn® is a physician recommended astaxanthin dietary supplement for inflammatory health. The Company sells ZanthoSyn® primarily through wholesale and e-commerce channels. The safety and efficacy of the Company's products have not been directly evaluated in clinical trials or confirmed by the FDA.

Going concern matters

The accompanying condensed consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. As shown in the accompanying condensed consolidated financial statements, the Company incurred net losses of $1,433,626 and $3,650,740 for the three and nine-months ended September 30, 2019, respectively, and incurred net losses of $928,888 and $3,076,873 for the three and nine-months ended September 30, 2018, respectively. The Company has incurred losses since inception resulting in an accumulated deficit of $65,594,058 as of September 30, 2019, and has had negative cash flows from operating activities since inception. The Company expects that its marketing program for ZanthoSyn® will continue to focus on outreach to physicians, healthcare professionals, retail personnel, and consumers, and anticipates further losses in the development of its consumer business. The Company also plans to advance the research and development of its pharmaceutical candidates and anticipates further losses in the development of its pharmaceutical business. As a result of these and other factors, management has determined there is substantial doubt about the Company's ability to continue as a going concern.

During the nine-months ended September 30, 2019, the Company raised additional capital to carry out its business plan. As part of the Company's efforts, it raised an additional $245,000 in equity from existing stockholders and $2,625,000 in gross proceeds from debt, including $2,325,000 from related parties. On August 14, 2019, the Company filed a registration statement on Form S-1 for a proposed $15 million public offering of common stock and warrants. The Company intends to use the proceeds from the proposed public offering primarily to fund pharmaceutical development and its operations. The Company's continued ability to raise additional capital through future equity and debt securities issuances is unknown. Obtaining additional financing, the successful development of the Company's contemplated plan of operations, and its transition, ultimately, to profitable operations are necessary for the Company to continue operations. The ability to successfully resolve these factors raises substantial doubt about the Company's ability to continue as a going concern. The condensed consolidated financial statements of the Company do not include any adjustments that may result from the outcome of these uncertainties.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Unaudited interim financial information

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") for interim financial information and the rules and regulations of the Securities and Exchange Commission (the "SEC") for interim financial information. In the opinion of the Company's management, the accompanying condensed consolidated financial statements reflect all adjustments, consisting of normal, recurring adjustments, considered necessary for a fair presentation of the results for the interim periods ended September 30, 2019 and 2018.

Although management believes that the disclosures in these unaudited condensed consolidated financial statements are adequate to make the information presented not misleading, certain information and footnote disclosures normally included in financial statements that have been prepared in accordance U.S. GAAP have been condensed or omitted pursuant to the rules and regulations of the SEC.

These unaudited interim consolidated financial statements should be read in conjunction with the consolidated financial statements and the related notes included in the Company's annual report on Form 10-K for the fiscal year ended December 31, 2018, filed with the SEC on March 28, 2019.

Revenue from contracts with customers

In May 2014, the Financial Accounting Standards Board ("FASB") issued a new standard related to revenue recognition. Under the standard, revenue is recognized when a customer obtains control of promised goods or services in an amount that reflects the consideration the entity expects to receive in exchange for those goods or services. In addition, the standard requires disclosure of the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers.

The Company adopted this standard effective January 1, 2018, using the retrospective method. As there was no impact on contracts that were previously completed and no significant impact to contracts completed after adoption, there was no need to restate prior results from operations.

The Company recognizes revenues from its contracts with customers for its products through wholesale and e-commerce channels when goods and services have been identified, the payment terms agreed to, the contract has commercial substance, both parties have approved the contract, and it is probable that the Company will collect all substantial consideration.

The following table presents our revenues disaggregated by revenue source and geographical location. Sales and usage-based taxes are included as a component of revenues for the nine-months ended:

Geographical area	Source	September 30, 2019 *(Unaudited)*	September 30, 2018 *(Unaudited)*
United States	Nutraceuticals	$ 439,505	$ 1,118,486
Hong Kong	Nutraceuticals	$ -	$ 16,413

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Revenue from contracts with customers (continued)

Sales discounts, rebates, promotional amounts to vendors, and returns and allowances are recorded as a reduction to sales in the period in which sales are recorded. The Company records shipping charges and sales tax gross in revenues and cost of goods sold. Sales discounts and other adjustments are recorded at the time of sale.

Leases

In February 2016, the FASB issued ASU No. 2016-02, *Leases*. This ASU requires management to recognize lease assets and lease liabilities for all leases. ASU No. 2016-02 retains a distinction between finance leases and operating leases. The classification criteria for distinguishing between finance leases and operating leases are substantially similar to the classification criteria for distinguishing between capital leases and operating leases in the previous lease guidance. The result of retaining a distinction between finance leases and operating leases is that under the lessee accounting model, the effect of leases in the statement of comprehensive income and the statement of cash flows is largely unchanged from previous U.S. GAAP. The guidance in ASU No. 2016-02 is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years.

The Company applied the modified retrospective approach in adopting this standard. The modified retrospective approach includes a number of optional practical expedients that the Company elected to apply; primarily the identification and classification of leases that commenced before the effective date, initial direct costs for leases that commenced before the effective date, and the ability to use hindsight in evaluating lessee options to extend or terminate a lease or to purchase the underlying asset. As part of this adoption, the Company will, in effect, continue to account for leases that commence before the effective date in accordance with previous U.S. GAAP unless the lease is modified, except that lessees are required to recognize a right-of-use asset and a lease liability for all operating leases at each reporting date based on the present value of the remaining minimum rental payments that were tracked and disclosed under previous U.S. GAAP. This adoption of this standard on January 1, 2019, resulted in the Company recognizing a right-to-use asset and lease liability. The Company elected to not recognize any right-to-use assets or liabilities for leases that are twelve months or less. Lease costs are recognized straight-line over the term of the lease. The adoption of this standard did not impact retained earnings or cash flows of the Company.

Derivative financial instruments

The Company accounts for the fair value of the conversion feature in accordance with ASC 815-15, *Derivatives and Hedging; Embedded Derivatives*, which requires the Company to bifurcate and separately account for the conversion feature as an embedded derivative contained in the Company's convertible note. The Company is required to carry the embedded derivative on its balance sheet at fair value. The initial value of the embedded derivative is accounted for as a discount to the convertible note and a derivative liability. The liability is required to be remeasured at each reporting date and changes in fair value is recognized as a component in its results of operations. The Company valued the embedded derivatives on the condensed consolidated balance sheet at fair value using the Black-Scholes valuation model.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Other significant accounting policies

There have been no other material changes to our significant accounting policies during the nine-months ended September 30, 2019, as compared to the significant accounting policies described in our Annual Report.

Reclassifications

The Company has made certain reclassifications to conform its prior periods' data to the current presentation, such as reclassifying a separation agreement that has terms extending beyond one year. These reclassifications had no effect on the reported results of operations or cash flows.

NOTE 3 – INVENTORIES

Inventories consist of the following as of:

	September 30, 2019 *(Unaudited)*	December 31, 2018
Finished goods	$ 533,139	$ 96,750
Raw materials	774,588	1,383,630
Total inventories	$ 1,307,727	$ 1,480,380

As of September 30, 2019 and December 31, 2018, all raw materials were held at the manufacturer's facility for future production.

NOTE 4 – INTANGIBLE ASSETS, net

Intangible assets, net, consists of the following as of:

	September 30, 2019 *(Unaudited)*	December 31, 2018
Patents	$ 613,943	$ 578,326
Less accumulated amortization	(321,614))	(292,512)
	292,329	285,814
Patents pending	135,292	148,720
Total intangible assets, net	$ 427,621	$ 434,534

Patents are amortized straight-line over a period of fifteen years. Amortization expense was $10,074 and $29,102 for the three and nine-months ended September 30, 2019, respectively. Amortization expense was $6,717 and $21,952 for the three and nine-months ended September 30, 2018, respectively.

NOTE 4 – INTANGIBLE ASSETS, net (continued)

The Company has capitalized costs for several patents that are still pending. In those instances, the Company has not recorded any amortization. The Company will commence amortization when these patents are approved.

During the three and nine-months ended September 30, 2019, the Company abandoned three patent applications in progress resulting in a loss of $36,205 on the abandonment of patents.

The Company owns 29 issued patents, including 14 in the United States and 15 others in Europe, Canada, China, India, Japan, and Hong Kong. These patents will expire beginning in 2023 through 2028, subject to any patent term extensions of the individual patent. The Company has 2 patent applications pending in the United States and 2 foreign patent applications pending in Europe and the Patent Cooperation Treaty ("PCT") countries.

NOTE 5 –ACCRUED SEPARATION COSTS

On August 9, 2016, the Company entered into a separation agreement with an employee to pay $118,635 of accrued compensation over nine-years. As of September 30, 2019, $94,885 remains outstanding of which $9,000 is due within one-year and is reflected as a current liability.

NOTE 6 – RELATED PARTY NOTES PAYABLE

Notes payable consisted of the following as of:

	September 30, 2019 (Unaudited)	December 31, 2018
Inventory financing. On January 11, 2019, the Company entered into a $1,000,000 revolving inventory financing facility with a lender that is also a current stockholder that beneficially owns more than 5% of the Company's common stock. Use of proceeds from this facility is limited to the purchase of inventory, including raw materials, intermediates, and finished goods, unless otherwise waived by the lender. This facility accrues interest at the rate of 12% per annum, is unsecured, and matures in three years from origination. This facility requires monthly interest payments.	$ 1,000,000	$ -
Officer loan. On June 26, 2019, the Company borrowed $75,000 from the Chief Executive Officer of the Company with principal and interest due on August 26, 2019, which was subsequently extended to December 31, 2019. This note accrues interest at the rate of 4.5% per annum and is unsecured.	75,000	
Promissory note. On May 20, 2019, the Company entered into a $400,000 promissory note with a lender that is also a current stockholder that beneficially owns more than 5% of the Company's common stock. On July 10, 2019, this note was amended to increase the principal sum by an additional $100,000. This note accrues interest at the rate of 12% per annum, is unsecured, and originally matured on August 20, 2019, which was subsequently extended to June 30, 2020. All principal and accrued interest is due on the maturity date.	500,000	-
Total notes payable	$ 1,575,000	$ -
Less current portion	(575,000)	-
Long term notes payable	$ 1,000,000	$ -

<u>Interest expense</u>

The Company incurred interest charges of $45,925 and $101,385 during the three and nine-months ended September 30, 2019, respectively, on these notes payable of which $31,111 was accrued and payable as of September 30, 2019.

NOTE 6 – RELATED PARTY NOTES PAYABLE (continued)

Maturities

Future maturities of notes payable are as follows as of September 30:

2020	$	575,000
2021		-
2022		1,000,000
	$	1,575,000

NOTE 7 – RELATED PARTY CONVERTIBLE NOTE PAYABLE

Related party convertible note payable consisted of the following as of:

	September 30, 2019 (Unaudited)	December 31, 2018
Convertible note 2019-02. On July 19, 2019, the Company issued a convertible note payable in the amount $815,217, with an original issue discount of $65,217 in exchange for $750,000. This note accrues interest at 8% per annum and matures on June 30, 2020. This note and accrued interest may convert into shares of common stock at the conversion price then in effect (initially $0.12 per share, subject to adjustment) any time at the holder's option or automatically upon a qualified financing of at least $5 million at the lower of the conversion price then in effect or a 25% discount to the offering price. The conversion price is subject to adjustment upon the issuance of the Company's common stock or securities convertible into common stock at a price per share less than the then prevailing conversion price, other than specified exempt issuances; accordingly, on November 8, 2019, the conversion price was adjusted to $0.07 per share. This note was also issued with a detachable warrant to purchase 1,500,000 shares of stock at $0.12 per share, which shall be adjusted in accordance with any adjustment to the conversion price of this note; accordingly, on November 8, 2019, the exercise price was adjusted to $0.07 per share. The valuation of the conversion feature and detachable warrants resulted in the recognition of an additional $286,050 discount on this note. This note requires monthly interest payments.	$ 815,217	$ -
Total notes payable	815,217	-
Less original issue discounts	(65,217)	-
Related party convertible note payable, net	750,000	-
Less conversion rights and warrant discounts	(286,050)	-
Plus amortization of discounts	73,898	-
Total convertible notes payable, net	$ 537,848	$ -

NOTE 7 – RELATED PARTY CONVERTIBLE NOTE PAYABLE (continued)

Discounts

Total discounts of $351,267 are amortized using the interest method, which resulted in amortization recorded as interest expense of $73,898 for the three and nine-months ended September 30, 2019.

Interest expense

The Company incurred interest charges of $13,222 during the three and nine-months ended September 30, 2019, on this related party convertible note payable of which $5,360 was accrued and payable as of September 30, 2019.

Maturities

Future maturities of notes payable are as follows as of September 30:

2020	$	815,217
	$	815,217

NOTE 8 – CONVERTIBLE NOTES PAYABLE

Convertible notes payable consisted of the following as of:

	September 30, 2019 (Unaudited)	December 31, 2018
Convertible note 2019-01. On April 18, 2019, the Company issued a convertible note payable in the amount $150,000. This note accrues interest at 10% per annum and matures on December 31, 2019. This note and accrued interest may convert into shares of common stock at the conversion price then in effect (initially $0.12 per share, subject to adjustment) any time at the holder's option or automatically upon maturity provided the 20-day volume weighted average price per share of the Company's common stock upon maturity is at least $0.12 per share. The conversion price is subject to adjustment upon the issuance of the Company's common stock or securities convertible into common stock at a price per share less than the then prevailing conversion price, other than specified exempt issuances; accordingly, on November 8, 2019, the conversion price was adjusted to $0.07 per share. This note was also issued with a detachable warrant to purchase 500,000 shares of stock at $0.20 per share. The valuation of the conversion feature and detachable warrants resulted in the recognition of an $83,300 aggregate discount on this note.	$ 150,000	$ -
Convertible note 2019-03. On September 4, 2019, the Company issued a convertible note payable in the amount $108,696, with an original issue discount of $8,696 in exchange for $100,000. This note accrues interest at 8% per annum and matures on June 30, 2020. This note and accrued interest may convert into shares of common stock at $0.12 per share any time at the holder's option. If this note, or any portion thereof, has not been repaid or converted in full on or prior to the maturity date, then repayment of the unpaid principal balance plus any accrued and unpaid interest thereon, shall be amortized over the following thirty-six (36) months. This note was also issued with a detachable warrant to purchase 200,000 shares of stock at $0.12 per share. The valuation of the detachable warrants resulted in the recognition of an additional $11,170 discount on this note. This note requires monthly interest payments.	108,696	-

NOTE 8 – CONVERTIBLE NOTES PAYABLE (continued)

	September 30, 2019 (Unaudited)	December 31, 2018
Convertible note 2019-04. On September 25, 2019, the Company issued a convertible note payable in the amount $54,348, with an original issue discount of $4,348 in exchange for $50,000. This note accrues interest at 8% per annum and matures on June 30, 2020. This note and accrued interest may convert into shares of common stock at $0.12 per share any time at the holder's option. If this note, or any portion thereof, has not been repaid or converted in full on or prior to the maturity date, then repayment of the unpaid principal balance plus any accrued and unpaid interest thereon, shall be amortized over the following thirty-six (36) months. This note was also issued with a detachable warrant to purchase 100,000 shares of stock at $0.12 per share. The valuation of the detachable warrants resulted in the recognition of an additional $4,190 discount on this note. This note requires monthly interest payments.	54,348	-
Total notes payable	313,044	-
Less original issue discounts	(13,044)	-
Convertible notes payable, net	300,000	-
Less conversion rights and warrant discounts	(98,660)	-
Plus amortization of discounts	55,358	-
Total convertible notes payable, net	$ 256,698	$ -

Discounts

Total discounts of $111,704 are amortized using the interest method, which resulted in amortization recorded as interest expense of $31,696 and $55,358 for the three and nine-months ended September 30, 2019, respectively.

Interest expense

The Company incurred interest charges of $4,496 and $7,537 during the three and nine-months ended September 30, 2019, respectively, on these notes payable of which $7,537 was accrued and payable as of September 30, 2019.

Maturities

Future maturities of notes payable are as follows as of September 30:

2020	$ 313,044
	$ 313,044

NOTE 9 – DERIVATIVE FINANCIAL INSTRUMENTS

The Company has identified the embedded derivatives related to the convertible notes described in Note 8. These embedded derivatives included certain conversion and reset features. The accounting treatment of derivative financial instruments requires that the Company record fair value of these derivative liabilities as of the inception date of those convertible notes and each subsequent reporting date.

The Company estimates the fair value of these derivative liabilities using the Black-Scholes valuation model. The initial value is used in the determination of a note discount with each subsequent change in fair value as a component of operations. The range of fair value assumptions used for derivative financial instruments during the nine-months ended September 30, 2019, were as follows:

Dividend yield	0.0%
Risk-free rate	1.75% - 2.44%
Volatility	102% - 137%
Expected term	1 year

Volatility was calculated based on the historical volatility of the Company. The risk-free interest rate used was based on the U.S. Treasury constant maturity rate in effect at the time of grant for the expected term of the derivative liabilities to be valued. The expected dividend yield was zero, because the Company does not anticipate paying a dividend within the relevant timeframe.

For the nine-months ended September 30, 2019, the Company recognized total derivative liabilities and convertible note discounts of $243,275 based on the fair value at the convertible notes' inception dates. These derivative liabilities were subsequently revalued at $246,414 as of September 30, 2019, which resulted in a loss of $3,139 on the change in value of these derivative liabilities.

The following table presents the three-level hierarchy prescribed by U.S. GAAP for derivative liabilities since it is a liability that is measured and recognized at fair value on a recurring basis as of:

	Level 1	**Level 2**	**Level 3**
September 30, 2019	-	-	$ 246,414

NOTE 10 – STOCKHOLDERS' DEFICIT

Self-directed stock issuance 2019

During the nine-months ended September 30, 2019, the Company sold securities in a self-directed offering to existing stockholders of the Company in the aggregate amount of $245,000, respectively, at $0.30 per unit. Each $0.30 unit consisted of 2 shares of restricted common stock (1,633,330 shares) and a five-year warrant to purchase 1 share of restricted common stock (816,665 warrant shares) at $0.20 per share.

NOTE 10 – STOCKHOLDERS' DEFICIT (continued)

Warrant exchange offering

In June 2018, the Company commenced an offering to exchange outstanding warrants for shares of common stock under a Form S-4 Registration Statement. These shares of common stock were issued to warrant holders in exchange for (i) their outstanding warrants to purchase shares of common stock at $0.625 per share, and (ii) cash payment of $0.15 per share. This offering closed on July 27, 2018, and resulted in an exchange of 9.6 million warrants and $1,440,043 in gross proceeds for 9,600,286 shares of common stock. Stock issuance costs associated with this capital raise totaled $196,006, resulting in a net total of $1,244,037 raised in this offering.

Shares outstanding

As of September 30, 2019 and December 31, 2018, the Company had a total of 137,261,594 and 133,888,573, respectively, shares of common stock outstanding.

NOTE 11 – STOCK GRANTS

Director stock grants

During the nine-months ended September 30, 2019 and 2018, the Company granted its independent directors an aggregate of 1,627,191 and 906,774, respectively, shares of restricted common stock in the Company. These shares were fully vested upon issuance. The increase in number of shares issued was due to the expansion of the Board of Directors by two members in September 2018. The expense recognized for these grants based on the grant date fair value was $262,500 and $200,000 for the nine-months ended September 30, 2019 and 2018, respectively.

Consultant stock grants

On April 10, 2017, the Company granted a consultant 100,000 shares of restricted common stock valued at $0.23 per share. These shares were subject to a risk of forfeiture and vested quarterly in arrears commencing on April 1, 2017. The Company recognized $0 and $5,750 in stock-based compensation related to this grant during the nine-months ended September 30, 2019 and 2018, respectively.

On August 8, 2017, the Company granted a consultant 100,000 shares of restricted common stock valued at $0.175 per share. These shares were subject to a risk of forfeiture and vested 25% upon grant and quarterly in arrears thereafter commencing on September 1, 2017. The Company recognized $0 and $4,375 in stock-based compensation related to this grant during the nine-months ended September 30, 2019 and 2018, respectively.

On December 31, 2018, the Company granted consultants 112,500 shares of restricted common stock valued at $0.20 per share. These shares were fully vested upon issuance. The Company recognized $22,500 in stock-based compensation related to these grants during the year ended December 31, 2018.

On March 31, 2019, the Company granted consultants 37,500 shares of restricted common stock valued at $0.17 per share. On June 30, 2019, the Company granted consultants 37,500 shares of restricted common stock valued at $0.125 per share. On September 30, 2019, the Company granted consultants 37,500 shares of restricted common stock valued at $0.089 per share. These shares were fully vested upon issuance. The Company recognized $14,400 in stock-based compensation related to these grants during the nine-months ended September 30, 2019.

NOTE 12 – STOCK OPTION PLANS

On February 7, 2014, the Company adopted the 2014 Equity Compensation Plan. Under this plan, the Company may issue options to purchase shares of common stock to employees, directors, advisors, and consultants. The aggregate number of shares reserved under this plan upon adoption was 30,420,148. On April 16, 2015, the majority stockholder of the Company approved an increase in the Company's 2014 Equity Compensation Plan by 15 million shares. On December 4, 2018, the stockholders of the Company approved an increase in the Company's 2014 Equity Compensation Plan by an additional 5 million shares, for a total of 50,420,148 shares reserved under the plan.

Under the terms of the 2014 Equity Compensation Plan and the 2006 Stock Incentive Plan (collectively, the "Plans"), incentive stock options may be granted to employees at a price per share not less than 100% of the fair market value at date of grant. If the incentive stock option is granted to a 10% stockholder, then the purchase or exercise price per share shall not be less than 110% of the fair market value per share of common stock on the grant date. Non-statutory stock options and restricted stock may be granted to employees, directors, advisors, and consultants at a price per share, not less than 100% of the fair market value at date of grant. Options granted are exercisable, unless specified differently in the grant documents, over a default term of ten years from the date of grant and generally vest over a period of four years.

A summary of stock option activity is as follows:

	Options	Weighted average exercise price	Weighted average remaining contractual term in years	Aggregate intrinsic value
Outstanding January 1, 2018	38,213,427	$ 0.41	5.23	$ 562,456
Exercisable January 1, 2018	36,213,427	$ 0.41	4.98	$ 562,456
Canceled	(350,000)			
Granted	2,833,334			
Exercised	(200,000)			
Forfeited	-			
Outstanding December 31, 2018	40,496,761	$ 0.40	4.52	$ 986,808
Exercisable December 31, 2018	37,157,179	$ 0.41	4.10	$ 966,808
Canceled	(58,336)			
Granted	-			
Exercised	-			
Forfeited	-			
Outstanding September 30, 2019	40,438,425	$ 0.40	3.77	$ 149,089
Exercisable September 30, 2019	38,130,093	$ 0.41	3.48	$ 149,089

NOTE 12 – STOCK OPTION PLANS (continued)

The aggregate intrinsic value in the table above is before applicable income taxes and represents the excess amount over the exercise price option recipients would have received if all options had been exercised on September 30, 2019, based on a valuation of the Company's stock for that day.

A summary of the Company's non-vested options for the nine-months ended September 30, 2019 and year ended December 31, 2018, are presented below:

Non-vested at January 1, 2018	2,000,000
Granted	2,833,334
Vested	(1,143,752)
Canceled	(350,000)
Non-vested at December 31, 2018	3,339,582
Granted	-
Vested	(972,914)
Canceled	(58,336)
Non-vested at September 30, 2019	2,308,332

The Company estimates the fair value of stock options granted on each grant date using the Black-Scholes option valuation model and recognizes an expense ratably over the requisite service period. The range of fair value assumptions related to options issued were as follows for the:

	Nine-months ended September 30, 2019	Year ended December 31, 2018
Dividend yield	0.0%	0.0%
Risk-free rate	2.38% - 3.04%	2.38% - 3.04%
Volatility	214% - 226%	214% - 226%
Expected term	3 - 7 years	3 - 7 years

Volatility was calculated based on the historical volatility of the Company. The risk-free interest rate used was based on the U.S. Treasury constant maturity rate in effect at the time of grant for the expected term of the stock options to be valued. The expected dividend yield was zero, because the Company does not anticipate paying a dividend within the relevant timeframe.

The Company records forfeitures as they occur and reverses compensation cost previously recognized, in the period the award is forfeited, for an award that is forfeited before completion of the requisite service period.

Stock option exercise

During the year ended December 31, 2018, the Company issued 156,997 shares of common stock in connection with the cashless exercise of stock options for 100,000, 50,000, and 50,000 shares of common stock exercisable at $0.06 per share with 43,003 shares of common stock withheld with an aggregate fair market value equal to the aggregate exercise price.

NOTE 12 – STOCK OPTION PLANS (continued)

Stock based compensation

The Company recognized stock-based compensation expense related to options during the:

	Nine-months ended September 30	
	2019	2018
	Amount	Amount
Service provider compensation	$ 133,125	$ 76,250
Employee compensation	124,750	156,875
Total	$ 257,875	$ 233,125

NOTE 13 – WARRANTS

The following is a summary of the Company's warrant activity:

	Warrants	Weighted average exercise price	Weighted average remaining contractual term in years	Aggregate intrinsic value
Outstanding January 1, 2018	127,434,122	$ 0.24	3.15	$ 3,957,689
Exercisable January 1, 2018	127,434,122	$ 0.24	3.15	$ 3,957,689
Canceled	-			
Granted	315,010			
Exercised	(9,600,286)			
Expired	(101,984)			
Outstanding December 31, 2018	118,046,862	$ 0.20	2.32	$ 7,848,637
Exercisable December 31, 2018	118,046,862	$ 0.20	2.32	$ 7,848,637
Canceled	-			
Granted	3,116,665			
Exercised	-			
Expired	(18,405,496)			
Outstanding September 30, 2019	102,758,031	$ 0.13	2.07	$ 146,779
Exercisable September 30, 2019	102,758,031	$ 0.13	2.07	$ 146,779

NOTE 13 – WARRANTS (continued)

The Company estimates the fair value of warrants granted on each grant date using the Black-Scholes option valuation model. Volatility is calculated based on the historical volatility of the Company. The risk-free interest rate used is based on the U.S. Treasury constant maturity rate in effect at the time of grant for the expected term of the warrants to be valued. The expected dividend yield is zero, because the Company does not anticipate paying a dividend within the relevant timeframe.

The Company did not recognize any stock-based compensation expense related to warrants during the three-months ended September 30, 2019 and 2018.

Convertible note warrants

Warrants to purchase 2,300,000 shares of common stock at $0.12 to $0.20 per share were issued in connection with the issuance of convertible notes. These warrants were immediately vested and expire in five years and were recorded as discounts on the convertible notes in the aggregate amount of $141,435.

Warrant exchange offering

In June 2018, the Company commenced an offering to exchange outstanding warrants for shares of common stock under a Form S-4 Registration Statement. These shares of common stock were issued to warrant holders in exchange for (i) their outstanding warrants to purchase shares of common stock at $0.625 per share, and (ii) cash payment of $0.15 per share. This offering closed on July 27, 2018, and resulted in an exchange of 9.6 million warrants and $1,440,043 in gross proceeds for 9,600,286 shares of common stock. Stock issuance costs associated with this capital raise totaled $196,006, resulting in a net total of $1,244,037 raised in this offering. As part of this offering, warrants to purchase 315,010 shares of common stock at $0.21 per share were issued to investment bankers for their services.

Warrant expiration

During the nine-months ended September 30, 2019, warrants to purchase an aggregate of 18,405,496 shares of common stock expired. During the year ended December 31, 2018, warrants to purchase an aggregate of 101,984 shares of common stock expired.

NOTE 14 – INCOME TAXES

The Company accounts for income taxes using the asset and liability method. Under this method, deferred income tax assets and liabilities are determined based upon the difference between the financial statement carrying amounts and the tax basis of assets and liabilities and are measured using the enacted tax rate expected to apply to taxable income in the years in which the differences are expected to be reversed.

The effective tax rate for the three and three-months ended September 30, 2019 and 2018, differs from the statutory rate of 21% as a result of state taxes (net of Federal benefit), permanent differences, and a reserve against deferred tax assets.

The Company's valuation allowance was primarily related to the operating losses. The valuation allowance is determined in accordance with the provisions of ASC No. 740, *Income Taxes*, which requires an assessment of both negative and positive evidence when measuring the need for a valuation allowance. Based on the available objective evidence and the Company's history of losses, management provides no assurance that the net deferred tax assets will be realized. As of September 30, 2019, and December 31, 2018, the Company has applied a valuation allowance against its deferred tax assets net of the expected income from the reversal of the deferred tax liabilities.

Recent tax legislation

On March 22, 2018, the Tax Cuts and Jobs Act ("TCJA") was enacted into law, which significantly changes existing U.S. tax law and includes numerous provisions that affect our business, such as reducing the U.S. federal statutory tax rate from 35% to 21% effective January 1, 2018.

Uncertain tax positions

The Company is subject to taxation in the United States and three state jurisdictions. The preparation of tax returns requires management to interpret the applicable tax laws and regulations in effect in such jurisdictions, which could affect the amount of tax paid by the Company. Management, in consultation with its tax advisors, files its tax returns based on interpretations that are believed to be reasonable under the circumstances. The income tax returns, however, are subject to routine reviews by the various taxing authorities. As part of these reviews, a taxing authority may disagree with respect to the tax positions taken by management ("uncertain tax positions") and therefore may require the Company to pay additional taxes.

Management evaluates the requirement for additional tax accruals, including interest and penalties, which the Company could incur as a result of the ultimate resolution of its uncertain tax positions. Management reviews and updates the accrual for uncertain tax positions as more definitive information becomes available from taxing authorities, completion of tax audits, expiration of statute of limitations, or upon occurrence of other events.

NOTE 14 – INCOME TAXES (continued)

Uncertain tax positions (continued)

As of September 30, 2019 and December 31, 2018, there was no liability for income tax associated with unrecognized tax benefits. The Company recognizes accrued interest related to unrecognized tax benefits as well as any related penalties in interest income or expense in its condensed consolidated statements of operations, which is consistent with the recognition of these items in prior reporting periods.

The federal and state income tax returns of the Company are subject to examination by the IRS and state taxing authorities, generally for three years after they were filed.

NOTE 15 – BASIC AND DILUTED NET LOSS PER SHARE

The following table sets forth the computation of the Company's basic and diluted net loss per share for:

	Three-months ended September 30, 2019 *(Unaudited)*		
	Net Loss (Numerator)	Shares (Denominator)	Per share amount
Basic loss per share	$ (1,433,626)	136,640,761	$ (0.01)
Effect of dilutive securities—Common stock options, warrants, and convertible note	-	-	-
Diluted loss per share	$ (1,433,626)	136,640,761	$ (0.01)

	Three-months ended September 30, 2018 *(Unaudited)*		
	Net Loss (Numerator)	Shares (Denominator)	Per share amount
Basic loss per share	$ (928,888)	130,083,598	$ (0.01)
Effect of dilutive securities—Common stock options, warrants, and convertible note	-	-	-
Diluted loss per share	$ (928,888)	130,083,598	$ (0.01)

	Nine-months ended September 30, 2019 *(Unaudited)*		
	Net Loss (Numerator)	Shares (Denominator)	Per share amount
Basic loss per share	$ (3,650,740)	135,516,490	(0.03)
Effect of dilutive securities—Common stock options, warrants, and convertible note	-	-	-
Diluted loss per share	$ (3,650,740)	135,516,490	(0.03)

NOTE 15 – BASIC AND DILUTED NET LOSS PER SHARE (continued)

	Nine-months ended September 30, 2018 *(Unaudited)*		
	Net Loss (Numerator)	Shares (Denominator)	Per share amount
Basic loss per share	$ (3,076,873)	125,271,516	$ (0.02)
Effect of dilutive securities—Common stock options, warrants, and convertible note	-	-	-
Diluted loss per share	$ 3,076,873	125,271,516	$ (0.02)

The following outstanding shares of common stock equivalents were excluded from the computation of diluted net loss per share for the periods presented because including them would have been antidilutive for the periods ended:

	September 30, 2019	September 30, 2018
	(Unaudited)	*(Unaudited)*
Convertible notes	9,490,186	-
Common stock options	40,438,425	39,496,761
Common stock warrants	102,758,031	118,148,846
Total common stock equivalents	152,686,642	157,645,607

NOTE 16 – LEASES

Manoa Innovation Center

The Company entered into an automatically renewable month-to-month lease for office space on August 13, 2010. Under the terms of this lease, the Company must provide a written notice 45 days prior to vacating the premises. Total rent expense under this agreement as amended was $8,989 and $27,188 for the three and nine-months ended September 30, 2019, respectively, and $8,760 and $29,662 for the three and nine-months ended September 30, 2018, respectively.

Fleet Lease

In January 2018, the Company entered into a vehicle lease arrangement with a rental company for three vehicles. The terms of the leases require monthly payments of $1,619 for three years. These leases convert to month-to-month leases in January 2021 unless terminated. Total lease expense under this agreement was $4,964 and $16,520 for the three and nine-months ended September 30, 2019, respectively, and $5,602 and $14,953 for the three and nine-months ended September 30, 2018, respectively.

Right-to-use leased asset and liability

As a result of the adoption of ASU No. 2016-02,*Leases*, on January 1, 2019, the Company recognized a right-to-use leased asset and liability for the Fleet Leases. The balance of this right-to-use asset and liability was $22,015 as of September 30, 2019.

NOTE 17 – SUBSEQUENT EVENTS

The Company evaluated all material events through the date the financials were ready for issuance and identified the following for additional disclosure.

Convertible Notes

On the dates set forth in the table below, the Company entered into convertible notes with lenders, who are also current stockholders, for the amounts set forth in the table below. Each of these notes accrues interest payable monthly at the rate of 8% per annum and matures on June 30, 2020. Each of these notes and accrued interest thereon may convert into shares of common stock at the conversion price set forth in the table below any time at the holder's option. If any of these notes, or any portion thereof, has not been repaid or converted in full on or prior to the maturity date, then repayment of the unpaid principal balance plus any accrued and unpaid interest thereon, shall be amortized over the following thirty-six (36) months. The Company has the right to prepay each of these notes without penalty or premium. Each of these notes were issued with detachable five-year warrants to purchase shares of common stock as set forth in the table below.

Issuance Date	Principal Amount	Original Issue Discount	Gross Proceeds	Note Conversion Price Per Share	Number of Shares Underlying Warrants	Warrant Exercise Price Per Share
October 3, 2019	$ 27,174	$ 2,174	$ 25,000	$ 0.12	50,000	$ 0.12
October 10, 2019	27,174	2,174	25,000	0.12	50,000	0.12
October 23, 2019	108,696	8,696	100,000	0.12	250,000	0.15
					250,000	0.20
October 29, 2019	27,174	2,174	25,000	0.12	50,000	0.12
November 8, 2019	16,304	1,304	15,000	0.07	30,000	0.07
Total	$ 206,522	$ 16,522	$ 190,000	$ 0.07-0.12	680,000	$ 0.07-0.20

On the date set forth in the table below, the Company entered into a senior convertible note payable with a lender, who is also a current stockholder and beneficial owner of more than 5% of the Company's common stock, in the amount set forth in the table below. This note accrues interest payable monthly at the rate of 8% per annum and matures on June 30, 2020. This note and accrued interest thereon may convert into shares of common stock at the conversion price then in effect (initially $0.12 per share, subject to adjustment) any time at the holder's option or automatically upon a qualified financing of at least $5 million at the lower of the conversion price then in effect or a 25% discount to the offering price. The conversion price is subject to adjustment upon the issuance of the Company's common stock or securities convertible into common stock at a price per share less than the then prevailing conversion price, other than specified exempt issuances; accordingly, on November 8, 2019, the conversion price was adjusted to $0.07 per share. The Company has the right to prepay this note without penalty or premium. This note was issued with a detachable five-year warrant to purchase shares of common stock as set forth in the table below. The exercise price of this warrant shall be adjusted in accordance with any adjustment to the conversion price of this note; accordingly, on November 8, 2019, the exercise price was adjusted to $0.07 per share.

Issuance Date	Principal Amount	Original Issue Discount	Gross Proceeds	Note Conversion Price Per Share	Number of Shares Underlying Warrants	Warrant Exercise Price Per Share
October 16, 2019	$ 217,391	$ 17,391	$ 200,000	$ 0.07	400,000	$ 0.07

General Nutrition Corporation

On October 16, 2019, the exclusivity provision of the Company's purchasing agreement with GNC expired, however, all other provisions of the Company's purchasing agreement with GNC remain in effect. The Company may expand ZanthoSyn® distribution to mass market retailers, other specialty nutrition stores, pharmacies, and other retailers. The Company also plans to increase its sales and marketing efforts through e-commerce.

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

Explanatory Note

Unless otherwise noted, references in this Quarterly Report on Form 10-Q to "Cardax," the "Company," "we," "our," or "us" means Cardax, Inc., the registrant, and, unless the context otherwise requires, together with its wholly-owned subsidiary, Cardax Pharma, Inc., a Delaware corporation ("Pharma"), and Pharma's predecessor, Cardax Pharmaceuticals, Inc., a Delaware corporation ("Holdings"), which merged with and into Cardax, Inc., on December 30, 2015.

Unless otherwise noted, references in this Quarterly Report on Form 10-Q to our "product" or "products" includes our dietary supplements, pharmaceutical candidates, and any of our other current or future products, product candidates, and technologies, to the extent applicable.

Corporate Overview and History

We are a development stage biopharmaceutical company primarily focused on the development of pharmaceuticals for chronic diseases driven by inflammation. We also have a commercial business unit that markets dietary supplements for inflammatory health. CDX-101, our astaxanthin pharmaceutical candidate, is being developed for cardiovascular inflammation and dyslipidemia, with a target initial indication of severe hypertriglyceridemia. CDX-301, our zeaxanthin pharmaceutical candidate, is being developed for macular degeneration, with a target initial indication of Stargardt disease. Our pharmaceutical candidates are currently in pre-clinical development, including the planning of IND enabling studies. ZanthoSyn® is a physician recommended astaxanthin dietary supplement for inflammatory health. We sell ZanthoSyn® primarily through wholesale and e-commerce channels. The safety and efficacy of our products have not been directly evaluated in clinical trials or confirmed by the FDA.

At present we are not able to estimate if or when we will be able to generate sustained revenues. Our financial statements have been prepared assuming that we will continue as a going concern; however, given our recurring losses from operations, our independent registered public accounting firm has determined there is substantial doubt about our ability to continue as a going concern.

Subsequent Events

Convertible Promissory Notes

On the dates set forth in the table below, we entered into convertible notes with lenders, who are also current stockholders, for the amounts set forth in the table below. Each of these notes accrues interest payable monthly at the rate of 8% per annum and matures on June 30, 2020. Each of these notes and accrued interest thereon may convert into shares of our common stock at the conversion price set forth in the table below any time at the holder's option. If any of these notes, or any portion thereof, has not been repaid or converted in full on or prior to the maturity date, then repayment of the unpaid principal balance plus any accrued and unpaid interest thereon, shall be amortized over the following thirty-six (36) months. We have the right to prepay each of these notes without penalty or premium. Each of these notes were issued with detachable five-year warrants to purchase shares of our common stock as set forth in the table below.

Issuance Date	Principal Amount	Original Issue Discount	Gross Proceeds	Note Conversion Price Per Share	Number of Shares Underlying Warrants	Warrant Exercise Price Per Share
October 3, 2019	$ 27,174	$ 2,174	$ 25,000	$ 0.12	50,000	$ 0.12
October 10, 2019	27,174	2,174	25,000	0.12	50,000	0.12
October 23, 2019	108,696	8,696	100,000	0.12	250,000	0.15
					250,000	0.20
October 29, 2019	27,174	2,174	25,000	0.12	50,000	0.12
November 8, 2019	16,304	1,304	15,000	0.07	30,000	0.07
Total	$ 206,522	$ 16,522	$ 190,000	$ 0.07-0.12	680,000	$ 0.07-0.20

On the date set forth in the table below, we entered into a senior convertible note payable with a lender, who is also a current stockholder and beneficial owner of more than 5% of our common stock, in the amount set forth in the table below. This note accrues interest payable monthly at the rate of 8% per annum and matures on June 30, 2020. This note and accrued interest thereon may convert into shares of our common stock at the conversion price then in effect (initially $0.12 per share, subject to adjustment) any time at the holder's option or automatically upon a qualified financing of at least $5 million at the lower of the conversion price then in effect or a 25% discount to the offering price. The conversion price is subject to adjustment upon the issuance of our common stock or securities convertible into our common stock at a price per share less than the then prevailing conversion price, other than specified exempt issuances; accordingly, on November 8, 2019, the conversion price was adjusted to $0.07 per share. We have the right to prepay this note without penalty or premium. This note was issued with a detachable five-year warrant to purchase shares of our common stock as set forth in the table below. The exercise price of this warrant shall be adjusted in accordance with any adjustment to the conversion price of this note; accordingly, on November 8, 2019, the exercise price was adjusted to $0.07 per share.

Issuance Date	Principal Amount	Original Issue Discount	Gross Proceeds	Note Conversion Price Per Share	Number of Shares Underlying Warrants	Warrant Exercise Price Per Share
October 16, 2019	$ 217,391	$ 17,391	$ 200,000	$ 0.07	400,000	$ 0.07

General Nutrition Corporation

On October 16, 2019, the exclusivity provision of our purchasing agreement with GNC expired, however, all other provisions of our purchasing agreement with GNC remain in effect. We may expand ZanthoSyn® distribution to mass market retailers, other specialty nutrition stores, pharmacies, and other retailers. We also plan to increase our sales and marketing efforts through e-commerce.

Results of Operations

Results of Operations for the Three and Nine-Months Ended September 30, 2019 and 2018:

The following table reflects our operating results for the three and nine-months ended September 30, 2019 and 2018:

Operating Summary	Three-months ended September 30, 2019	Three-months ended September 30, 2018	Nine-months ended September 30, 2019	Nine-months ended September 30, 2018
Revenues	$ 229,142	$ 549,540	$ 439,505	$ 1,134,899
Cost of Goods Sold	(120,818)	(240,152)	(254,479)	(521,353)
Gross Profit	108,324	309,388	185,026	613,546
Operating Expenses	(1,300,035)	(1,237,019)	(3,540,412)	(3,689,560)
Net Operating Loss	(1,191,711)	(927,631)	(3,355,386)	(3,076,014)
Other (Expense) Income	(241,915)	(1,257)	(295,354)	(859)
Net Loss	$ (1,433,626)	$ (928,888)	$ (3,650,740)	$ (3,076,873)

Operating Summary for the Three-Months Ended September 30, 2019 and 2018

Our revenues presently derive from the sale of ZanthoSyn® primarily through wholesale and, to a lesser extent, e-commerce channels. We launched our e-commerce channel in 2016 and began selling to GNC stores in 2017. ZanthoSyn® is currently available at over three thousand GNC corporate stores in the United States. As a result, revenues were $229,142 and $549,540 for the three-months ended September 30, 2019 and 2018, respectively. The decrease in revenues for the three-months ended September 30, 2019 was primarily attributed to decreased replenishment orders by GNC during the current period compared to the previous year. Costs of goods sold were $120,818 and $240,152 for the three-months ended September 30, 2019 and 2018, respectively, and included costs of the product, shipping and handling, sales taxes, merchant fees, and other costs incurred on the sale of goods. Gross profits were $108,324 and $309,388 for the three-months ended September 30, 2019 and 2018, respectively, which represented gross profit margins of approximately 47% and 56%, respectively. The decrease in gross profit margin for the three-months ended September 30, 2019, was primarily attributed to increased promotional activities at GNC stores, which increased the sales discounts passed through to us during the current period.

Operating expenses were $1,300,035 and $1,237,019 for the three-months ended September 30, 2019 and 2018, respectively. Operating expenses primarily consisted of services provided to the Company, including payroll, consultation, and contract services, for research and development, including our clinical trial and pharmaceutical development programs, sales and marketing, and administration. These expenses were paid in accordance with agreements entered with each employee or service provider. Included in operating expenses were $175,712 and $180,562 in stock-based compensation for the three-months ended September 30, 2019 and 2018, respectively. The increase in operating expenses for the period from the same period in the prior year was primarily related to an increase in professional fees as a result of clinical trials and debt and equity issuances and filings.

Other expenses, net, were $241,915 and $1,257 for the three-months ended September 30, 2019 and 2018, respectively. For the three-months ended September 30, 2019, other expenses, net, consisted of the change in the fair value of a derivative liability, loss on abandonment of patents, and interest expense of $20,524, $36,205, and $185,189, respectively. These expenses were partially offset by interest income of $3 realized during the nine-months ended September 30, 2019. For the three-months ended September 30, 2018, other expenses, net, consisted of interest income and interest expense of $7 and $(1,264), respectively.

Operating Summary for the Nine-Months Ended September 30, 2019 and 2018

Our revenues were $439,505 and $1,134,899 for the nine-months ended September 30, 2019 and 2018, respectively. The decrease in revenues for the nine-months ended September 30, 2019 was primarily attributed to a combination of (i) GNC selling through existing ZanthoSyn® inventory we sold to GNC during the prior year, which impacted the timing and amounts of replenishment orders during the current period, (ii) increased promotional activities at GNC stores, which increased the sales discounts passed through to us during the current period, and (iii) GNC inventory adjustments to focus on ZanthoSyn 60 count and 90 count bottles, which are the top performing ZanthoSyn variants at GNC, resulting in a one-time return of remaining ZanthoSyn 30 count bottles from GNC inventory to us. Costs of goods sold were $254,479 and $521,353 for the nine-months ended September 30, 2019 and 2018, respectively, and included costs of the product, shipping and handling, sales taxes, merchant fees, and other costs incurred on the sale of goods. Gross profits were $185,026 and $613,546 for the nine-months ended September 30, 2019 and 2018, respectively, which represented gross profit margins of approximately 42% and 54%, respectively. The decrease in gross profit margin for the nine-months ended September 30, 2019 was primarily attributed to increased promotional activities at GNC stores, which increased the sales discounts passed through to us during the current period.

Operating expenses were $3,540,412 and $3,689,560 for the nine-months ended September 30, 2019 and 2018, respectively. Operating expenses primarily consisted of services provided to the Company, including payroll, consultation, and contract services, for research and development, including our clinical trial and pharmaceutical development programs, sales and marketing, and administration. These expenses were paid in accordance with agreements entered with each employee or service provider. Included in operating expenses were $534,774 and $443,249 in stock-based compensation for the nine-months ended September 30, 2019 and 2018, respectively. The decrease in operating expenses for the period from the same period in the prior year was primarily related to a sales and marketing conference and related expenses that occurred in 2018 but not in 2019.

Other expenses, net, were $295,354 and $859 for the nine-months ended September 30, 2019 and 2018, respectively. For the nine-months ended September 30, 2019, other expenses, net, consisted of the change in the fair value of a derivative liability, loss on abandonment of patents, and interest expense of $3,139, $36,205, and $256,015, respectively. These expenses were partially offset by interest income of $5 realized during the nine-months ended September 30, 2019. For the nine-months ended September 30, 2018, other expenses, net, consisted of interest income of $1,941, other income of $556, and interest expense of $(3,356).

Liquidity and Capital Resources

Since our inception, we have sustained operating losses and have used cash raised by issuing securities in our operations. During the nine-months ended September 30, 2019 and 2018, we used cash in operating activities in the amount of $3,047,889 and $2,712,155, respectively, and incurred net losses of $3,650,740 and $3,076,873, respectively.

We require additional financing in order to continue to fund our operations and to pay existing and future liabilities and other obligations.

On August 14, 2019, we filed a registration statement on Form S-1 for a proposed $15 million public offering of common stock and warrants. We intend to use the proceeds from the proposed public offering primarily to fund pharmaceutical development and our operations. After giving effect to the net proceeds that we will receive from the proposed public offering, if closed, we expect to have sufficient cash resources to fund the budgeted expenditures for our expected operations for at least one year. We cannot give any assurance that the proposed public offering will be consummated.

We also may continue to obtain additional financing from investors through the private placement of our common stock and warrants to purchase our common stock or through the issuance of debt or convertible debt securities and plan to do so prior to the closing of the proposed public offering. There can be no assurance that a financing transaction will be available to us on terms and conditions that we determined are acceptable.

We cannot give any assurance that we will in the future be able to achieve a level of profitability from the sale of existing or future products or otherwise to sustain our operations. These conditions raise substantial doubt about our ability to continue as a going concern. The accompanying financial statements do not include any adjustments to reflect the possible future effects on recoverability and reclassification of assets or the amounts and classification of liabilities that may result from the outcome of this uncertainty.

Any inability to obtain additional financing on acceptable terms will materially and adversely affect us, including requiring us to significantly curtail or cease business operations altogether.

Our working capital and capital requirements at any given time depend upon numerous factors, including, but not limited to:

- revenues from the sale of any products or licenses;
- costs of production, marketing and sales capabilities, or other operating expenses; and
- costs of research, development, and commercialization of our products and technologies.

We have undertaken certain actions regarding the advancement of our pharmaceutical development program, the conduct of a dietary supplement clinical trial, and the continued sales and marketing of our commercial dietary supplement. We plan to fund such activities, including compensation to service providers, with a combination of cash and equity payments. The amount of payments in cash and equity will be determined by us from time to time.

We expect that the proposed public offering should provide sufficient capital to satisfy our ongoing obligations, although no assurance can be made that such public offering will be consummated on acceptable terms, if at all. To the extent our cash and cash equivalents, cash flow from operating activities, and proceeds from the revolving inventory financing facility or the proposed public offering are insufficient to fund our future activities, including the development of our pharmaceutical candidates, we will need to raise additional funds through private or public equity or debt financings or bank credit arrangements. We also may need to raise additional funds in the event we determine to effect one or more acquisitions of, or investments in, businesses, services, or technologies. If additional funding is required, we may not be able to effect equity or debt financing or obtain bank credit arrangements on terms acceptable to us or at all.

The following is a summary of our cash flows provided by (used in) operating, investing, and provided by financing activities during the periods indicated:

Cash Flow Summary	Nine-months ended September 30, 2019	Nine-months ended September 30, 2018
Net Cash Used in Operating Activities	$ (3,047,889)	$ (2,712,155)
Net Cash Used in Investing Activities	(58,394)	(30,483)
Net Cash Provided by Financing Activities	2,870,000	704,375
Net Cash (Decrease) for Period	(236,283)	(2,038,263)
Cash at Beginning of Period	243,753	2,236,837
Cash at End of Period	$ 7,470	$ 198,574

Cash Flows from Operating Activities

During the nine-months ended September 30, 2019 and 2018, our operating activities primarily consisted of receipts and receivables from sales and payments or accruals for employees, directors, and consultants for services related to administration, sales and marketing, research and development, and inventory deposits.

Cash Flows from Investing Activities

During the nine-months ended September 30, 2019 and 2018, our investing activities were related to expenditures on patents.

Cash Flows from Financing Activities

During the nine-months ended September 30, 2019, our financing activities consisted of transactions in which we raised proceeds through the issuance of our common stock and convertible and other notes payable. The issuance of the convertible notes resulted in a derivative liability of $246,414 as of September 30, 2019.

Off-Balance Sheet Arrangements

There are no off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

As a smaller reporting company, we are not required to provide the information called for by this Item.

ITEM 4. CONTROLS AND PROCEDURES.

Disclosure Controls and Procedures

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 15d-15(f). Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Internal control over financial reporting is a process designed 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 and includes those policies and procedures that (a) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (b) provide reasonable assurance that transactions are recorded as necessary to permit the preparation of financial statements in accordance with generally accepted accounting principles and that receipts and expenditures of the Company are being made only in accordance with authorizations of the our management and directors; and (c) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements. Based on our evaluation under the framework in Internal Control—Integrated Framework, our management concluded that our internal control over financial reporting was effective as of September 30, 2019.

Changes in Internal Controls over Financial Reporting

There were no changes in the Company's internal control over financial reporting during the quarter ended September 30, 2019, that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS.

From time to time, we may become involved in various lawsuits and legal proceedings that arise in the ordinary course of business. However, litigation is subject to inherent uncertainties and an adverse result in these or other matters may arise from time to time that may harm our business. We are currently not aware of any such legal proceedings or claims that we believe will have a material adverse effect on our business, financial condition or operating results.

ITEM 1A. RISK FACTORS.

As a smaller reporting company, we are not required to provide the information called for by this Item.

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

During the nine-months ended September 30, 2019, the Company sold securities in a self-directed offering to existing stockholders of the Company in the aggregate amount of $245,000, respectively, at $0.30 per unit. Each $0.30 unit consisted of 2 shares of restricted common stock (1,633,330 shares) and a five-year warrant to purchase 1 share of restricted common stock (816,665 warrant shares) at $0.20 per share. We used the net proceeds for our general working capital and to fund our research, development, and clinical programs.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES.

None.

ITEM 4. MINE SAFETY DISCLOSURES.

Not applicable.

ITEM 5. OTHER INFORMATION.

None.

ITEM 6. EXHIBITS.

Exhibit No.	Description
31.1[(1)]	Certification of the Chief Executive Officer pursuant to Exchange Act Rule 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2[(1)]	Certification of the Chief Financial Officer pursuant to Exchange Act Rule 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1[(1)]	Certification of the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2[(1)]	Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS[(2)]	XBRL Instance Document
101.SCH[(2)]	XBRL Taxonomy Extension Schema Document
101.CAL[(2)]	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF[(2)]	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB[(2)]	XBRL Taxonomy Extension Label Linkbase Document
101.PRE[(2)]	XBRL Taxonomy Extension Presentation Linkbase Document

(1) Filed herewith.

(2) Furnished herewith. Pursuant to Rule 406T of Regulation S-T, the Interactive Data Files on Exhibit 101 hereto are deemed not filed or part of any registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, are deemed not filed for purposes of Section 18 of the Securities Exchange Act of 1934, and otherwise are not subject to liability under those sections.

SIGNATURES

Pursuant to the requirements of Section 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: November 14, 2019

CARDAX, INC.

By:	*/s/ David G. Watumull*
Name:	David G. Watumull
Title:	Chief Executive Officer and President

Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, David G. Watumull, Chief Executive Officer, certify that:

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

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

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

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

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

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

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

Dated: November 14, 2019

/s/ David G. Watumull

David G. Watumull
Chief Executive Officer

Exhibit 31.2

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

I, John B. Russell, Chief Financial Officer, certify that:

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

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

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

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

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

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

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

Dated: November 14, 2019

/s/ John B. Russell
John B. Russell
Chief Financial Officer

Exhibit 32.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002 (18 U.S.C. SECTION 1350)

In connection with the Quarterly Report of Cardax, Inc. (the "Company") on Form 10-Q for the quarterly period ended September 30, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Quarterly Report"), I, David G. Watumull, Chief Executive Officer, do hereby certify, to my knowledge:

(1) The Quarterly Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Quarterly Report fairly presents, in all material respects, the financial condition and results of operation of the Company.

Date: November 14, 2019

By: */s/ David G. Watumull*
David G. Watumull
Chief Executive Officer

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Cardax, Inc. and will be retained by Cardax, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002 (18 U.S.C. SECTION 1350)

In connection with the Quarterly Report of Cardax, Inc. (the "Company") on Form 10-Q for the quarterly period ended September 30, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Quarterly Report"), I, John B. Russell, Chief Financial Officer, do hereby certify, to my knowledge:

(1) The Quarterly Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Quarterly Report fairly presents, in all material respects, the financial condition and results of operation of the Company.

Date: November 14, 2019

By: */s/ John B. Russell*
John B. Russell
Chief Financial Officer

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Cardax, Inc. and will be retained by Cardax, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.