## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

# FORM S-4 REGISTRATION STATEMENT

UNDER
THE SECURITIES ACT OF 1933

### CARDAX, INC.

(Exact name of registrant as specified in its charter)

**Delaware** (State of incorporation) 2834

(Primary Standard Industrial Classification Code Number) 45-4484428

(I.R.S. Employer Identification Number)

2800 Woodlawn Drive, Suite 129 Honolulu, Hawaii 96822 (808) 457-1400

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

David G. Watumull President and Chief Executive Officer Cardax, Inc. 2800 Woodlawn Drive, Suite 129 Honolulu, Hawaii 96822 (808) 457-1400

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:
Richard M. Morris, Esq.
Herrick, Feinstein LLP
2 Park Avenue
New York, New York 10016
(212) 592-1400

**Approximate date of commencement of proposed sale to the public:** As soon as practicable after the effective date of this Registration Statement.

If the securities being registered on this Form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box. [ ]

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ]

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ]

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

Large accelerated filer [ ]
Non-accelerated filer [ ] (Do not check if a smaller reporting company)
Emerging growth company [X]

Accelerated filer [ ]
Smaller reporting company [X]

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 7(a)(2)(B) of the Securities Act [ ]

If applicable, place an X in the box to designate the appropriate rule provision relied upon in conducting this transaction:

Exchange Act Rule 13e-4(i) (Cross-Border Issuer Tender Offer) [ ]
Exchange Act Rule 14d-1(d) (Cross-Border Third-Party Tender Offer) [ ]

#### **CALCULATION OF REGISTRATION FEE**

Title of each class of securities to be registered	Amount to be Registered <sup>(1)</sup>	Proposed maximum offering price per share <sup>(2)</sup>		 Proposed maximum aggregate offering price <sup>(3)</sup>	Amount of registration fee	
Common Stock, \$0.001 par value per share, to be						
issued in the exchange offer <sup>(4)</sup>	27,705,782 shs.	\$	0.31	\$ 8,630,351.09	\$	1,074.48

- (1) Pursuant to Rule 416 under the Securities Act of 1933, this registration statement will cover such indeterminate number of shares of our common stock, par value \$0.001 per share ("common stock"), that may be issued with respect to stock splits, stock dividends, and similar transactions.
- (2) Estimated solely for purposes of computing the amount of the registration fee pursuant to Rule 457(c) under the Securities Act of 1933, computed based upon the average of the bid and ask price per share of our common stock on May 1, 2018 on the OTCQB.
- (3) This amount represents the maximum aggregate value of the Exchange Shares.
- (4) Represents the maximum number of our common stock to be issued to holders of the registrant's outstanding warrants pursuant to the exchange offer described in the offer letter/prospectus to which this registration statement relates.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion Preliminary Prospectus May 2, 2018

#### PROSPECTUS

Effective date



#### Offer to Exchange

#### Each \$0.625 Warrant to purchase shares of Common Stock

and

\$0.15 in cash

for

#### **Shares of Common Stock**

### THE OFFER WILL EXPIRE AT 5:00 P.M., NEW YORK CITY TIME, ON THE DATE THAT IS 20 BUSINESS DAYS AFTER THE EFFECTIVE DATE OF THIS REGISTRATION STATEMENT, UNLESS THE OFFER IS EXTENDED.

We hereby offer to exchange, upon the terms and subject to the conditions set forth in this offer to exchange and in the related letter of transmittal, each issued and outstanding warrant that provided the holder to purchase a share of common stock at \$0.625 per share (each, an "Original Warrant") and payment by the holder of \$0.15 in cash (the "Exchange Payment"), at the election of the holder, for one share of our common stock (an "Exchange Share").

We will accept for exchange any and all Original Warrants validly tendered at any time prior to 5:00 p.m., New York City time, during the period (the "Exchange Period") beginning on the effective date of this Registration Statement, and continuing until the date (the "Expiration Date") that is 20 business days after the effective date, unless extended by us. We will issue the Exchange Shares on a continuous basis pursuant to Rule 415 of the Securities Act of 1933 as amended ("Securities Act") during the Exchange Period.

We will accept for exchange any Original Warrant held by any person other than the original holder if such Original Warrant is transferred in accordance with the terms of the Original Warrant and applicable federal and state securities laws. See "General Terms of Exchange Offer–Transfer of Original Warrants."

We are making this offer upon the terms and subject to the conditions described in this prospectus and in the related letter of transmittal (which together, as they may be amended from time to time, constitute the "Exchange Offer").

Our common stock is traded on the OTCQB under the symbol CDXI. On May 1, 2018, the last reported sale price for our common stock was \$0.34 per share.

	Per New			
	Wa	rrant Share	Total <sup>(1)</sup>	
Exchange Payment	\$	0.15	\$	4,155,867
Financial Advisor fee <sup>(2)</sup>	\$	0.00525	\$	145,455
Solicitation Agent fee <sup>(3)</sup>	\$	0.00645	\$	178,702
Proceeds to us, before expenses	\$	0.1383	\$	3,831,710

- (1) Assumes that all 27,705,782 Original Warrants are exchanged in the Exchange Offer.
- (2) In connection with the Exchange Offer, we have agreed to pay M.M. Dillon & Co., the Financial Advisor for this Exchange Offer, a cash fee of 3.5% of the gross proceeds from the Exchange Offer and a 5-year common stock purchase warrant with a fair market value equal to 3.5% of the gross proceeds from the Exchange Offer, based on a Black-Scholes valuation as of the day immediately prior to the filing date of the initial registration statement in connection with the Exchange Offer. See "General Terms of Exchange Offer—Fees and Expenses" and "Solicitation Agents" for a description of compensation payable to the Financial Advisor.
- (3) In connection with the Exchange Offer, we have agreed to pay CIM Securities, the Solicitation Agent for this Exchange Offer, a cash fee of 4.3% of the gross proceeds from the Exchange Offer and a 5-year common stock purchase warrant with a fair market value equal to 3.5% of the gross proceeds from the Exchange Offer, based on a Black-Scholes valuation as of the day immediately prior to the filing date of the initial registration statement in connection with the Exchange Offer. See "General Terms of Exchange Offer–Fees and Expenses" and "Solicitation Agents" for a description of compensation payable to the Solicitation Agent.

These are speculative securities. Please read the "Risk Factors" section beginning on page 8 of this prospectus before making a decision to invest in our common stock.

We are an "emerging growth company" as defined under the federal securities laws and, as such, may elect to comply with certain reduced public company reporting requirements for future filings.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The Financial Advisor for this Exchange Offer is

M.M. DILLON & CO.

The Solicitation Agent for this Exchange Offer is

CIM SECURITIES

The date of this prospectus is

, 2018

We Are Not Asking You for a Proxy and You are Requested To Not Send Us a Proxy

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#### BASIS OF PRESENTATION

Unless otherwise noted, references in this prospectus 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.

#### FORWARD-LOOKING STATEMENTS

There are statements in this prospectus 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. For a discussion of these risks, you should read this entire prospectus carefully, especially the risks discussed under the section entitled "Risk Factors." 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 prospectus 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, except as required by law.

#### CAUTIONARY NOTE REGARDING INDUSTRY DATA

Unless otherwise indicated, information contained in this prospectus concerning our company, our business, the services we provide and intend to provide, our industry and our general expectations concerning our industry are based on management estimates. Such estimates are derived from publicly available information released by third party sources, as well as data from our internal research, and reflect assumptions made by us based on such data and our knowledge of the industry, which we believe to be reasonable.

This document incorporates by reference important business and financial information about the Company from documents that are not included in or delivered with this prospectus. These documents are available without charge to security holders of the Company upon written or oral request at the address and telephone number listed below:

David G. Watumull c/o Cardax, Inc. 2800 Woodlawn Drive, Suite 129 Honolulu, Hawaii 96822 (808) 457-1400

Please be sure to include your complete name and address in your request. Please see "Where You Can Find Additional Information" to find out where you can find more information about Cardax, Inc.

#### PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus. This summary may not contain all of the information that may be important to you. You should read the entire prospectus carefully together with our financial statements and the related notes appearing elsewhere in this prospectus before you decide to invest in our common stock. This prospectus contains forward-looking statements, which involve risks and uncertainties. Our actual results could differ materially from those anticipated in such forward-looking statements as a result of certain factors, including those discussed under the heading "Risk Factors" and other sections of this prospectus.

#### **Our Business and Strategy**

#### Overview

We are a life sciences company engaged in the development, marketing, and distribution of consumer health products and we are a smaller reporting company as defined by applicable federal securities regulations.

We were incorporated on January 30, 2012, as a Delaware corporation, under the name "Koffee Korner Inc., and later changed our name to Cardax, Inc. in a February 7, 2014 reverse merger (the "Merger") that acquired the life sciences business of Pharma. On the effective date of the Merger, we divested our coffee business and now exclusively continue Pharma's life sciences business. On December 30, 2015, our former principal stockholder, Holdings, merged with and into us.

#### **Our Business**

We are a life sciences company engaged in the development, marketing, and distribution of consumer health products. We believe we are well positioned for significant and sustained growth via the commercialization of consumer health products utilizing synthetically manufactured astaxanthin and related xanthophyll carotenoids, which support health and longevity by reducing inflammation at the cellular and mitochondrial level without inhibiting normal function. We may also pursue the development of astaxanthin and related xanthophyll carotenoids for pharmaceutical applications. The safety and efficacy of our products have not been directly evaluated in clinical trials or confirmed by the U.S. Food and Drug Administration (the "FDA").

#### **Our Products**

ZanthoSyn® is marketed as a novel astaxanthin dietary supplement with superior absorption and purity. Astaxanthin is a naturally occurring molecule with safe anti-inflammatory activity that supports joint health, cardiovascular health, metabolic health, liver health, and longevity. The form of astaxanthin utilized in ZanthoSyn® has demonstrated excellent safety in peer-reviewed published studies and is Generally Recognized as Safe ("GRAS") according to FDA regulations.

We sell ZanthoSyn® primarily through e-commerce and wholesale channels. We launched our e-commerce channel in August 2016 and began selling to General Nutrition Corporation ("GNC") stores in Hawaii on January 25, 2017 and GNC corporate stores across the United States on August 10, 2017. ZanthoSyn® is currently available at over three thousand GNC corporate stores in the United States. ZanthoSyn® was the top selling product at GNC stores in Hawaii during the fourth quarter of 2017. We have also sold ZanthoSyn® on a wholesale basis to Health Elite Club Limited, a Hong Kong-based company.

Our ZanthoSyn® product manufacturing process relies on certain third-party suppliers and this dependence creates several risks, including limited control over pricing, availability, quality, and delivery schedules. In addition, any supply interruption could materially harm our ability to manufacture ZanthoSyn® until a new source of supply is obtained on acceptable terms. We may be unable to find such other sources in a reasonable time period or on commercially reasonable terms, if at all, which would have an adverse effect on our business, financial condition and results of operations.

We market ZanthoSyn® primarily through a two-pronged approach:

- Physician outreach and education, where ZanthoSyn<sup>®</sup> is positioned as the first safe, physician friendly, anti-inflammatory for health and longevity, and GNC serves as a convenient and credible distribution channel for physicians recommending ZanthoSyn<sup>®</sup>
- GNC store outreach, education, and in-store sales support, building on the ability to utilize ZanthoSyn<sup>®</sup> as a foundation of health, wellness, and performance regimens

Our sales and marketing program was initially launched in Hawaii, where robust physician outreach and education coupled with GNC store outreach, education, and in-store sales support increased consumer awareness and catalyzed strong sales growth. We have also launched this program in major markets in California and expect to extend this program nationally as resources permit. To support these efforts, we have hired additional sales and marketing personnel.

We may also conduct human clinical trials with astaxanthin and are currently evaluating various opportunities. While the FDA does not require human clinical trials for consumer health products, we believe that positive results from human clinical trials would promote scientific and consumer awareness of astaxanthin's health and longevity applications.

As a next generation ZanthoSyn® product, we are developing CDX-085, our patented astaxanthin derivative for more concentrated astaxanthin product applications. In collaboration with the University of Hawaii, we demonstrated that astaxanthin through administration of CDX-085 activated an important anti-aging gene in rodents. Following these results, the National Institutes of Health selected CDX-085 for an important anti-aging research program.

#### Synthetic Astaxanthin vs. Natural Astaxanthin

We believe synthetic astaxanthin offers significant advantages compared to astaxanthin from microalgae, krill, or other sources:

- Synthetic astaxanthin can be formulated for superior bioavailability; in a human study comparing ZanthoSyn® (our synthetic astaxanthin dietary supplement) to a leading microalgal astaxanthin product, the astaxanthin blood levels following administration of ZanthoSyn® were nearly 3 times higher than the microalgal astaxanthin product at the same dose.
- Synthetic astaxanthin has been extensively tested in a battery of toxicity studies, including acute, subacute, subchronic, and
  chronic toxicity studies, carcinogenicity studies, genotoxicity studies, and developmental and reproductive toxicity studies;
  whereas to our knowledge microalgal or other sources of astaxanthin have not undergone the same amount of safety testing in
  such toxicity studies.
- Synthetic astaxanthin is manufactured with superior purity and precision, whereas astaxanthin extracted from microalgae and krill oil is obtained in a complex mixture, which may include many unknown marine byproducts.
- Synthetic manufacture of astaxanthin is scalable, whereas we believe the ability to readily scale the production and extraction of astaxanthin from microalgae or other sources will be limited as demand for astaxanthin grows.
- Synthetic manufacture of astaxanthin emits fewer greenhouse gases and consumes less energy, raw material, and land than traditional microalgal astaxanthin production.

#### Pharmaceutical Development

We may pursue the development of astaxanthin and related xanthophyll carotenoids for pharmaceutical applications and are currently evaluating the feasibility of targeting rare diseases or conditions under the FDA's orphan drug program.

#### **Corporate Information**

Our common stock is traded on the OTCQB under the trading symbol "CDXI". We are a Delaware corporation that acquired our life science business through a merger with Cardax Pharma, Inc., a Delaware corporation, on February 7, 2014.

Our executive offices are located at 2800 Woodlawn Drive, Suite 129, Honolulu, Hawaii 96822; our telephone number is (808) 457-1400. Our website is located at http://www.cardaxpharma.com. The information on our website is not part of this prospectus.

#### **Emerging Growth Company Status**

We are an "emerging growth company" as defined under the Jumpstart Our Business Startups Act, common referred to as the "JOBS Act." We will remain an "emerging growth company" for up to five years, or until the earliest of (i) the last day of the fiscal year in which our total annual gross revenues exceed \$1 billion, (ii) the date that we become a "large accelerated filer" as defined I Rule 12b-2 under the Securities Exchange Act of 1934, which would occur if the market value of our ordinary shares that is held by non-affiliates exceeds \$700 million as of the last business day of our most recently completed second fiscal quarter, or (iii) the date on which we have issued more than \$1 billion in non-convertible debt during the preceding three year period.

As an "emerging growth company," we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not "emerging growth companies" including, but not limited to:

- not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act (we will also not be subject to the auditor attestation requirements of Section 404(b) as long as we are a "smaller reporting company," which includes issuers that had a public float of less than \$75 million as of the last business day of their most recently completed second fiscal quarter);
- reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved.

In addition, Section 107 of the JOBS Act provides that an "emerging growth company" can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. Under this provision, an "emerging growth company" can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. However, we are choosing to "opt out" of such extended transition period, and as a result, we will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth companies. Section 107 of the JOBS Act provides that our decision to opt out of the extended transition period for complying with new or revised accounting standards is irrevocable.

#### **Summary of Risk Factors**

Our business is subject to numerous risks, as more fully described in the section entitled "Risk Factors" immediately following this prospectus summary. You should read these risks before you invest in our common stock. In particular, our risks include, but are not limited to, the following:

- We have a history of operating losses and have received a going concern opinion from our auditors.
- We have limited experience as a commercial company.
- We are dependent upon the success of our lead astaxanthin technologies, which may not be successfully commercialized.
- We operate in highly competitive industries, and our failure to compete effectively could adversely affect our market share, financial condition and growth prospects. If competitors are better able to develop and market products that are more effective, or gain greater acceptance in the marketplace than our products, our commercial opportunities may be reduced or eliminated.

- If we fail to comply with FDA regulations our business could suffer.
- We may rely on third-party distributors for sales, marketing and distribution activities.
- We may be subject to product liability claims. Our insurance may not be sufficient to cover these claims, or we may be required
  to recall our products.
- If we are unable to obtain and maintain protection of our intellectual property, the value of our products may be adversely affected.
- Our operating results may fluctuate, which may result in volatility of our share price.
- If we are unable to manage our expected growth, our future revenue and operating results may be adversely affected.
- We are highly dependent on our senior management, and if we are not able to retain them or to recruit and retain additional qualified personnel, our business will suffer.
- Our ability to grow and compete in the future will be adversely affected if adequate capital is not available to us or not available
  on terms favorable to us.
- Our common stock has a limited trading market, which could affect your ability to sell shares of our common stock and the
  price you may receive for our common stock.
- Future sales of our common stock in the public market could lower the price of our common stock and impair our ability to raise funds in future securities offerings.
- We are subject to penny stock regulations and restrictions and you may have difficulty selling shares of our common stock.
- We are registering an aggregate of 27,705,782 Exchange Shares which may be issued pursuant to the Exchange Offer. The sale of such shares could depress the market price of our common stock.

#### The Exchange Offer

We are making the Exchange Offer primarily to raise capital from holders of our existing warrants to purchase Exchange Shares. We believe that by allowing holders of Original Warrants to exchange such Original Warrants for Exchange Shares, the Company can raise additional capital in an efficient and cost-effective manner.

There are 27,705,782 Original Warrants outstanding. Each Original Warrant provides the holder the right to purchase a share of our common stock at a price equal to \$0.625 per share, subject to certain specified adjustments for changes or reclassifications to our common stock. The Original Warrants expire February 7, 2019 (five years from the date of issuance).

The Original Warrants were issued on February 7, 2014, as follows:

- 6,276,960 were issued upon the consummation of the Merger in connection with the private placement of shares of our common stock and Original Warrants for aggregate gross cash proceeds of \$3,923,100;
- 17,768,377 were issued upon the consummation of the Merger in connection with the conversion of unsecured promissory notes issued by our predecessor Cardax Pharma, Inc. in the aggregate principal amount of \$10,565,036 plus all accrued interest thereon into our common stock and Original Warrants; and
- 3,660,445 were issued upon the consummation of the Merger to placement agents and other service providers.

The Merger and the issuance of the Original Warrants are described in the Current Report on Form 8-K, filed by us February 10, 2014.

We are now permitting all holders of the Original Warrants to tender their Original Warrants and receive the Exchange Shares through this Exchange Offer, subject to a payment of \$0.15. You should read the discussions under the headings "General Terms of the Exchange Offer," and "Description of Securities," respectively, for more information about the Exchange Offer, and the Exchange Shares.

The Exchange Offer

Price

**Expiration Date** 

Procedure for Participating in the Exchange Offer

During the Exchange Period, holders can tender Original Warrants and the Exchange Payment, in exchange for an Exchange Share. A holder may tender as few or as many Original Warrants as the holder elects. All Original Warrants that are not tendered prior to the Expiration Date, or, or for any reason, not accepted by us, will continue to be outstanding according to their terms unmodified. We will issue the Exchange Shares on a continuous basis during the Exchange Period.

The cost to you for participating in this Exchange Offer is \$0.15 per share. See "General Terms of the Exchange Offer—Fees and Expenses".

The Exchange Offer will expire on the Expiration Date, which is at 5:00 p.m., New York City time, on the date that is 20 business days after the effective date of this Registration Statement, unless extended by us at our sole discretion.

In all cases, the issuance of Exchange Shares pursuant to the Exchange Offer will be made only after timely receipt by the Exchange Agent of the Original Warrants and the Letter of Transmittal properly completed and duly executed and any required signature guarantees and other documents required by the Letter of Transmittal, and timely receipt by the Company of the Exchange Payment.

By signing or agreeing to be bound by the Letter of Transmittal and other required documents, you will represent to us that, among other things:

- any Exchange Shares that you receive will be acquired in the ordinary course of your business or for your own personal investment;
- you have no arrangement or understanding with any person to participate in the distribution of the Exchange Shares;
- you are not our "affiliate," as defined in Rule 405 under the Securities Act;
- if you are not a broker-dealer, you are not engaged in and do not intend to engage in the distribution of the Exchange Shares;
- i f you are a broker-dealer, that you will receive Exchange Shares for your own account in exchange for Original Warrants that were acquired as a result of market-making activities or other trading activities and that you will deliver a prospectus in connection with any resale of such Exchange Shares.

Procedures for Tendering Original Warrants Through a Custodian

If you are a beneficial owner of Original Warrants, but the holder of such Original Warrants is a custodial entity such as a bank, broker, dealer, trust company or other nominee, and you seek to tender your Original Warrants pursuant to the Exchange Offer, you must provide appropriate instructions to such holder of the Original Warrants.

Return of Original Warrants

If we do not accept any Original Warrants tendered in the Exchange Offer for any reason described in the terms and conditions of the Exchange Offer, we will return such Original Warrants without expense to the exercising holder.

Conditions to the Exchange Offer

The Exchange Offer is subject to certain customary conditions, which we may amend or waive. We have the right, in our sole discretion, to terminate or withdraw the Exchange Offer if any of the conditions described in this prospectus are not satisfied or waived.

See "General Terms of the Exchange Offer — Conditions to the Exchange Offer."

United States Federal Income Tax Considerations

We recommend that you consult with your own tax advisor with regard to the possibility of any federal, state, local, or other tax consequences of the Exchange Offer. See "Certain United States Federal Income Tax Considerations" for a discussion of the material U.S. Federal Income Tax Consequences of participating in the Exchange Offer.

Use of Proceeds

We intend to use the net proceeds from the Exchange Offer for general corporate purposes. See "Use of Proceeds".

Solicitation Agent

CIM Securities, LLC ("<u>CIM Securities</u>") is serving as the Solicitation Agent in connection with the Exchange Offer. Questions, requests for assistance, or requests for additional copies of the Exchange Offer documents, Letter of Transmittal, or other materials should be directed to: CIM Securities, LLC, Attn: Andrew Daniels, Managing Director, 509 Madison Avenue, 9th Floor, New York, NY 10022; Andrew.Daniels@brooklinecm.com; 646-603-6717.

Exchange Agent

VStock Transfer, LLC is serving as the Exchange Agent in connection with the Exchange Offer. See "Exchange Agent."

Registration

The Exchange Shares issued at the closing will be registered pursuant to this registration statement. See "Description of Securities."

Risk Factors

See "Risk Factors" and other information included in this prospectus for a discussion of factors you should consider carefully before investing pursuant to the terms of this prospectus.

#### **Background and Purpose of the Exchange Offer**

Through a series of discussions with M.M. Dillon & Co. Group LLC ("M.M. Dillon & Co.") and other prospective financial advisors, we determined that, on the basis of the price of our common stock and other potential sources of capital, the Exchange Offer provided the best alternative to raise capital.

By undertaking the Exchange Offer, we are trying raise capital which will be used for general corporate purposes.

Approval of the Exchange Offer

Our Board and our Audit Committee met telephonically on October 16, 2017 to discuss the potential Exchange Offer. At this meeting, David G. Watumull initially discussed the financial purposes for eliminating the Original Warrants and the reasons why the Exchange Offer would be the best means available at present to raise capital. Mr. Watumull next presented the terms of engaging M.M. Dillon & Co. to act as the Financial Advisor and CIM Securities as the Solicitation Agent in connection with the Exchange Offer. Mr. Bickerstaff recused himself from each meeting and did not submit a vote on the engagement of M.M. Dillon & Co. and CIM Securities due to his affiliation as a managing director of M.M. Dillon & Co. Our Board and our Audit Committee (with Mr. Bickerstaff abstaining) resolved to proceed with the engagement of M.M. Dillon & Co. and CIM Securities, on the terms as presented by management for such purpose.

On October 18, 2017, representatives of the law firms of Herrick, Feinstein LLP met with representative of M.M. Dillon & Co. and representatives from CIM Securities in person to discuss the Exchange Offer and the SEC filings related to the Exchange Offer. The current status of the proposed exchange transaction was discussed as well as the merits of the Exchange Offer and existing market conditions.

On May 2, 2018, the terms of M.M. Dillon & Co.'s engagement were modified, and such modifications were approved by our Board (with Mr. Bickerstaff abstaining) on April 30, 2018.

Our Board met telephonically on April 30, 2018 to discuss approving the proposed structure for the exchange of the Original Warrants and the SEC filings related to the Exchange Offer. Mr. Watumull reviewed the current status of the proposed exchange transaction previously circulated to the Board, noting that the Company will file with the SEC all information required for this exchange offer and related Offer Letter to all holders of Original Warrants to exchange Original Warrants and the Exchange Payment for Exchange Shares. The members of the Board asked questions of management and Herrick, Feinstein LLP on the Exchange Offer and the documents. The Board discussed the interests of the Company and its stockholders, the consequences of not pursuing the Exchange Offer and resolved to approve the final Exchange Offer terms and related documents reviewed at the meeting. The Board also determined and approved the price of the Exchange Offer based on the discount to the quoted price of the common stock and the Board's valuation of the Original Warrants based on the Black-Scholes valuation model.

#### Interests of Directors in the Exchange Offer

None of the directors, officers or their affiliates beneficially owns any of the Existing Warrants and, therefore will not participate in the Exchange Offer. See "Certain Relationships and Related Party Transactions— Financial Advisor", for other interests of a director in the Exchange Offer.

#### RISK FACTORS

Prospective participants in the Exchange Offer should carefully consider all of the information contained in this prospectus. An investment in our common stock, any warrants to purchase our common stock, or any other security that may be issued by us involves a high degree of risk. You should carefully consider the risks described below, together with all of the other information included elsewhere in this prospectus, before making an investment decision. If any of the following risks actually occur, our business, financial condition or results of operations could suffer. In that case, the trading price of our shares of common stock could decline, and you may lose all or part of your investment. You should read the section entitled "Forward-Looking Statements" above for a discussion of what types of statements are forward-looking statements, as well as the significance of such statements in the context of this prospectus.

#### Risks Related to the Exchange Offer

Your tender of Original Warrants in exchange for the issuance of Exchange Shares will not be accepted if you fail to follow the Exchange Offer procedures.

We will issue you Exchange Shares pursuant to the Exchange Offer only after a timely receipt of your Original Warrants, Exchange Payment, and a properly completed and duly executed Letter of Transmittal, and all other required documents. Therefore, if you want to tender your Original Warrants in connection with the Exchange Offer, please allow sufficient time to ensure timely processing of your exchange. If we do not receive your Original Warrants, Exchange Payment, Letter of Transmittal, and other required documents by the Expiration Date, we will not accept your Original Warrants in exchange for the issuance of Exchange Shares. We are generally under no duty to give notification of defects or irregularities with respect to the delivery of your Original Warrants, Exchange Payment, Letter of Transmittal, and other required documents pursuant to the terms of the Exchange Offer. If there are defects or irregularities with respect to your tender of Original Warrants, we may not accept your tender of Original Warrants pursuant to the terms of the Exchange Offer.

If holders of Original Warrants have claims against us resulting from their acquisition or ownership of the Original Warrants, they will give up those claims if they tender their Original Warrants in the Exchange Offer.

By tendering the Original Warrants in the Exchange Offer, upon closing of the Exchange Offer, holders of the Original Warrants will be deemed to have released and waived any and all claims they, their successors and their assigns have or may have had against us, our affiliates and their stockholders, and our directors, officers, employees, attorneys, accountants, advisors, agents, and representatives, in each case whether current or former, as well as the directors, officers, employees, attorneys, accountants, advisors, agents, and representatives of our affiliates and our stockholders, arising from, related to, or in connection with their acquisition or ownership of the Original Warrants, unless those claims arise under federal or state securities laws.

Because it is not possible to estimate the likelihood of their success in pursuing any legal claims or the magnitude of any recovery to which they ultimately might be entitled, it is possible that the consideration that the holders of Original Warrants receive in the Exchange Offer will have a value less than what they own today. Moreover, holders who do not tender their Original Warrants in the Exchange Offer will continue to have the right to prosecute any claims against us.

#### Income tax consequences of participation in this Exchange Offer.

We have not obtained and do not intend to obtain a ruling from the Internal Revenue Service, or IRS, regarding the U.S. federal income tax consequences of the tender of Original Warrants pursuant to the Exchange Offer. You should consult with your own tax advisor with regard to the possibility of any federal, state, local, or other tax consequences of this Exchange Offer. See "Certain United States Federal Income Tax Considerations".

#### Risks Related to Our Business, Industry, and Financial Condition

#### We have a history of operating losses and have received a going concern opinion from our auditors.

We have incurred substantial net losses since our inception and may continue to incur losses for the foreseeable future, as we continue our product development activities. As a result of our limited operating history, we have limited historical financial data that can be used in evaluating our business and our prospects and in projecting our future operating results. Through December 31, 2017, we have accumulated a total deficit of \$57,919,096.

Additionally, we have received a "going concern" opinion from our independent registered public accounting firm. 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 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. Our ability to continue as a going concern is dependent upon our ability to raise additional capital and implement our business plan. If we are unable to achieve or sustain profitability or to secure additional financing on acceptable terms, we may not be able to meet our obligations as they come due, raising substantial doubts as to our ability to continue as a going concern. Any such inability to continue as a going concern may result in our common stock holders losing their entire investment. There is no guarantee that we will become profitable or secure additional financing on acceptable terms. Our consolidated financial statements contemplate that we will continue as a going concern and do not contain any adjustments that might result if we were unable to continue as a going concern. Changes in our operating plans, our existing and anticipated working capital needs, the acceleration or modification of our expansion plans, increased expenses, potential acquisitions or other events will all affect our ability to continue as a going concern.

#### We have limited experience as a commercial company.

In 2016, we launched our first commercial product, ZanthoSyn® and we have limited sales to date. As such, we have limited historical financial data upon which to base our projected revenue, planned operating expenses or upon which to evaluate our company and our commercial prospects. Based on our limited experience in developing and marketing new products, we may not be able to effectively:

- drive adoption of our current and future products, including ZanthoSyn®;
- attract and retain customers for our products;
- provide appropriate levels of customer support for our products;
- implement an effective marketing strategy to promote awareness of our products;
- develop, manufacture and commercialize new products or achieve an acceptable return on our research and development efforts and expenses;
- comply with regulatory requirements applicable to our products;
- anticipate and adapt to changes in our market;
- maintain and develop strategic relationships with vendors and manufacturers to acquire necessary materials for the production of our existing or future products;

- scale our manufacturing activities to meet potential demand at a reasonable cost;
- avoid infringement and misappropriation of third-party intellectual property;
- obtain any necessary licenses to third-party intellectual property on commercially reasonable terms;
- obtain valid and enforceable patents that give us a competitive advantage;
- protect our proprietary technology; and
- attract, retain and motivate qualified personnel.

In addition, a high percentage of our expenses is and will continue to be fixed. Accordingly, if we do not generate revenue as and when anticipated, our losses may be greater than expected and our operating results will suffer

#### We are dependent upon the success of our lead astaxanthin technologies, which may not be successfully commercialized.

While the FDA does not require clinical trials for consumer health products such as dietary ingredients/supplements and food additives, we may conduct clinical trials to demonstrate the safety and efficacy of our product(s) in humans. A failure of any clinical trial can occur at any stage of testing. The results of initial clinical testing of this product may not necessarily indicate the results that will be obtained from later or more extensive testing. Additionally, any observations made with respect to blinded clinical data are inherently uncertain as we cannot know which set of data come from patients treated with an active drug versus the placebo vehicle. Investors are cautioned not to rely on observations coming from blinded data and not to rely on initial clinical trial results as necessarily indicative of results that will be obtained in subsequent clinical trials.

Additionally, our products will be subject to a variety of FDA and other food and drug regulatory regimes. The extent of regulations applicable to our products, and the designations our products may receive from regulatory agencies such as the FDA, are dependent upon the nature and development of our future products and how such products are ultimately commercialized and marketed.

### A number of different factors could prevent us from conducting a clinical trial or commercializing our product candidates on a timely basis, or at all.

We, the FDA, other applicable regulatory authorities or an institutional review board, or IRB, may suspend clinical trials of a product candidate at any time for various reasons, including if we or they believe the subjects or patients participating in such trials are being exposed to unacceptable health risks. Among other reasons, adverse side effects of a product candidate on subjects or patients in a clinical trial could result in the FDA or other regulatory authorities suspending or terminating the trial and refusing to approve a particular product candidate for any or all indications of use.

Clinical trials of a product require the enrollment of a sufficient number of patients, including patients who are suffering from the disease or condition the product candidate is intended to treat and who meet other eligibility criteria. Rates of patient enrollment are affected by many factors, and delays in patient enrollment can result in increased costs and longer development times.

Clinical trials also require the review and oversight of IRBs, which approve and continually review clinical investigations and protect the rights and welfare of human subjects. An inability or delay in obtaining IRB approval could prevent or delay the initiation and completion of clinical trials, and the FDA may decide not to consider any data or information derived from a clinical investigation not subject to initial and continuing IRB review and approval.

Numerous factors could affect the timing, cost or outcome of our drug development efforts, including the following:

- delays in filing or acceptance of investigational drug applications for our product candidates;
- difficulty in securing centers to conduct clinical trials;
- conditions imposed on us by the FDA or comparable foreign authorities that are applicable to our business regarding the scope or design of our clinical trials;
- problems in engaging IRBs to oversee trials or problems in obtaining or maintaining IRB approval of studies;
- difficulty in enrolling patients in conformity with required protocols or projected timelines;
- third-party contractors failing to comply with regulatory requirements or to meet their contractual obligations to us in a timely manner;
- our product candidates having unexpected and different chemical and pharmacological properties in humans than in laboratory testing and interacting with human biological systems in unforeseen, ineffective or harmful ways;
- the need to suspend or terminate clinical trials if the participants are being exposed to unacceptable health risks;
- insufficient or inadequate supply or quality of our product candidates or other materials necessary to conduct our clinical trials;
- effects of our product candidates not being the desired effects or including undesirable side effects or the product candidates having other unexpected characteristics;
- the cost of our clinical trials being greater than we anticipate;
- negative or inconclusive results from our clinical trials or the clinical trials of others for similar product candidates or inability
  to generate statistically significant data confirming the efficacy of the product being tested;
- changes in the FDA's requirements for testing during the course of that testing;
- reallocation of our limited financial and other resources to other programs; and
- adverse results obtained by other companies developing similar products.

It is possible that none of our future product candidates that we may develop will obtain the appropriate regulatory approvals necessary to begin selling them or that any regulatory approval to market a product may be subject to limitations on the indicated uses for which we may market the product. The time required to obtain FDA and other approvals is unpredictable, but often can take years following the commencement of clinical trials, depending upon the complexity of the product candidate. Any analysis we perform of data from clinical activities is subject to confirmation and interpretation by regulatory authorities, which could delay, limit or prevent regulatory approval. Any delay or failure in obtaining required approvals could have a material adverse effect on our ability to generate revenue from the particular product candidate.

We also must comply with clinical trial and post-approval safety and adverse event reporting requirements. Adverse events related to our products must be reported to the FDA in accordance with regulatory timelines based on their severity and expectedness. Failure to make timely safety reports and to establish and maintain related records could result in withdrawal of marketing authorization.

We may also become subject to numerous foreign regulatory requirements governing the conduct of clinical trials, manufacturing and marketing authorization, pricing and third-party reimbursement. The foreign regulatory approval process includes all of the risks associated with the FDA approval described above as well as risks attributable to the satisfaction of local regulations in foreign jurisdictions. Approval by the FDA does not assure approval by regulatory authorities outside of the United States.

We have limited experience in managing communications with regulatory agencies, including filing investigational new drug applications, filing new drug applications, submitting promotional materials, and generally directing the regulatory processes in all territories.

We may be responsible for managing communications with regulatory agencies, including filing investigational new drug ("IND") applications, filing new drug applications ("NDAs"), submitting promotional materials, and generally directing the regulatory processes in all territories. We have limited experience directing such activities and may not be successful with our planned development strategies, on the planned timelines, or at all. Even if any of our product candidates are designated for "fast track" or "priority review" status or if we seek approval under accelerated approval (Subpart H) regulations, such designation or approval pathway does not necessarily mean a faster development process or regulatory review process or necessarily confer any advantage with respect to approval compared to conventional FDA procedures. Accelerated development and approval procedures will only be available if the indications for which we are developing products remain unmet medical needs and if our clinical trial results support use of surrogate endpoints, respectively. Even if these accelerated development or approval mechanisms are available to us, depending on the results of clinical trials, we may elect to follow the more traditional approval processes for strategic and marketing reasons, since drugs approved under accelerated approval procedures are more likely to be subjected to post-approval requirements for clinical studies to provide confirmatory evidence that the drugs are safe and effective. If we fail to conduct any such required post-approval studies or if the studies fail to verify that any of our product candidates are safe and effective, our FDA approval could be revoked. It can be difficult, time-consuming and expensive to enroll patients in such clinical trials because physicians and patients are less likely to participate in a clinical trial to receive a drug that is already commercially available. Drugs approved under accelerated approval procedures also require regulatory pre-approval of promotional materials that may delay or otherwise hinder commercialization efforts.

We operate in highly competitive industries, and our failure to compete effectively could adversely affect our market share, financial condition and growth prospects. If competitors are better able to develop and market products that are more effective, or gain greater acceptance in the marketplace than our products, our commercial opportunities may be reduced or eliminated.

The consumer health and pharmaceutical industries are constantly evolving, and scientific advances are expected to continue at a rapid pace. This results in intense competition among companies operating in the industry. Other, larger companies may have, or may be developing, products that compete with our products and may significantly limit the market acceptance of our products or render them obsolete. Our technical and/or business competitors would include major pharmaceutical companies, biotechnology companies, consumer health companies, universities and nonprofit research institutions and foundations. Most of these competitors have significantly greater research and development capabilities than we have, as well as substantial marketing, financial and managerial resources. ZanthoSyn®, our lead product, primarily competes against consumer health and pharmaceutical products that provide anti-inflammatory health benefits. In addition, there are several other companies, both public and private, that service the same markets as we do, all of which compete to some degree with us.

The primary competitive factors facing us include safety, efficacy, price, quality, breadth of product line, manufacturing quality and capacity, service, marketing and distribution capabilities. Our current and future competitors may have greater resources, more widely accepted and innovative products and stronger name recognition than we do. Our ability to compete is affected by our ability to:

- develop or acquire new products and innovative technologies;
- obtain regulatory clearance and compliance for our products;
- manufacture and sell our products cost-effectively;

- meet all relevant quality standards for our products in their particular markets;
- respond to competitive pressures specific to each of our geographic and product markets;
- protect the proprietary technology of our products and avoid infringement of the proprietary rights of others;
- market our products;
- attract and retain skilled employees, including sales representatives;
- maintain and establish distribution relationships; and
- engage in acquisitions, joint ventures or other collaborations.

Competitors could develop products that are more effective, achieve favorable reimbursement status from third-party payors, cost less or are ready for commercial introduction before our products. If our competitors are better able to develop and patent products earlier than we can, or develop more effective and/or less expensive products that render our products obsolete or non-competitive, our business will be harmed and our commercial opportunities will be reduced or eliminated.

In addition, competitors and other parties may also seek to impact regulatory status of our products through the filing of citizen petitions or other similar documents. For example, allegations were made by the Natural Algae Astaxanthin Association ("NAXA"), a small trade group with four members, each of which markets natural astaxanthin products, in a citizen petition that it filed with FDA, which we believed to be false and baseless. Responding to any such actions, even if false and baseless, will use our limited time and resources.

We believe that the market in which we compete in is also highly sensitive to the introduction of new products, including various prescription drugs, which may rapidly capture a significant share of the market. In the United States, we expect to also compete for sales with heavily advertised national brands manufactured by large pharmaceutical, biotechnology, and consumer health companies, as well as other retailers.

As some products gain market acceptance, we may experience increased competition for those products as more participants enter the market. Currently, we are not a manufacturer. To the extent that we engage third-party manufacturers or use strategic alliances to produce our products, our manufacturing capabilities may not be adequate or sufficient to compete with large scale, direct or third-party manufacturers. Certain of our potential competitors are larger than us and have longer operating histories, customer bases, greater brand recognition and greater resources for marketing, advertising and product promotion. They may be able to secure inventory from vendors on more favorable terms, operate with a lower cost structure or adopt more aggressive pricing policies. In addition, our potential competitors may be more effective and efficient in introducing new products. We may not be able to compete effectively, and our attempt to do so may require us to increase marketing and/or reduce our prices, which may result in lower margins. Failure to effectively compete could adversely affect our market share, financial condition and growth prospects.

#### Market acceptance of ZanthoSyn® and any future products are vital to our future success.

The commercial success of ZanthoSyn® and any future products is dependent upon the acceptance of such products. ZanthoSyn® and any future products may not gain and maintain any significant degree of market acceptance among potential consumers, retailers, healthcare providers, or acceptance by third-party payors, such as health insurance companies. The health applications for ZanthoSyn® and any future products can also be addressed by other products or techniques. The medical community widely accepts alternative treatments, and certain of these other treatments have a long history of use. We cannot be certain that our proposed products and the procedures in which they are used will be able to replace those established treatments or that users will accept and utilize our products or any other medical products that we may market.

Market acceptance will depend upon numerous factors, many of which are not under our control, including:

- the safety and efficacy of our products;
- favorable regulatory approval and product labeling;
- the availability, safety, efficacy and ease of use of alternative products or treatments;
- our ability to educate potential users on the advantages of our products;
- the price of our products relative to alternative technologies; and
- the availability of third-party reimbursement.

If our proposed products do not achieve significant market acceptance, our future revenues and profitability would be adversely affected.

The pharmaceutical and consumer health industries are subject to extensive and complex healthcare regulation. Any determination that we have violated federal or state laws applicable to us that regulate healthcare would have a material adverse effect on our business, prospects and financial condition.

Federal and state laws regulating healthcare are extensive and complex. The laws applicable to our business are subject to evolving interpretations, and therefore we cannot be sure that a review of our operations by federal or state courts or regulatory authorities will not result in a determination that we have violated one or more provisions of federal or state law. Any such determination could have a material adverse effect on our business, prospects and financial condition.

#### If we fail to comply with FDA regulations our business could suffer.

The manufacture and marketing of pharmaceutical and consumer health products are subject to extensive regulation by the FDA and foreign and state regulatory authorities. In the United States, pharmaceutical and consumer health companies such as ours must comply with laws and regulations promulgated by the FDA. These laws and regulations require various authorizations prior to a product being marketed in the United States. Manufacturing facilities and practices are also subject to FDA regulations. The FDA regulates the clinical testing, manufacture, labeling, sale, distribution and promotion of pharmaceutical and consumer health products in the United States. Our failure to comply with regulatory requirements, including any future changes to such requirements, could have a material adverse effect on our business, prospects, financial condition and results of operations.

Even after clearance or approval of a product, we are subject to continuing regulation by the FDA, including the requirements of registering our facilities and listing our products with the FDA. We are subject to reporting regulations. These regulations require us to report to the FDA if any of our products may have caused or contributed to a death or serious injury and such product or a similar product that we market would likely cause or contribute to a death or serious injury. Unless an exemption applies, we must report corrections and removals to the FDA where the correction or removal was initiated to reduce a risk to health posed by the product or to remedy a violation of the Food, Drug and Cosmetic Act. The FDA also requires that we maintain records of corrections or removals, regardless of whether such corrections and removals are required to be reported to the FDA. In addition, the FDA closely regulates promotion and advertising, and our promotional and advertising activities could come under scrutiny by the FDA.

The FDA also requires that manufacturing be in compliance with its Quality System Regulation, or QSR. The QSR covers the methods and documentation of the design, testing, control, manufacturing, labeling, quality assurance, packaging, storage and shipping of our products. Our failure to maintain compliance with the QSR requirements could result in the shutdown of, or restrictions on, our manufacturing operations, to the extent we have any, and the recall or seizure of our products, which would have a material adverse effect on our business. In the event that one of our suppliers fails to maintain compliance with our quality requirements, we may have to qualify a new supplier and could experience manufacturing delays as a result.

The FDA has broad enforcement powers. If we violate applicable regulatory requirements, the FDA may bring enforcement actions against us, which could have a material adverse effect on our business, prospects, financial condition and results of operations. Violations of regulatory requirements, at any stage, including after approval, may result in various adverse consequences, including the delay by a regulatory agency in approving or refusal to approve a product, withdrawal or recall of an approved product from the market, other voluntary agency-initiated action that could delay further development or marketing, as well as the imposition of criminal penalties against the manufacturer and NDA holder.

The extent of FDA regulations applicable to us, and whether our products are ultimately designated as drugs (including active pharmaceutical ingredients) or dietary supplements (including dietary ingredients), will depend upon how our products are ultimately commercialized. Because we are currently evaluating the extent of our pharmaceutical program, we are unable to determine the extent of FDA regulations applicable to our product candidates. Furthermore, our products may be commercialized by us or by other parties through licensing arrangements, joint ventures, or other alliances, and our burden of complying with any regulations applicable to our product candidates will depend upon the nature and extent of any relationships with such partners. While consumer health products are not as extensively regulated as pharmaceutical products, the extent of any other regulatory regimes to which we may be subject will depend upon the specific products we ultimately produce.

We may seek orphan drug designation for current or future product candidates, but any orphan drug designations we receive may not confer marketing exclusivity or other expected benefits.

Under the Orphan Drug Act of 1983 (the "Orphan Drug Act"), the FDA may grant orphan drug designation to a drug intended to treat a rare disease or condition that (i) affects less than 200,000 persons in the United States, or (ii) affects more than 200,000 in the United States and for which there is no reasonable expectation that the cost of developing and making available in the United States a drug for such disease or condition will be recovered from sales in the United States of such drug. The Orphan Drug Act mainly provides incentives intended to make the development of orphan drugs financially viable but does not provide for separate regulatory standards for orphan drugs. Drugs that receive an orphan drug designation do not require prescription drug user fees at the time of marketing application, may qualify the drug development sponsor for certain tax credits, and can be marketed without generic competition for seven years.

We may seek orphan drug designation for current or future product candidates that we believe may qualify for orphan drug designation; however, there can be no assurance that we will request an orphan product designation for any product candidate, or if requested, that will receive such orphan drug designation. If we are unable to secure orphan drug designation, our regulatory and commercial prospects may be negatively impacted. Even if we obtain orphan drug designation for a current or future product candidate, we may not be able to obtain or maintain orphan drug exclusivity for that product candidate. We may not be the first to obtain marketing approval of any product candidate for which we have obtained orphan drug designation for the orphan-designated indication due to the uncertainties associated with developing pharmaceutical products. In addition, exclusive marketing rights in the United States may be limited if we seek approval for an indication broader than the orphan-designated indication or may be lost if the FDA later determines that the request for designation was materially defective or if we are unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition. Further, even if we obtain orphan drug exclusivity for a product, that exclusivity may not effectively protect the product from competition because different drugs with different active moieties may be approved for the same condition. Even after an orphan drug is approved, the FDA can subsequently approve the same drug with the same active moiety for the same condition if the FDA concludes that the later drug is clinically superior in that it is shown to be safer, more effective, or makes a major contribution to patient care, or the manufacturer of the product with orphan exclusivity is unable to maintain sufficient product quantity. Orphan drug designation may not shorten the development time or regulatory review time of a drug or give the drug any advantage in the regulatory review or approval process, nor does it prevent competitors from obtaining approval of the same product candidate as ours for indications other than those in which we have been granted orphan drug designation.

Healthcare and insurance legislation may increase the difficulty and cost for us to commercialize our product candidates and affect the prices we may obtain.

The United States and many foreign jurisdictions have enacted or proposed legislative and regulatory changes affecting the healthcare system that could prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities and affect our ability to profitably sell any product candidate for which we obtain marketing approval.

In the United States, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, or Medicare Modernization Act, changed the way Medicare covers and pays for pharmaceutical products. The legislation expanded Medicare coverage for drug purchases by the elderly by establishing Medicare Part D and introduced a new reimbursement methodology based on average sales prices for physician-administered drugs under Medicare Part B. In addition, this legislation provided authority for limiting the number of drugs that Medicare will cover in any therapeutic class under the new Medicare Part D program. Cost reduction initiatives and other provisions of this legislation could decrease the coverage and reimbursement rate that we receive for any of our approved products. While the Medicare Modernization Act applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates. Therefore, any reduction in reimbursement that results from the Medicare Modernization Act may result in a similar reduction in payments from private payors.

In March 2010, former President Obama signed into law the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, or, collectively, the Affordable Care Act, a law intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against healthcare fraud and abuse, add new transparency requirements for healthcare and health insurance industries, impose new taxes and fees on pharmaceutical and medical device manufacturers and impose additional health policy reforms. Among other things, the Affordable Care Act expanded manufacturers' rebate liability under the Medicaid Drug Rebate Program by increasing the minimum rebate for both branded and generic drugs, effective the first quarter of 2010, and revising the definition of "average manufacturer price," or AMP, for reporting purposes, which could increase the amount of Medicaid drug rebates manufacturers are required to pay to states. The legislation also extended Medicaid drug rebates, previously due only on fee-for-service utilization, to Medicaid managed care utilization, and created an alternative rebate formula for

certain new formulations of certain existing products that is intended to increase the amount of rebates due on those drugs. The Centers for Medicare and Medicaid Services, which administers the Medicaid Drug Rebate Program, also has proposed to expand Medicaid drug rebates to the utilization that occurs in the United States territories, such as Puerto Rico and the Virgin Islands. Also effective in 2010, the Affordable Care Act expanded the types of entities eligible to receive discounted 340B pricing, although, with the exception of children's hospitals, these newly eligible entities will not be eligible to receive discounted 340B pricing on orphan drugs. In addition, because 340B pricing is determined based on AMP and Medicaid drug rebate data, the revisions to the Medicaid rebate formula and AMP definition described above could cause the required 340B discounts to increase. Furthermore, as of 2011, the new law imposes a significant annual fee on companies that manufacture or import branded prescription drug products and requires manufacturers to provide a 50% discount off the negotiated price of prescriptions filled by beneficiaries in the Medicare Part D coverage gap, referred to as the "donut hole." Substantial new provisions affecting compliance have also been enacted, which may affect our business practices with healthcare practitioners. Notably, a significant number of provisions are not yet, or have only recently become, effective. Although it is too early to determine the full effect of the Affordable Care Act, the new law appears likely to continue the downward pressure on pharmaceutical pricing, especially under the Medicare program, and may also increase our regulatory burdens and operating costs.

In addition, other legislative changes have been proposed and adopted since the Affordable Care Act was enacted. In August 2011, the former President signed into law the Budget Control Act of 2011, which, among other things, created the Joint Select Committee on Deficit Reduction to recommend to Congress proposals in spending reductions. The Joint Select Committee on Deficit Reduction did not achieve a targeted deficit reduction of at least \$1.2 trillion for fiscal years 2012 through 2021, triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions to Medicare payments to providers of up to 2% per fiscal year.

We expect that the Affordable Care Act, as well as other healthcare reform measures that have and may be adopted in the future, may result in more rigorous coverage criteria and in additional downward pressure on the price that we receive for any approved product, and could seriously harm our future revenues. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability or commercialize our products.

The impact of continued health care reform efforts with respect to the Affordable Care Act is currently unknown, and may adversely affect our business model.

Since its enactment, there have been judicial and Congressional challenges to numerous provisions of the Affordable Care Act. In January 2017, Congress voted to adopt a budget resolution for fiscal year 2017, or the Budget Resolution, that authorizes the implementation of legislation that would repeal portions of the Affordable Care Act. The Budget Resolution is not a law, but it is widely viewed as the first step toward the passage of legislation that would repeal certain aspects of the Affordable Care Act. On January 20, 2017, President Trump signed an Executive Order directing federal agencies with authorities and responsibilities under the Affordable Care Act to waive, defer, grant exemptions from, or delay the implementation of any provision of the Affordable Care Act that would impose a fiscal or regulatory burden on states, individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices. Additionally, on October 12, 2017, President Trump issued another executive order requiring the Secretaries of the Departments of Health and Human Services ("HHS"), Labor and the Treasury to consider proposing regulations or revising existing guidance to allow more employers to form association health plans that would be allowed to provide coverage across state lines, increase the availability of shortterm, limited duration health insurance plans, which are generally not subject to the requirements of the Affordable Care Act, and increase the availability and permitted use of health reimbursement arrangements. On October 13, 2017, the Department of Justice announced that HHS was immediately stopping its cost sharing reduction payments to insurance companies based on the determination that those payments had not been appropriated by Congress. Furthermore, on December 22, 2017, President Trump signed tax reform legislation into law that, in addition to overhauling the federal tax system, also, effective as of January 1, 2019, repeals the penalties associated with the individual mandate. Congress or the President of the United States may also consider subsequent legislation or executive action to replace or eliminate elements of the Affordable Care Act. We will continue to evaluate the effect that the Affordable Care Act and any future measures to modify, repeal or replace the Affordable Care Act have on our business. We are not able to provide any assurance that the continued healthcare reform debate will not result in legislation, regulation, or executive action by the President of the United States that is adverse to our business.

#### We cannot predict the effect the recent U.S. tax reform will have on us.

On December 22, 2017, President Trump signed the Tax Act into law, resulting in sweeping changes to the tax code. The Tax Act, *inter alia*, reduced the corporate tax rate to 21%, reduced interest expense deductibility, increased capitalization amounts for deferred acquisition costs, eliminated the corporate alternative minimum tax, and reduced the dividend received deduction. Most of the changes in the Tax Act are effective as of January 1, 2018. We are currently unable to predict whether this legislation would have a cumulative positive or negative impact on us.

We rely on third parties to supply and manufacture our proposed products. If these third parties do not perform as expected or if our agreements with them are terminated, our business, prospects, financial condition and results of operations would be materially adversely affected.

We outsource our manufacturing to third parties. Our reliance on contract manufacturers and suppliers exposes us to risks, including the following:

- We rely on our suppliers and manufacturers to provide us with the needed products or components in a timely fashion and of an acceptable quality. An uncorrected defect or supplier's variation in a component could harm our or our third-party manufacturers' ability to manufacture, and our ability to sell, products and may subject us to product liability claims.
- The facilities of our third-party manufacturers must satisfy production and quality standards set by applicable regulatory authorities. Regulatory authorities periodically inspect manufacturing facilities to determine compliance with these standards. If we or our third-party manufacturers fail to satisfy these requirements, the facilities could be shut down.
- These manufacturing operations could also be disrupted or delayed by fire, earthquake or other natural disaster, a work stoppage or other labor-related disruption, failure in supply or other logistical channels, electrical outages or other reasons. If there was any such disruption to any of these manufacturing facilities, our third-party manufacturers would potentially be unable to manufacture our products.
- A third-party manufacturer or supplier could decide to terminate our manufacturing or supply arrangement, including due to a
  disagreement between us and such third-party manufacturer, if the third-party manufacturer determines not to further
  manufacture our products, or if we fail to comply with our obligations under such arrangements.
- If any third-party manufacturer makes improvements in the manufacturing process for our products, we may not own, or may have to share, the intellectual property rights to the innovation.

We currently rely on a limited number of suppliers to provide key components for our products. If these or other suppliers become unable to provide components in the volumes needed or at an acceptable price or quality, we would have to identify and qualify acceptable replacements from alternative suppliers. We may experience stoppages in the future. We may not be able to find a sufficient alternative supplier in a reasonable time period, or on commercially reasonable terms, if at all, and our ability to produce and supply our products could be impaired.

To the extent we are able to identify alternative suppliers, qualifying suppliers is a lengthy process. There are a limited number of manufacturers and suppliers that may satisfy applicable requirements. In addition, FDA regulations may require additional testing of any components from new suppliers prior to our use of these materials or components, which testing could delay or prevent the supply of components. Moreover, a new manufacturer would have to be educated in, or develop substantially equivalent processes for, production of our products, which could take a significant period of time.

Each of these risks could delay the development or commercialization of our products or result in higher costs or deprive us of potential product revenues. Furthermore, delays or interruptions in the manufacturing process could limit or curtail our ability to meet demand for our products and/or make commercial sales, unless and until the manufacturing capability at the facilities are restored and requalified or alternative manufacturing facilities are developed or brought on-line and "scaled up." Any such delay or interruption could have a material adverse effect on our business, prospects, financial condition and results of operations.

An unexpected interruption or shortage in the supply or significant increase in the cost of components could limit our ability to manufacture any products, which could reduce our sales and margins.

To the extent we engage in relationships with contract manufacturers in the future, an unexpected interruption of supply or a significant increase in the cost of components, whether to us or to our contract manufacturers for any reason, such as regulatory requirements, import restrictions, loss of certifications, disruption of distribution channels as a result of weather, terrorism or acts of war, or other events, could result in significant cost increases and/or shortages of our products. Our inability to obtain a sufficient amount of products or to pass through higher cost of products we offer could have a material adverse effect on our business, financial condition or results of operations.

#### We have limited experience in marketing our products and services.

We have undertaken limited marketing efforts for ZanthoSyn® and any future products and services. Our sales and marketing teams compete against the experienced and well-funded sales organizations of competitors. Our future revenues and ability to achieve profitability will depend largely on the effectiveness of our sales and marketing team, and we will face significant challenges and risks related to marketing our services, including, but not limited to, the following:

- the ability of sales representatives to obtain access to or persuade adequate numbers of healthcare providers to promote and/or purchase and use our products and services;
- the ability to recruit, properly motivate, retain, and train adequate numbers of qualified sales and marketing personnel;
- · the costs associated with hiring, training, maintaining, and expanding an effective sales and marketing team; and
- assuring compliance with government regulatory requirements affecting the healthcare industry in general and our products in particular.

We may seek to establish a network of distributors in selected markets to market, sell and distribute our products. If we fail to select or use appropriate distributors, or if the sales and marketing strategies of such distributors prove ineffective in generating sales of our products, our future revenues would be adversely affected and we might never become profitable.

#### We may rely on third-party distributors for sales, marketing and distribution activities.

We may rely on third-party distributors to sell, market, and distribute ZanthoSyn® and any future products. Because we may rely on third-party distributors for sales, marketing and distribution activities, we may be subject to a number of risks associated with our dependence on these third-party distributors, including:

- lack of day-to-day control over the activities of third-party distributors;
- third-party distributors may not fulfill their obligations to us or otherwise meet our expectations;
- third-party distributors may terminate their arrangements with us on limited or no notice or may change the terms of these arrangements in a manner unfavorable to us for reasons outside of our control; and
- disagreements with our distributors could require or result in costly and time-consuming litigation or arbitration.

If we fail to establish and maintain satisfactory relationships with third-party distributors, we may be unable to sell, market and distribute our products, our future revenues and market share may not grow as anticipated, and we could be subject to unexpected costs which would harm our results of operations and financial condition. There is no assurance that our sales through GNC stores will continue on terms that are favorable to us or at all.

#### The loss of our largest customer would substantially reduce revenues.

Our customers are material to our success. If we are unable to maintain good relationships with our existing customers, our business could suffer. We currently sell ZanthoSyn® to GNC under an exclusive sales contract for the "brick and mortar" retail channel in the United States. GNC has the ability to terminate the exclusive nature of this agreement. The loss of GNC as the exclusive seller or the reduction of increasing sales through GNC would have a material adverse effect on the Company.

#### Commercialization of our products and services will require us to build and maintain sophisticated sales and marketing teams.

We have limited prior experience with commercializing our products. To successfully commercialize our products and services, we will need to establish and maintain sophisticated sales and marketing teams. While we intend to use current Company employees and service providers to lead our marketing efforts, we may choose to expand our marketing and sales team. Experienced sales representatives may be difficult to locate and retain, and all new sales representatives will need to undergo extensive training. There is no assurance that we will be able to recruit and retain sufficiently skilled sales representatives, or that any new sales representatives will ultimately become productive. If we are unable to recruit and retain qualified and productive sales personnel, our ability to commercialize our products and to generate revenues will be impaired, and our business will be harmed.

### We may not be able to establish or maintain the third-party relationships that are necessary to develop or potentially commercialize some or all of our product candidates.

We expect to depend on collaborators, partners, licensees, contract research organizations, contract manufacturing organizations, clinical research organizations and other third parties to support our discovery efforts, to formulate product candidates, to manufacture our product candidates and to conduct clinical trials for some or all of our product candidates. We cannot guarantee that we will be able to successfully negotiate agreements for or maintain relationships with collaborators, partners, licensees, contractors, clinical investigators, vendors and other third parties on favorable terms, if at all. Our ability to successfully negotiate such agreements will depend on, among other things, potential partners' evaluation of the superiority of our technology over competing technologies, the quality of the preclinical and clinical data that we have generated and the perceived risks specific to developing our product candidates. If we are unable to obtain or maintain these agreements, we may not be able to clinically develop, formulate, manufacture, obtain regulatory approvals for or commercialize our future product candidates. We cannot necessarily control the amount or timing of resources that our contract partners will devote to our research and development programs, product candidates or potential product candidates, and we cannot guarantee that these parties will fulfill their obligations to us under these arrangements in a timely fashion. We may not be able to readily terminate any such agreements with contract partners even if such contract partners do not fulfill their obligations to us. We may experience stoppages in the future. We may not be able to find a sufficient alternative provider in a reasonable time period, or on commercially reasonable terms, if at all, and our ability to produce and supply our products could be impaired.

### We expect to continue to incur significant research and development expenses, which may make it difficult for us to attain profitability.

We expend substantial funds to develop our proprietary technologies, and additional substantial funds will be required for further research and development, including preclinical testing and clinical trials of any product candidates, and to manufacture and market any products that are approved for commercial sale. Because the successful development of our products is uncertain, we are unable to precisely estimate the actual funds we will require to develop and potentially commercialize them. In addition, we may not be able to generate enough revenue, even if we are able to commercialize any of our product candidates, to become profitable.

We may be subject to product liability claims. Our insurance may not be sufficient to cover these claims, or we may be required to recall our products.

Our business is to develop and commercialize, among other things, pharmaceutical and consumer health products that provide anti-inflammatory benefits. As a result, we will face an inherent risk of product liability claims. The pharmaceutical industry has been historically litigious. Since our products are to be used in the human body, manufacturing errors, design defects or packaging defects could result in injury or death to the patient. This could result in a recall of one or more of our products and substantial monetary damages. Any product liability claim brought against us, with or without merit, could result in a diversion of our resources, an increase in our product liability insurance premiums and/or an inability to secure coverage in the future. We may also have to pay any amount awarded by a court in excess of our policy limits. In addition, any recall of our products, whether initiated by us or by a regulatory agency, may result in adverse publicity for us that could have a material adverse effect on our business, prospects, financial condition and results of operations. Our product liability insurance policies have various exclusions; therefore, we may be subject to a product liability claim or recall for which we have no insurance coverage. In such a case, we may have to pay the entire amount of the award or costs of the recall. Finally, product liability insurance supplements or renewals may be expensive and may not be available in the future on acceptable terms, or at all.

If we experience product recalls, we may incur significant and unexpected costs and damage to our reputation and, therefore, could have a material adverse effect on our business, financial condition or results of operations.

We may be subject to product recalls, withdrawals or seizures if any of our products are believed to cause injury or illness or if we are alleged to have violated governmental regulations in the manufacture, labeling, promotion, sale or distribution of our products. A recall, withdrawal or seizure of any of our products could materially and adversely affect consumer confidence in our brands and lead to decreased demand for our products. In addition, a recall, withdrawal or seizure of any of our products would require significant management attention, would likely result in substantial and unexpected expenditures and could materially and adversely affect our business, financial condition or results of operations.

If we are unable to obtain and maintain protection of our intellectual property, the value of our products may be adversely affected.

Our business is dependent in part upon our ability to use intellectual property rights to protect our products from competition. To protect our products, we rely on a combination of patent and other intellectual property laws, employment, confidentiality and invention assignment agreements with our employees and contractors, and confidentiality agreements and protective contractual provisions with our partners, licensors and other third parties. These methods, however, afford us only limited protection against competition from other products.

We attempt to protect our intellectual property position, in part, by filing patent applications related to our proprietary technology, inventions and improvements that are important to our business. However, our patent position is not likely by itself to prevent others from commercializing products that compete directly with our products. Moreover, we do not have patent protection for certain components of our products and our patent applications can be challenged. In addition, we may fail to receive any patent for which we have applied, and any patent owned by us or issued to us could be challenged, invalidated, or held to be unenforceable. We also note that any patent granted may not provide a competitive advantage to us. Our competitors may independently develop technologies that are substantially similar or superior to our technologies. Further, third parties may design around our patented or proprietary products and technologies.

We rely on certain trade secrets and we may not be able to adequately protect our trade secrets even with contracts with our personnel and third parties. Also, any third party could independently develop and have the right to use, our trade secret, know-how and other proprietary information. If we are unable to protect our intellectual property rights, our business, prospects, financial condition and results of operations could suffer materially.

#### Our ability to market our products may be impaired by the intellectual property rights of third parties.

Our success depends in part on our products not infringing on the patents and proprietary rights of other parties. For instance, in the United States, patent applications filed in recent years are confidential for 18 months, while older applications are not published until the patent issues. As a result, there may be patents and patent applications of which we are unaware, and avoiding patent infringement may be difficult.

Our industry is characterized by a large number of patents, patent applications and frequent litigation based on allegations of patent infringement. Competitors may own patents or proprietary rights, or have filed patent applications, related to products that are similar to ours. We may not be aware of all of the patents and pending applications potentially adverse to our interests that may have been issued to others. Moreover, since there may be unpublished patent applications that could result in patents with claims relating to our products, we cannot be sure that our current products will not infringe any patents that might be issued or filed in the future. Based on the litigious nature of our industry and the fact that we may pose a competitive threat to some companies who own or control various patents, we believe it is possible that one or more third parties may assert a patent infringement claim seeking damages or enjoining us from the manufacture or marketing of one or more of our products. Such a lawsuit may have already been filed against us without our knowledge, or may be filed in the near future. If any future claim of infringement against us was successful, we may be required to pay substantial damages, cease the infringing activity or obtain the requisite licenses or rights to use the technology, which may not be available to us on acceptable terms, if at all. Even if we were able to obtain rights to a third party's intellectual property rights, these rights may be non-exclusive, thereby giving our competitors potential access to the same rights and weakening our market position. Moreover, regardless of the outcome, patent litigation could significantly disrupt our business, divert our management's attention and consume our financial resources. We cannot predict if or when any third-party patent holder will file suit for patent infringement.

## We may be involved in lawsuits or proceedings to protect or enforce our intellectual property rights or to defend against infringement claims, which could be expensive and time consuming.

Litigation may be necessary to enforce our intellectual property rights, protect our trade secrets or determine the validity and scope of the proprietary rights of others. Interference proceedings conducted by a patent and trademark office may be necessary to determine the priority of inventions with respect to our patent applications. Litigation or interference proceedings could result in substantial costs and diversion of resources and management attention. In addition, in an infringement proceeding, a court may decide that a patent of ours is not valid or is unenforceable or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology. An adverse determination of any litigation or defense proceedings could put one or more of our patents at risk of being invalidated or interpreted narrowly and could put our patent applications at risk of not issuing. In addition, we may be enjoined from marketing one or more of our products if a court finds that such products infringe the intellectual property rights of a third party.

During litigation, we may not be able to prevent the confidentiality of certain of our proprietary rights because of the substantial amount of discovery required in connection with intellectual property litigation. In addition, during the course of litigation, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If investors or customers perceive these results to be negative, it could have a material adverse effect on our business, prospects, financial condition and results of operations.

#### Our insurance liability coverage is limited and may not be adequate to cover potential losses.

In the ordinary course of business, we purchase insurance coverage (e.g., liability coverage) to protect us against claims made by third parties and employees for property damage or personal injuries. However, the protection provided by such insurance is limited in significant respects and, in some instances, we have no coverage and certain of our insurance policies have substantial "deductibles" or have limits on the maximum amounts that may be recovered. Insurers have also introduced new exclusions or limitations of coverage for claims related to certain perils including, but not limited to, mold and terrorism. If a series of losses occurred, such as from a series of lawsuits in the ordinary course of business each of which were subject to the deductible amount, or if the maximum limit of the available insurance was substantially exceeded, we could incur losses in amounts that would have a material adverse effect on our results of operations and financial condition. We do not presently have any product liability insurance that would provide coverage for any allegation of product defects or related claims. We will review our ability to obtain such insurance coverage later, but there cannot be any assurance that such insurance coverage will be available on acceptable terms.

#### Our operating results may fluctuate, which may result in volatility of our share price.

Our operating results, including components of operating results, can be expected to fluctuate from time to time in the future. Some of the factors that may cause these fluctuations include:

- the impact of acquisitions;
- market acceptance of our existing products, as well as products in development;
- the timing of regulatory approvals;
- our ability or the ability of third-party distributors to sell, market, and distribute our products;
- our ability or the ability of our contract manufacturers to manufacture our products efficiently; and
- the timing of our research and development expenditures.

#### If we are unable to manage our expected growth, our future revenue and operating results may be adversely affected.

Our anticipated growth is expected to place a significant strain on our management, operational and financial resources. Our current and planned personnel, systems, procedures and controls may not be adequate to support our anticipated growth. To manage our growth, we will be required to improve existing, and implement new, operational and financial systems, procedures and controls and expand, train and manage our growing employee base. We expect that we may need to increase our management personnel to oversee our expanding operations. Recruiting and retaining qualified individuals can be difficult. If we are unable to manage our growth effectively, or are unsuccessful in recruiting qualified management personnel, our business, prospects, financial condition and results of operations could be harmed.

### We are highly dependent on our senior management, and if we are not able to retain them or to recruit and retain additional qualified personnel, our business will suffer.

We are highly dependent upon our senior management, including David G. Watumull, our President and Chief Executive Officer, Gilbert M. Rishton, our Chief Science Officer, Timothy J. King, our Vice President, Research, John B. Russell, our Chief Financial Officer, and David M. Watumull, our Chief Operating Officer. The loss of services of David G. Watumull or any other member of our senior management could have a material adverse effect on our business, prospects, financial condition and results of operations. We carry \$1 million "key person" life insurance policies on David G. Watumull and David M. Watumull but do not carry similar insurance for any of our other senior executives.

We may choose to increase our management personnel. For example, we will need to obtain certain additional functional capability, including regulatory, sales, quality assurance and control, either by hiring additional personnel or by outsourcing these functions to qualified third parties. We may not be able to engage these third parties on terms favorable to us. Also, we may not be able to attract and retain qualified personnel on acceptable terms given the competition for such personnel among companies that operate in our markets. The trend in the pharmaceutical industry of requiring sales and other personnel to enter into non-competition agreements prior to starting employment exacerbates this problem, since personnel who have made such a commitment to their current employers are more difficult to recruit. If we fail to identify, attract, retain and motivate these highly skilled personnel, or if we lose current employees, our business, prospects, financial conditions and results of operations could be adversely affected.

Our ability to grow and compete in the future will be adversely affected if adequate capital is not available to us or not available on terms favorable to us.

The ability of our business to grow and compete depends on the availability of adequate capital, which in turn depends in large part on our cash flow from operations and the availability of equity and debt financing. We cannot assure you that our cash flow from operations will be sufficient or that we will be able to obtain equity or debt financing on acceptable terms or at all to implement our growth strategy. As a result, we cannot assure you that adequate capital will be available to finance our current growth plans, take advantage of business opportunities or respond to competitive pressures, any of which could harm our business. Additionally, if adequate additional financing is not available on acceptable terms, we may not be able to continue our business operations. Any additional capital, investment or financing of our business may result in dilution of our stockholders or be on terms and conditions that impair our ability to profitably conduct our business.

You may have limited access to information regarding our Company because we are a limited reporting company exempt from many regulatory requirements.

As a filer subject to Section 15(d) of the Exchange Act, the Company is not required to prepare proxy or information statements; our common stock is not subject to the protection of the going private regulations; the Company is subject to only limited portions of the tender offer rules; our officers, directors, and more than ten (10%) percent stockholders are not required to file beneficial ownership reports about their holdings in our Company; such persons are not subject to the short-swing profit recovery provisions of the Exchange Act; and stockholders of more than five percent (5%) are not required to report information about their ownership positions in the securities. As a result, investors will have reduced visibility as to the Company and its financial condition.

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

Our common stock has a limited trading market, which could affect your ability to sell shares of our common stock and the price you may receive for our common stock.

Our common stock is currently traded in the over-the-counter market and "bid" and "asked" quotations regularly appear on the OTCQB maintained by OTC Markets, Inc. under the symbol "CDXI". There is only limited trading activity in our securities. We have a relatively small public float compared to the number of our shares outstanding. Accordingly, we cannot predict the extent to which investors' interest in our common stock will provide an active and liquid trading market, which could depress the trading price of our common stock and could have a long-term adverse impact on our ability to raise capital in the future. Due to our limited public float, we may be vulnerable to investors taking a "short position" in our common stock, which would likely have a depressing effect on the price of our common stock and add increased volatility to our trading market. The volatility of the market for our common stock could have a material adverse effect on our business, results of operations and financial condition. There cannot be any guarantee that an active trading market for our securities will develop or, if such a market does develop, will be sustained. Accordingly, investors must be able to bear the financial risk of losing their entire investment in our common stock.

#### We may voluntarily file for deregistration of our common stock with the Commission.

Compliance with the periodic reporting requirements required by the Securities and Exchange Commission (the "Commission" or "SEC") consumes a considerable amount of both internal, as well external, resources and represents a significant cost for us. Our senior management team has relatively limited experience managing a company subject to the reporting requirements of the Exchange Act, and the regulations promulgated thereunder. Our management will be required to design and implement appropriate programs and policies in responding to increased legal, regulatory compliance and reporting requirements, and any failure to do so could lead to the imposition of fines and penalties and harm our business. In addition, if we are unable to continue to devote adequate funding and the resources needed to maintain such compliance, while continuing our operations, we may be in non-compliance with applicable SEC rules or the securities laws, and be delisted from the OTCQB or other market we may be listed on, which would result in a decrease in or absence of liquidity in our common stock, and potentially subject us and our officers and directors to civil, criminal and/or administrative proceedings and cause us to voluntarily file for deregistration of our common stock with the Commission.

Future sales of our common stock in the public market could lower the price of our common stock and impair our ability to raise funds in future securities offerings.

We intend to raise additional capital through the sale of our securities. Future sales of a substantial number of shares of our common stock in the public market, or the perception that such sales may occur, could adversely affect the then prevailing market price of our common stock and could make it more difficult for us to raise funds in the future through the sale of our securities.

#### We may issue shares of preferred stock that subordinate your rights and dilute your equity interests.

We believe that for us to successfully execute our business strategy we will need to raise investment capital and it may be preferable or necessary to issue preferred stock to investors. Preferred stock may grant the holders certain preferential rights in voting, dividends, liquidation or other rights in preference over a company's common stock.

The issuance by us of preferred stock could dilute both the equity interests and the earnings per share of existing holders of our common stock. Such dilution may be substantial, depending upon the number of shares issued. The newly authorized shares of preferred stock could also have voting rights superior to our common stock, and in such event, would have a dilutive effect on the voting power of our existing stockholders.

Any issuance of preferred stock with voting rights could, under certain circumstances, have the effect of delaying or preventing a change in control of us by increasing the number of outstanding shares entitled to vote and by increasing the number of votes required to approve a change in control of us. Shares of voting or convertible preferred stock could be issued, or rights to purchase such shares could be issued, to render more difficult or discourage an attempt to obtain control of us by means of a tender offer, proxy contest, merger or otherwise. Such issuances could therefore deprive our stockholders of benefits that could result from such an attempt, such as the realization of a premium over the market price that such an attempt could cause. Moreover, the issuance of such shares of preferred stock to persons friendly to our Board of Directors could make it more difficult to remove incumbent managers and directors from office even if such change were to be favorable to stockholders generally.

#### The market price of our common stock may be volatile and may be affected by market conditions beyond our control.

The market for our common shares is characterized by significant price volatility when compared to seasoned issuers, and we expect that our share price will continue to be more volatile than a seasoned issuer for the indefinite future. The volatility in our share price is attributable to a number of factors. First, our shares of common stock are sporadically and thinly traded. As a consequence of this lack of liquidity, the trading of relatively small quantities of shares by our stockholders may disproportionately influence the price of those shares in either direction. The price for our shares could, for example, decline precipitously in the event that a large number of shares of our common stock are sold on the market without commensurate demand, as compared to a seasoned issuer which could better absorb those sales without adverse impact on its share price. Second, we are a speculative or "risky" investment due to our limited operating history and lack of profits to date, and uncertainty of future market acceptance for our potential products. As a consequence of this enhanced risk, more risk-averse investors may, under the fear of losing all or most of their investment in the event of negative news or lack of progress, be more inclined to sell their shares on the market more quickly and at greater discounts than would be the case with the stock of a seasoned issuer. Many of these factors are beyond our control and may decrease the market price of our common stock, regardless of our operating performance. We cannot make any predictions or projections as to what the prevailing market price for our common stock will be at any time, including as to whether our common stock will sustain its current market price, or as to what effect the sale of shares or the availability of common stock for sale at any time will have on the prevailing market price.

The market price of our common stock is subject to significant fluctuations in response to, among other factors:

- changes in our financial performance or a change in financial estimates or recommendations by securities analysts;
- announcements of innovations or new products or services by us or our competitors;

- the emergence of new competitors or success of our existing competitors;
- operating and market price performance of other companies that investors deem comparable;
- changes in our Board of Directors or management;
- sales or purchases of our common stock by insiders;
- commencement of, or involvement in, litigation;
- changes in governmental regulations; and
- general economic conditions and slow or negative growth of related markets.

In addition, if the market for stock in our industry, or the stock market in general, experiences a loss of investor confidence, the market price of our common stock could decline for reasons unrelated to our business, financial condition or results of operations. If any of the foregoing occurs, it could cause the price of our common stock to fall and may expose us to lawsuits that, even if unsuccessful, could be costly to defend and distract our Board of Directors and management.

We do not intend to pay dividends for the foreseeable future, and you must rely on increases in the market prices of our common stock for returns on your investment.

For the foreseeable future, we intend to retain any earnings to finance the development and expansion of our business, and we do not anticipate paying any cash dividends on our common stock. Accordingly, investors must be prepared to rely on sales of their common stock after price appreciation to earn an investment return, which may never occur. Investors seeking cash dividends should not purchase our common stock. Any determination to pay dividends in the future will be made at the discretion of our Board of Directors and will depend on our results of operations, financial condition, contractual restrictions, restrictions imposed by applicable law and other factors our Board of Directors deems relevant.

#### We are subject to penny stock regulations and restrictions and you may have difficulty selling shares of our common stock.

The Commission has adopted regulations which generally define so-called "penny stocks" as an equity security that has a market price of less than \$5.00 per share or an exercise price of less than \$5.00 per share, subject to certain exemptions. Our common stock is a "penny stock", and we are subject to Rule 15g-9 under the Exchange Act, or the Penny Stock Rule. This rule imposes additional sales practice requirements on broker-dealers that sell such securities to persons other than established customers and "accredited investors" (generally, individuals with a net worth in excess of \$1,000,000 or annual income exceeding \$200,000, or \$300,000 together with their spouses). For transactions covered by Rule 15g-9, a broker-dealer must make a special suitability determination for the purchaser and receive the purchaser's written consent to the transaction prior to sale. As a result, this rule affects the ability of broker-dealers to sell our securities and affects the ability of purchasers to sell any of our securities in the secondary market.

For any transaction involving a penny stock, unless exempt, the rules require delivery, prior to any transaction in a penny stock, of a disclosure schedule prepared by the Commission relating to the penny stock market. Disclosure is also required to be made about sales commissions payable to both the broker-dealer and the registered representative and current quotations for the securities. Finally, monthly statements are required to be sent disclosing recent price information for the penny stock held in the account and information on the limited market in penny stock.

There can be no assurance that our shares of common stock will qualify for exemption from the Penny Stock Rule. In any event, even if our common stock were exempt from the Penny Stock Rule, we would remain subject to Section 15(b)(6) of the Exchange Act, which gives the Commission the authority to restrict any person from participating in a distribution of penny stock if the Commission finds that such a restriction would be in the public interest.

In addition to the "penny stock" rules described above, the Financial Industry Regulatory Authority ("FINRA") has adopted similar rules that may also limit a stockholder's ability to buy and sell our common stock. FINRA rules require that in recommending an investment to a customer, a broker-dealer must have reasonable grounds for believing that the investment is suitable for such customer. Prior to recommending speculative low priced securities to their non-institutional customers, broker-dealers must make reasonable efforts to obtain information about the customer's financial status, tax status, investment objectives and other information. Under interpretations of these rules, FINRA believes that there is a high probability that speculative low priced securities will not be suitable for at least some customers. The FINRA requirements make it more difficult for broker-dealers to recommend that their customers buy our common stock, which may limit your ability to buy and sell our stock and have an adverse effect on the market for our shares.

We are an "emerging growth company," and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act, or the JOBS Act, which was enacted in April 2012. For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We could be an emerging growth company for up to five years, although circumstances could cause us to lose that status earlier. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year following the fifth anniversary of the completion of the IPO, (2) the last day of the fiscal year in which we have total annual gross revenue of at least \$1.0 billion, (3) the date on which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds \$700.0 million as of the prior June 30th, and (4) the date on which we have issued more than \$1.0 billion in non-convertible debt securities during the prior three-year period. We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may suffer or be more volatile.

Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. We have elected to use the extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date we (i) are no longer an emerging growth company or (ii) affirmatively and irrevocably opt out of the extended transition period under the JOBS Act.

Provisions in our corporate charter documents and under Delaware law could make an acquisition of us more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our corporate charter and our bylaws may discourage, delay, or prevent a merger, acquisition, or other change in control of us that stockholders may consider favorable, including transactions in which stockholders might otherwise receive a premium for their shares. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. Because our board of directors is responsible for appointing the members of our management team, these provisions could in turn affect any attempt by our stockholders to replace current members of our management team. Among others, these provisions include the following:

- our board of directors will have the right to elect directors to fill a vacancy created by the expansion of our board of directors or the resignation, death, or removal of a director, which will prevent stockholders from being able to fill vacancies on our board of directors;
- our stockholders will not be able to act by written consent or call special stockholders' meetings; as a result, a holder, or holders, controlling a majority of our capital stock would not be able to take certain actions other than at annual stockholders' meetings or special stockholders' meetings called by our board of directors, the chairman of our board, the chief executive officer, or the president;
- our certificate of incorporation will prohibit cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- our stockholders will be required to provide advance notice and additional disclosures in order to nominate individuals for
  election to our board of directors or to propose matters that can be acted upon at a stockholders' meeting, which may discourage
  or deter a potential acquiror from conducting a solicitation of proxies to elect the acquiror's own slate of directors or otherwise
  attempting to obtain control of our company; and
- our board of directors will be able to issue, without stockholder approval, shares of undesignated preferred stock, which makes
  it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the
  success of any attempt to acquire us.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner.

#### **Risks Related To Market Conditions**

We are registering an aggregate of 27,705,782 Exchange Shares, some or all of which, may be issued pursuant to the Exchange Offer. The sale of such shares could depress the market price of our common stock.

We are registering an aggregate of 27,705,782 Exchange Shares, some or all of which, may be issued pursuant to the Exchange Offer. The 27,705,782 Exchange Shares will represent approximately 18% of our shares outstanding. Our common stock is thinly traded. The sale of these shares into the public market may result in a greater number of shares being available for trading than the market can absorb and therefore, could depress the market price of our common stock.

The sale of material amounts of common stock could encourage short sales by third parties and further depress the price of our common stock. As a result, you may lose all or part of your investment.

The significant downward pressure on our common stock price caused by the sale of a significant number of shares could cause our common stock price to decline, thus allowing short sellers of our common stock an opportunity to take advantage of any decrease in the value of our common stock. The presence of short sellers in our common stock may further depress the price of our common stock.

#### **USE OF PROCEEDS**

We estimate that the net proceeds we will receive from the Exchange Offer will be approximately \$3,800,000, after deducting estimated offering expenses payable by us. The receipt of \$3,800,000 in net proceeds assumes that all of the Original Warrants are tendered. We have no ability to know with certainty the number of Original Warrants that will be tendered, if any, and thus, the receipt of the \$3,800,000 of net proceeds and the use of those proceeds outlined below should be read in the context of this uncertainty.

We anticipate that the net proceeds from this offering will be used for general corporate purposes, including to continue to fund our ZanthoSyn® sales and marketing program. We may also fund human clinical trials with ZanthoSyn® to promote scientific and consumer awareness and advance the development of next generation products for consumer health and pharmaceutical applications, including seeking orphan drug designation for current or future product candidates. This expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering.

#### PRICE RANGE OF COMMON STOCK AND DIVIDEND POLICY

#### **Market Information**

Our shares of common stock are quoted on the OTCQB under the symbol "CDXI." The high and low bid quotations for our shares of common stock for each full quarterly period within the two most recent fiscal years and the current fiscal year are:

Quarter Ended	High		Low	
Manual 21 2016	¢	0.20	ø	0.02
March 31, 2016	\$	0.28	\$	0.03
June 30, 2016	\$	0.18	\$	0.05
September 30, 2016	\$	0.20	\$	0.07
December 31, 2016	\$	0.15	\$	0.03
March 31, 2017	\$	0.27	\$	0.09
June 30, 2017	\$	0.23	\$	0.12
September 30, 2017	\$	0.59	\$	0.16
December 31, 2017	\$	0.49	\$	0.07
March 31, 2018	\$	0.44	\$	0.13

Such quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission and do not necessarily represent actual transactions.

As of May 1, 2018, there were approximately 470 stockholders of record of our common stock. The number of stockholders does not include beneficial owners holding shares through nominee names.

As of May 1, 2018, the last reported sale price of our common stock on the OTCQB was \$0.34.

#### Dividends

We have never paid any cash dividends and intend, for the foreseeable future, to retain any future earnings for the development of our business. Our future dividend policy will be determined by our Board of Directors on the basis of various factors, including our results of operations, financial condition, capital requirements and investment opportunities.

#### Securities Authorized for Issuance under Equity Compensation Plans

We adopted, and our stockholders approved, the Cardax, Inc. 2014 Equity Compensation Plan (the "2014 Plan"), effective as of February 7, 2014. Under such plan, we may grant equity-based incentive awards, including options, restricted stock, and other stock-based awards, to any directors, employees, advisors, and consultants that provide services to us or any of our subsidiaries on terms and conditions that are from time to time determined by us. An aggregate of 45,420,148 shares of our common stock are reserved for issuance under the 2014 Plan. Options for the purchase of 43,365,083 shares of our common stock have been granted, options for the purchase of 916,357 shares of our common stock have been exercised, and options for the purchase of 3,851,965 shares of our common stock have been forfeited; options for the purchase of 38,596,761 shares of our common stock are outstanding as of May 1, 2018. In addition, an aggregate of 2,881,386 shares of our common stock have been granted under the 2014 Plan. The purpose of the 2014 Plan is to provide financial incentives for selected directors, employees, advisors, and consultants of Cardax and/or its subsidiaries, thereby promoting the long-term growth and financial success of the Company.

### **Equity Compensation Plan Information**

The following table summarizes information as of May 1, 2018 about our outstanding stock options and shares of common stock reserved for future issuance under our existing equity compensation plans.

		Weighted-	
		average	
		exercise price	
		of	
Number of securities to be issued upon exercise of outstanding options,		outstanding options, warrants and	Number of securities remaining available for future issuance under equity compensation
warrants and rights		rights	plans
38,596,761	\$	0.41	3,189,727
-		=	-
38,596,761	\$	0.41	3,189,727
	issued upon exercise of outstanding options, warrants and rights  38,596,761	issued upon exercise of outstanding options, warrants and rights  38,596,761 \$	Number of securities to be issued upon exercise of outstanding options, warrants and rights  38,596,761 \$ 0.41

### **Penny Stock Regulations**

The Commission has adopted regulations which generally define so-called "penny stocks" as an equity security that has a market price of less than \$5.00 per share or an exercise price of less than \$5.00 per share, subject to certain exemptions. Our common stock is a "penny stock", and we are subject to Rule 15g-9 under the Exchange Act, or the Penny Stock Rule. This rule imposes additional sales practice requirements on broker-dealers that sell such securities to persons other than established customers and "accredited investors" (generally, individuals with a net worth in excess of \$1,000,000 or annual income exceeding \$200,000, or \$300,000 together with their spouses). For transactions covered by Rule 15g-9, a broker-dealer must make a special suitability determination for the purchaser and receive the purchaser's written consent to the transaction prior to sale. As a result, this rule affects the ability of broker-dealers to sell our securities and affects the ability of purchasers to sell any of our securities in the secondary market.

For any transaction involving a penny stock, unless exempt, the rules require delivery, prior to any transaction in a penny stock, of a disclosure schedule prepared by the Commission relating to the penny stock market. Disclosure is also required to be made about sales commissions payable to both the broker-dealer and the registered representative and current quotations for the securities. Finally, monthly statements are required to be sent disclosing recent price information for the penny stock held in the account and information on the limited market in penny stock.

There can be no assurance that our shares of common stock will qualify for exemption from the Penny Stock Rule. In any event, even if our common stock were exempt from the Penny Stock Rule, we would remain subject to Section 15(b)(6) of the Exchange Act, which gives the Commission the authority to restrict any person from participating in a distribution of penny stock if the Commission finds that such a restriction would be in the public interest.

In addition to the "penny stock" rules described above, the FINRA has adopted similar rules that may also limit a stockholder's ability to buy and sell our common stock. FINRA rules require that in recommending an investment to a customer, a broker-dealer must have reasonable grounds for believing that the investment is suitable for such customer. Prior to recommending speculative low priced securities to their non-institutional customers, broker-dealers must make reasonable efforts to obtain information about the customer's financial status, tax status, investment objectives and other information. Under interpretations of these rules, FINRA believes that there is a high probability that speculative low priced securities will not be suitable for at least some customers. The FINRA requirements make it more difficult for broker-dealers to recommend that their customers buy our common stock, which may limit the ability of our stockholders to sell their shares and have an adverse effect on the market for our shares.

### MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The financial data discussed below is derived from our audited consolidated financial statements for the fiscal years ended December 31, 2017 and 2016, which are found elsewhere in this prospectus. Our consolidated financial statements are prepared and presented in accordance with generally accepted accounting principles in the United States. The financial data discussed below is only a summary and investors should read the following discussion and analysis of our financial condition and results of our operations in conjunction with our consolidated financial statements and the related notes to those statements included elsewhere in this prospectus. This discussion contains forward-looking statements reflecting our current expectations that involve risks and uncertainties. Our actual results and the timing of events may differ materially from those contained in these forward-looking statements due to a number of factors, including those discussed in the section entitled "Risk Factors," and elsewhere in this prospectus.

### **Corporate Overview and History**

We were incorporated on January 30, 2012, as a Delaware corporation, under the name "Koffee Korner Inc., and later changed our name to Cardax, Inc. in a February 7, 2014 reverse merger (the "Merger") that acquired the life sciences business of Pharma. Prior to the February 7, 2014, our business was limited to a single location retailer of specialty coffee located in Houston, Texas. On the effective date of the Merger, we divested our coffee business and now exclusively continue Pharma's life sciences business. On December 30, 2015, our former principal stockholder, Holdings, merged with and into us.

We are devoting substantially all of our present efforts to establishing our business related to the development and commercialization of consumer health products. Our first commercial product, ZanthoSyn®, is a physician recommended anti-inflammatory supplement for health and longevity that features astaxanthin with optimal absorption and purity. The form of astaxanthin utilized in ZanthoSyn® has demonstrated excellent safety in peer-reviewed published studies and is designated as GRAS (Generally Recognized as Safe) according to FDA regulations. We sell ZanthoSyn® primarily through e-commerce and wholesale channels and expect that our marketing program will continue to focus on education of physicians, healthcare professionals, retail personnel, and consumers. As a next generation product, we are developing CDX-085, our patented astaxanthin derivative for more concentrated astaxanthin product applications. We may also pursue pharmaceutical applications of astaxanthin and related compounds. 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.

## **Results of Operations**

Results of Operations for the Years Ended December 31, 2017 and 2016:

The following table reflects our operating results for the years ended December 31, 2017 and 2016:

Year ended	Year ended	
December 31, 2017	December 31, 2016	Change
\$ 610,323	\$ 35,258	\$ 575,065
(274,707)	(14,580)	(260,127)
335,616	20,678	314,938
(2,337,886)	(1,850,902)	(486,984)
(2,002,270)	(1,830,224)	(172,046)
17,036	46,519	(29,483)
\$ (1,985,234)	\$ (1,783,705)	\$ (201,529)
	December 31, 2017 \$ 610,323 (274,707) 335,616 (2,337,886) (2,002,270) 17,036	December 31, 2017         December 31, 2016           \$ 610,323         \$ 35,258           (274,707)         (14,580)           335,616         20,678           (2,337,886)         (1,850,902)           (2,002,270)         (1,830,224)           17,036         46,519

### **Operating Summary**

We sell ZanthoSyn® primarily through e-commerce and wholesale channels. We launched our e-commerce channel in August 2016 and began selling to GNC stores in Hawaii on January 25, 2017 and GNC corporate stores across the United States on August 10, 2017. As a result, revenues were \$610,323 and \$35,258 for the years ended December 31, 2017 and 2016, respectively. Cost of goods sold were \$274,707 and \$14,580 for the years ended December 31, 2017 and 2016, 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 \$335,616 and \$20,678 for the years ended December 31, 2017 and 2016, which represented gross profit margins of 55% and 59%, respectively.

Operating expenses were \$2,337,886 and \$1,850,902, for the years ended December 31, 2017 and 2016, respectively. Operating expenses primarily consisted of services provided to the Company, including payroll and consultation, for research and development, administration, and sales and marketing. These expenses were paid in accordance with agreements entered into with each consultant, employee, or service provider. Included in operating expenses were \$242,146 and \$525,062 in stock based compensation for the years ended December 31, 2017 and 2016, respectively.

Other income was \$17,036 and \$46,519, for the years ended December 31, 2017 and 2016, respectively. For the years ended December 31, 2017 and 2016, other income primarily consisted of a State of Hawaii refundable research and development credit of \$17,253 and \$47,082.

#### Assets and Liabilities

Assets were \$3,156,685 and \$750,580 as of December 31, 2017 and 2016, respectively. The increase was primarily due to an increase in cash. At December 31, 2017, cash totaled \$2,236,837. Negative working capital of \$1,833,988 as of December 31, 2017, was primarily due to accrued payroll and paid time off of \$3,490,225, accrued Board of Director fees and related consultation of \$418,546, and accounts payable of \$603,391, less cash of \$2,236,837. The accrual of payroll and Board of Director fees and related consultation, which occurred from January 2008 to December 2013, was due to significant capital constraints, and was selected in favor of layoffs or furloughs in order to maximize employee and director retention. In 2013 and 2014, the Company initiated repayment on these accrued amounts, utilizing approximately 5% to 10% of proceeds from various financings and plans to continue a structured repayment of the outstanding amounts over time as resources permit.

### **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 years ended December 31, 2017 and 2016, we used cash in operating activities of \$2,080,623 and \$1,256,771, respectively, and incurred a net loss of \$1,985,234 and \$1,783,705, respectively.

As of December 31, 2017, we had a U.S. federal income tax net operating loss carryforward of \$33,345,946. The net operating losses may be available to offset our future taxable income to the extent permitted under the Internal Revenue Code.

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

In addition to the \$4,138,435 raised during the year ended December 31, 2017, we intend to raise additional capital that would fund our operations through at least December 31, 2018. We may continue to obtain additional financing from investors through the private placement of our common stock and warrants to purchase our common stock. Any financing transaction could also, or in the alternative, include the issuance of our debt or convertible debt securities. There can be no assurance that a financing transaction would be available to us on terms and conditions that we determined are acceptable. We may also access capital under the previously reported equity purchase agreement, pursuant to which we have the right, but not the obligation, to sell shares of our common stock, as described in our Registration Statement on Form S-1 (333-214049) filed on February 8, 2017.

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 further 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 technologies.

We have funded our research, development, and commercialization primarily by issuing convertible debt and equity securities in several separate private placements of securities.

Upon the consummation of the Merger, the outstanding principal amount of the senior secured convertible promissory notes issued by Pharma in 2013, consisting of (a) the aggregate principal amount of approximately \$3,648,244 for notes exchanged with Holdings on May 31, 2013, and (b) the aggregate principal amount of \$4,840,792 for notes issued by Pharma during the year ended December 31, 2013, together in the aggregate principal amount of \$8,489,036, plus all accrued interest thereon, was automatically converted into an aggregate number of 14,446,777 shares of our common stock and warrants, issued by Cardax, to purchase an aggregate of 14,446,777 shares of our common stock at an exercise price equal to \$0.625 that expire on February 7, 2019.

Upon the consummation of the Merger, the outstanding principal amount of the convertible unsecured promissory notes issued by Pharma in 2014, consisting of the aggregate principal amount of \$2,076,000 plus all accrued interest thereon, was automatically converted into an aggregate number of 3,353,437 shares of our common stock and warrants to purchase an aggregate of 3,321,600 shares of our common stock at an exercise price equal to \$0.625 that expire on February 7, 2019.

Upon the consummation of the Merger we issued and sold an aggregate of 6,276,960 shares of our common stock and warrants, that expire on February 7, 2019, to purchase an aggregate of 6,276,960 shares of our common stock at a price per share equal to \$0.625, for aggregate gross cash proceeds of \$3,923,100.

During the year ended December 31, 2015, we sold securities in a self-directed offering in the aggregate amount of \$1,806,222 at \$0.30 per unit, which included the conversion of a \$30,000 note issued on January 28, 2015 and \$222 in accrued interest. Each unit consisted of one share of our common stock, two Class D warrants, each to purchase one share of our common stock at \$0.10 per share, which expire March 31, 2020, and one Class E warrant to purchase three-fourths of one share of our common stock at \$0.1667 per share, which expires March 31, 2020. In aggregate, we issued 6,020,725 shares of our common stock, Class D warrants to purchase 12,041,450 shares of our common stock, and Class E warrants to purchase 4,515,554 shares of our common stock.

During the year ended December 31, 2016 and the first quarter of 2017, we sold securities in a self-directed offering in the aggregate amount of \$1,300,000 at \$0.08 per unit. Each unit consisted of (i) one share of our common stock, (ii) a five-year warrant to purchase one share of our common stock at \$0.08, (iii) a five-year warrant to purchase one share of our common stock at \$0.12, and (iv) a five-year warrant to purchase one share of our common stock at \$0.16. In aggregate, we issued (i) 16,250,000 shares of our common stock, (ii) warrants to purchase 16,250,000 shares of our common stock at \$0.08 per share, (iii) warrants to purchase 16,250,000 shares of our common stock at \$0.12 per share, and (iv) warrants to purchase 16,250,000 shares of our common stock at \$0.16 per share.

During the year ended December 31, 2017, we sold securities in a self-directed offering in the aggregate amount of \$3,774,456 at \$0.12 per unit. Each unit consisted of (i) one share of our common stock, and (ii) a five-year warrant to purchase one share of our common stock at \$0.12. In aggregate, we issued (i) 31,453,788 shares of our common stock, and (ii) warrants to purchase 31,453,788 shares of our common stock at \$0.12 per share.

During the year ended December 31, 2017, we sold securities in a self-directed offering in the aggregate amount of \$124,979 at \$0.30 per unit. Each unit consisted of (i) one share of our common stock, and (ii) a five-year warrant to purchase one share of our common stock at \$0.30. In aggregate, we issued (i) 416,595 shares of our common stock, and (ii) warrants to purchase 416,595 shares of our common stock at \$0.30 per share.

On July 13, 2016, we entered into an Equity Purchase Agreement with Southridge. Pursuant to the Equity Purchase Agreement, Southridge shall commit to purchase up to \$5,000,000 of our common stock over the course of twenty-four (24) months commencing on February 9, 2017, the effective date of our registration statement pursuant to the registration rights agreement. The price that we may specify in any exercise of a Put Right will be determined by calculating a 12% discount to the lowest closing bid price—subject to a predesignated floor—during a ten trading day period following delivery of a notice of the exercise of our Put Right to Southridge.

As a result of the foregoing, management believes that that the Company should have sufficient sources of liquidity to satisfy its obligations for at least the next 12 months. To the extent our cash and cash equivalents, cash flow from operating activities, and net proceeds from the issuance of our common stock pursuant to the Equity Purchase Agreement are insufficient to fund our future activities, we may need to raise additional funds through bank credit arrangements or public or private equity or debt financings. We also may need to raise additional funds in the event we determine in the future 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 obtain bank credit arrangements or to effect an equity or debt financing on terms acceptable to us or at all.

We will incur ongoing recurring expenses associated with professional fees for accounting, legal, and other expenses for annual reports, quarterly reports, proxy statements and other filings under the Exchange Act. We estimate that these costs will likely be in excess of \$250,000 per year for the next few years. These obligations will reduce our ability and resources to fund other aspects of our business. We hope to be able to use our status as a public company to increase our ability to use non-cash means of settling obligations and compensate certain independent contractors who provide professional services to us, although there can be no assurances that we will be successful in any of those efforts.

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

	Ŋ	Year ended		Year ended		
Cash Flow Summary	Dece	December 31, 2017		December 31, 2017		ember 31, 2016
Net Cash Used in Operating Activities	\$	(2,080,623)	\$	(1,256,771)		
Net Cash Used in Investing Activities		(19,408)		(29,206)		
Net Cash Provided by Financing Activities		4,178,435		1,121,000		
Net Cash Increase (Decrease) for Period		2,078,404		(164,977)		
Cash at Beginning of Year	<u></u>	158,433		323,410		
Cash at End of Year	\$	2,236,837	\$	158,433		

Cash Flows from Operating Activities

During the years ended December 31, 2017 and 2016, our operating activities primarily consisted of payments or accruals for employees, directors, and consultants for services related to research and development, administration, and sales and marketing.

Cash Flows from Investing Activities

During the years ended December 31, 2017 and 2016, our investing activities were primarily related to the capitalization of patent costs.

Cash Flows from Financing Activities

During the years ended December 31, 2017 and 2016, our financing activities primarily consisted of various transactions in which we raised proceeds through the issuance of common stock.

Our existing liquidity is not sufficient to fund our operations, anticipated capital expenditures, working capital and other financing requirements for the foreseeable future. We will need to seek to obtain additional debt or equity financing, especially if we experience downturns or cyclical fluctuations in our business that are more severe or longer than anticipated, or if we experience significant increases in the cost of components and manufacturing, or increases in our expense levels resulting from being a publicly-traded company. If we attempt to obtain additional debt or equity financing, we cannot assure you that such financing will be available to us on favorable terms, or at all

### **Recently Issued Accounting Pronouncements**

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2014-09, *Revenue from Contracts with Customers*, related to revenue recognition. The underlying principle of this ASU is that a business or other organization will recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects what it expects in exchange for the goods or services. This ASU also requires more detailed disclosures and provides additional guidance for transactions that were not addressed completely in prior accounting guidance. ASU No. 2014-09 provides alternative methods of initial adoption. The Company is currently assessing the impact of this ASU on the Company's consolidated financial statements. In August 2015, the FASB issued ASU No. 2015-14, *Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date*, which defers the effective date of ASU No. 2014-09 by one year to fiscal years beginning after December 15, 2017, including interim periods within those years and permitted early adoption of the standard, but not before the original effective date. The Company has assessed the impact of these ASUs and does not believe that they will have a material effect on the Company's consolidated financial statements.

The FASB issued four additional ASUs in 2016 that affect the guidance in ASU No. 2014-09, *Revenue from Contracts with Customers*, and are effective upon adoption of ASU No. 2014-09.

The Company has assessed the impact of these ASUs and does not believe that they will have a material effect on the Company's consolidated financial statements, including the following ASUs:

- In March 2016, the FASB issued ASU No. 2016-08, Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross versus Net). This ASU clarifies the implementation guidance on principal versus agent considerations. The guidance includes indicators to assist an entity in determining whether it controls a specified good or service before it is transferred to the customers.
- In April 2016, the FASB issued ASU No. 2016-10, *Identifying Performance Obligations and Licensing*. This ASU clarifies the following two aspects of ASU No. 2014-09: identifying performance obligations and licensing implementation guidance. The amendment requires revenue recognition to depict the transfer of goods or services to customers in an amount that reflects the consideration that a company expects to be entitled to in exchange for the goods or services. To achieve this principle, a company must apply five steps including identifying the contract with a customer, identifying the performance obligations in the contract, determining the transaction price, allocating the transaction price to the performance obligations, and recognizing revenue when (or as) the company satisfies the performance obligations. Additional quantitative and qualitative disclosures to enhance the understanding about the nature, amount, timing, and uncertainty of revenue and cash flows are also required.

- In May 2016, the FASB issued ASU No. 2016-12, Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients. This ASU makes narrow-scope amendments to ASU No. 2014-09, Revenue from Contracts with Customers, and provides practical expedients to simplify the transition to the new standard and to clarify certain aspects of the standard.
- In December 2016, the FASB issued ASU 2016-20, *Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers (Topic 606)*. This ASU addresses technical corrections and improvements to clarify the codification and to correct unintended application of guidance. Those items generally are not expected to have a significant effect on current accounting practice or create a significant administrative cost for most entities. The amendments in this Update are of a similar nature to the items typically addressed in the Technical Corrections and Improvements project.

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 leases 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 is currently assessing the impact of this ASU on the Company's consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-09, *Compensation - Stock Compensation*. This ASU was issued as part of the FASB's simplification initiative focused on improving areas of U.S. GAAP for which cost and complexity may be reduced while maintaining or improving the usefulness of information disclosed within the financial statements. The amendments focused on simplification specifically with regard to share-based payment transactions, including income tax consequences, classification of awards as equity or liabilities, and classification on the statement of cash flows. The guidance in ASU No. 2016-09 is effective for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years. Early adoption is permitted. The amendments in this ASU should be applied prospectively to an award modified on or after the adoption date. The Company has assessed the impact of this ASU and does not believe that this update has a significant impact on its consolidated financial statements.

In November 2016, the FASB issued ASU 2016-18, *Statement of Cash Flows (Topic 23)*. The amendments of ASU No. 2016-18 require that a statement of cash flow explain the change during a period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. The guidance of ASU No. 2016-18 is effective for years beginning after December 15, 2017, including interim periods within those years. The Company has assessed the impact of this ASU and does not believe that this update has a significant impact on its consolidated financial statements.

In May 2017, the FASB issued ASU No. 2017-09, *Compensation-Stock Compensation: Scope of Modification Accounting*. The amendments of ASU No. 2017-09 provide guidance about which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting. The guidance of ASU No. 2017-09 is effective for years beginning after December 15, 2017, including interim periods within those years. The Company has assessed the impact of this ASU and does not believe that this update has a significant impact on its consolidated financial statements.

We do not believe that any other recently issued, but not yet effective accounting pronouncements, if adopted, would have a material effect on the consolidated financial statements.

# **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.

#### OUR BUSINESS

#### Overview

We are a life sciences company engaged in the development, marketing, and distribution of consumer health products and we are a smaller reporting company as defined by applicable federal securities regulations.

We were incorporated on January 30, 2012, as a Delaware corporation, under the name "Koffee Korner Inc., and later changed our name to Cardax, Inc. in a February 7, 2014 reverse merger (the "Merger") that acquired the life sciences business of Pharma. On the effective date of the Merger, we divested our coffee business and now exclusively continue Pharma's life sciences business. On December 30, 2015, our former principal stockholder, Holdings, merged with and into us.

Our executive offices are located at 2800 Woodlawn Drive, Suite 129, Honolulu, Hawaii 96822; our telephone number is (808) 457-1400. Our website is located at https://www.cardaxpharma.com. The information on our website is not part of this prospectus.

#### **Our Business**

We are a life sciences company engaged in the development, marketing, and distribution of consumer health products. We believe we are well positioned for significant and sustained growth via the commercialization of consumer health products utilizing synthetically manufactured astaxanthin and related xanthophyll carotenoids, which support health and longevity by reducing inflammation at the cellular and mitochondrial level without inhibiting normal function. We may also pursue the development of astaxanthin and related xanthophyll carotenoids for pharmaceutical applications. The safety and efficacy of our products have not been directly evaluated in clinical trials or confirmed by the U.S. Food and Drug Administration (the "FDA").

#### **Our Products**

ZanthoSyn® is marketed as a novel astaxanthin dietary supplement with superior absorption and purity. Astaxanthin is a naturally occurring molecule with safe anti-inflammatory activity that supports joint health, cardiovascular health, metabolic health, liver health, and longevity. The form of astaxanthin utilized in ZanthoSyn® has demonstrated excellent safety in peer-reviewed published studies and is Generally Recognized as Safe ("GRAS") according to FDA regulations.

We sell ZanthoSyn® primarily through e-commerce and wholesale channels. We launched our e-commerce channel in August 2016 and began selling to General Nutrition Corporation ("GNC") stores in Hawaii on January 25, 2017 and GNC corporate stores across the United States on August 10, 2017. ZanthoSyn® is currently available at over three thousand GNC corporate stores in the United States. ZanthoSyn® was the top selling product at GNC stores in Hawaii during the fourth quarter of 2017. We have also sold ZanthoSyn® on a wholesale basis to Health Elite Club Limited, a Hong Kong-based company.

Our ZanthoSyn® product manufacturing process relies on certain third-party suppliers and this dependence creates several risks, including limited control over pricing, availability, quality, and delivery schedules. In addition, any supply interruption could materially harm our ability to manufacture ZanthoSyn® until a new source of supply is obtained on acceptable terms. We may be unable to find such other sources in a reasonable time period or on commercially reasonable terms, if at all, which would have an adverse effect on our business, financial condition and results of operations.

We market ZanthoSyn® primarily through a two-pronged approach:

- Physician outreach and education, where ZanthoSyn<sup>®</sup> is positioned as the first safe, physician friendly, anti-inflammatory for health and longevity, and GNC serves as a convenient and credible distribution channel for physicians recommending ZanthoSyn<sup>®</sup>
- GNC store outreach, education, and in-store sales support, building on the ability to utilize ZanthoSyn® as a foundation of health, wellness, and performance regimens

Our sales and marketing program was initially launched in Hawaii, where robust physician outreach and education coupled with GNC store outreach, education, and in-store sales support increased consumer awareness and catalyzed strong sales growth. We have also launched this program in major markets in California and expect to extend this program nationally as resources permit. To support these efforts, we have hired additional sales and marketing personnel.

We may also conduct human clinical trials with astaxanthin and are currently evaluating various opportunities. While the FDA does not require human clinical trials for consumer health products, we believe that positive results from human clinical trials would promote scientific and consumer awareness of astaxanthin's health and longevity applications.

As a next generation ZanthoSyn® product, we are developing CDX-085, our patented astaxanthin derivative for more concentrated astaxanthin product applications. In collaboration with the University of Hawaii, we demonstrated that astaxanthin through administration of CDX-085 activated an important anti-aging gene in rodents. Following these results, the National Institutes of Health selected CDX-085 for an important anti-aging research program.

## Synthetic Astaxanthin vs. Natural Astaxanthin

We believe synthetic astaxanthin offers significant advantages compared to astaxanthin from microalgae, krill, or other sources:

- Synthetic astaxanthin can be formulated for superior bioavailability; in a human study comparing ZanthoSyn® (our synthetic astaxanthin dietary supplement) to a leading microalgal astaxanthin product, the astaxanthin blood levels following administration of ZanthoSyn® were nearly 3 times higher than the microalgal astaxanthin product at the same dose.
- Synthetic astaxanthin has been extensively tested in a battery of toxicity studies, including acute, subacute, subchronic, and chronic toxicity studies, carcinogenicity studies, genotoxicity studies, and developmental and reproductive toxicity studies; whereas to our knowledge microalgal or other sources of astaxanthin have not undergone the same amount of safety testing in such toxicity studies.
- Synthetic astaxanthin is manufactured with superior purity and precision, whereas astaxanthin extracted from microalgae and krill oil is obtained in a complex mixture, which may include many unknown marine byproducts.
- Synthetic manufacture of astaxanthin is scalable, whereas we believe the ability to readily scale the production and extraction of astaxanthin from microalgae or other sources will be limited as demand for astaxanthin grows.
- Synthetic manufacture of astaxanthin emits fewer greenhouse gases and consumes less energy, raw material, and land than traditional microalgal astaxanthin production.

# Pharmaceutical Development

We may pursue the development of astaxanthin and related xanthophyll carotenoids for pharmaceutical applications and are currently evaluating the feasibility of targeting rare diseases or conditions under the FDA's orphan drug program.

### **Research and Development**

Our research and development program is presently comprised of employees, consultants, including regulatory, scientific, and medical professionals, and third-party collaborators or contract organizations, including academic institutions, contract research organizations, and contract manufacturing organizations. We utilized dedicated internal synthetic chemistry, biology, and bioanalytical chemistry laboratories and a research and development staff to conduct discovery stage synthesis of product candidates (with transfer of materials and/or methods for additional process development and/or testing), *in vitro* testing of product candidates and related components to elucidate the mechanism of action, and analysis of biological samples from internal research and/or contract organizations to detect and quantify levels of product candidates and related components following administration of product in various studies. Our research and development staff has also worked with other professionals to identify, contract and transfer materials and methods, and oversee research and manufacturing by contract organizations. Contract organizations provide us with access to larger scale manufacturing, animal proof-of-concept studies, pharmacokinetics, and toxicity, and analysis that would not otherwise be available to us without significant expense. We anticipate that the majority of our research and development will be conducted by contract organizations with direction and oversight by our current internal research and development personnel, including two Ph.D. scientists, two Ph.D. scientific executives, one operational executive, and one M.D. consultant.

In addition to conducting or overseeing research and development activities, our research and development personnel analyze and interpret other research on astaxanthin, as well as related compounds, competing products, applicable health applications, and industry trends. In the United States National Library of Medicine's online repository, PubMed.gov, there are more than 1,600 peer-reviewed journal articles that reference astaxanthin in the title or abstract, over 400 of which were published in the last three years, with the vast majority published by organizations and researchers that are not affiliated with us. This type of "open-source" research has served to significantly advance the understanding of astaxanthin, and has also presented our research and development personnel with the critical task of keeping up-to-date on all of the latest research and interpreting and integrating the findings with our research and that of others in order to serve as the preeminent thought leaders on astaxanthin's mechanism of action and its application in biological systems.

Our research and development expenditures totaled \$460,991 and \$347,885 for the years ended December 31, 2017 and 2016. These expenditures primarily reflect the compensation of our research and development personnel and product development activities.

### **Government Regulation**

Most aspects of our business are subject to some degree of government regulation. For some of our products, government regulation is significant and, in general, there appears to be a trend toward more stringent regulation throughout the world, as well as global harmonization of various regulatory requirements. We expect to devote significant time, effort and expense to address the extensive government and regulatory requirements applicable to our business. We believe that we are no more or less adversely affected by existing government regulations than our competitors.

### FDA Regulation

Life sciences companies must comply with comprehensive regulation by the FDA and other regulatory agencies in the United States and comparable authorities in other countries. While the FDA does not require human clinical trials for consumer health products, we may conduct Phase I, Phase II, and/or Phase III clinical trials with our products.

We must obtain regulatory approvals by the FDA and, to the extent we have any international distribution of our products, foreign government agencies prior to human clinical testing and commercialization of any pharmaceutical product and for post-approval clinical studies for additional indications in approved drugs. We anticipate that any pharmaceutical product candidate will be subject to rigorous preclinical and clinical testing and pre-market approval procedures by the FDA and similar health authorities in foreign countries to the extent applicable. The extent to which our products are regulated by the FDA, and the designations applicable to our products, will depend upon the types of products we ultimately develop. We are currently evaluating other product developments or technologies to pursue and cannot predict, during this stage of our development, the scope of FDA or other agency regulation to which we or our products and technologies will be subject. Various federal statutes and regulations also govern or influence the preclinical and clinical testing, record-keeping, approval, labeling, manufacture, quality, shipping, distribution, storage, marketing and promotion, export and reimbursement of products and product candidates.

The steps ordinarily required before a drug product may be marketed in the United States include:

- preclinical studies;
- submission to the FDA of an IND, which must become effective before human clinical trials may commence;

- adequate and well-controlled human clinical trials to establish the safety and efficacy of the product candidate in the desired indication for use;
- submission of an NDA to the FDA, together with payment of a substantial user fee; and
- FDA approval of the NDA, including inspection and approval of the product manufacturing facility and select sites at which human clinical trials were conducted.

Preclinical trials typically involve laboratory evaluation of product candidate chemistry, formulation and stability, as well as animal studies to assess the potential safety and efficacy of each product candidate. The results of preclinical trials are submitted to the FDA as part of an IND and are reviewed by the FDA before the commencement of clinical trials. Unless the FDA objects to an IND, the IND will become effective 30 days following its receipt by the FDA. Submission of an IND may not result in FDA clearance to commence clinical trials, and the FDA's failure to object to an IND does not guarantee FDA approval of a marketing application.

Clinical trials involve the administration of the product candidate to humans under the supervision of a qualified principal investigator. In the United States, clinical trials must be conducted in accordance with Good Clinical Practices under protocols submitted to the FDA as part of the IND. In addition, each clinical trial must be approved and conducted under the auspices of an institutional review board and with the patient's informed consent. We would be subject to similar protocols and similar regulatory considerations if we conduct clinical trials outside the United States.

The goal of Phase I clinical trials is to establish initial data about safety and tolerability of the product candidate in humans. The investigators seek to evaluate the effects of various dosages and to establish an optimal dosage level and schedule.

The goal of Phase II clinical trials is to provide evidence about the desired therapeutic efficacy of the product candidate in limited studies with small numbers of carefully selected subjects. Investigators also gather additional safety data.

Phase III clinical trials consist of expanded, large-scale, multi-center studies in the target patient population. This phase further tests the product's effectiveness, monitors side effects, and, in some cases, compares the product's effects to a standard treatment, if one is already available. Phase III trials are designed to more rigorously test the efficacy of a product candidate and are normally randomized, double-blinded, and placebo-controlled. Phase III trials are typically monitored by an independent data monitoring committee, or DMC, which periodically reviews data as a trial progresses. A DMC may recommend that a trial be stopped before completion for a number of reasons including safety concerns, patient benefit or futility.

Data obtained from this development program are submitted as part of an NDA to the FDA and possibly to corresponding agencies in other countries for review. The NDA requires agency approval prior to marketing in the relevant country. Extensive regulations define the form, content and methods of gathering, compiling and analyzing the product candidate's safety and efficacy data.

The process of obtaining regulatory approval can be costly, time consuming and subject to unanticipated delays. Regulatory agencies may refuse to approve an application if they believe that applicable regulatory criteria are not satisfied and may also require additional testing for safety and efficacy and/or post-marketing surveillance or other ongoing requirements for post-marketing studies. In some instances, regulatory approval may be granted with the condition that confirmatory Phase IV clinical trials are carried out, and if these trials do not confirm the results of previous studies, regulatory approval for marketing may be withdrawn. Moreover, each regulatory approval of a product is limited to specific indications. The FDA or other regulatory authorities may approve only limited label information for the product. The label information describes the indications and methods of use for which the product is authorized, may include Risk Evaluation and Mitigation Strategies and, if overly restrictive, may limit a sponsor's ability to successfully market the product. Regulatory agencies routinely revise or issue new regulations, which can affect and delay regulatory approval of product candidates.

Furthermore, pharmaceutical manufacturing processes must conform to current Good Manufacturing Practices, or cGMPs. Manufacturers, including a drug sponsor's third-party contract manufacturers, must expend time, money and effort in the areas of production, quality control and quality assurance, including compliance with stringent record-keeping requirements. Manufacturing establishments are subject to periodic inspections by the FDA or other health authorities, in order to assess, among other things, compliance with cGMP. Before approval of the initiation of commercial manufacturing processes, the FDA will usually perform a preapproval inspection of the facility to determine its compliance with cGMP and other rules and regulations. In addition, foreign manufacturing establishments must also comply with cGMPs in order to supply products for use in the United States, and are subject to periodic inspection by the FDA or by regulatory authorities in certain countries under reciprocal agreements with the FDA. Manufacturing processes and facilities for pharmaceutical products are highly regulated. Regulatory authorities may choose not to certify or may impose restrictions, or even shut down existing manufacturing facilities that they determine are non-compliant.

### FDA GRAS Determination

"GRAS" is an acronym for the phrase "generally recognized as safe," which the FDA utilizes to describe those substances that, in the generally recognized opinion of the scientific community, will not be harmful to consumers, provided the substance is used as intended. According to applicable FDA regulations, any substance that is intentionally added to food is a food additive, which is subject to premarket review and approval by FDA, unless the substance is generally recognized, among qualified experts, as having been adequately shown to be safe under the conditions of its intended use. Under sections 201(s) and 409 of the Federal Food, Drug, and Cosmetic Act (the "FD&C Act"), and FDA's implementing regulations in 21 CFR 170.3 and 21 CFR 170.30, the use of a food substance may be GRAS either through scientific procedures or, for a substance used in food before 1958, through experience based on common use in food. General recognition of safety through scientific procedures requires the same quantity and quality of scientific evidence as is required to obtain approval of the substance as a food additive and ordinarily is based upon published studies, which may be corroborated by unpublished studies and other data and information. General recognition of safety through experience based on common use in foods requires a substantial history of consumption for food use by a significant number of consumers.

Manufacturers of GRAS substances may provide the FDA with a notification of GRAS determination, which includes a description of the substance, the applicable conditions of use, and an explanation of how the substance was determined to be safe. Upon review of such a notification, the FDA may respond with a "no questions" position, whereby the manufacturer's determination that a product is GRAS for its intended purposes is affirmed. Alternatively, manufacturers may elect to "self-affirm" a given substance as GRAS without FDA notification but should retain all applicable safety data used for GRAS determination in the case of FDA inquiry.

Synthetic copies of naturally-occurring dietary ingredients or related components do not qualify as dietary ingredients under the FD&C Act, but substances that have been affirmed by the FDA as GRAS, self-affirmed as GRAS, or approved as direct food additives in the U.S. may be marketed as dietary ingredients, subject to FDA regulations for dietary ingredients.

## FDA NDI Notification

The Dietary Supplement Health and Education Act of 1994 (the "DSHEA") (Pub. L. 103-417) was signed into law on October 25, 1994 and amended the FD&C Act by adding: (i) section 201(ff) (21 U.S.C. 321(ff)), which defines the term "dietary supplement", and (ii) section 413 (21 U.S.C. 350b), which defines the term "new dietary ingredient" ("NDI") and requires the manufacturer or distributor of an NDI, or of the dietary supplement that contains the NDI, to submit a premarket notification to FDA at least 75 days before introducing/delivering the supplement into interstate commerce, unless the NDI and any other dietary ingredients in the dietary supplement have been present in the food supply without chemical alteration (21 U.S.C. 350b(a)(1)). The NDI notification must contain applicable information, including history of use and citations to published articles, from which the manufacturer or distributor of the NDI or dietary supplement has concluded that the dietary supplement containing the NDI will be reasonably expected to be safe under the conditions of its intended use. NDI notifications are not required for the marketing of approved food additives or GRAS substances as NDIs unless the dietary ingredient has been chemically altered.

### FDA Orphan Drug Designation

The Orphan Drug Act was signed into law on January 4, 1983. The Congressional findings for the Orphan Drug Act were as follows: (i) there are many rare diseases and conditions that affect such small numbers of individuals residing in the United States; (ii) adequate drugs for many rare diseases and conditions have not been developed; (iii) drugs for rare diseases and conditions are commonly referred to as "orphan drugs"; (iv) because so few individuals are affected by any one rare disease or condition, a pharmaceutical company that develops an orphan drug may reasonably expect the drug to generate relatively small sales in comparison to the cost of developing the drug and consequently to incur a financial loss; (v) there is reason to believe that some promising orphan drugs will not be developed unless changes are made in the applicable Federal laws to reduce the costs of developing such drugs and to provide financial incentives to develop such drugs; and (vi) it is in the public interest to provide such changes and incentives for the development of orphan drugs.

Under the Orphan Drug Act, the FDA may grant orphan drug designation to a drug intended to treat a rare disease or condition that (i) affects less than 200,000 persons in the United States, or (ii) affects more than 200,000 in the United States and for which there is no reasonable expectation that the cost of developing and making available in the United States a drug for such disease or condition will be recovered from sales in the United States of such drug. Orphan drug designation must be requested before submitting an NDA. After the FDA grants orphan drug designation, the identity of the drug and its potential orphan use are disclosed publicly by the FDA.

In the United States, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages, and NDA user-fee waivers. In addition, if a drug receives the first FDA approval for the indication for which it has orphan designation, the drug is entitled to orphan drug exclusivity, which means the FDA may not approve any other application, including a full NDA, to market the same drug for the same indication for a period of seven years, except in limited circumstances, such as a showing of clinical superiority over the drug with orphan exclusivity or where the manufacturer with orphan exclusivity is unable to assure sufficient quantities of the approved orphan-designated drug. Competitors, however, may receive approval of different drugs for the indication that the orphan drug has exclusivity or obtain approval for the same drug but for a different indication for which the orphan drug has exclusivity. Orphan drug exclusivity also could block the approval of one of our drugs for seven years if a competitor obtains approval of the same drug as defined by the FDA or if our product candidate is determined to be contained within the competitor's drug for the same indication or disease. If a drug designated as an orphan drug receives marketing approval for an indication broader than what is designated, it may not be entitled to orphan drug exclusivity. In addition, exclusive marketing rights in the United States may be lost if the FDA later determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantities of the drug to meet the needs of patients with the rare disease or condition. There can be no assurance that we will request an orphan drug designation for any current or future product candidate, or if requested, that will receive such orphan drug designation.

# Other Regulations

Pharmaceutical companies are subject to various federal and state laws pertaining to healthcare "fraud and abuse," including anti-kickback and false claims laws. The Anti-Kickback Statute is a federal criminal statute that makes it illegal for any person, including a prescription drug manufacturer, or a party acting on its behalf, to knowingly and willfully solicit, offer, receive or pay any remuneration, directly or indirectly, in exchange for, or to induce, the referral of business, including the purchase, order or prescription of a particular drug, for which payment may be made under federal healthcare programs such as Medicare and Medicaid. Some of the state prohibitions apply to referral of patients for healthcare services reimbursed by any source, not only the Medicare and Medicaid programs.

In the course of practicing medicine, physicians may legally prescribe FDA approved drugs for an indication that has not been approved by the FDA and which, therefore, is not described in the product's approved labeling, so-called "off-label use." The FDA does not ordinarily regulate the behavior of physicians in their choice of treatments. The FDA and other governmental agencies do, however, restrict communications on the subject of off-label use by a manufacturer or those acting on behalf of a manufacturer. Companies may not promote FDA-approved drugs for off-label uses. The FDA and other governmental agencies do permit a manufacturer (and those acting on its behalf) to engage in some limited, non-misleading, non-promotional exchanges of scientific information regarding unapproved indications. The United States False Claims Act prohibits, among other things, anyone from knowingly and willfully presenting, or causing to be presented for payment to third-party payers (including Medicare and Medicaid) claims for reimbursed drugs or services that are false or fraudulent, claims for items or services not provided as claimed or claims for medically unnecessary items or services. Violations of fraud and abuse laws may be punishable by criminal and/or civil sanctions, including imprisonment, fines and civil monetary penalties, as well as possible exclusion from federal health care programs (including Medicare and Medicaid). In addition, under this and other applicable laws, such as the Food, Drug and Cosmetic Act, there is an ability for private individuals to bring similar actions. Further, there is an increasing number of state laws that require manufacturers to make reports to states on pricing and marketing information. Many of these laws contain ambiguities as to what is required to comply with the law.

We are subject to various laws and regulations regarding laboratory practices and the experimental use of animals in connection with our research. In each of these areas, as above, the FDA and other regulatory authorities have broad regulatory and enforcement powers, including the ability to suspend or delay issuance of approvals, seize or recall products, withdraw approvals, enjoin violations and institute criminal prosecution, any one or more of which could have a material adverse effect upon our business, financial condition and results of operations.

We must comply with regulations under the Occupational Safety and Health Act, the Environmental Protection Act, the Toxic Substances Control Act and other federal, state and local regulations. We are subject to federal, state and local laws and regulations governing the use, generation, manufacture, storage, air emission, effluent discharge, handling and disposal of certain hazardous or potentially hazardous materials. We may be required to incur significant costs to comply with environmental and health and safety regulations in the future. Our research and development involves the controlled use of hazardous materials, including, but not limited to, certain hazardous chemicals.

Our activities are also potentially subject to federal and state consumer protection and unfair competition laws. We are also subject

to the United States Foreign Corrupt Practices Act, or the FCPA, which prohibits companies and individuals from engaging in specified activities to obtain or retain business or to influence a person working in an official capacity. Under the FCPA, it is illegal to pay, offer to pay, or authorize the payment of anything of value to any foreign government official, governmental staff members, political party or political candidate in an attempt to obtain or retain business or to otherwise influence a person working in an official capacity. In addition, federal and state laws protect the confidentiality of certain health information, in particular, individually identifiable information, and restrict the use and disclosure of that information. At the federal level, the Department of Health and Human Services promulgated health information privacy and security rules under the Health Insurance Portability and Accountability Act of 1996. In addition, many state laws apply to the use and disclosure of health information.

### Competition

The industry in which we intend to compete is subject to intense competition. We believe that our ability to compete will be dependent in large part upon our ability to continually enhance and improve our products and technologies. In order to do so, we plan to effectively utilize and expand our research and development capabilities. Competition is based primarily on scientific and technological superiority, technical support, availability of patent protection, protection of trade secrets, access to adequate capital, ability to develop, acquire and market products successfully, ability to obtain governmental approvals and ability to serve the particular needs of customers. We intend to compete on the basis of safety, effectiveness, convenience, manufacturing superiority, intellectual property, and where appropriate, price.

Numerous pharmaceutical and biotechnology companies are developing or producing anti-inflammatories. These companies include, but are not limited to: AbbVie, Amgen, Astellas, AstraZeneca, Bayer, Boehringer Ingelheim, Bristol-Myers Squibb, Eisai, Eli Lilly, Gilead, GlaxoSmithKline, Johnson & Johnson, Merck, MT Pharma, Nestle/Pamlab, Novartis, Pfizer, Reata, Roche/Genentech, Sanofi-Aventis, Servier, Takeda, and Vivus.

In addition to competing with other anti-inflammatories in health applications, we compete with microalgal astaxanthin consumer health products on the basis of our global-scale manufacturing capability and product purity. Leading manufacturers of microalgal astaxanthin include Cyanotech, which produces the BioAstin brand; Fuji Health Science (parent company: Fuji Chemical), which produces the AstaREAL brand; and Algatechnologies, which produces the AstaPure brand. Many other companies, including Valensa International (parent company: EID Parry), acquire astaxanthin from these or other smaller manufacturers. We believe that large-scale, multi-fold expansion of naturally produced microalgal astaxanthin would require large amounts of land, and fresh water for open pond systems or large amounts of infrastructure and energy for closed systems, and, consequently, a significant if not overwhelming amount of investment capital. Furthermore, microalgal astaxanthin products, which are lipophilic extracts of a commercially cultivated microalgae, typically have relatively low astaxanthin content, with the majority of the product comprised of other lipophilic, non-astaxanthin microalgal compounds. In contrast, our synthetically manufactured astaxanthin products have very high astaxanthin content, with consistent purity. Higher relative astaxanthin content reduces the size/number of capsules or tablets required to achieve equivalent circulating levels of astaxanthin. We may also face competition from other synthetic astaxanthin consumer health products, although competitors in this space are limited by the substantial cost and technical expertise required to develop large-scale, industrial production of astaxanthin.

Our success will also depend in large part on our ability to obtain and maintain international and domestic patent and other legal protections for the proprietary technology that we consider important to our business. We intend to continue to seek appropriate patent protection for our products where applicable by filing patent applications in the United States and other selected countries. We intend for these patent applications to cover, where applicable, claims for composition of matter, uses, processes for preparation and formulations. Our success will also depend on our ability, and the ability of our current and/or future strategic partners to maintain trade secrets related to proprietary production methods for products that we, or our partners, intend to market.

# **Raw Materials and Components**

We utilize contract manufacturers and/or other third-party suppliers for the production of our products and product candidates. The raw materials and supplies required for the production of our products and product candidates may be available, in some instances from one supplier, and in other instances, from multiple suppliers. In those cases where raw materials are only available through one supplier, such supplier may be either a sole source (the only recognized supply source available to us) or a single source (the only approved supply source for us among other sources). We, our contract manufacturers, and/or other third-party suppliers will adopt appropriate policies to attempt, to the extent feasible, to minimize our raw material supply risks, including maintenance of greater levels of raw materials inventory and implementation of multiple raw materials sourcing strategies, especially for critical raw materials. Although to date we have not experienced any significant delays in obtaining any raw materials from suppliers, we cannot provide assurance that we, our contract manufacturers, and/or other third-party suppliers will not face shortages from one or more of them in the future.

#### **Customers**

We sell ZanthoSyn® primarily through e-commerce and wholesale channels. We launched our e-commerce channel in August 2016 and began selling to GNC stores in Hawaii on January 25, 2017 and GNC corporate stores across the United States on August 10, 2017. We have also sold ZanthoSyn® on a wholesale basis to Health Elite Club Limited, a Hong Kong-based company.

We currently sell ZanthoSyn® to GNC under an exclusive sales contract for the "brick and mortar" retail channel in the United States, which comprises the majority of our revenues, the loss of which would have a material adverse effect on the Company. During the years ended December 31, 2017 and 2016, sales to GNC accounted for 74% and 0% of our revenues, respectively. No other customer accounted for 10% or more of our revenues during these years.

### **Intellectual Property**

We have obtained and are continuing to seek patent protection for compositions of matter, pharmaceutical compositions, and pharmaceutical uses, in certain disease areas, of our various carotenoid analogs and derivatives. Such carotenoids include, but are not limited to, astaxanthin, zeaxanthin, lutein, and/or lycophyll, and esters and other analogs and derivatives of these compounds. More specifically, we seek to protect: (i) the composition of matter of novel carotenoid analogs and derivatives, (ii) pharmaceutical compositions comprising synthetic or natural preparations of novel or natural occurring carotenoid analogs and derivatives, and (iii) the pharmaceutical use of synthetic preparations of novel or naturally occurring carotenoid analogs and derivatives in specific disease areas, including, but not limited to, the treatment of inflammation and related tissue damage, liver disease, and reperfusion injury, as well as the pharmaceutical use of synthetic or natural preparations of novel or natural occurring carotenoid analogs and derivatives for the reduction of platelet aggregation. We intend to enforce and defend our intellectual property rights consistent with our strategic business objectives.

We own 22 issued patents, including 14 in the United States and 8 others in Europe, China, India, Japan, and Hong Kong, related to the technology described above. These patents will expire during the years of 2023 to 2028, subject to any patent term extensions of the individual patent. We have 4 foreign patent applications pending in Europe, Canada, and Brazil, also related to the technology described above. Of these patents and patent applications, 21 patents and 3 patent applications have coverage related to astaxanthin analogs and derivatives; however, our proprietary technologies and business opportunities are not dependent on any single patent or sub-set of patents—the portfolio, which includes coverage related to compositions of matter, pharmaceutical compositions, and pharmaceutical uses, as described above, provides the comprehensive coverage that we deem material to our business.

# **Employees**

As of the date of this prospectus, we have 11 full-time employees and 1 part-time employee. None of our employees are subject to a collective bargaining agreement. We believe the relations with our employees are satisfactory.

# **Properties**

We maintain a facility of approximately 738 square feet at 2800 Woodlawn Drive, Honolulu, Hawaii, which is leased on a month-to-month basis. We believe that our facility is adequate for our current purposes.

### **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.

#### MANAGEMENT

Set forth below is a list of the names, ages and positions of our directors and executive officers.

Name	Age	Position(s)
George W. Bickerstaff, III	62	Chairman of the Board of Directors
David G. Watumull	68	President, Chief Executive Officer, and Director
Terence A. Kelly, Ph.D.	57	Director
Michele Galen	61	Director
John B. Russell	45	Chief Financial Officer and Treasurer
Richard M. Morris	57	Secretary
David M. Watumull	36	Chief Operating Officer, Assistant Treasurer, and Assistant Secretary

### **Biographies of Directors and Executive Officers**

George W. Bickerstaff, III has served as a Director since June 16, 2014. Mr. Bickerstaff is currently a Managing Director of M.M. Dillon & Co. Group LLC, which he joined in 2005. Prior to joining M.M. Dillon & Co. Group LLC, Mr. Bickerstaff held various positions with Novartis International AG, a global pharmaceuticals and consumer health company, including Chief Financial Officer of Novartis Pharma AG from October 2000 to May 2005. From December 1999 to September 2000, Mr. Bickerstaff served as Executive Vice President and Chief Financial Officer of Workscape, Inc. a provider of employee-related information services. From July 1998 to December 1999, Mr. Bickerstaff served as Executive Vice President and Chief Financial Officer of Uniscribe Professional Services, Inc., a nationwide provider of paper and technology-based document management solutions. From January 1998 to June 1998, Mr. Bickerstaff served as Executive Vice President and Chief Financial Officer of Intellisource Group, Inc., a provider of information technology solutions to the federal, state and local government and utility markets. From July 1997 to December 1997, Mr. Bickerstaff served as Vice President of Finance of Cognizant Corporation, a global business information services company. From January 1990 to June 1997, Mr. Bickerstaff served in various senior finance roles, including Chief Financial Officer of IMS Healthcare, a global business information services company in the healthcare and pharmaceutical industries. Prior to that, Mr. Bickerstaff held various finance, audit and engineering positions with the Dun & Bradstreet Corporation and General Electric Company. Mr. Bickerstaff has been a member of the board of directors of CareDx, Inc., a company that develops, markets, and delivers diagnostic surveillance solutions for organ transplant recipients, since April 2014. Mr. Bickerstaff was a member of the board of directors of Vion Pharmaceuticals, Inc., from June 2005 to March 2010. Mr. Bickerstaff's nonprofit activities include serving on the board of directors of the International Vaccine Institute, the International Centre for Missing and Exploited Children, The Center for Disease Dynamics, Economics & Policy and The Global Alliance for Vaccines and Immunization. Mr. Bickerstaff holds a B.S. in Engineering and a B.A. in Business Administration from Rutgers University (1978). Mr. Bickerstaff's experience through various roles in establishing the strategic, operational, and financial direction of numerous private and public companies, including those in the pharmaceutical industry, will be instrumental in enabling our Board to implement our strategic plan.

David G. Watumull has served as our Chief Executive Officer, President, and Director since February 7, 2014. Mr. Watumull has served as the Chief Executive Officer, President, and Director of Pharma since its inception in May 2013. Mr. Watumull also served as the Chief Executive Officer, President, and Director of Holdings from its inception in March 2006 until it merged with us in December 2015. Mr. Watumull is a co-founder of Holdings and has over 20 years of experience as a biotechnology industry executive. From 2001 to 2006, Mr. Watumull served as President, Chief Executive Officer, and Director of Hawaii Biotech, Inc. Mr. Watumull was Executive Vice President of Aquasearch, Inc., a public astaxanthin consumer health company, from 1998 to 2000. From 1997 to 1998 he headed his own biotech research firm, Watumull & Co. From 1994 to 1997 he was a biotech research analyst, money manager, and investment banker at First Honolulu Securities. From 1992 to 1994 he led his own money management firm, Biovest, Inc. Prior to that, from 1982 to 1992, Mr. Watumull worked at Paine Webber in various capacities, including as a biotech money manager and investment executive. Mr. Watumull's extensive background in the biotechnology industry, his operational acumen, and his position of leadership since the founding of our business uniquely qualifies him to serve as a member of our Board.

Terence A. Kelly, Ph.D. has served as a Director since June 16, 2014. Dr. Kelly has over 20 years of experience as a scientist and executive in the pharmaceutical industry starting as a medicinal chemist in 1990. Dr. Kelly is currently the President and Chief Executive Officer of CoMentis, Inc. and a founder of Kelly Pharma Research Consulting, LLC. From 1990 to 2009, Dr. Kelly served in various scientific and executive positions at Boehringer Ingelheim, where after a successful early career developing LFA-1 antagonists, he led its US-based medicinal chemistry department, which included 145 scientists in the high throughput screening, computational chemistry, structural biology, combinatorial chemistry and medicinal chemistry groups. Dr. Kelly holds a B.S. degree in Chemistry at Rensselaer Polytechnic Institute (1982) and a Ph.D. degree in Chemistry at the University of Texas at Austin (1988). He completed postdoctoral work in natural products synthesis at Yale University (1988-1990) and holds an MBA from New York University, Stern School of Business (1998). Dr. Kelly is the co-author of over 25 scientific publications and serves on the College of Natural Sciences Advisory Council for the University of Texas. Dr. Kelly's scientific training and his track record of delivering high quality compounds into advanced clinical studies provide valuable skills and knowledge to our Board.

Michele Galen has served as a Director since January 4, 2017. Ms. Galen serves as a strategic advisor and board member across pharmaceuticals, biotechnology, health start-ups and global health, drawing on her broad experience in global business, communications, law and journalism. From June 2016 to present, Ms. Galen has led an independent consultancy, Michele Galen LLC. From April 2015 to June 2016, Ms. Galen served as Global Head, Communications and Public Affairs, for Shire plc, a biotechnology company, where she served as the lead communications and public affairs advisor on the successful \$32 billion acquisition and integration of Baxalta. From February 2015 to March 2015, Ms. Galen led an independent consultancy, Michele Galen LLC. From May 2014 to January 2015, Ms. Galen served as a senior advisor to Novartis AG. From February 2012 to May 2014, Ms. Galen led Global Communications for Novartis AG, based in Basel, Switzerland. From February 2010 to February 2012, Ms. Galen served as Vice President and Global Head of Communications & Patient Advocacy for Novartis Pharma AG. From October 2003 to February 2010, Ms. Galen served as Vice President and Global Head, Oncology Affairs for Novartis Pharma AG, From February 2001 to October 2003, Ms, Galen served as Vice President, Corporate Communications for Novartis Pharmaceuticals Corporation. Earlier in her career, Ms. Galen was a Managing Director in the global public relations firm Burson-Marsteller. There, she co-founded the Organizational Change Communications practice. She is an award-winning journalist, and worked as Legal Editor and Social Issues Editor at Business Week magazine. Ms. Galen is a member of the New York State Bar and practiced law at Stroock, Stroock & Lavan LLP, and Skadden, Arps, Slate, Meagher & Flom LLP. Ms. Galen currently serves on the inaugural board of directors of Global Oncology, and on the advisory board of MK&A, a global healthcare consultancy firm. Formerly, she served as a pro bono advisor to the UNICEF Office of Public Advocacy, and on the boards of the Global Health Council and Stupid Cancer. Ms. Galen received a B.A. from George Washington University, M.S. from the Columbia University Graduate School of Journalism, and J.D. from New York University School of Law. She also completed the External Executive Coaching Intensive at Columbia University. Ms. Galen's broad pharmaceutical, biotechnology, and healthcare background provide valuable skills and knowledge to our Board.

John B. Russell, CPA, has served as our Chief Financial Officer and Treasurer since February 7, 2014. Mr. Russell has served as the Chief Financial Officer and Treasurer of Pharma since July 2013. Mr. Russell also served as the Chief Financial Officer and Treasurer of Holdings from July 2013 until it merged with us in December 2015. Mr. Russell is the founder of JBR Business Solutions, LLC and has served as its President since 2010. Mr. Russell has over 20 years of accounting, finance, operations, and SEC reporting experience in biopharmaceutical and high-tech industries. From 2010 to the present, he has served as Chief Financial Officer for various privately-held start-up companies. Mr. Russell was in charge of the Business Advisory Services for the Grant Thornton Honolulu office from 2006 to 2010. From 2005 to 2006, Mr. Russell worked at a consulting company as the Operations Consulting - Financial Management lead, advising Cisco Systems, Inc. Mr. Russell was the General Accounting Manager of the publicly traded company Scios Inc. from 2003 to 2005, where he was in charge of SEC reporting and internal controls. Mr. Russell was the Controller for several portfolio companies in the venture capital firm, Raza Foundries, Inc., from 2001 to 2002, and the General Accounting Manager for inSilicon Corporation, a public company, from 2000 to 2001. Previous to that, Mr. Russell was an auditor at PricewaterhouseCoopers LLP from 1995 to 2000. Mr. Russell is a licensed CPA in Hawaii and has a B.A. in Economics/Accounting from Claremont McKenna College.

Richard M. Morris has served as our Secretary since February 7, 2014. Mr. Morris has served as Secretary of Pharma since December 2017 and previously as Assistant Secretary of Pharma from its inception in May 2013 to December 2017. Mr. Morris also served as Assistant Secretary of Holdings from July 2013 until its merger with us in December 2015. Mr. Morris is a Partner at Herrick, Feinstein LLP, our legal counsel ("Herrick"). As a partner of Herrick, Mr. Morris represents a variety of clients, primarily in corporate matters. Prior to becoming a lawyer, Mr. Morris was an auditor with the Commodities Exchange in New York and later focused on operations and financial management at Kidder Peabody. He also was the U.S. Audit Manager for the financial division for a diversified Australian company. Mr. Morris has a B.S. in Accounting from New York University (1982) and a J.D. from Fordham University School of Law (1990), with bar admissions in New York and Connecticut.

**David M. Watumull** has served as our Chief Operating Officer since August 2017 and previously as our Vice President, Operations from February 7, 2014 to August 2017. Mr. Watumull has also served as our Assistant Treasurer and Assistant Secretary since February 7, 2014. Mr. Watumull has served as the Chief Operating Officer of Pharma since December 2017 and previously as Vice President, Operations of Pharma from its inception in May 2013 to December 2017. Mr. Watumull has also served as Assistant Treasurer and Assistant Secretary of Pharma since July 2013 and previously as Secretary and Treasurer of Pharma from May 2013 to July 2013. Mr. Watumull also served as Vice President, Operations, Assistant Treasurer, and Assistant Secretary of Holdings from July 2013 until it merged with us in December 2015, and previously as Director, Operations and Finance from 2009 to 2013, Operations Manager from 2008 to 2009, and Program Manager from its inception in 2006 to 2009. Mr. Watumull oversees all operations with responsibility for sales and marketing, product development and manufacturing, regulatory compliance, finance, and administration. Mr. Watumull was previously Program Manager at Hawaii Biotech, Inc. from 2005 to 2006, Project Coordinator from 2004 to 2005, and Information Technology Associate / Manager from 2002 to 2004. Mr. Watumull also worked at Aquasearch, Inc., from 2000 to 2001 in various capacities including Medical Information Specialist and Information Technology Associate. Mr. Watumull graduated first in his high school class and studied Electrical Engineering at the University of Hawaii.

Executive officers are appointed by our Board of Directors. Each executive officer holds his or her office until he or she resigns, is removed by our Board of Directors or his or her successor is elected and qualified. Directors are elected annually by our stockholders at the annual meeting. Each director holds his or her office until his or her successor is elected and qualified or his or her earlier resignation or removal.

### **Family Relationships**

David G. Watumull is the father of David M. Watumull. There are no other family relationships among any of our officers or directors.

## **Involvement in Certain Legal Proceedings**

To the best of our knowledge, none of our directors or executive officers has been convicted in a criminal proceeding, excluding traffic violations or similar misdemeanors, or has been a party to any judicial or administrative proceeding during the past ten years that resulted in a judgment, decree, or final order enjoining the person from future violations of, or prohibiting activities subject to, federal or state securities laws, or a finding of any violation of federal or state securities laws, except for matters that were dismissed without sanction or settlement. Except as set forth in our discussion below in "Certain Relationships and Related Transactions, and Director Independence – Transactions with Related Persons," none of our directors, director nominees, or executive officers has been involved in any transactions with us or any of our directors, executive officers, affiliates, or associates which are required to be disclosed pursuant to the rules and regulations of the Commission.

# **Code of Ethics**

Our Code of Business Conduct and Ethics, effective as of February 7, 2014 (the "Code of Ethics"), contains the ethical principles by which our Chief Executive Officer and Chief Financial Officer, among others, are expected to conduct themselves when carrying out their duties and responsibilities. A copy of our Code of Ethics may be found on our website at www.cardaxpharma.com. We will provide a copy of our Code of Ethics to any person, without charge, upon request, by writing to David G. Watumull, Cardax, Inc., 2800 Woodlawn Drive, Suite 129, Honolulu, Hawaii 96822.

#### **Board Committees**

We are not required under the Securities and Exchange Act to maintain any committees of our Board of Directors. We have formed certain committees of our board as a matter of preferred corporate practices.

We have an audit committee, a compensation committee and a nominating and corporate governance committee, each of which has the composition and responsibilities described below.

Audit Committee. Our audit committee oversees a broad range of issues surrounding our accounting and financial reporting processes and audits of our consolidated financial statements, including the following:

- monitors the integrity of our financial statements, our compliance with legal and regulatory requirements, our independent registered public accounting firm's qualifications and independence, and the performance of our internal audit function and independent registered public accounting firm;
- assumes direct responsibility for the appointment, compensation, retention and oversight of the work of any independent registered public accounting firm engaged for the purpose of performing any audit, review or attest services and for dealing directly with any such accounting firm;
- provides a medium for consideration of matters relating to any audit issues; and
- prepares the audit committee report that the rules require be included in our filings with the SEC.

The members of our audit committee are George W. Bickerstaff, III (Chairperson) and Terence A. Kelly, Ph.D. Our audit committee has a written charter available on our website at www.cardaxpharma.com.

Compensation Committee. Our compensation committee reviews and recommends policy relating to compensation and benefits of our officers, directors and employees, including reviewing and approving corporate goals and objectives relevant to the compensation of our Chief Executive Officer and other senior officers, evaluating the performance of these persons in light of those goals and objectives and setting compensation of these persons based on such evaluations. The compensation committee reviews and evaluates, at least annually, the performance of the compensation committee and its members, including compliance of the compensation committee with its charter.

The members of our compensation committee are Terence A. Kelly, Ph.D. (Chairperson) and George W. Bickerstaff, III. Our compensation committee has a written charter available on our website at www.cardaxpharma.com.

Nominating and Corporate Governance Committee. The nominating and corporate governance committee oversees and assists our Board of Directors in identifying, reviewing and recommending nominees for election as directors; evaluating our Board of Directors and our management; developing, reviewing and recommending corporate governance guidelines and a corporate code of business conduct and ethics; and generally advises our Board of Directors on corporate governance and related matters.

The members of our nominating and corporate governance committee are Terence A. Kelly, Ph.D. (Chairperson) and George W. Bickerstaff, III. Our nominating and corporate governance committee has a written charter available on our website at www.cardaxpharma.com.

# **Director Independence**

George W. Bickerstaff, III, Terence A. Kelly, Ph.D., and Michele Galen are our independent directors. Because our common stock is not currently listed on a national securities exchange, we have used the definition of "independence" of The NASDAQ Stock Market to make this determination. NASDAQ Listing Rule 5605(a)(2) provides that an "independent director" is a person other than an officer or employee of the Company or any other individual having a relationship that, in the opinion of the Company's Board, would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. The NASDAQ listing rules provide that a director cannot be considered independent if:

- the director is, or at any time during the past three years was, an employee of the Company;
- the director or a family member of the director accepted any compensation from the Company in excess of \$120,000 during any period of 12 consecutive months within the three years preceding the independence determination (subject to certain exclusions, including, among other things, compensation for board or board committee service);
- a family member of the director is, or at any time during the past three years was, an executive officer of the Company;
- the director or a family member of the director is a partner in, controlling stockholder of, or an executive officer of an entity to which the Company made, or from which the Company received, payments in the current or any of the past three fiscal years that exceed 5% of the recipient's consolidated gross revenue for that year or \$200,000, whichever is greater (subject to certain exclusions):
- the director or a family member of the director is employed as an executive officer of an entity where, at any time during the past three years, any of the executive officers of the Company served on the compensation committee of such other entity; or
- the director or a family member of the director is a current partner of the Company's outside auditor, or at any time during the past three years was a partner or employee of the Company's outside auditor, and who worked on the Company's audit.

## Indemnification

We maintain directors' and officers' liability insurance. Our amended and restated certificate of incorporation and amended and restated bylaws include provisions limiting the liability of directors and officers and indemnifying them under certain circumstances. We have entered into indemnification agreements with our directors to provide our directors and certain of their affiliated parties with additional indemnification and related rights. See "Indemnification of Directors and Officers" for further information.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers or persons controlling the Company pursuant to Delaware law, we are informed that in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

### **Conflicts of Interest**

Certain potential conflicts of interest are inherent in the relationships between our officers and directors and us.

From time to time, one or more of our affiliates may form or hold an ownership interest in and/or manage other businesses both related and unrelated to the type of business that we own and operate. These persons expect to continue to form, hold an ownership interest in and/or manage additional other businesses which may compete with our business with respect to operations, including financing and marketing, management time and services and potential customers. These activities may give rise to conflicts between or among the interests of us and other businesses with which our affiliates are associated. Our affiliates are in no way prohibited from undertaking such activities, and neither us nor our stockholders will have any right to require participation in such other activities.

Further, because we intend to transact business with some of our officers, directors and affiliates, as well as with firms in which some of our officers, directors or affiliates have a material interest, potential conflicts may arise between the respective interests of us and these related persons or entities. We believe that such transactions will be effected on terms at least as favorable to us as those available from unrelated third parties.

With respect to transactions involving real or apparent conflicts of interest, we have adopted policies and procedures which require that: (i) the fact of the relationship or interest giving rise to the potential conflict be disclosed or known to the directors who authorize or approve the transaction prior to such authorization or approval; and (ii) the transaction be fair and reasonable to us at the time it is authorized or approved by our directors.

### **EXECUTIVE COMPENSATION**

The following sets forth information with respect to the compensation awarded or paid to David G. Watumull, our Chief Executive Officer, and David M. Watumull, our Chief Operating Officer, for all services rendered in all capacities to the Company and its predecessors during the fiscal years ending December 31, 2016 and 2017. These executive officers are referred to as the "named executive officers" throughout this prospectus. In addition, the following sets forth information with respect to the compensation awarded or paid to our two highest compensated individuals not serving as executive officers, Gilbert M. Rishton, our Chief Science Officer, and Timothy J. King, our Vice President of Research, for all services rendered in all capacities to the Company and its predecessors during the fiscal years ending December 31, 2016 and 2017.

### **Compensation of Executive Officers**

The following table sets forth information regarding each element of compensation that we paid or awarded to our named executive officers, and our two highest compensated individuals not serving as executive officers, for the two fiscal years ended December 31, 2016 and 2017, which includes cash compensation, stock options awarded in lieu of cash compensation, and all other compensation:

				iı	ck Options n Lieu of	All Other	
Name	Year	Cas	h Comp. <sup>(1)</sup>	Cas	sh Comp. <sup>(2)</sup>	Comp.(3)	Total
David G. Watumull	2016	\$	48,682(4)	\$	46,463	\$ 8,935	\$ 104,080
Chief Executive Officer	2017	\$	138,461(4)	\$	-	\$ 10,466	\$ 148,927
David M. Watumull	2016	\$	55,718(6)	\$	33,771	\$ 3,736	\$ 93,225
Chief Operating Officer <sup>(5)</sup>	2017	\$	107,500(6)	\$	· -	\$ 7,350	\$ 114,850
-							
Gilbert M. Rishton	2016	\$	27,003(7)	\$	40,694	\$ 167	\$ 67,864
Chief Science Officer	2017	\$	76,827(7)	\$	-	\$ 525	\$ 77,352
Timothy J. King	2016	\$	45,146(8)	\$	33,771	\$ -	\$ 78,917
Vice President, Research	2017	\$	99,712(8)	\$	-	\$ -	\$ 99,712

- (1) The amounts disclosed refer to cash compensation.
- (2) The amounts disclosed refer to stock options awarded in lieu of cash compensation.
- (3) The amounts disclosed refer to imputed income in connection with certain benefits and/or insurance premiums paid in lieu of additional cash compensation.
- (4) On March 28, 2016, Mr. David G. Watumull was furloughed and agreed to continue service as Chief Executive Officer for cash compensation equal to the minimum wage. On September 6, 2016, the compensation arrangement of Mr. David G. Watumull was amended so that, effective September 8, 2016, he would receive bi-weekly compensation equal to \$4,327. On August 31, 2017, the compensation arrangement of Mr. David G. Watumull was amended so that, effective September 1, 2017, he would receive bi-weekly compensation equal to \$7,212.
- (5) On August 31, 2017, Mr. David M. Watumull was promoted to Chief Operating Officer.
- (6) On March 28, 2016, Mr. David M. Watumull was furloughed and agreed to continue service as Vice President, Operations for cash compensation equal to the minimum wage. On June 3, 2016, the compensation arrangement of David M. Watumull was amended so that, effective May 30, 2016, he would receive bi-weekly compensation equal to \$3,269. On August 31, 2017, the compensation arrangement of Mr. David M. Watumull was amended so that, effective September 1, 2017, he would receive bi-weekly compensation equal to \$5,769.
- (7) On March 28, 2016, Mr. Rishton was furloughed and would from time to time be re-engaged to the extent his services are required at cash compensation equal to the hourly minimum wage. On September 6, 2016, the compensation arrangement of Mr. Rishton was amended so that, effective September 8, 2016, he would receive bi-weekly compensation equal to \$1,923. On August 31, 2017, the compensation arrangement of Mr. Rishton was amended so that, effective September 1, 2017, he would receive bi-weekly compensation equal to \$4,904.
- (8) On March 28, 2016, Mr. King was furloughed and would from time to time be re-engaged to the extent his services were required at cash compensation equal to the hourly minimum wage. On June 3, 2016, the compensation arrangement of Mr. King was amended so that, effective May 30, 2016, he would receive bi-weekly compensation equal to \$1,635. On September 6, 2016, the compensation arrangement of Mr. King was amended so that, effective September 8, 2016, he would receive bi-weekly compensation equal to \$3,269. On August 31, 2017, the compensation arrangement of Mr. King was amended so that, effective September 1, 2017, he would receive bi-weekly compensation equal to \$4,904.

# Outstanding Equity Awards to Executive Officers at Fiscal Year-End 2017

The following table sets forth information regarding outstanding option awards to our named executive officers as of December 31, 2017:

		Option awar	ds <sup>(1)(2)</sup>			
Name	Number of securities underlying unexercised options exercisable	Number of securities underlying unexercised options unexercisable	Equity incentive plan awards: Number of securities underlying unexercised options		Option exercise price (\$)	Option expiration date
David G. Watumull	1,750,588	-	орнонз	_	\$ 0.155	February 7, 2024
David G. Watumull	4,941,845	-		-	\$ 0.625	February 7, 2024
David G. Watumull	468,498(3)	-		-	\$ 0.32	June 30, 2020
David G. Watumull	390,686(3)	-		-	\$ 0.20	June 30, 2020
David G. Watumull	89,523(3)	-		-	\$ 0.49	September 30, 2020
David G. Watumull	137,675(3)	-		-	\$ 0.27	December 31, 2020
David G. Watumull	774,385(3)	-		-	\$ 0.06	March 31, 2021
David M. Watumull	45,058	-		-	\$ 0.155	February 7, 2024
David M. Watumull	2,388,554	-		-	\$ 0.625	February 7, 2024
David M. Watumull	160,806(3)	-		-	\$ 0.32	June 30, 2020
David M. Watumull	284,917(3)	-		-	\$ 0.20	June 30, 2020
David M. Watumull	67,639(3)	-		-	\$ 0.49	September 30, 2020
David M. Watumull	104,021(3)	-		-	\$ 0.27	December 31, 2020
David M. Watumull	562,846(3)	-		-	\$ 0.06	March 31, 2021

<sup>(1)</sup> The type of securities underlying all outstanding option awards is our common stock.

<sup>(2)</sup> None of our named executive officers have received stock awards.

<sup>(3)</sup> Stock options awarded in lieu of cash compensation.

### **Compensation of Directors**

The following table sets forth information regarding each element of compensation that we paid or awarded to our current independent directors for the fiscal year ended December 31, 2017:

Name	Year	Cash Com	ıp.	Equit	y Awards	Total
George W. Bickerstaff, III	2017	\$	_	\$	58,333(1)	\$ 58,333
Terence A. Kelly, Ph.D.	2017	\$	-	\$	58,333(2)	\$ 58,333
Michele Galen	2017	\$	-	\$	58,333(3)	\$ 58,333

- (1) The amount disclosed represents compensation recognized in 2017 for equity awarded in connection with services provided by Mr. Bickerstaff as an independent director. On August 31, 2017, the compensation arrangement of Mr. Bickerstaff was amended so that effective September 1, 2017, he would receive quarterly equity compensation of \$18,750 in arrears in the form of a grant of shares of our common stock or non-qualified stock options to purchase shares of our common stock based on the higher of the then current market price or \$0.15 per share.
- (2) The amount disclosed represents compensation recognized in 2017 for equity awarded in connection with services provided by Dr. Kelly as an independent director. On August 31, 2017, the compensation arrangement of Dr. Kelly was amended so that effective September 1, 2017, he would receive quarterly equity compensation of \$18,750 in arrears in the form of a grant of shares of our common stock or non-qualified stock options to purchase shares of our common stock based on the higher of the then current market price or \$0.15 per share.
- (3) The amount disclosed represents compensation recognized in 2017 for equity awarded in connection with services provided by Ms. Galen as an independent director. Ms. Galen was elected to the Board of Directors on January 4, 2017 with quarterly equity compensation of \$12,500 in arrears in the form of a grant of shares of our common stock or non-qualified stock options to purchase shares of our common stock based on the higher of the then current market price or \$0.15 per share. On August 31, 2017, the compensation arrangement of Ms. Galen was amended so that effective September 1, 2017, she would receive quarterly equity compensation of \$12,500 in arrears in the form of a grant of shares of our common stock or non-qualified stock options to purchase shares of our common stock based on the higher of the then current market price or \$0.15 per share.

## Outstanding Equity Awards to Directors at Fiscal Year-End 2017

The following table sets forth information regarding outstanding equity awards to our independent directors as of December 31, 2017:

	Stock awards <sup>(1)</sup>		Option awa	ards <sup>(2)</sup>		
	Number of securities	Number of securities underlying unexercised options	Number of securities underlying unexercised options	Equity incentive plan awards: Number of securities underlying unexercised unearned	Option xercise price	Option
Name	awarded	exercisable	unexercisable	<u>options</u>	(\$)	expiration date
George W. Bickerstaff, III	1,213,725	-	-	-	\$ -	-
Terence A. Kelly, Ph.D.	567,866	-	-	-	\$ -	-
Terence A. Kelly, Ph.D.	-	416,667	-	-	\$ 0.06	March 31, 2021
Terence A. Kelly, Ph.D.	-	27,778	-	-	\$ 0.15	September 30, 2021
Terence A. Kelly, Ph.D.	-	83,333	-	-	\$ 0.15	December 31, 2021
Terence A. Kelly, Ph.D.	-	78,125	-	-	\$ 0.185	March 31, 2022
Terence A. Kelly, Ph.D.	-	83,333	-	-	\$ 0.20	June 30, 2022
Michele Galen	318,161	_	-	-	\$ _	-

- (1) All shares are fully vested.
- (2) The type of securities underlying all outstanding option awards is our common stock.

### **Employment and Consulting Agreements**

**Executive Officer Compensation** 

On February 7, 2014, we entered into employment agreements with each of Messrs. David G. Watumull, David M. Watumull, Gilbert M. Rishton, and Timothy J. King, which provided for employment for an initial term of one year, subject to renewal and earlier termination rights as provided in such agreements. These agreements provide for compensation terms and duration of employment as set forth in each such agreement. Such agreements include restrictive covenants concerning competition with us and solicitation of our employees and clients, if such individuals are terminated for cause as defined in such agreements.

- To conserve cash resources while seeking additional financing, we and our employees, including Messrs. David G. Watumull, David M. Watumull, Gilbert M. Rishton, and Timothy J. King, agreed to reduce cash compensation effective January 15, 2015.
- On June 30, 2015, the compensation arrangements of Messrs. David G. Watumull, David M. Watumull, Gilbert M. Rishton, and Timothy J. King were amended so that, effective after June 30, 2015, we had the right to pay any compensation due to such officer during any calendar quarter that was not paid in cash in the form of shares of our common stock or incentive stock options under the 2014 Plan. In addition, the amount of the unpaid cash compensation that accrued during the first and second quarters of 2015 was paid with incentive stock options under the 2014 Plan.
- On March 28, 2016, we furloughed all of our employees and independent contractors indefinitely and arranged with our Chief Executive Officer, David G. Watumull; our Chief Financial Officer, John B. Russell; and our Vice President, Operations, David M. Watumull, to continue their services for cash compensation equal to the minimum wage. In addition, each of the directors agreed, effective April 1, 2016, to suspend any additional equity compensation, until otherwise agreed by the Company.
- On June 3, 2016, the compensation arrangement of David M. Watumull was amended so that, effective May 30, 2016, he would receive bi-weekly compensation equal to \$3,269 and the compensation arrangement of Timothy J. King was amended so that, effective May 30, 2016, he would receive bi-weekly compensation equal to \$1,635.

- On September 6, 2016, the compensation arrangements of certain officers were amended so that effective September 8, 2016, (i) David G. Watumull would receive bi-weekly compensation equal to \$4,327, (ii) Gilbert M. Rishton would receive bi-weekly compensation equal to \$1,923, and (iii) Timothy J. King would receive bi-weekly compensation equal to \$3,269.
- On August 31, 2017, the compensation arrangements of certain officers were amended so that effective September 1, 2017, (i) David G. Watumull would receive bi-weekly compensation equal to \$7,212, (ii) David M. Watumull would receive bi-weekly compensation equal to \$5,769, (iii) Gilbert M. Rishton would receive bi-weekly compensation equal to \$4,904, and (iv) Timothy J. King would receive bi-weekly compensation equal to \$4,904.

On July 30, 2013, we entered into a service agreement with JBR Business Solutions, LLC, under which John B. Russell agreed to serve as our Chief Financial Officer, and under which Mr. Russell would be paid an aggregate of \$7,000 a month. Mr. Russell is the Managing Partner of JBR Business Solutions, LLC. To conserve cash resources while seeking additional financing, we and Mr. Russell, agreed to reduce cash compensation effective January 15, 2015. On June 30, 2015, the compensation arrangement was amended so that, effective after June 30, 2015, we had the right to pay up to 50% of any compensation due during any calendar quarter that was not paid in cash in the form of shares of our common stock or non-qualified stock options under the 2014 Plan. On March 28, 2016, Mr. Russell was furloughed and agreed to continue service as Chief Financial Officer for cash compensation equal to the minimum wage. On September 6, 2016, the compensation arrangement was amended so that effective September 30, 2016, he would receive monthly compensation of \$3,500. On August 31, 2017, the compensation arrangement was amended so that effective September 1, 2017, Mr. Russell would receive monthly compensation of \$5,250.

### Director Compensation

On June 30, 2015, we entered into an agreement with George W. Bickerstaff, III and Terence A. Kelly, Ph.D. that provided for the annual compensation of each independent director equal to \$100,000, payable quarterly in arrears in the form of a grant of shares of our common stock or non-qualified stock options to purchase shares of our common stock under the 2014 Plan.

Effective April 1, 2016, the independent directors of the Company agreed to suspend any additional equity compensation, until otherwise agreed by the Company

On September 6, 2016, the compensation arrangements of the independent directors of the Company were amended so that effective September 30, 2016, they would each receive quarterly equity compensation of \$12,500 in arrears in the form of a grant of shares of our common stock or non-qualified stock options to purchase shares of our common stock under the 2014 Plan based on the higher of the then current market price or \$0.15 per share, with such compensation prorated for one of three months for the quarter ended September 30, 2016.

On January 4, 2017, our Board of Directors elected Michele Galen to serve as an independent director until our next annual meeting of stockholders with quarterly equity compensation of \$12,500 in arrears in the form of a grant of shares of our common stock or non-qualified stock options to purchase shares of our common stock under the 2014 Plan based on the higher of the then current market price or \$0.15 per share.

On August 31, 2017, the compensation arrangements of the independent directors of the Company were amended so that effective September 1, 2017, they would each receive quarterly equity compensation of \$18,750 in arrears in the form of a grant of shares of our common stock or non-qualified stock options to purchase shares of our common stock under the 2014 Plan based on the higher of the then current market price or \$0.15 per share.

### 2014 Equity Compensation Plan

Our 2014 Plan is administered by our compensation committee. The purpose of the 2014 Plan is to provide financial incentives for selected directors, employees, advisors, and consultants of Cardax and/or its subsidiaries, thereby promoting the long-term growth and financial success of the Company. The issuance of awards under the 2014 Plan is at the discretion of our compensation committee, which has the authority to determine the persons to whom any awards shall be granted and the terms, conditions and restrictions applicable to any award. Under the 2014 Plan, we may grant equity-based incentive awards, including options, restricted stock, and other stock-based awards, to any directors, employees, advisors, and consultants that provide services to us or any of our subsidiaries. An aggregate of 45,420,148 shares of our common stock have been reserved for issuance under the 2014 Plan, which is subject to adjustment as described in such plan. As of May 1, 2018, there are 3,189,727 shares of common stock available for future awards under the 2014 Plan.

### SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information regarding the ownership of our common stock as of May 1, 2018 for:

- each director;
- each person known by us to own beneficially 5% or more of our common stock;
- each officer named in the summary compensation table elsewhere in this prospectus; and
- all directors and executive officers as a group.

The amounts and percentages of our common stock beneficially owned are reported on the basis of regulations of the SEC governing the determination of beneficial ownership of securities. Under the rules of the SEC, a person is deemed to be a "beneficial owner" of a security if that person has or shares "voting power," which includes the power to vote or to direct the voting of such security, or "investment power," which includes the power to dispose of or to direct the disposition of such security. A person is also deemed to be a beneficial owner of any securities of which that person has the right to acquire beneficial ownership within 60 days. Under these rules more than one person may be deemed a beneficial owner of the same securities and a person may be deemed to be a beneficial owner of securities as to which such person has no economic interest.

For purposes of the table below, we have assumed that 150,642,406 shares of our common stock will be outstanding upon closing of the Exchange Offer, based upon the following:

- (i) 122,936,624 shares of our common stock outstanding as of May 1, 2018; and
- (ii) 27,705,782 Exchange Shares issuable upon the tender of all Original Warrants under the Exchange Offer based on the Original Warrants outstanding as of May 1, 2018.

Unless otherwise indicated below, to the best of our knowledge each beneficial owner named in the table has sole voting and sole investment power with respect to all shares beneficially owned, subject to community property laws where applicable.

	·	Common Stock Beneficially Owned Prior to the Exchange Offer				
Name	Number of Shares	% <sup>(1)</sup>	Number of Shares	%		
Directors and Executive Officers						
George W. Bickerstaff, III <sup>(2)</sup>	2,283,169(3)	1.9%	2,283,169	1.5%		
Terence A. Kelly, Ph.D. (4)	1,303,398(5)	1.1%	1,303,398	0.9%		
Michele Galen <sup>(6)</sup>	387,605(7)	0.3%	387,605	0.3%		
David G. Watumull <sup>(8)</sup>	10,412,364(9)	7.9%	10,412,364	6.5%		
David M. Watumull <sup>(10)</sup>	3,613,841(11)	2.9%	3,613,841	2.3%		
John B. Russell <sup>(12)</sup>	331,997(13)	0.3%	331,997	0.2%		
All directors and executive officers as a						
group (6 persons)	18,332,374	13.4%	18,332,374	11.1%		
Beneficial Owner of 5% or more						
Eric J. Pearson and Lianne L. Pearson <sup>(14)</sup>	41,157,458(15)	28.7%	41,157,458	24.0%		
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- (1) Based on 122,936,624 shares of common stock issued and outstanding as of May 1, 2018.
- (2) The address of Mr. George W. Bickerstaff, III is c/o Cardax, Inc., 2800 Woodlawn Drive, Honolulu, Hawaii 96822. Mr. Bickerstaff is the current Chairman of our Board of Directors.
- (3) Represents 2,283,169 shares of common stock.
- (4) The address of Dr. Terence A. Kelly is c/o Cardax, Inc., 2800 Woodlawn Drive, Honolulu, Hawaii 96822. Dr. Kelly is a member of our Board of Directors.
- (5) Represents (a) 614,162 shares of common stock, (b) 416,667 shares of common stock issuable upon exercise by Dr. Kelly of options that are presently exercisable, at an exercise price of \$0.06 per share, (c) 111,111 shares of common stock issuable upon exercise by Dr. Kelly of options that are presently exercisable, at an exercise price of \$0.15 per share, (d) 78,125 shares of common stock issuable upon exercise by Dr. Kelly of options that are presently exercisable, at an exercise price of \$0.185 per share, and (e) 83,333 shares of common stock issuable upon exercise by Dr. Kelly of options that are presently exercisable, at an exercise price of \$0.20 per share.
- (6) The address of Ms. Michele Galen is c/o Cardax, Inc., 2800 Woodlawn Drive, Honolulu, Hawaii 96822. Ms. Galen is a member of our Board of Directors.
- (7) Represents 387,605 shares of common stock.
- (8) The address of Mr. David G. Watumull is c/o Cardax, Inc., 2800 Woodlawn Drive, Honolulu, Hawaii 96822. Mr. David G. Watumull is our President, CEO, and a member of our Board of Directors.
- (9) Represents (a) 1,750,588 shares of common stock issuable upon exercise by Mr. David G. Watumull of options that are presently exercisable, at an exercise price of \$0.155 per share, (b) 4,941,845 shares of common stock issuable upon exercise by Mr. David G. Watumull of options that are presently exercisable, at an exercise price of \$0.625 per share, (c) 468,498 shares of common stock issuable upon exercise by Mr. David G. Watumull of options that are presently exercisable, at an exercise price of \$0.32 per share, (d) 390,686 shares of common stock issuable upon exercise by Mr. David G. Watumull of options that are presently exercisable, at an exercise price of \$0.20 per share, (e) 89,523 shares of common stock issuable upon exercise by Mr. David G. Watumull of options that are presently exercisable, at an exercise price of \$0.49 per share, (f) 137,675 shares of common stock issuable upon exercise by Mr. David G. Watumull of options that are presently exercisable, at an exercise price of \$0.27 per share, (g) 774,385 shares of common stock issuable upon exercise by Mr. David G. Watumull of options that are presently exercisable, at an exercise price of \$0.06 per share, (h) 408,172 shares of common stock issued in the Holdings Merger, which Mr. Watumull may be deemed to beneficially own as the Trustee of the David G. Watumull Revocable Living Trust, (i) 50,992 shares of common stock issuable upon exercise of a certain warrant issued in the Holdings Merger at an exercise price of \$0.981 per share, which Mr. Watumull may be deemed to beneficially own as the Trustee of the David G. Watumull Revocable Living Trust, (j) 350,000 shares of common stock issued in the 2016/2017 Unit Offering, which Mr. Watumull may be deemed to beneficially own as the Trustee of the David G. Watumull Revocable Living Trust, (k) 350,000 shares of common stock issuable upon exercise of a certain warrant issued in the 2016/2017 Unit Offering at an exercise price of \$0.08 per share, which Mr. Watumull may be deemed to beneficially own as the Trustee of the David G. Watumull Revocable Living Trust, (1) 350,000 shares of common stock issuable upon exercise of a certain warrant issued in the 2016/2017 Unit Offering at an exercise price of \$0.12 per share, which Mr. Watumull may be deemed to beneficially own as the Trustee of the David G. Watumull Revocable Living Trust, and (m) 350,000 shares of common stock issuable upon exercise of a certain warrant issued in the 2016/2017 Unit Offering at an exercise price of \$0.16 per share, which Mr. Watumull may be deemed to beneficially own as the Trustee of the David G. Watumull Revocable Living Trust.
- (10) The address of Mr. David M. Watumull is c/o Cardax, Inc., 2800 Woodlawn Drive, Honolulu, Hawaii 96822. Mr. David M. Watumull is our Chief Operating Officer.

- (11) Represents (a) 45,058 shares of common stock issuable upon exercise by Mr. David M. Watumull of options that are presently exercisable, at an exercise price of \$0.155 per share, (b) 2,388,554 shares of common stock issuable upon exercise by Mr. David M. Watumull of options that are presently exercisable, at an exercise price of \$0.625 per share, (c) 160,806 shares of common stock issuable upon exercise by Mr. David M. Watumull of options that are presently exercisable, at an exercise price of \$0.32 per share, (d) 284,917 shares of common stock issuable upon exercise by Mr. David M. Watumull of options that are presently exercisable, at an exercise price of \$0.20 per share, (e) 67,639 shares of common stock issuable upon exercise by Mr. David M. Watumull of options that are presently exercisable, at an exercise price of \$0.49 per share, (f) 104,021 shares of common stock issuable upon exercise by Mr. David M. Watumull of options that are presently exercisable, at an exercise price of \$0.27 per share, and (g) 562,846 shares of common stock issuable upon exercise by Mr. David M. Watumull of options that are presently exercisable, at an exercise price of \$0.06 per share.
- (12) The address of Mr. John B. Russell is c/o Cardax, Inc., 2800 Woodlawn Drive, Honolulu, Hawaii 96822. Mr. Russell is our Chief Financial Officer.
- (13) Represents (a) 59,835 shares of common stock issuable upon exercise of options that are presently exercisable, at an exercise price of \$0.32 per share, which Mr. Russell may be deemed to beneficially own as the Managing Partner of JBR Business Solutions, LLC, (b) 62,424 shares of common stock issuable upon exercise of options that are presently exercisable, at an exercise price of \$0.20 per share, which Mr. Russell may be deemed to beneficially own as the Managing Partner of JBR Business Solutions, LLC, (c) 18,956 shares of common stock issuable upon exercise of options that are presently exercisable, at an exercise price of \$0.49 per share, which Mr. Russell may be deemed to beneficially own as the Managing Partner of JBR Business Solutions, LLC, (d) 24,988 shares of common stock issuable upon exercise of options that are presently exercisable, at an exercise price of \$0.27 per share, which Mr. Russell may be deemed to beneficially own as the Managing Partner of JBR Business Solutions, LLC, and (e) 165,794 shares of common stock issuable upon exercise of options that are presently exercisable, at an exercise price of \$0.06 per share, which Mr. Russell may be deemed to beneficially own as the Managing Partner of JBR Business Solutions, LLC.
- (14) The address of Dr. Eric J. Pearson and Mrs. Lianne L. Pearson is 814 Mokulua Drive, Kailua, Hawaii 96734.
- (15) Represents (a) 208,333 shares of common stock issued in the 2017 Unit Offering, (b) 7,796,961 shares of common stock issued in the 2017 Unit Offering, which the Pearson's may be deemed to beneficially own as the beneficiaries of the Eric J Pearson DVM 401(k) Profit Sharing Plan FBO Eric J Pearson and Lianne Pearson, (c) 968,993 shares of common stock issued in the 2017 Unit Offering, which the Pearson's may be deemed to beneficially own as the beneficiaries of the Sunwest Trust FBO Lianne L. Pearson Roth IRA, (d) 1,234,262 shares of common stock issued in the 2017 Unit Offering, which the Pearson's may be deemed to beneficially own as the beneficiaries of the Sunwest Trust FBO Eric J. Pearson Roth IRA, (e) 400,000 shares of common stock issued in the 2017 Unit Offering, which the Pearson's may be deemed to beneficially own as the beneficiaries of the Sunwest Trust FBO Eric J. Pearson Roth IRA, (f) 9,903,584 shares of common stock issued in the 2017 Unit Offering, which the Pearson's may be deemed to beneficially own as the beneficiaries of the Eric J Pearson DVM 401(k) Profit Sharing Plan FBO Eric J Pearson and Lianne Pearson, (g) 66,596 shares of common stock issued in the 2017(2) Unit Offering, which the Pearson's may be deemed to beneficially own as the beneficiaries of the Sunwest Trust as Custodian for Lianne Pearson Roth IRA, (h) 208,333 shares of common stock issuable upon exercise of a certain warrant issued in the 2017 Unit Offering at an exercise price of \$0.12 per share, (i) 7,796,961 shares of common stock issuable upon exercise of a certain warrant issued in the 2017 Unit Offering at an exercise price of \$0.12 per share, which the Pearson's may be deemed to beneficially own as the beneficiaries of the Eric J Pearson DVM 401(k) Profit Sharing Plan FBO Eric J Pearson and Lianne Pearson, (j) 968,993 shares of common stock issuable upon exercise of a certain warrant issued in the 2017 Unit Offering at an exercise price of \$0.12 per share, which the Pearson's may be deemed to beneficially own as the beneficiaries of the Sunwest Trust FBO Lianne L. Pearson Roth IRA, (k) 1,234,262 shares of common stock issuable upon exercise of a certain warrant issued in the 2017 Unit Offering at an exercise price of \$0.12 per share, which the Pearson's may be deemed to beneficially own as the beneficiaries of the Sunwest Trust FBO Eric J. Pearson Roth IRA, (1) 400,000 shares of common stock issuable upon exercise of a certain warrant issued in the 2017 Unit Offering at an exercise price of \$0.12 per share, which the Pearson's may be deemed to beneficially own as the beneficiaries of the Sunwest Trust FBO Eric J. Pearson Roth IRA, (m) 9,903,584 shares of common stock issuable upon exercise of a certain warrant issued in the 2017 Unit Offering at an exercise price of \$0.12 per share, which the Pearson's may be deemed to beneficially own as the beneficiaries of the Eric J Pearson DVM 401(k) Profit Sharing Plan FBO Eric J Pearson and Lianne Pearson, and (n) 66,596 shares of common stock issuable upon exercise of a certain warrant issued in the 2017(2) Unit Offering at an exercise price of \$0.30 per share, which the Pearson's may be deemed to beneficially own as the beneficiaries of the Sunwest Trust as Custodian for Lianne Pearson Roth IRA.

## CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

On October 16, 2017, the Company engaged M.M. Dillon & Co., to serve as the Financial Advisor for the Company in connection with this Exchange Offer, and related transactions. George W. Bickerstaff, III, a director of the Company, is currently a Managing Director of M.M. Dillon & Co., and as such, abstained from voting on the engagement of M.M. Dillon & Co.

On May 2, 2018, the terms of M.M. Dillon & Co.'s engagement were modified, and such modifications were approved by our Board (with Mr. Bickerstaff abstaining) on April 30, 2018.

As the Financial Advisor in connection with this Exchange Offer, M.M. Dillon & Co. shall be paid a cash fee of 3.5% of the gross proceeds from the Exchange Offer and a 5-year common stock purchase warrant with a fair market value equal to 3.5% of the gross proceeds from the Exchange Offer.

Other than compensation arrangements with directors and executive officers, which are described under "Executive Compensation — Employment and Consulting Agreements", and except as described above, we have no other related-party transactions that are subject to disclosure.

### GENERAL TERMS OF EXCHANGE OFFER

### Purpose of the Exchange Offer

We are making the Exchange Offer primarily to raise capital from holders of Original Warrants. We believe that by allowing holders of Original Warrants to exchange the Original Warrants for Exchange Shares, the Company can raise additional capital for general corporate purposes in an efficient and cost-effective manner.

You should read the discussion under the heading "Description of Securities" for more information about the Exchange Shares.

### **Terms of the Exchange Offer**

Upon the terms and subject to the conditions described in this prospectus and in the Letter of Transmittal, we are offering to issue Exchange Shares to the holders of outstanding Original Warrants who validly tender their Original Warrants on or prior to the Expiration Date. All outstanding Original Warrants that are not tendered prior to the Expiration Date or, for any valid reason, not accepted by us, will continue to be outstanding according to their terms unmodified.

As of May 1, 2018, there are outstanding 27,705,782 Original Warrants subject to the Exchange Offer. This prospectus and the Letter of Transmittal are being sent to all registered holders of the outstanding Original Warrants. There will be no fixed record date for determining registered holders of the outstanding Original Warrants entitled to participate in the Exchange Offer.

The Exchange Agent will act as agent for the tendering holders of the Original Warrants for the purposes of receiving the Original Warrants and the completed, signed, and dated Letter of Transmittal and other required documents. The Exchange Payment should be sent directly to us. We will issue the Exchange Shares on a continuous basis during the Exchange Period.

We intend to conduct the Exchange Offer in accordance with the applicable requirements of the Securities Act and the Exchange Act, and the rules and regulations promulgated by the SEC thereunder.

### **Expiration Time**

The Exchange Offer will expire on the Expiration Date, which is at 5:00 p.m., New York City time, on the date that is 20 business days after the effective date of this Registration Statement unless extended by us at our sole discretion.

### **Extensions, Termination, or Amendment**

Subject to applicable law, we expressly reserve the right, at any time or at various times, and regardless of whether any events preventing satisfaction of the conditions to the Exchange Offer, to extend the period of time during which the Exchange Offer is open by giving oral (to be confirmed in writing) or written notice of such extension to the Exchange Agent and by making public disclosure by press release or other appropriate means of such extension to the extent required by law.

During any extension of the Exchange Offer, all Original Warrants previously tendered and not accepted by us will remain subject to the Exchange Offer and may, subject to the terms and conditions of the Exchange Offer, be accepted by us, and all Original Warrants previously tendered and accepted by us pursuant to the Exchange Offer will remain effective. In addition, we may waive conditions without extending the Exchange Offer in accordance with applicable law.

If any of the conditions described below under "Conditions to the Exchange Offer" have not been satisfied with respect to the Exchange Offer, we reserve the right, at our sole discretion:

- to extend the Exchange Offer,
- to delay accepting any Original Warrants tendered pursuant to the Exchange Offer,
- to terminate the Exchange Offer, or
- to otherwise amend the Exchange Offer in any respect in compliance with applicable securities laws and stock exchange rules.

#### Announcements

Any extension, termination, or amendment of the Exchange Offer will be followed as promptly as practicable by announcement thereof, such announcement in the case of an extension to be issued no later than 9:00 a.m., New York City time, on the next business day following the previously scheduled Expiration Date. Without limiting the manner in which we may choose to make such announcement, we will not, unless otherwise required by law, have any obligation to publish, advertise, or otherwise communicate any such announcement other than by making a release to an appropriate news agency or another means of announcement that we deem appropriate.

### Acceptance of Tendered Original Warrants Pursuant to the Exchange Offer

If the conditions to the Exchange Offer are satisfied, or if we waive all of the conditions that have not been satisfied, we will accept, during the Exchange Period, and after we receive completed and duly executed Letters of Transmittal with respect to any and all of the Original Warrants tendered at such time and the Exchange Payment, the tendered Original Warrants by notifying the Exchange Agent of our acceptance. The notice may be oral if we promptly confirm it in writing.

We expressly reserve the right, in our sole discretion, to delay acceptance of the Original Warrants tendered pursuant to the Exchange Offer, or to terminate the Exchange Offer and not accept the Original Warrants tendered pursuant to the Exchange Offer, (1) if any of the conditions to the Exchange Offer shall not have been satisfied or validly waived by us, or (2) in order to comply in whole or in part with any applicable law.

In all cases, the Exchange Shares will be issued only after timely receipt by the Exchange Agent of the Original Warrants, the properly completed and duly executed Letter of Transmittal (or a facsimile thereof), and any other documents required by the Letter of Transmittal, and timely receipt by the Company of the Exchange Payment.

For purposes of the Exchange Offer, we will have accepted the Original Warrants tendered pursuant to the Exchange Offer, if, as and when we give oral or written notice to the Exchange Agent of our acceptance of such Original Warrants pursuant to the Exchange Offer.

If, for any reason whatsoever, acceptance of any Original Warrants tendered or the issuance of the Exchange Shares is delayed or we extend the Exchange Offer or are unable to accept the tender of the Original Warrants pursuant to the Exchange Offer, then, without prejudice to our rights set forth herein, we may instruct the Exchange Agent to retain the Original Warrants tendered.

We will have the right, which may be waived, to reject the defective tender of Original Warrants pursuant to the Exchange Offer as invalid and ineffective. If we waive our rights to reject a defective tender, subject to the other terms and conditions set forth in the Exchange Offer and the Letter of Transmittal, you will be entitled to the Exchange Shares.

# **Procedures for Participating in the Exchange Offer**

## General

In order to participate in the Exchange Offer, you must tender your Original Warrants as described below. It is your responsibility to tender your Original Warrants. We have the right to waive any defects. However, we are not required to waive defects and are not required to notify you of defects in your tender.

If you have any questions or need help in tendering your Original Warrants pursuant to the Exchange Offer, please contact the Solicitation Agent whose address and telephone number are listed in this prospectus. See "Solicitation Agent."

The method of tendering the Original Warrants and delivering the Letters of Transmittal and other required documents is at your election and risk. If delivery is by mail, we recommend that registered mail, properly insured, with return receipt requested, be used. In all cases, sufficient time should be allowed to assure timely delivery. No Original Warrants, Letters of Transmittal, or other required documents should be sent to the Company.

### Proper Participation in the Exchange

All Original Warrants are currently in certificated form. For a holder of Original Warrants to tender their Original Warrants pursuant to the Exchange Offer, (1) the Original Warrants and a properly completed and duly executed Letter of Transmittal (or a facsimile thereof), together with any signature guarantees and any other documents required by the Instructions to the Letter of Transmittal, must be received by the Exchange Agent in accordance with the instructions specified in the Letter of Transmittal and at the address or facsimile number set forth in this prospectus and (2) the Exchange Payment must be received by the Company in accordance with the instructions specified in the Letter of Transmittal and at the address or pursuant to the wire instructions set forth in this prospectus prior to the Expiration Date.

In all cases, the issuance of the Exchange Shares pursuant to the Exchange Offer will be made during the Exchange Period only after timely receipt by the Company of the Exchange Payment and timely receipt by the Exchange Agent of:

- the Original Warrants;
- the Letter of Transmittal (or a facsimile thereof) properly completed and duly executed; and
- any required signature guarantees and other documents required by the Letter of Transmittal.

### Procedures for Tendering Original Warrants Held Through a Custodian

If you are a beneficial owner of Original Warrants, but the holder of such Original Warrants is a custodial entity such as a bank, broker, dealer, trust company, or other nominee, and you seek to tender your Original Warrants pursuant to the Exchange Offer, you must provide appropriate instructions to such holder of the Original Warrants. Beneficial owners may be instructed to complete and deliver an instruction letter to such holder of Original Warrants for this purpose. We urge you to contact such person that holds Original Warrants for you if you wish to tender your Original Warrants pursuant to the Exchange Offer.

### Signature Guarantees

Signatures on all Letters of Transmittal must be guaranteed by a recognized participant in the Securities Transfer Agents Medallion Program, *if and only if* Original Warrants are registered in the name of a person other than the signer of the Letter of Transmittal, or the Exchange Shares are to be issued in the name of a person other than the holder of the Original Warrant, or the Exchange Shares are being issued through Deposit/Withdrawal At Custodian or "DWAC", or as otherwise required by the Exchange Agent.

## Determination of Validity of Tender

All questions as to the validity, form, eligibility (including time of receipt) and acceptance of any tendered Original Warrants pursuant to this Exchange Offer and any of the procedures described above, and the form and validity of all documents will be determined by us in our sole discretion, which determination will be final and binding, subject to the rights of our Original Warrant holders to challenge such determination in a court of competent jurisdiction. We reserve the absolute right to reject any or all tenders of Original Warrants determined by us not to be in proper form, or if the acceptance of or tender of Original Warrants may, in the opinion of our counsel, be unlawful. We also reserve the right to waive any conditions to the Exchange Offer that we are legally permitted to waive.

Your tender of Original Warrants pursuant to the Exchange Offer will not be deemed to have been made until all defects or irregularities in your tender have been cured or waived. Neither we, the Exchange Agent, nor any other person or entity is under any duty to give notification of any defects or irregularities in any tender or withdrawal of any tender pursuant to the Exchange Offer, or will incur any liability for failure to give any such notification.

### Return of Original Warrants

If we do not accept any Original Warrants in the Exchange Offer for any reason described in the terms and conditions of the Exchange Offer or if a greater number of Original Warrants are tendered than the holder of the Original Warrants desires to tender and exchange in the Exchange Offer, we will return such Original Warrants without expense to the holder. These actions will occur as promptly as practicable after the expiration or termination of the Exchange Offer.

### Your Representations to Us

By signing or agreeing to be bound by the Letter of Transmittal and other required documents, you will represent to us that, among other things:

- any Exchange Shares or that you receive will be acquired in the ordinary course of your business or for your own personal investment;
- you have no arrangement or understanding with any person to participate in the distribution of the Exchange Shares;
- you are not our "affiliate," as defined in Rule 405 under the Securities Act;
- if you are not a broker-dealer, you are not engaged in and do not intend to engage in the distribution of the Exchange Shares; and
- if you are a broker-dealer, that you will receive Exchange Shares for your own account in exchange for the tender of the Original Warrants that were acquired as a result of market-making activities or other trading activities and that you will deliver a prospectus in connection with any resale of such Exchange Shares.

#### Resales

Each broker-dealer that receives Exchange Shares for its own account in exchange for the tender of Original Warrants, where such Original Warrants were acquired by such broker-dealer as a result of any trading activities must acknowledge that it will deliver a prospectus in connection with any resale of such Exchange Shares. See "Solicitation Agents."

### Conditions to the Exchange Offer

Notwithstanding any other provisions of the Exchange Offer, we will not be required to accept the tendered Original Warrants pursuant to the Exchange Offer or to issue the Exchange Shares pursuant to the Exchange Offer, and may terminate, amend or extend the Exchange Offer or delay issuing the Exchange Shares, if any of the following shall occur or exist or have not been satisfied, or have not been waived by us, prior to the Expiration Date:

- no action or event shall have occurred, no action shall have been taken, and no statute, rule, regulation, judgment, order, stay, decree, or injunction shall have been promulgated, enacted, entered or enforced applicable to the Exchange Offer or the exchange of Original Warrants for Exchange Shares under the Exchange Offer by or before any court or governmental regulatory or administrative agency, authority, or tribunal of competent jurisdiction, including, without limitation, taxing authorities, that challenges the making of the Offer or the exchange of Original Warrants for Exchange Shares under the Exchange Offer or would reasonably be expected to, directly or indirectly, prohibit, prevent, restrict or delay consummation of, or would reasonably be expected to otherwise adversely affect in any material manner, the Exchange Offer or the exchange of Original Warrants for Exchange Shares under the Exchange Offer;
  - there shall not have occurred:
    - o any general suspension of or limitation on trading in securities on OTCQB, whether or not mandatory,
    - o a declaration of a banking moratorium or any suspension of payments in respect of banks by federal or state authorities in the United States, whether or not mandatory,
    - o a commencement of a war, armed hostilities, a terrorist act, or other national or international calamity directly or indirectly relating to the United States, or
    - o in the case of any of the foregoing existing at the time of the commencement of the Offer, a material acceleration or worsening thereof; and
  - effectiveness with the SEC of our registration statement on Form S-4.

These conditions are for our benefit and may be asserted by us or may be waived by us, including any action or inaction by us giving rise to any condition, in whole or in part, at any time and from time to time at or prior to the Expiration Date, in our reasonable discretion. We may additionally terminate the Exchange Offer if any condition is not satisfied on or prior to the Expiration Date. If any of these events occur, subject to the termination rights described above, we may (i) return any tendered Original Warrants to you, (ii) extend the Exchange Offer and retain all tendered Original Warrants until the expiration of the extended Exchange Offer, or (iii) amend the Exchange Offer in any respect by giving oral or written notice of such amendment to the Exchange Agent and making public disclosure of such amendment to the extent required by law. Notwithstanding the foregoing, in no event may we terminate, amend or extend the Exchange Offer or delay issuing the Exchange Shares if the occurrence, existence, or nonsatisfaction of any of the foregoing resulted from our action or failure to act.

We have not made a decision as to what circumstances would lead us to waive any condition, and any such waiver would depend on circumstances prevailing at the time of such waiver. Although we have no present plans or arrangements to do so, we reserve the right to amend, at any time, the terms of the Exchange Offer. We will give holders of Original Warrants notice of such amendments as may be required by applicable law.

## **Transfer of Original Warrants**

The Original Warrants provide that they may be transferred under their terms in compliance with state and federal securities laws.

The holder may sell the Original Warrant only pursuant to either: (i) the registration requirements of the Securities Act, including any applicable prospectus delivery requirements, in compliance with the plan of distribution set forth in the applicable registration statement; or (ii) an exemption therefrom, including Rule 144 under the Securities Act.

In general, under Rule 144, a holder may transfer securities, subject to certain holding requirements and subject to the availability of current public information about the Company. The holders of the Original Warrants currently satisfy the holding period requirements, and the Company currently satisfies the public information requirements. As such, Company has arranged for an opinion of counsel to be delivered to the stock record agent to holders seeking to transfer the Original Warrants, subject to compliance with all applicable federal and state securities laws and other applicable law.

Upon receipt by the Company of satisfactory evidence of the ownership of and the loss, theft, destruction, or mutilation of any Original Warrant, and (i) in the case of loss, theft, or destruction, upon receipt by the Company of indemnity satisfactory to it, or (ii) in the case of mutilation, upon receipt of such Original Warrant and upon surrender and cancellation of such Original Warrant, the Company may execute and deliver in lieu thereof a new warrant representing the right to purchase an equal number of shares of common stock.

The description of the Original Warrants is qualified in its entirety by reference to the forms of such warrants filed as exhibits to the registration statement of which this prospectus forms a part.

### Fees and Expenses

We will bear the expenses of soliciting the tender of the Original Warrants pursuant to the Exchange Offer. The principal solicitation is being made by email and mail; however, we may make additional solicitation by facsimile, telephone, or in person by our officers and regular employees and those of our affiliates.

We have retained a financial advisor and a solicitation agent in connection with the Exchange Offer, who will be paid fees in connection with this Exchange Offer. We will also pay the Exchange Agent reasonable and customary fees for their services and reimburse them for their related reasonable out-of-pocket expenses. We may also pay brokerage houses and other custodians, nominees, and fiduciaries the reasonable out-of-pocket expenses incurred by them in forwarding copies of this prospectus, Letter of Transmittal, and related documents to the beneficial owners of the Original Warrants and in handling or forwarding Original Warrants tendered pursuant to the Exchange Offer.

We will pay cash expenses to be incurred in connection with the Exchange Offer. They include:

- SEC registration fees for the Exchange Shares,
- Financial Advisor and Solicitation Agent fees,
- fees and expenses of the Exchange Agent,
- · accounting, advisory, and legal fees,
- printing costs, and
- related fees and expenses.

If your Original Warrants are held or the Exchange Shares will be held through a broker or other nominee on your behalf, your broker or other nominee may charge you a commission in connection with the Exchange Offer.

### **Transfer Taxes**

If you tender your Original Warrants pursuant to the Exchange Offer, you will not be required to pay any transfer taxes. We will pay all transfer taxes, if any, applicable to the tender of Original Warrants in the Exchange Offer. The tendering holder will, however, be required to pay any transfer taxes, whether imposed on the registered holder or any other person, if:

- certificates representing the Exchange Shares issued in exchange for the Original Warrants are to be delivered to, or are to be issued in the name of, any person other than the registered holder of the Original Warrants tendered,
- tendered Original Warrants are registered in the name of any person other than the person signing the Letter of Transmittal, or
- a transfer tax is imposed for any reason other than the issuance of Exchange Shares in exchange for the tender of Original Warrants in the Exchange Offer.

If satisfactory evidence of payment of any transfer taxes payable by an exercising holder is not submitted with the Letter of Transmittal, the amount of the transfer taxes will be billed directly to that exercising holder. The Exchange Agent will retain possession of the Exchange Shares with a value equal to the amount of the transfer taxes due until it receives payment of the taxes.

## **Consequences of Failure to Tender**

If you currently hold Original Warrants and do not tender them in connection with the Exchange Offer, then, following the expiration of the Exchange Offer, your Original Warrants will continue to be outstanding according to their terms unmodified. The Original Warrants will continue to be exercisable per their terms.

#### Other

Participation in the Exchange Offer is voluntary, and you should carefully consider whether to accept. You are urged to consult your financial, legal, and tax advisors in making your decision on what action to take.

In the future, we may at our discretion seek to acquire untendered Original Warrants in open market or privately negotiated transactions, through subsequent exchange offers or otherwise. We have no present plan to acquire any Original Warrants that do not participate in the Exchange Offer.

#### **Solicitation Agent**

We have appointed CIM Securities as the Solicitation Agent for the Exchange Offer. You should direct questions, requests for assistance, and requests for additional copies of the prospectus and the Letter of Transmittal that may accompany this prospectus to the Solicitation Agent as follows:

CIM Securities, LLC Attn: Andrew Daniels, Managing Director

> 509 Madison Avenue, 9th Floor New York, NY 10022

> > 646-603-6717

Andrew.Daniels@brooklinecm.com

## **Exchange Agent**

We have appointed VStock Transfer, LLC as the Exchange Agent for the Exchange Offer. The Original Warrants, Letter of Transmittal, and all other documents required to participate in the Exchange Offer should be directed to the Exchange Agent as follows:

VStock Transfer, LLC

18 Lafayette Place Woodmere, NY 11598

855-9VSTOCK

info@vstocktransfer.com

The Exchange Payment should be sent directly to the Company pursuant to the instructions on the Letter of Transmittal.

Delivery to an address other than set forth above will not constitute a valid delivery

#### DESCRIPTION OF SECURITIES

## **Authorized Capital Stock**

Our authorized share capital consists of 400,000,000 shares of common stock, par value \$0.001 per share, and 50,000,000 shares of preferred stock, par value \$0.001 per share.

#### Common Stock

As of May 1, 2018, 122,936,624 shares of our common stock were outstanding. The outstanding shares of common stock are validly issued, fully paid and non-assessable.

Holders of common stock are entitled to one vote for each share on all matters submitted to a stockholder vote. Holders of common stock do not have cumulative voting rights. Therefore, holders of a majority of the shares of common stock voting for the election of directors can elect all of the directors. Holders of common stock representing a majority of the voting power of the Company's capital stock issued, outstanding and entitled to vote, represented in person or by proxy, are necessary to constitute a quorum at any meeting of stockholders. A vote by the holders of a majority of the Company's outstanding shares is required to effectuate certain fundamental corporate changes such as liquidation, merger, or an amendment to the Company's certificate of incorporation.

Holders of common stock are entitled to share in all dividends that our Board of Directors, in its discretion, declares from legally available funds. In the event of a liquidation, dissolution or winding up, each outstanding share entitles its holder to participate pro rata in all assets that remain after payment of liabilities and after providing for each class of stock, if any, having preference over the common stock. The common stock has no pre-emptive, subscription or conversion rights and there are no redemption provisions applicable to the common stock.

## Preferred Stock

As of the date of this prospectus, there were no shares of our preferred stock issued and outstanding.

Our authorized preferred stock is "blank check" preferred. Accordingly, subject to limitations prescribed by law, our Board is expressly authorized, at its discretion, to adopt resolutions to issue shares of preferred stock of any class or series, to fix the number of shares of any class or series of preferred stock and to change the number of shares constituting any series and to provide for or change the voting powers, designations, preferences and relative, participating, optional or other special rights, qualifications, limitations or restrictions thereof, including dividend rights (including whether the dividends are cumulative), dividend rates, terms of redemption (including sinking fund provisions), redemption prices, conversion rights and liquidation preferences of the shares constituting any series of the preferred stock, in each case without any further action or vote by our stockholders.

## **Options**

We adopted our 2014 Plan, pursuant to which we may grant options or other equity incentive awards to employees or other persons on terms and conditions determined by our Board of Directors or our compensation committee. The options or other equity awards that may be granted under this plan may qualify as incentive stock options under the Internal Revenue Code of 1986, as amended. The number of shares of our common stock reserved for issuance upon the exercise or exchange of such options or other equity incentive awards accounted for 13% of our capitalization as of May 1, 2018, determined on a fully diluted basis.

As of the date of this prospectus, we have outstanding options to purchase an aggregate of 38,596,761 shares of our common stock under our 2014 Plan adopted and approved by the Board and our stockholders as follows:

- Options to purchase an aggregate of 19,148,909 shares of our common stock at an exercise price equal to \$0.625 per share, exercisable through February 7, 2024. Fifty percent of these options became immediately exercisable as of February 7, 2014, and the remaining 50% vested ratably on a monthly basis through February 7, 2015.
- Options to purchase an aggregate of 684,984 shares of our common stock at an exercise price equal to \$0.155 per share, exercisable through May 15, 2020. These options became immediately exercisable on February 7, 2014.
- Options to purchase an aggregate of 4,274,606 shares of our common stock at an exercise price equal to \$0.155 per share, exercisable through February 7, 2024. These options became immediately exercisable on February 7, 2014.
- Options to purchase an aggregate of 1,979,246 shares of our common stock at an exercise price equal to \$0.32 per share, exercisable through June 30, 2020. These options became immediately exercisable on June 30, 2015.
- Options to purchase an aggregate of 2,672,830 shares of our common stock at an exercise price equal to \$0.20 per share, exercisable through June 30, 2020. These options became immediately exercisable on June 30, 2015.
- Options to purchase an aggregate of 713,653 shares of our common stock at an exercise price equal to \$0.49 per share, exercisable through September 30, 2020. These options became immediately exercisable on September 30, 2015.
- Options to purchase an aggregate of 1,091,161 shares of our common stock at an exercise price equal to \$0.27 per share, exercisable through December 31, 2020. These options became immediately exercisable on December 31, 2015.
- Options to purchase an aggregate of 5,175,469 shares of our common stock at an exercise price equal to \$0.06 per share, exercisable through March 31, 2021. These options became immediately exercisable on March 31, 2016.
- An option to purchase an aggregate of 100,000 shares of our common stock at an exercise price equal to \$0.07 per share, exercisable through July 11, 2021. One quarter (1/4) of the shares vested on the last day of each calendar quarter following July 11, 2016.
- An option to purchase an aggregate of 27,778 shares of our common stock at an exercise price equal to \$0.15 per share, exercisable through September 30, 2021. This option became immediately exercisable on September 30, 2016.
- An option to purchase an aggregate of 83,333 shares of our common stock at an exercise price equal to \$0.15 per share, exercisable through December 31, 2021. This option became immediately exercisable on December 31, 2016.
- An option to purchase an aggregate of 78,125 shares of our common stock at an exercise price equal to \$0.185 per share, exercisable through March 31, 2022. This option became immediately exercisable on March 31, 2017.
- An option to purchase an aggregate of 83,333 shares of our common stock at an exercise price equal to \$0.20 per share, exercisable through June 30, 2022. This option became immediately exercisable on June 30, 2017.
- An option to purchase an aggregate of 400,000 shares of our common stock at an exercise price equal to \$0.50 per share, exercisable through September 25, 2027. One-fourth (1/4) of the shares vest on September 25, 2018 and one forty-eighth (1/48) of the shares vest on the last day of each full month thereafter.

- An option to purchase an aggregate of 50,000 shares of our common stock at an exercise price equal to \$0.47 per share, exercisable through September 25, 2027. This option became immediately exercisable on January 31, 2018.
- An option to purchase an aggregate of 1,000,000 shares of our common stock at an exercise price equal to \$0.44 per share, exercisable through November 1, 2027. One-fourth (1/4) of the shares vest on November 1, 2018 and one forty-eighth (1/48) of the shares vest on the last day of each full month thereafter.
- An option to purchase an aggregate of 100,000 shares of our common stock at an exercise price equal to \$0.37 per share, exercisable through November 27, 2027. One-fourth (1/4) of the shares vest on November 27, 2018 and one forty-eighth (1/48) of the shares vest on the last day of each full month thereafter.
- An option to purchase an aggregate of 100,000 shares of our common stock at an exercise price equal to \$0.34 per share, exercisable through December 13, 2027. One-fourth (1/4) of the shares vest on December 13, 2018 and one forty-eighth (1/48) of the shares vest on the last day of each full month thereafter.
- An option to purchase an aggregate of 500,000 shares of our common stock at an exercise price equal to \$0.16 per share, exercisable through January 1, 2028. One-fourth (1/4) of the shares vest on January 1, 2019 and one forty-eighth (1/48) of the shares vest on the last day of each full month thereafter.
- Options to purchase an aggregate of 333,334 shares of our common stock at an exercise price equal to \$0.16 per share, exercisable through January 1, 2023. One-twelfth (1/12) of the shares vest on the last day of each month thereafter.

#### Warrants

As of the date of this prospectus, we have outstanding warrants to purchase an aggregate of 127,434,122 shares of our common stock as follows:

- Warrants to purchase 27,705,782 shares of our common stock at an exercise price of \$0.625 per share, subject to certain specified adjustments for changes or reclassifications to our common stock. Each warrant may be exercised at any time, in whole or in part, on any business day that is on or prior to February 7, 2019. Warrants for the purchase of up to 3,660,445 shares of our common stock may be exercised on a cashless exercise basis, in accordance with the terms set forth in such warrants. A "cashless exercise" means that in lieu of paying the aggregate purchase price for the shares being purchased upon exercise of the warrants in cash, the holder will forfeit a number of shares underlying the warrants with a "fair market value" equal to such aggregate exercise price.
- A warrant to purchase 300,000 shares of our common stock at an exercise price of \$0.50 per share until February 7, 2019.
- A warrant to purchase 30,000 shares of our common stock at an exercise price of \$0.40 per share until November 10, 2019.
- A warrant to purchase 50,000 shares of our common stock at an exercise price of \$0.30 per share until March 31, 2020.
- Warrants to purchase 12,041,450 shares of our common stock at an exercise price of \$0.10 per share until March 31, 2020.
- Warrants to purchase 4,515,554 shares of our common stock at an exercise price of \$0.1667 per share until March 31, 2020.
- A warrant to purchase 149,000 shares of our common stock at an exercise price of \$0.30 per share until December 31, 2020.

- A warrant to purchase 111,750 shares of our common stock at an exercise price of \$0.1667 per share until December 31, 2020.
- Warrants to purchase 15,750,000 shares of our common stock at an exercise price of \$0.08 per share until various dates in 2021 and 2022
- Warrants to purchase 16,250,000 shares of our common stock at an exercise price of \$0.12 per share until various dates in 2021 and 2022.
- Warrants to purchase 16,250,000 shares of our common stock at an exercise price of \$0.16 per share until various dates in 2021 and 2022.

Warrants to purchase 31,453,788 shares of our common stock at an exercise price of \$0.12 per share until various dates in 2022.

Warrants to purchase 416,595 shares of our common stock at an exercise price of \$0.30 per share until various dates in 2022.

- Warrants to purchase 101,984 shares of our common stock at an exercise price of \$0.981 per share until various dates in 2018.
- Warrants to purchase 295,747 shares of our common stock at an exercise price of \$0.981 per share until various dates in 2019.
- Warrants to purchase 159,058 shares of our common stock at an exercise price of \$0.981 per share until various dates in 2020.
- Warrants to purchase 177,164 shares of our common stock at an exercise price of \$0.25 per share until December 31, 2019.
- A warrant to purchase 558,750 shares of our common stock at an exercise price of \$0.08 per share until May 3, 2022.
- A warrant to purchase 558,750 shares of our common stock at an exercise price of \$0.12 per share until May 3, 2022.
- A warrant to purchase 558,750 shares of our common stock at an exercise price of \$0.16 per share until May 3, 2022.

The above description of warrants is qualified in its entirety by reference to the forms of such warrants filed as exhibits to the registration statement of which this prospectus forms a part.

## **Other Convertible Securities**

Other than as described above, we do not have outstanding any options, warrants or other securities that are convertible into, or exchangeable for, shares of our common stock.

### **Registration Rights**

Between 2015 and 2017, we sold approximately \$7 million of subscriptions in securities under separate subscription agreements (each, a "<u>Subscription Agreement</u>"), by and between the Company and investors, pursuant to which we issued and sold to the investors units, consisting of shares of our common stock and warrants to purchase shares of our common stock ("<u>Units</u>"). Under the terms of the Subscription Agreements, the Company agreed to register such Units. We expect to fulfill our obligations under these registration rights promptly after the closing of this offering.

On July 13, 2016, we entered into an Equity Purchase Agreement with Southridge. Pursuant to the Equity Purchase Agreement, Southridge shall commit to purchase up to \$5 million of our common stock over the course of twenty-four (24) months commencing on February 9, 2017, the effective date of our registration statement pursuant to the registration rights agreement. The price that we may specify in any exercise of a Put Right will be determined by calculating a 12% discount to the lowest closing bid price—subject to a predesignated floor—during a ten trading day period following delivery of a notice of the exercise of our Put Right to Southridge.

#### **Anti-Takeover Provisions**

Amended and Restated Certificate of Incorporation and Bylaws

Our Amended and Restated Bylaws provides that our stockholders do not have cumulative voting rights, and thus stockholders holding a majority of the voting power of our shares of common stock outstanding will be able to elect all of our directors. The authorized number of directors may be changed only by resolution of our board of directors, and vacancies and newly created directorships on our board of directors may, except as otherwise required by law or determined by our board, only be filled by a majority vote of the directors then serving on our board of directors, even though less than a quorum (except, that (i) stockholders removing any director may at the same meeting fill the vacancy and (ii) if the directors fail to fill any such vacancy, the stockholders may at any special meeting called for that purpose fill such vacancy.). A special meeting of stockholders may be called only by our board of directors, the Chairman of the Board of Directors, or by the Chief Executive Officer. Our amended and restated bylaws also provide that stockholders seeking to present proposals before a meeting of stockholders to nominate candidates for election as directors at a meeting of stockholders must provide timely advance notice in writing, and specify requirements as to the form and content of a stockholder's notice.

The foregoing provisions make it more difficult for our existing stockholders to replace our board of directors as well as for another party to obtain control of our company by replacing our board of directors. Since our board of directors has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management. In addition, the authorization of undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change the control of our company. These provisions are intended to enhance the likelihood of continued stability in the composition of our board of directors and its policies and to discourage certain types of transactions that may involve an actual or threatened acquisition of our company. These provisions are also designed to reduce our vulnerability to an unsolicited acquisition proposal and to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and may have the effect of deterring hostile takeovers or delaying changes in control of our company or our management. As a consequence, these provisions also may inhibit fluctuations in the market price of our stock that could result from actual or rumored takeover attempts.

In addition, our authorized but unissued common shares could be used by our Board of Directors for defensive purposes against a hostile takeover attempt, including (by way of example) the private placement of shares or the granting of options to purchase shares to persons or entities sympathetic to, or contractually bound to support, management. We have no such present arrangement or understanding with any person. Further, our common stock may be reserved for issuance upon exercise of stock purchase rights designed to deter hostile takeovers, commonly known as a "poison pill."

Section 203 of the Delaware General Corporation Law

We are subject to Section 203 of the Delaware General Corporation Law, or Section 203, which prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years after the date that such stockholder became an interested stockholder, with the following exceptions:

- before such date, our board of directors approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon closing of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least eighty-five percent (85%) of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned by: (i) persons who are directors and also officers; and (ii) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or after such date, the business combination is approved by our board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 defines business combination to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of ten percent (10%) or more of the assets of the corporation involving the interested stockholder:
- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loss, advances, guarantees, pledges or other financial benefits by or through the corporation.

In general, Section 203 defines an "interested stockholder" as an entity or person who, together with the person's affiliates and associates, beneficially owns, or within three years prior to the time of determination of interested stockholder status did own, fifteen percent (15%) or more of the outstanding voting stock of the corporation.

## Limitation on Liability and Indemnification Matters

See the section of this prospectus entitled "Management — Indemnification".

## Listing

Our common stock is traded on the OTCQB under the trading symbol "CDXI".

## **Exchange Agent**

Our independent exchange agent is VStock Transfer, LLC. VStock Transfer's address is 18 Lafayette Place, Woodmere, NY 11598.

#### CERTAIN UNITED STATED FEDERAL INCOME TAX CONSIDERATIONS

#### Material U.S. Federal Income Tax Consequences

#### General

The following description summarizes the material U.S. federal income tax consequences of the exchange of Original Warrants and Exchange Payment for Exchange Shares (the "Exchange") and the ownership and disposition of the Exchange Shares. This description assumes that holders hold the Original Warrants, and will hold the Exchange Shares received upon exchange of the Original Warrants, as capital assets (generally, property held for investment). This description does not address all of the tax consequences that might be relevant to a holder's particular circumstances or to holders that may be subject to special tax rules, such as banks or other financial institutions, insurance companies, real estate investment trusts, regulated investment companies, tax exempt organizations, dealers in securities, traders in securities that elect to use a mark-to-market method of accounting for their securities holdings, persons who hold Exchange Shares or Original Warrants as part of a "straddle," hedging transaction, conversion transaction, or other similar integrated transaction for U.S. federal income tax purposes, or U.S. holders (as defined below) that have a functional currency other than the U.S. dollar.

If a partnership (or any other entity treated as a partnership for U.S. federal income tax purposes) holds Exchange Shares or Original Warrants, the tax treatment of the partnership and a partner in such partnership generally will depend on the status of the partner and the nature of the activities of the partnership. A holder that is a partnership, and the partners in such partnerships, should consult its tax advisors regarding the tax consequences of the Exchange, and the ownership and disposition of Exchange Shares received in the exchange.

This description does not address the tax consequences arising under the laws of any foreign, state, or local tax jurisdiction. Moreover, except to the extent specifically set forth below, this description does not address the U.S. federal estate and gift tax, or alternative minimum tax, or other non-income tax consequences of the ownership and disposition of Exchange Shares received upon exchange of the Original Warrants.

This description is based on the United States Internal Revenue Code of 1986, as amended (the "<u>Code</u>"), existing and proposed Treasury Regulations promulgated thereunder, judicial decisions, published positions of the U.S. Internal Revenue Service (the "<u>IRS</u>"), and other applicable authorities, each as in effect on the date hereof. These authorities are subject to change, possibly with retroactive effect, or differing interpretations by the IRS or a court, which could affect the tax consequences described herein. We have not obtained, and have no plans to request, a ruling from the IRS with respect to any of the U.S. federal income tax consequences described below, and as a result, there can be no assurance that the IRS or the courts will agree with any of the conclusions stated in this description.

This description is for general information only and is not tax advice. It is not intended to constitute a complete description of all tax consequences for holders relating to the Exchange or relating to the ownership and disposition of the Exchange Shares. You are urged to consult with your tax advisor regarding the U.S. federal income tax consequences of the Exchange and of the ownership and disposition of Exchange Shares, applicable in your particular situation, as well as any consequences under the federal estate or gift tax, the federal alternative minimum tax, or under the tax laws of any state, local, foreign, or other taxing jurisdiction.

## Tax Consequences to U.S. Holders

Subject to the limitations stated above, the following description addresses certain material U.S. federal income tax consequences of the Exchange and of the ownership and disposition of the Exchange Shares, that are expected to apply if you are a U.S. holder of the Original Warrants or Exchange Shares. For this purpose, you are a "U.S. holder" if you are:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity taxable as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States or any State thereof, including the District of Columbia;

- an estate the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust (i) if a court within the United States is able to exercise primary supervision over the administration of the trust and one or more United States persons (as defined in Section 7701(a)(30) of the Code) have the authority to control all substantial decisions of the trust, or (ii) that has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person.

The Exchange Offer

The United States federal income tax consequences of the Exchange are not free from doubt. However, the Company believes that it is appropriate to treat the Exchange, for United States federal income tax purposes, as a "recapitalization" within the meaning of Section 368(a)(1)(E) of the Code. If the Exchange does qualify as a recapitalization, it is expected that (i) you will not recognize any gain or loss on the Exchange, (ii) your aggregate tax basis in the Exchange Shares received in the Exchange will equal the sum of (x) your aggregate tax basis in your Original Warrants surrendered in the Exchange and (y) the Exchange Payment made in connection with the Exchange, and (iii) your holding period for the Exchange Shares received in the Exchange will include your holding period for the surrendered Original Warrants. Special tax basis and holding period rules apply to holders that acquired different blocks of Original Warrants at different prices or at different times. You should consult your tax advisor as to the applicability of these special rules to your particular circumstances.

The foregoing tax discussion is based on current tax law, regulations and interpretive rulings as they exist at this time. The IRS has not made a determination, nor has the Company received any opinion of counsel, on the U.S. federal income tax consequences of the Exchange Offer or of a holder's participation in the Exchange Offer, and there is no published guidance directly on point. Because of the lack of authority dealing with transactions similar to the Exchange Offer, the U.S. federal income tax consequences of the Exchange Offer are unclear, and alternative characterizations are possible that could require you to immediately recognize income, gain or loss, or may impact your holding period.

For example, the IRS could re-characterize the Exchange, for U.S. federal income tax purposes, as an exchange of each Original Warrant for a new warrant providing the holder with a right to purchase an Exchange Share at an exercise price of \$0.15 (a "New Warrant"), qualifying as a recapitalization within the meaning of Section 368(a)(1)(E) of the Code, followed by an immediate exercise of a New Warrant for an Exchange Share. In such case, upon exercise of a New Warrant for an Exchange Share, a holder generally will not recognize gain or loss and will instead be treated as acquiring an Exchange Share as a result of such exercise. The holder will have an adjusted tax basis in the Exchange Share so acquired equal to the sum of such holder's adjusted tax basis in the New Warrant immediately prior to such exercise, plus the exercise price deemed paid by such holder for the Exchange Share in connection with a deemed exercise of such New Warrant. Under this alternative characterization of the Exchange, the holding period for the Exchange Shares will generally commence on the date after the date of the Exchange.

In light of the uncertainty and discussion above, we urge you to consult your tax advisor regarding the potential tax consequences of the Exchange Offer to you in your particular circumstances, including the consequences of possible alternative characterizations.

Ownership and Disposition of Exchange Shares

Dividends. Distributions of cash or property, if any, that we pay on the Exchange Shares will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits (as determined under U.S. federal income tax principles) and will be includible in your gross income as ordinary dividend income when actually or constructively received by you. Distributions in excess of our current and accumulated earnings and profits will be treated first as a tax-free return of capital to the extent of your tax basis in the Exchange Shares, and thereafter will be treated as capital gain from the sale or exchange of the Exchange Shares. If you are a non-corporate U.S. holder, dividends you receive with respect to the Exchange Shares are eligible for U.S. federal income taxation at the rates generally applicable to long-term capital gains for individuals, provided that you satisfy applicable holding period and other requirements.

In general, corporate holders of Exchange Shares will be entitled to a deduction (sometimes referred to as a "dividends received deduction") equal to 70% of distributions which are treated as dividends on Exchange Shares. However, these holders will not be entitled to this deduction with respect to amounts treated as a return of capital or capital gain. In addition, the benefit of this deduction may be reduced by the corporate alternative minimum tax. Furthermore, the dividends received deduction is subject to various limitations which, among other things, require a certain holding period and restrict the availability of the deduction if the underlying stock on which the dividend is paid is "debt financed." Corporate holders should consult their tax advisors as to their eligibility for this deduction.

Sale or Exchange. Upon a sale or other taxable disposition of the Exchange Shares, you generally will recognize capital gain or loss equal to the difference between (i) the amount of cash and the fair market value of any property you receive on the disposition and (ii) your adjusted tax basis for the Exchange Shares. The capital gain or loss will be long-term capital gain or loss if you held the Exchange Shares for more than one year. The deductibility of capital losses is subject to limitations.

In certain circumstances, a redemption of Exchange Shares may be treated as a distribution (and not a sale as discussed immediately above). A redemption of Exchange Shares will be treated as a sale if all of the holder's interest in the Company is redeemed or certain other tests are met which generally involve a sufficient reduction in the holder's interest (including deemed interest under certain constructive ownership rules) in the Company. If the transaction is treated as a sale, then the tax treatment of the holder will follow that which is described above with respect to the sale other taxable disposition of Exchange Shares. Alternatively, the entire amount of the cash and property received in connection with a redemption may be treated as a distribution (and not as a sale). Redemption treatment will be applied without an offset of the holder's adjusted tax basis in the redeemed shares of Exchange Shares. Rather, the redemption proceeds will be treated in the same manner as distributions (described above under "—Dividends"). If the redemption is treated as a distribution (as opposed to a sale), then the holder's adjusted tax basis in the redeemed shares of our common stock, to the extent not reduced through distributions treated as a return of capital, will be transferred to the holder's remaining shares of our common stock.

#### Tax on Net Investment Income

A 3.8% Medicare contribution tax will generally apply to all or some portion of the net investment income of a U.S. holder who is an individual with adjusted gross income that exceeds a threshold amount. In the case of individuals, a 3.8% tax is imposed for each taxable year on the lesser of (a) net investment income for the year or (b) the modified adjusted gross income for such year in excess of a threshold amount (\$250,000 if married filing jointly or if considered a "surviving spouse" for federal income tax purposes, \$125,000 if married filing separately, and \$200,000 in other cases). For these purposes, dividends received with respect to the Exchange Shares, and gains or losses realized from the taxable disposition of the Exchange Shares, will generally be taken into account in computing your net investment income.

## Information Reporting and Backup Withholding

In general, any dividends you receive with respect to the Exchange Shares, and amounts you receive with respect to a sale or other disposition of the Exchange Shares, are reported to the IRS and to you, unless you are an exempt payee and the payment is not subject to backup withholding. Such dividends and other amounts may be subject to backup withholding (at a rate of 28%), and subject to related information reporting with respect to otherwise exempt payees, unless you provide to us (i) your correct taxpayer identification number and certification (on Form W-9) that you are not subject to backup withholding, or (ii) proof that you are an exempt payee. Any amounts withheld from a payment under the backup withholding rules will be allowed as a credit against your U.S. federal income tax liability and may entitle you to a refund, provided you timely furnish the required information or returns to the IRS.

## Tax Consequences to Non-U.S. Holders

Subject to the limitations stated above, the following description addresses certain material U.S. federal income tax consequences of the Exchange and of the ownership and disposition of the Exchange Shares, that are expected to apply if you are a non-U.S. holder of the Original Warrants or Exchange Shares. For this purpose, you are a "non-U.S. holder" if you are an individual, corporation, estate, or trust that is not a U.S. holder as defined above. Special rules may apply to certain non-U.S. holders such as "controlled foreign corporations," "passive foreign investment companies," individuals present in the United States for 183 days or more in the taxable year of disposition (but who are not U.S. residents) or, in certain circumstances, individuals who are former U.S. citizens or residents.

The Exchange Offer

The Exchange should generally have the same tax consequences for non-U.S. holders as described above for U.S. holders (other than for foreign tax credit purposes).

Ownership and Disposition of Exchange Shares

Distributions. Generally, but subject to the discussions below under "Additional Withholding Tax on Payments Made to Foreign Accounts," distributions of cash or property, if any, (other than our common stock, if any, distributed pro rata to our shareholders) paid to a non-U.S. holder will be subject to withholding of United States federal income tax at a 30% rate or such lower rate as may be specified by an applicable United States income tax treaty. In order to obtain the benefit of any applicable United States income tax treaty, a non-U.S. holder will have to file certain forms (e.g., Form W-8BEN or Form W-8BEN-E). Such forms generally would contain your name and address and a certification that such non-U.S. holder is eligible for the benefits of such treaty.

Sale or Exchange. Generally, but subject to the discussions below under "Additional Withholding Tax on Payments Made to Foreign Accounts," a non-U.S. holder will not be subject to United States federal income or withholding tax on any gain realized on the sale or exchange of our common stock unless (1) such gain is effectively connected with your conduct of a trade or business in the United States and, where an income tax treaty applies, is attributable to a permanent establishment, (2) if an individual non-U.S. holder is present in the United States for 183 days or more in the taxable year of such sale or exchange and certain other conditions are met, or (3) if the rules of the Foreign Investment in Real Property Tax Act, or FIRPTA (described below) treat the gain as effectively connected with a U.S. trade or business.

The FIRPTA rules may apply to a sale, exchange or other disposition of Exchange Shares if we are, or were within five years before the transaction, a "U.S. real property holding corporation," or a USRPHC. In general, we would be a USRPHC if interests in U.S. real estate comprised a majority of our assets. We do not believe that we are a USRPHC or that we will become one in the future. If we are or become a USRPHC, so long as our common stock is regularly traded on an established securities market, only a non-U.S. holder who, actually or constructively, holds or held (at any time during the shorter of the five-year period preceding the date of disposition or the holder's holding period) more than 5% of our common stock will be subject to U.S. federal income tax on the disposition of our common stock.

Income Effectively Connected with a U.S. Trade or Business. Except as may be otherwise provided in an applicable United States income tax treaty, if a non-U.S. holder conducts a trade or business within the United States, such non-U.S. holder generally will be taxed at ordinary United States federal income tax rates (on a net income basis) on dividends and gains that are effectively connected with the conduct of such trade or business and such dividends will not be subject to the withholding described above. A non-U.S. holder that is a foreign corporation may also be subject to a 30% "branch profits tax" unless such non-U.S. holder qualifies for a lower rate under an applicable United States income tax treaty. To claim an exemption from withholding on dividends because the income is effectively connected with a United States trade or business, a non-U.S. holder must provide a properly executed Form W-8ECI (or such successor form as the IRS designates) prior to the payment of dividends.

### Information Reporting and Backup Withholding

A non-U.S. holder may be required to comply with certain certification procedures to establish that the holder is not a U.S. person in order to avoid backup withholding tax with respect to our payment of dividends on, or the proceeds of a sale or other disposition of, an Exchange Share. Any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against that non-U.S. holder's U.S. federal income tax liability provided the required information is timely furnished to the IRS. In certain circumstances, the name and address of the beneficial owner and the amount of dividends paid on an Exchange Share, as well as the amount, if any, of tax withheld, may be reported to the IRS. Copies of these information returns may also be made available under the provisions of a specific treaty or agreement to the tax authorities of the country in which the non-U.S. holder resides or is established.

#### Additional Withholding Tax on Payments Made to Foreign Accounts

Withholding taxes may be imposed under Sections 1471 to 1474 of the Code (such Sections commonly referred to as the Foreign Account Tax Compliance Act, or "FATCA") on certain types of payments made to non-U.S. financial institutions and certain other non-U.S. entities. Specifically, a 30% withholding tax may be imposed on payments of dividends on, or gross proceeds from the sale or other disposition of, Exchange Shares paid to a "foreign financial institution" or a "non-financial foreign entity" (each as defined in the Code), unless (1) the foreign financial institution undertakes certain diligence and reporting obligations, (2) the non-financial foreign entity either certifies it does not have any "substantial United States owners" (as defined in the Code) or furnishes identifying information regarding each substantial United States owner, or (3) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (1) above, it must enter into an agreement with the U.S. Department of the Treasury requiring, among other things, that it undertake to identify accounts held by certain "specified United States persons" or "United States-owned foreign entities" (each as defined in the Code), annually report certain information about such accounts, and withhold 30% on certain payments to non-compliant foreign financial institutions and certain other account holders. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules.

Under the applicable U.S. Treasury regulations and administrative guidance, withholding under FATCA generally applies to payments of dividends, and will apply to payments of gross proceeds from the sale or other disposition of Exchange Shares on or after January 1, 2019.

Holders should consult their tax advisors regarding the potential application of withholding under FATCA to their Exchange Shares.

#### SOLICITATION AGENTS

We have engaged M.M. Dillion & Co. to serve as financial advisor and CIM Securities, to serve as solicitation agent for this Exchange Offer. As compensation for their services, we have agreed to pay M.M. Dillon & Co. a cash fee of 3.5% of the gross proceeds from the Exchange Offer and a 5-year common stock purchase warrant with a fair market value equal to 3.5% of the gross proceeds from the Exchange Offer and a 5-year common stock purchase warrant with a fair market value equal to 3.5% of the gross proceeds from the Exchange Offer. The fair market value of the common stock purchase warrants shall be based on a Black-Scholes valuation as of the day immediately prior to the filing date of the initial registration statement in connection with the Exchange Offer.

M.M. Dillion & Co. and CIM Securities will also be reimbursed for reasonable out-of-pocket expenses incurred in connection with the Exchange Offer (including reasonable fees and disbursements of counsel).

The agreement between us and M.M. Dillon & Co. and CIM Securities provides that we will indemnify M.M. Dillon & Co. and CIM Securities against certain liabilities, including liabilities under the Securities Act.

M.M. Dillion & Co. and CIM Securities may allow or re-allow any of the compensation payable to them to any broker-dealers that participate in the exchange offering. Any such allowance or re-allowance will be on terms and conditions agreed by CIM Securities and the applicable broker-dealer.

George W. Bickerstaff, III, a director of the Company, is currently a Managing Director of M.M. Dillon & Co. See "Certain Relationships and Related Party Transactions".

This prospectus, as it may be amended or supplemented from time to time, may be used by a broker-dealer in connection with resales of Exchange Shares received in exchange for Original Warrants where such Original Warrants were acquired as a result of market-making activities or other trading activities. We have agreed that, for a period of 90 days after the consummation of the Exchange Offer, we will make this prospectus, as amended or supplemented, available to any broker-dealer for use in connection with any such resale, and will deliver as many additional copies of this prospectus and each amendment or supplement to this prospectus and any documents incorporated by reference in this prospectus as any broker-dealer may request in the Letter of Transmittal. In addition, all dealers effecting transactions in connection with this Exchange Offer may be required to deliver a prospectus.

We will not receive any proceeds from any sale of Exchange Shares by broker-dealers other than the Exchange Payment. Exchange Shares received by broker-dealers for their own account pursuant to the Exchange Offer may be sold from time to time in one or more transactions in the over-the-counter market, in negotiated transactions, through the writing of options on the Exchange Shares or a combination of such methods of resale, at market prices prevailing at the time of resale, at prices related to such prevailing market prices or at negotiated prices. Any such resale may be made directly to purchasers or through brokers or dealers who may receive compensation in the form of commissions or concessions from any such broker- dealer and/or the purchasers of any such Exchange Shares. Any broker-dealer that resells Exchange Shares that were received by it for its own account pursuant to the Exchange Offer and any broker or dealer that participates in a distribution of such Exchange Shares may be deemed to be an "underwriter" within the meaning of the Securities Act, and any profit of any such resale of Exchange Shares and any commission or concessions received by any such persons may be deemed to be underwriting compensation under the Securities Act.

#### LEGAL MATTERS

The validity of the shares of our common stock covered by this prospectus will be passed upon by Herrick, Feinstein LLP, New York. New York.

## **EXPERTS**

The financial statements included in this prospectus have been so included in reliance on the report of KBL, LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

#### WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC under the Securities Act a registration statement on Form S-4 relating to the shares of common stock that will be issued in connection with the Exchange Offer. The registration statement, including the attached exhibits and schedules, contains additional relevant information about us and our capital stock. This prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules thereto. For further information about us and our common stock, you should refer to the registration statement, including the exhibits and schedules thereto. Statements contained in this prospectus as to the contents of any contract or other document referred to are not necessarily complete and in each instance, if such contract or document is filed as an exhibit, reference is made to the copy of such contract or other document filed as an exhibit to the registration statement, each statement being qualified in all respects by such reference. You may inspect a copy of the registration statement and the exhibits and schedules thereto without charge at the Public Reference Room of the SEC at 100 F Street, N.E., Washington, D.C. 20549. You may obtain copies of all or any part of the registration statement from such office at prescribed rates. You may also obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains an Internet website, which is located at http://www.sec.gov, that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. You may access the registration statement, of which this prospectus is a part, at the SEC's Internet website.

## INDEX TO FINANCIAL STATEMENTS

## Cardax, Inc., and Subsidiary

December 31, 2017 and 2016

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#### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Cardax, Inc. and Subsidiaries

### **Opinion on the Financial Statements**

We have audited the accompanying consolidated balance sheets of Cardax, Inc. and Subsidiaries (the "Company") as of December 31, 2017 and 2016, the related consolidated statements of operations, changes in stockholders' deficit, and cash flows for the years then ended, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2017 and 2016, and the results of its consolidated operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

## **Basis for Opinion**

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal controls over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

## Going Concern Consideration

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has sustained significant operating losses and needs to obtain additional financing to continue the services they provide. These conditions raise substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

## /s/ KBL, LLP

We have served as the Company's auditor since 2013.

KBL, LLP New York, NY March 26, 2018

## CONSOLIDATED BALANCE SHEETS

## As of December 31,

	2017			2016		
ASSETS	'					
CURRENT ASSETS						
Cash	\$	2,236,837	\$	158,433		
Accounts receivable	Ψ	37,243	Ψ	-		
Inventories		340,425		10,827		
Deposits and other assets		90,831		122,876		
Prepaid expenses		22,838		19,919		
Total current assets		2,728,174		312,055		
PROPERTY AND EQUIPMENT, net		1,901		7,755		
INTANGIBLE ASSETS, net		426,610		430,770		
TOTAL ASSETS	\$	3,156,685	\$	750,580		
LIADH ITIES AND STOCKHOLDERS DEFICIT						
LIABILITIES AND STOCKHOLDERS' DEFICIT						
CURRENT LIABILITIES						
Accrued payroll and payroll related expenses	\$	3,490,225	\$	3,510,464		
Accounts payable and accrued expenses		603,391		657,094		
Fees payable to directors		418,546		418,546		
Employee settlement		50,000		50,000		
Total current liabilities		4,562,162		4,636,104		
COMMITMENTS AND CONTINGENCIES		<u>-</u>				
Total liabilities		4,562,162		4,636,104		
STOCKHOLDERS' DEFICIT						
Preferred Stock - \$0.001 par value; 50,000,000 shares authorized, 0 shares issued						
and outstanding as of December 31, 2017 and 2016, respectively Common stock - \$0.001 par value; 400,000,000 shares authorized, 122,674,516		-		-		
and 85,068,709 shares issued and outstanding December 31, 2017 and 2016,		100 (77		0.5.0.00		
respectively		122,675		85,069		
Additional paid-in-capital		56,401,069		51,963,269		
Deferred compensation		(10,125)		(55.022.062)		
Accumulated deficit		(57,919,096)		(55,933,862)		
Total stockholders' deficit		(1,405,477)		(3,885,524)		
TOTAL LIABILITIES AND STOCKHOLDERS' DEFICIT	\$	3,156,685	\$	750,580		
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				-		

## CONSOLIDATED STATEMENTS OF OPERATIONS

For the years ended December 31,

		2017	2016		
REVENUES, net	\$	610,323	\$	35,258	
COST OF GOODS SOLD		274,707		14,580	
GROSS PROFIT		335,616		20,678	
OPERATING EXPENSES:					
General and administrative expenses		1,070,085		831,673	
Sales and marketing		535,242		117,181	
Research and development		460,991		347,885	
Stock based compensation		242,146		525,062	
Depreciation and amortization		29,422		29,101	
Total operating expenses		2,337,886		1,850,902	
Loss from operations		(2,002,270)		(1,830,224)	
OTHER INCOME (EXPENSES):					
Other income		17,253		47,082	
Interest income		3,320		2,362	
Interest expense		(3,537)		(2,925)	
Total other income (expense)		17,036		46,519	
Loss before the provision for income taxes		(1,985,234)		(1,783,705)	
PROVISION FOR INCOME TAXES		-		_	
NET LOSS	\$	(1,985,234)	\$	(1,783,705)	
NET EGGS	Φ	(1,983,234)	Φ	(1,783,703)	
NET LOSS PER SHARE					
Basic	\$	(0.02)	\$	(0.02)	
Diluted	\$	(0.02)	\$	(0.02)	
SHARES USED IN CALCULATION OF NET LOSS PER SHARE					
Basic		99,951,385		76,227,524	
Diluted		99,951,385		76,227,524	
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## CONSOLIDATED STATEMENT OF CHANGES IN STOCKHOLDERS' DEFICIT

Years ended December 31, 2016 and 2017

	Common Shares	Stock Amount	Additional Paid-In-Capital	Deferred Compensation	Accumulated Deficit	Total
Balance at January 1, 2016	69,087,955	\$ 69,088	\$ 50,333,188	\$ -	\$(54,150,157)	\$(3,747,881)
Common stock grants to independent directors	468,254	468	41,198	-	-	41,666
Common stock grant to institutional investor	1,500,000	1,500	105,000	-	-	106,500
Restricted stock issuances	14,012,500	14,013	1,106,987	-	-	1,121,000
Stock based compensation - options	-	-	376,896	-	-	376,896
Net loss					(1,783,705)	(1,783,705)
Balance at December 31, 2016	85,068,709	85,069	51,963,269	-	(55,933,862)	(3,885,524)
Common stock grants to independent directors	793,025	793	149,207	-	-	150,000
Common stock issuance to institutional investor	567,644	568	59,432	-	-	60,000
Restricted stock issuances	34,107,883	34,108	4,044,327	-	-	4,078,435
Restricted stock issuance to a broker for fees	558,750	559	44,141	-	-	44,700
Stock option exercise	645,288	645	(645)	-	-	-
Warrant exercise	733,217	733	39,267	-	-	40,000
Deferred compensation	200,000	200	40,300	(10,125)	-	30,375
Stock based compensation - options	-	-	61,771	-	-	61,771
Net loss	-			_	(1,985,234)	(1,985,234)
Balance at December 31, 2017	122,674,516	\$122,675	\$ 56,401,069	\$ (10,125)	\$(57,919,096)	\$(1,405,477)
		F	-5			

## CONSOLIDATED STATEMENTS OF CASH FLOWS

For the years ended December 31,

	2017		2016	
CASH FLOWS FROM OPERATING ACTIVITIES:	ф	(1.005.024)	Ф	(1.702.705)
Net loss	\$	(1,985,234)	\$	(1,783,705)
Adjustments to reconcile net loss to net cash used in operating activities:		20, 422		20.101
Depreciation and amortization		29,422		29,101
Stock based compensation		242,146		230,833
Changes in assets and liabilities:		(27.242)		
Accounts receivable		(37,243)		(10.025)
Inventories		(329,598)		(10,827)
Deposits and other assets		32,045		(35,161)
Prepaid expenses		(2,919)		(17,386)
Accrued payroll and payroll related expenses		(20,239)		269,638
Accounts payable and accrued expenses		(9,003)		60,736
Net cash used in operating activities		(2,080,623)		(1,256,771)
CASH FLOWS FROM INVESTING ACTIVITIES:				
Increase in intangible assets		(19,408)		(29,206)
Net cash used in investing activities		(19,408)		(29,206)
CASH FLOWS FROM FINANCING ACTIVITIES:				
Proceeds from the issuance of common stock		4,138,435		1,121,000
Proceeds from the exercise of warrants		40,000		
Net cash provided by financing activities		4,178,435		1,121,000
NET INCREASE (DECREASE) IN CASH		2,078,404		(164,977)
CASH AT THE BEGINNING OF THE PERIOD		158,433		323,410
CASH AT THE END OF THE PERIOD	\$	2,236,837	\$	158,433
NON-CASH INVESTING AND FINANCING ACTIVITIES:				
Conversion of accrued payroll and payroll related expenses into stock options	\$	-	\$	227,784
Conversion of accounts payable into stock options	\$	-	\$	66,445
Conversion of accounts payable into restricted stock	\$	44,700	\$	-
SUPPLEMENTAL DISCLOSURES:				
Cash paid for interest	\$	3,537	\$	2,925
Cash paid for income taxes	\$	-	\$	-
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# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

#### NOTE 1 - COMPANY BACKGROUND

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

Holdings was formed for the purpose of developing a platform of proprietary, exceptionally safe, small molecule compounds for large unmet medical needs where oxidative stress and inflammation play important causative roles. Holdings' platform has application in arthritis, metabolic syndrome, liver disease, and cardiovascular disease, as well as macular degeneration and prostate disease. Holdings' current primary focus is on the development of astaxanthin technologies. Astaxanthin is a naturally occurring marine compound that has robust anti-oxidant and anti-inflammatory activity.

In May of 2013, Holdings formed a 100% owned subsidiary company called Cardax Pharma, Inc. ("Pharma"). Pharma was formed to maintain Holdings' operations going forward, leaving Holdings as an investment holding company.

On November 29, 2013, Holdings entered into a definitive merger agreement ("Merger Agreement") with Koffee Korner Inc., a Delaware corporation ("Koffee Korner") (OTCQB:KOFF), and its wholly owned subsidiary ("Koffee Sub"), pursuant to which, among other matters and subject to the conditions set forth in such Merger Agreement, Koffee Sub would merge with and into Pharma. In connection with such merger agreement and related agreements, upon the consummation of such merger, Pharma would become a wholly owned subsidiary of Koffee Korner and Koffee Korner would issue shares of its common stock to Holdings. At the effective time of such merger, Holdings would own a majority of the shares of the then issued and outstanding shares of common stock of Koffee Korner.

On February 7, 2014, Holdings completed its merger with Koffee Korner, which was renamed to Cardax, Inc. (the "Company") (OTCQB:CDXI). Concurrent with the merger: (i) the Company received aggregate gross cash proceeds of \$3,923,100 in exchange for the issuance and sale of an aggregate 6,276,960 of shares of the Company's common stock, together with five year warrants to purchase an aggregate of 6,276,960 shares of the Company's common stock at \$0.625 per share, (ii) the notes issued on January 3, 2014, in the outstanding principal amount of \$2,076,000 and all accrued interest thereon, automatically converted into 3,353,437 shares of the Company's common stock upon the reverse merger at \$0.625 per share, together with five year warrants to purchase 3,321,600 shares of common stock at \$0.625 per share, (iii) the notes issued in 2013, in the outstanding principal amount of \$8,489,036 and all accrued interest thereon, automatically converted into 14,446,777 shares of the Company's common stock upon the reverse merger at \$0.625 per share, together with five year warrants to purchase 14,446,777 shares of common stock at \$0.625 per share, (iv) stock options to purchase 15,290,486 shares of Holdings common stock at \$0.07 per share were cancelled and substituted with stock options to purchase 6,889,555 shares of the Company's common stock at \$0.625 per share were issued, and (vi) the notes issued in 2008 and 2009, in the outstanding principal amounts of \$55,000 and \$500,000, respectively, and all accrued interest thereon, were repaid in full. The assets and liabilities of Koffee Korner were distributed in accordance with the terms of a spin-off agreement on the closing date.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### NOTE 1 – COMPANY BACKGROUND (continued)

The share exchange transaction was treated as a reverse acquisition, with Holdings and Pharma as the acquirers and Koffee Korner and Koffee Sub as the acquired parties. Unless the context suggests otherwise, when the Company refers to business and financial information for periods prior to the consummation of the reverse acquisition, the Company is referring to the business and financial information of Holdings and Pharma. Under accounting principles generally accepted in the United States of America ("U.S. GAAP") guidance Accounting Standards Codification ("ASC") No. 805-40, *Business Combinations – Reverse Acquisitions*, the Acquisition has been treated as a reverse acquisition with no adjustment to the historical book and tax basis of the Company's assets and liabilities.

On August 28, 2014, the Company entered into an Agreement and Plan of Merger (the "Holdings Merger Agreement") with its principal stockholder, Holdings, pursuant to which Holdings would merge with and into the Company (the "Holdings Merger"). On September 18, 2015, the Company filed a Form S-4 with the SEC in contemplation of the Holdings Merger. There would not be any cash consideration exchanged in the Holdings Merger. Upon the closing of the Holdings Merger, the stockholders of Holdings would receive an aggregate number of shares and warrants to purchase shares of the Company's common stock equal to the aggregate number of shares of the Company's common stock that were held by Holdings on the date of the closing of the Holdings Merger. The Company's restricted shares of common stock held by Holdings would be cancelled upon the closing of the Holdings Merger. Accordingly, there would not be not any change to the Company's fully diluted capitalization due to the Holdings Merger.

On November 24, 2015, the Holdings Merger Agreement was amended and restated (the "Amended Holdings Merger Agreement"). Under the terms of Amended Holdings Merger Agreement, the shares of common stock, par value \$0.001 per share of Holdings and the shares of all other issued and outstanding capital stock of Holdings that by their terms were convertible or could otherwise be exchanged for shares of Holdings common stock, would be converted into and exchanged for the Company's shares of common stock in a ratio of approximately 2.2:1. In addition, the Company would grant Holdings' option and warrant holders warrants to purchase the Company's warrants at the same stock conversion ratio. On November 24, 2015, the Company filed an amendment to the Form S-4 with the SEC and on December 29, 2015, the Form S-4 was declared effective by the SEC.

On December 30, 2015, the Company completed its merger with Holdings, pursuant to the Amended Holdings Merger Agreement. At closing, Holdings merged with and into the Company, with the Company surviving the Holdings Merger. Pursuant to the Amended Holdings Merger Agreement, there was not any cash consideration exchanged in the Holdings Merger. Upon the closing of the Holdings Merger, the stockholders of Holdings received an aggregate number of shares and warrants to purchase shares of Company common stock equal to the aggregate number of shares of Company common stock that were held by Holdings on the date of the closing of the Holdings Merger. The Company's restricted shares of common stock held by Holdings were cancelled upon the closing of the Holdings Merger. Accordingly, there was not any change to the Company's fully diluted capitalization due to the Holdings Merger.

The Company is engaged in the development, marketing, and distribution of consumer health products. The Company's first commercial product, ZanthoSyn®, is a physician recommended anti-inflammatory supplement for health and longevity that features astaxanthin with optimal absorption and purity. The Company sells ZanthoSyn® primarily through e-commerce and wholesale channels. As a second-generation product, the Company is developing CDX-085, its patented astaxanthin derivative for highly concentrated astaxanthin product applications. The Company also plans to pursue pharmaceutical applications of astaxanthin and related compounds. The safety and efficacy of the Company's products have not been directly evaluated in clinical trials or confirmed by the FDA.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

#### NOTE 1 – COMPANY BACKGROUND (continued)

### Going concern matters

The accompanying 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 a net loss of \$1,985,234 and \$1,783,705 for the years ended December 31, 2017 and 2016, respectively. The Company has incurred losses since inception resulting in an accumulated deficit of \$57,919,096 as of December 31, 2017, 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 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.

In addition to the \$4,138,435 raised in the year ended December 31, 2017, the Company plans to raise additional capital to carry out its business plan. The Company's 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 consolidated financial statements of the Company do not include any adjustments that may result from the outcome of these uncertainties.

On March 28, 2016, the Company furloughed all of its employees and independent contractors indefinitely and arranged with its Chief Executive Officer, David G. Watumull; its Chief Financial Officer, John B. Russell; and its Vice President, Operations, David M. Watumull, to continue their services for cash compensation equal to the minimum wage. In September 2017, the Company ended this furlough and restored their employees to 75% of their base pay.

## NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

## Basis of presentation

The consolidated financial statements have been consistently prepared in accordance with accounting principles generally accepted in the United States ("U.S. GAAP") and include the accounts of Cardax, Inc., and its wholly owned subsidiary, Cardax Pharma, Inc., and its predecessor, Cardax Pharmaceuticals, Inc., which was merged with and into Cardax, Inc. All significant intercompany balances and transactions have been eliminated in consolidation.

### Use of estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in our consolidated financial statements and the accompanying notes. Estimates in these consolidated financial statements include asset valuations, estimates of future cash flows from and the economic useful lives of long-lived assets, valuations of stock compensation, certain accrued liabilities, income taxes and tax valuation allowances, and fair value estimates. Despite management's intention to establish accurate estimates and reasonable assumptions, actual results could differ materially from these estimates and assumptions.

## Cash

The Company considers all highly liquid investments with maturities of three months or less at the time of purchase to be cash equivalents. The Company held no cash equivalents as of December 31, 2017 and 2016.

The Company maintains cash deposit accounts at one financial institution. Accounts at this institution are insured by the Federal Deposit Insurance Corporation up to \$250,000. The Company's cash balance at times may exceed these limits. As of December 31, 2017 and 2016, the Company had \$1,988,139 and \$0, respectively, in excess of federally insured limits on deposit.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

### Accounts receivable

Accounts receivable of \$37,243 and \$0 as of December 31, 2017 and 2016, respectively, consists of amounts due from sales of consumer health products.

It is the Company's policy to provide for an allowance for doubtful collections based upon a review of outstanding receivables, historical collection information, and existing economic conditions. Normal receivables are due 60 days after the issuance of the invoice. Receivables past due more than 90 days are considered delinquent. Delinquent receivables are written off based on individual credit evaluation and specific circumstances of the customer. There was no allowance necessary as of December 31, 2017 and 2016.

## **Inventories**

Inventories are stated at the lower of cost or market. Cost is determined using the average cost method. Market is defined as sales price less cost to dispose and a normal profit margin. Inventory costs include third party costs for finished goods. The Company utilizes contract manufacturers and receives inventory in finished form.

The Company provides a reserve against inventory for known or expected inventory obsolescence. The reserve is determined by specific review of inventory items for product age and quality that may affect salability. There were no reserves necessary for inventory as of December 31, 2017 and 2016.

### Property and equipment, net

Property and equipment are recorded at cost, less depreciation. Equipment under capital lease obligations and leasehold improvements are amortized on the straight-line method over the shorter period of the lease term or the estimated useful life of the equipment. Such amortization is included in depreciation and amortization in the consolidated financial statements. Depreciation is calculated using the straight-line method over the estimated useful lives of the respective assets are as follows.

Furniture and office equipment 7 years
Research and development equipment 3 to 7 years
Information technology equipment 5 years
Software 3 years

Major additions and improvements are capitalized, and routine expenditures for repairs and maintenance are charged to expense as incurred. When assets are retired or otherwise disposed of, the cost and related accumulated depreciation are removed from the accounts, and any resulting gain or loss is charged to income for the period.

## Impairment of long-lived assets

The Company evaluates long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset or group of assets, as appropriate, may not be recoverable.

When the sum of the undiscounted future net cash flows expected to result from the use and the eventual disposition is less than the carrying amounts, an impairment loss would be measured based on the discounted cash flows compared to the carrying amounts. There was no impairment charge recorded for the years ended December 31, 2017 and 2016.

## Revenue recognition

The Company recognizes revenue from the sale of its products through e-commerce and wholesale channels when the transfer of title and risk of loss occurs. For shipments with terms of FOB Shipping Point, revenue is recognized upon shipment. For shipments with terms of FOB Destination, revenue is recognized upon delivery.

Sales 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.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

## Cost of goods sold

Cost of goods sold is comprised of costs to manufacture or acquire products sold to customers, direct and indirect distribution costs, and other costs incurred in the sale of goods.

### Shipping and handling costs

Shipping and handling costs are included in cost of goods sold. Shipping and handling costs were \$10,366 and \$3,884 for the years ended December 31, 2017 and 2016, respectively.

### Sales and use tax

Revenues, as presented on the accompanying income statement, include taxes collected from customers and remitted to governmental authorities. Such taxes were \$5,132 and \$1,205 for the years ended December 31, 2017 and 2016, respectively.

## Research and development

Research and development costs are expensed as incurred and consists primarily of salaries and wages of scientists and related personnel engaged in research and development activities, scientific consultations, manufacturing of product candidates, third-party research, laboratory supplies, rents associated with operating leased laboratory equipment, and scientific advisory boards. The focus of these costs is on the development of Astaxanthin technologies. For the years ended December 31, 2017 and 2016, research and development costs were \$460,991 and \$347,885, respectively.

## Advertising

Advertising costs are expensed as incurred and are included as an element of sales and marketing costs in the accompanying consolidated statements of operations. For the years ended December 31, 2017 and 2016, advertising costs were \$84,317 and \$27,939, respectively.

## Income taxes

The Company accounts for income taxes under an asset and liability approach. Deferred income taxes reflect the impact of temporary differences between assets and liabilities recognized for financial reporting purposes and the amounts recognized for income tax reporting purposes, net operating loss carry-forwards, and other tax credits measured by applying currently enacted tax laws. A valuation allowance is provided when necessary to reduce deferred tax assets to an amount that is more likely than not to be realized.

The Company determines whether a tax position is more likely than not to be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. The Company uses a two-step approach to recognizing and measuring uncertain tax positions. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained upon tax authority examination, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount that is more than 50% likely of being realized upon ultimate settlement.

The Company files income tax returns in the United States ("U.S.") Federal and the States of Hawaii and California jurisdictions. Tax regulations within each jurisdiction are subject to the interpretation of the related tax laws and regulations and require significant judgment to apply.

The Company did not recognize any tax liabilities for income taxes associated with unrecognized tax benefits as of December 31, 2017 and 2016. The Company's policy is to include interest and penalties related to unrecognized tax benefits, if any, within the provision for income taxes in the consolidated statements of operations.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

## Fair value measurements

U.S. GAAP establishes a framework for measuring fair value. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements).

The three levels of the fair value hierarchy are described below:

- Level 1: Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Company has the ability to access.
- Level 2: Inputs to the valuation methodology include:
  - Ouoted prices for similar assets or liabilities in active markets;
  - Quoted prices for identical or similar assets or liabilities in inactive markets;
  - Inputs other than quoted prices that are observable for the asset or liability; and
  - Inputs that are derived principally from or corroborated by observable market data by correlation or other means

If the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.

Level 3: Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset's or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

As of December 31, 2017 and 2016, there were no recurring fair value measurements of assets and liabilities subsequent to initial recognition.

## Stock based compensation

The Company accounts for stock based compensation costs under the provisions of ASC No. 718, Compensation—Stock Compensation and ASC No. 505, Equity, which require the measurement and recognition of compensation expense related to the fair value of stock based compensation awards that are ultimately expected to vest. Stock based compensation expense recognized includes the compensation cost for all stock based payments granted to employees, officers, directors, and consultants based on the grant date fair value estimated. These standards also apply to awards modified, repurchased, or canceled during the periods reported.

## Basic and diluted net loss per share

Basic earnings per common share is calculated by dividing net loss for the year by the weighted average number of common shares outstanding during the year. Diluted earnings per common share is calculated by dividing net loss for the year by the sum of the weighted average number of common shares outstanding during the year plus the number of potentially dilutive common shares ("dilutive securities") that were outstanding during the year. Dilutive securities include options granted pursuant to the Company's stock option plans, and warrants issued to non-employees. Potentially dilutive securities are excluded from the computation of earnings per share in periods in which a net loss is reported, as their effect would be antidilutive.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

### Recent accounting pronouncements

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2014-09, *Revenue from Contracts with Customers*, related to revenue recognition. The underlying principle of this ASU is that a business or other organization will recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects what it expects in exchange for the goods or services. This ASU also requires more detailed disclosures and provides additional guidance for transactions that were not addressed completely in prior accounting guidance. ASU No. 2014-09 provides alternative methods of initial adoption. The Company is currently assessing the impact of this ASU on the Company's consolidated financial statements. In August 2015, the FASB issued ASU No. 2015-14, *Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date*, which defers the effective date of ASU No. 2014-09 by one year to fiscal years beginning after December 15, 2017, including interim periods within those years and permitted early adoption of the standard, but not before the original effective date. The Company has assessed the impact of these ASUs and does not believe that they will have a material effect on the Company's consolidated financial statements.

The FASB issued four additional ASUs in 2016 that affect the guidance in ASU No. 2014-09, *Revenue from Contracts with Customers*, and are effective upon adoption of ASU No. 2014-09. The Company has assessed the impact of these ASUs and does not believe that they will have a material effect on the Company's consolidated financial statements, including the following ASUs:

- In March 2016, the FASB issued ASU No. 2016-08, Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross versus Net). This ASU clarifies the implementation guidance on principal versus agent considerations. The guidance includes indicators to assist an entity in determining whether it controls a specified good or service before it is transferred to the customers.
- In April 2016, the FASB issued ASU No. 2016-10, *Identifying Performance Obligations and Licensing*. This ASU clarifies the following two aspects of ASU No. 2014-09: identifying performance obligations and licensing implementation guidance. The amendment requires revenue recognition to depict the transfer of goods or services to customers in an amount that reflects the consideration that a company expects to be entitled to in exchange for the goods or services. To achieve this principle, a company must apply five steps including identifying the contract with a customer, identifying the performance obligations in the contract, determining the transaction price, allocating the transaction price to the performance obligations, and recognizing revenue when (or as) the company satisfies the performance obligations. Additional quantitative and qualitative disclosures to enhance the understanding about the nature, amount, timing, and uncertainty of revenue and cash flows are also required.
- In May 2016, the FASB issued ASU No. 2016-12, Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients. This ASU makes narrow-scope amendments to ASU No. 2014-09, Revenue from Contracts with Customers, and provides practical expedients to simplify the transition to the new standard and to clarify certain aspects of the standard.
- In December 2016, the FASB issued ASU 2016-20, *Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers (Topic 606)*. This ASU addresses technical corrections and improvements to clarify the codification and to correct unintended application of guidance. Those items generally are not expected to have a significant effect on current accounting practice or create a significant administrative cost for most entities. The amendments in this Update are of a similar nature to the items typically addressed in the Technical Corrections and Improvements project.

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 leases guidance.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

#### Recent accounting pronouncements (continued)

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 is currently assessing the impact of this ASU on the Company's consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-09, Compensation - Stock Compensation. This ASU was issued as part of the FASB's simplification initiative focused on improving areas of U.S. GAAP for which cost and complexity may be reduced while maintaining or improving the usefulness of information disclosed within the financial statements. The amendments focused on simplification specifically with regard to share-based payment transactions, including income tax consequences, classification of awards as equity or liabilities, and classification on the statement of cash flows. The guidance in ASU No. 2016-09 is effective for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years. Early adoption is permitted. The amendments in this ASU should be applied prospectively to an award modified on or after the adoption date. The Company has assessed the impact of this ASU and does not believe that this update has a significant impact on its consolidated financial statements.

In November 2016, the FASB issued ASU 2016-18, *Statement of Cash Flows (Topic 23)*. The amendments of ASU No. 2016-18 require that a statement of cash flow explain the change during a period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. The guidance of ASU No. 2016-18 is effective for years beginning after December 15, 2017, including interim periods within those years. The Company has assessed the impact of this ASU and does not believe that this update has a significant impact on its consolidated financial statements.

In May 2017, the FASB issued ASU No. 2017-09, *Compensation-Stock Compensation: Scope of Modification Accounting*. The amendments of ASU No. 2017-09 provide guidance about which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting. The guidance of ASU No. 2017-09 is effective for years beginning after December 15, 2017, including interim periods within those years. The Company has assessed the impact of this ASU and does not believe that this update has a significant impact on its consolidated financial statements.

The Company does not believe that any other recently issued, but not yet effective accounting pronouncements, if adopted, would have a material effect on the consolidated financial statements.

## Reclassifications

The Company has made certain reclassifications to conform its prior periods' data to the current presentation. These reclassifications had no effect on the reported results of operations or cash flows.

## NOTE 3 – INVENTORIES

Inventories consist of the following as of December 31:

	2017	2016		
Finished goods	\$ 240,917	\$	10,827	
Raw materials	98,937		-	
Packing supplies and materials	571		-	
Total inventories	\$ 340,425	\$	10,827	

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

## NOTE 4 - PROPERTY AND EQUIPMENT, net

Property and equipment, net, consists of the following as of December 31:

	 2017	2016		
Information technology equipment	\$ 31,892	\$	31,892	
Less accumulated depreciation	(29,991)		(24,137)	
Total property and equipment, net	\$ 1,901	\$	7,755	

Depreciation expense was \$5,854 and \$6,168, for the years ended December 31, 2017 and 2016, respectively.

## NOTE 5 – INTANGIBLE ASSETS, net

Intangible assets, net, consists of the following as of December 31:

	2017	2016
Patents	\$ 493,027	\$ 432,985
Less accumulated amortization	(263,843)	(240,275)
	229,184	192,710
Patents pending	197,426	238,060
Total intangible assets, net	\$ 426,610	\$ 430,770

Patents are amortized straight-line over a period of fifteen years. Amortization expense was \$23,568 and \$22,933 for the years ended December 31, 2017 and 2016, respectively.

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.

The Company owns 22 issued patents, including 14 in the United States and 8 others in China, India, Japan, and Hong Kong. These patents will expire during the years of 2023 to 2028, subject to any patent term extensions of the individual patent. The Company has 4 foreign patent applications pending in Europe, Canada, and Brazil.

## NOTE 6 - STOCKHOLDERS' DEFICIT

## Self-directed stock issuance

During the year ended December 31, 2016, the Company sold securities in a self-directed offering in the aggregate amount of \$1,121,000 at \$0.08 per unit. Each unit consisted of 1 share of restricted common stock (14,012,500 shares), a five-year warrant to purchase 1 share of restricted common stock (14,012,500 warrant shares) at \$0.08 per share, a five-year warrant to purchase 1 share of restricted common stock (14,012,500 warrant shares) at \$0.12 per share, and a five-year warrant to purchase 1 share of restricted common stock (14,012,500 warrant shares) at \$0.16 per share.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

#### NOTE 6 – STOCKHOLDERS' DEFICIT (continued)

During the year ended December 31, 2017, the Company sold securities in a self-directed offering in the aggregate amount of \$179,000, \$3,774,456, and \$124,979 at \$0.08, \$0.12, and \$0.30, respectively, per unit. Each \$0.08 unit consisted of 1 share of restricted common stock (2,237,500 shares), a five-year warrant to purchase 1 share of restricted common stock (2,237,500 warrant shares) at \$0.08 per share, a five-year warrant to purchase 1 share of restricted common stock (2,237,500 warrant shares) at \$0.12 per share, and a five-year warrant to purchase 1 share of restricted common stock (2,237,500 warrant shares) at \$0.16 per share. Each \$0.12 unit consisted of 1 share of restricted common stock (31,453,788 shares) and a five-year warrant to purchase 1 share of restricted common stock (416,595 shares) and a five-year warrant to purchase 1 share of restricted common stock (416,595 shares) and a five-year warrant to purchase 1 share of restricted common stock (416,595 shares) and a five-year warrant to purchase 1 share of restricted common stock (416,595 shares) and a five-year warrant to purchase 1 share of restricted common stock (416,595 shares) and a five-year warrant to purchase 1 share of restricted common stock (416,595 warrant shares) at \$0.30 per share.

### Equity purchase agreement

In July 2016, the Company entered into an equity purchase agreement (the "EPA") and a registration rights agreement with an investor. Pursuant to the terms of the EPA, the Company has the right, but not the obligation, to sell shares of its common stock to the investor on the terms specified in the EPA. On the date of the EPA, the Company issued 1,500,000 shares to the investor. The total fair value of this stock on the date of grant was \$106,500. These shares were fully vested upon issuance.

During the years ended December 31, 2017 and 2016, the Company sold 567,644 and 0 shares of common stock for \$60,000 and \$0, respectively, pursuant to the EPA.

## Payable settlement

In May 2017, the Company settled a payable in the amount of \$44,700 with a previously engaged broker dealer through the issuance of securities at \$0.08 per unit. Each unit consisted of 1 share of restricted common stock (558,750 shares), a five-year warrant to purchase 1 share of restricted common stock (558,750 warrant shares) at \$0.08 per share, a five-year warrant to purchase 1 share of restricted common stock (558,750 warrant shares) at \$0.12 per share, and a five-year warrant to purchase 1 share of restricted common stock (558,750 warrant shares) at \$0.16 per share.

## Shares outstanding

As of December 31, 2017 and 2016, the Company had a total of 122,674,516 and 85,068,709 shares of common stock outstanding.

## NOTE 7 – STOCK GRANTS

## Director stock grants

During 2017 and 2016, the Company granted its independent directors an aggregate of 793,025 and 468,254, respectively, shares of restricted common stock in the Company. The expense recognized for these grants based on the grant date fair value was \$150,000 and \$41,666 for the years ended December 31, 2017 and 2016, respectively. These shares were fully vested upon issuance.

## 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 are subject to a risk of forfeiture and vest quarterly in arrears commencing on April 1, 2017. The Company recognized \$17,250 in stock based compensation related to this grant during the year ended December 31, 2017.

On August 8, 2017, the Company granted a consultant 100,000 shares of restricted common stock valued at \$0.175 per share. These shares are subject to a risk of forfeiture and vest 25% upon grant and quarterly in arrears thereafter commencing on September 1, 2017. The Company recognized \$13,125 in stock based compensation related to this grant during the year ended December 31, 2017.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

#### NOTE 8 - 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 that may be issued under this plan is 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.

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:

				Weighted average	
	Options	averag	eighted ge exercise price	remaining contractual term in years	Aggregate rinsic value
Outstanding January 1, 2016	34,167,354	\$	0.47	6.57	\$ 974,066
Exercisable January 1, 2016	34,167,354	\$	0.47	6.57	\$ 974,066
Canceled	-				
Granted	6,156,580				
Exercised	-				
Forfeited	(3,501,965)				
Outstanding December 31, 2016	36,821,969	\$	0.41	5.94	\$ 301,273
Exercisable December 31, 2016	36,771,969	\$	0.41	5.94	\$ 299,273
Canceled					
Granted	2,161,458				
Exercised	(770,000)				
Forfeited					
Outstanding December 31, 2017	38,213,427	\$	0.41	5.23	\$ 562,456
Exercisable December 31, 2017	36,213,427	\$	0.41	4.98	\$ 562,456

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 December 31, 2017, based on a valuation of the Company's stock for that day.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

## NOTE 8 – STOCK OPTION PLANS (continued)

A summary of the Company's non-vested options for the years ended December 31, 2017 and year ended December 31, 2016 are presented below:

Non-vested at January 1, 2016	-
Granted	6,156,580
Vested	(6,106,580)
Forfeited	-
Non-vested at December 31, 2016	50,000
Granted	2,161,458
Vested	(211,458)
Forfeited	-
Non-vested at December 31, 2017	2,000,000

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 outstanding were as follows for the years ended December 31:

	2017	2016
Dividend yield	0.0%	0.0%
Risk-free rate	1.89% - 2.26%	0.80% - 1.03%
Expected volatility	221% - 232%	141% - 225%
Expected term	5 - 7 years	5 years

The expected volatility was calculated based on the historical volatilities of publicly traded peer companies, determined by the Company, and 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, as the Company does not anticipate paying a dividend within the relevant timeframe. Due to a lack of historical information needed to estimate the Company's expected term, it was estimated using the simplified method allowed.

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, 2017, the Company issued 645,288 shares of common stock in connection with the cashless exercise of stock options for 100,000, 45,000, and 625,000 shares of common stock at \$0.155, \$0.06, and \$0.06, respectively, per share with 124,712 shares of common stock withheld with an aggregate fair market value equal to the aggregate exercise price.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

## NOTE 8 - STOCK OPTION PLANS (continued)

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

Years ended December 31 2017 2016 Number Amount Number Amount In lieu of accrued salaries 3,796,385 227,784 In lieu of accrued fees for outside services 1,107,417 66,445 Compensation for outside services 50,000 3,500 50,000 3,500 Employee compensation (unvested) 2,000,000 33,271 Director compensation 161,458 25,000 1,152,778 79,167 Total 2,211,458 61,771 6,106,580 376,896

## NOTE 9 – WARRANTS

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

				Weighted		
			***	average		
			Weighted .	remaining		
		ave	rage exercise	contractual term		Aggregate
	Warrants		price	in years	in	trinsic value
Outstanding January 1, 2016	47,003,962	\$	0.46	3.49	\$	2,579,541
Exercisable January 1, 2016	47,003,962	\$	0.46	3.49	\$	2,579,541
Canceled						
Granted	42,037,500					
Exercised	-					
Forfeited	(676,426)					
Outstanding December 31, 2016	88,365,036	\$	0.30	3.50	\$	543,770
Exercisable December 31, 2016	88,365,036	\$	0.30	3.50	\$	543,770
Canceled						
Granted	40,259,133					
Exercised	(798,000)					
Forfeited	(392,047)					
Outstanding December 31, 2017	127,434,122	\$	0.24	3.15	\$	3,957,689
Exercisable December 31, 2017	127,434,122	\$	0.24	3.15	\$	3,957,689
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# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

#### NOTE 9 – WARRANTS (continued)

The Company estimates the fair value of warrants granted on each grant date using the Black-Scholes option valuation model. The expected volatility was calculated based on the historical volatilities of publicly traded peer companies, determined by 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 warrants to be valued. The expected dividend yield was zero, as the Company does not anticipate paying a dividend within the relevant timeframe. The expected warrant term is the life of the warrant.

The Company did not recognize any stock based compensation expense related to warrants during the years ended December 31, 2017 and 2016, respectively.

### Warrant exercise

During the year ended December 31, 2017, the Company issued 233,217 shares of common stock in connection with the cashless exercise of a warrant for 298,000 shares of common stock at \$0.10 per share with 64,783 shares of common stock withheld with an aggregate fair market value equal to the aggregate exercise price.

During the year ended December 31, 2017, the Company issued 500,000 shares of common stock in connection with the exercise of a warrant for 500,000 shares of common stock at \$0.08 per share in exchange for \$40,000.

## Warrant expiration

During the years ended December 31, 2017 and 2016, warrants to purchase an aggregate of 392,047 and 676,426, respectively, shares of restricted common stock expired.

## NOTE 10 - RELATED PARTY TRANSACTIONS

## Executive chairman agreement

As part of an executive chairman agreement, a director provided services to the Company. This agreement was amended on April 1, 2015. Under the terms of this amendment, the director received \$37,500 in equity instruments issued quarterly in arrears as compensation. Effective April 1, 2016, the director agreed to suspend any additional equity compensation, until otherwise agreed by the Company. Effective August 12, 2016, the Company accepted the request for a leave of absence and resignation by the director as Executive Chairman and member of the Board of Directors.

The Company incurred \$0 and \$37,500 in stock based compensation to this director during the years ended December 31, 2017 and 2016, respectively.

The amount payable to this director was \$293,546 as of December 31, 2017 and 2016.

## NOTE 11 - 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.

In 2017, the Company adopted FASB issued ASU No. 2015-17, *Income Taxes (Topic 740)*. This ASU was issued as part of the FASB's simplification initiative focused on improving areas of U.S. GAAP for which cost and complexity may be reduced while maintaining or improving the usefulness of information disclosed within the financial statements. ASU No. 2015-17 simplifies the presentation of deferred income taxes by requiring that deferred tax liabilities and assets be presented net and classified as noncurrent in a classified statement of financial position. As a result of this adoption, the Company now presents deferred tax assets as a single line item, net, in long-term assets or labilities.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

## NOTE 11 – INCOME TAXES (continued)

There was not a provision for income taxes for the years ended December 31, 2017 and 2016.

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 following table presents a reconciliation of the statutory Federal rate and the Company's effective tax rate for the years ended December 31:

	2017	2016
Tax provision (benefit) at Federal statutory rate	(34.00)%	(34.00)%
Accrued compensation	(0.32)%	0.89%
Stock based compensation	4.15%	10.01%
Depreciation and amortization	0.59%	0.36%
Other	0.26%	0.09%
Change in valuation allowance	29.32%	22.65%
Effective tax rate	0.00%	0.00%

The effective tax rate for the three and years ended December 31, 2017 and 2016, differs from the statutory rate of 34% as a result of state taxes (net of Federal benefit), permanent differences, and a reserve against deferred tax assets.

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The following table presents significant components of the Company's deferred tax assets and liabilities for the years ended December 31:

	2017	2016
DEFERRED TAX ASSETS, net:		
Net operating loss carryforwards	\$ 8,705,467	\$ 12,013,384
Accrued compensation	1,074,903	1,535,184
Stock based compensation	66,348	200,700
Credit carryforwards	71,910	100,318
Depreciation and amortization carryforwards	 (71,054)	(87,903)
Total	 9,847,574	 13,761,683
Less valuation allowance	(9,847,574)	(13,761,683)
NET DEFERRED TAX ASSETS assets	\$ _	\$ -

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

#### NOTE 11 – INCOME TAXES (continued)

As of December 31, 2017, the Company had a Federal net operating loss carryforward of \$33,345,946. The net operating loss carryforward expires at various dates beginning in 2026 if not utilized. In addition, the Company had a net operating loss carryforward for Hawaii income tax purposes of \$26,606,541 as of December 31, 2017, which expires at various dates beginning in 2026 if not utilized. These amounts differ from the Company's accumulated deficit due to permanent and temporary tax differences.

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 December 31, 2017 and 2016, 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 December 22, 2017, 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. The TCJA reduces the U.S. federal statutory tax rate from 35% to 21% effective January 1, 2018.

As a result of TCJA, we recorded a change in our deferred tax asset of approximately, \$3.8 million, which was offset by an adjustment to the allowance.

#### Uncertain tax positions

The Company is subject to taxation in the United States and two 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.

As of December 31, 2017 and 2016, 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 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.

#### State tax credits

The Company received a refundable tax credit of \$17,253 and \$47,082 from the State of Hawaii during the years ended December 31, 2017 and 2016, respectively. This amount is recorded as other income in the consolidated statement of operations.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

# NOTE 12 – 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 the years ended December 31:

	2017				
	Net Loss (Numerator)		Shares	Per share amount	
			(Denominator)		
Basic loss per share	\$	(1,985,234)	99,951,385	\$	(0.02)
Effect of dilutive securities—Common stock options and warrants		_	-		-
Diluted loss per share	\$	(1,985,234)	99,951,385	\$	(0.02)
			2016		
		Net Loss	Shares		Per share
	(	Numerator)	(Denominator)		amount
Basic loss per share	\$	(1,783,705)	76,227,524	\$	(0.02)
Effect of dilutive securities—Common stock options and warrants		-	-		-
Diluted loss per share	\$	(1,783,705)	76,227,524	\$	(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 years ended December 31:

	2017	2016
Common stock options	38,213,427	36,821,969
Common stock warrants	127,434,122	88,365,036
Total common stock equivalents	165,647,549	125,187,005

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

#### NOTE 13 - 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 \$29,690 and \$32,049, for the years ended December 31, 2017 and 2016, respectively.

#### NOTE 14 – COMMITMENTS

#### Patent payable

As part of the formation of the Company, a patent license was transferred to the Company. The original license began in 2006. Under the terms of the license the Company agreed to pay \$10,000 per year through 2015 and royalties of 2% on any revenues resulting from the license. There were no revenues generated by this license during the years ended December 31, 2017 and 2016. The remaining obligation of \$20,000 as of December 31, 2017 and 2016, is recorded as a part of accounts payable on the consolidated balance sheets. The license expired in February 2016.

#### Employee settlement

As of December 31, 2017 and 2016, the Company owed a former employee a severance settlement payable in the amount of \$50,000 for accrued vacation benefits. As part of the severance settlement, a stock option previously granted to the former employee was fully vested and extended.

#### BASF agreement and license

In November 2006, the Company entered into a joint development and supply agreement with BASF SE ("BASF"). Under the agreement, the Company granted BASF an exclusive world-wide license to the Company's rights related to the development and commercialization of Astaxanthin consumer health products; the Company retains all rights related to Astaxanthin pharmaceutical products. The Company is to receive specified royalties based on future net sales of such Astaxanthin consumer health products. No royalties were realized from this agreement during the years ended December 31, 2017 and 2016.

## Capsugel agreement

On August 18, 2014, the Company entered into a collaboration agreement with Capsugel US, LLC ("Capsugel") for the joint commercial development of Astaxanthin products ("Capsugel Astaxanthin Products") for the consumer health market that contain nature-identical synthetic Astaxanthin and use Capsugel's proprietary formulation technology. The agreement provides for the parties to jointly administer activities under a product development plan that will include identifying at least one mutually acceptable third party marketer who will further develop, market and distribute Capsugel Astaxanthin Products. Capsugel will share revenues with the Company based on net sales of products that are developed under the collaboration. No revenues were realized from this agreement during the years ended December 31, 2017 and 2016. In January 2016, the Company suspended development of a Capsugel Astaxanthin Product, ASTX-1F, based on certain technical issues which, together with other business and regulatory issues, materially impeded the formulation of ASTX-1F as a commercially viable product for the consumer health market.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

#### NOTE 15 - SUBSEQUENT EVENTS

The Company evaluated all material events through the date the financials were ready for issuance and noted the following non-recognized events for disclosure.

In January 2018: (i) an unvested option to purchase 50,000 shares of common stock was fully vested and the expiration modified from 90 days post termination of services to September 2027; (ii) an option to purchase 500,000 shares of common stock was granted to a service provider and shall be exercisable at \$0.16 per share, vest over 4 years, and expire in 10 years; (iii) an option to purchase 166,667 shares of common stock was granted to a service provider and shall be exercisable at \$0.16 per share, vest over 1 year, and expire in 5 years; and (iv) an option to purchase 166,667 shares of common stock was granted to an employee and shall be exercisable at \$0.16 per share, vest over 1 year, and expire in 5 years.

\*\*\*

Through and including , 2018, all dealers effecting transactions in the registered securities offered hereby, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to the obligation of dealers to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

Offer to Exchange

Each \$0.625 Warrant to purchase shares of Common Stock

and

\$0.15 in cash

for

**Shares of Common Stock** 



, 2018

**PROSPECTUS** 

We Are Not Asking You for a Proxy and You are Requested To Not Send Us a Proxy

#### PART II

### INFORMATION NOT REQUIRED IN PROSPECTUS

#### Item 20. Indemnification of Directors and Officers

Our amended and restated certificate of incorporation and bylaws limit our directors' and officers' liability to the fullest extent permitted under Delaware corporate law. Specifically, our directors and officers are not liable to us or our stockholders for monetary damages for any breach of fiduciary duty by a director or officer, except for liability:

- for any breach of the director's or officer's duty of loyalty to us or our stockholders;
- for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;
- under Section 174 of the Delaware General Corporation Law; or
- for any transaction from which a director or officer derives an improper personal benefit.

If the Delaware General Corporation Law is amended to authorize corporate action further eliminating or limiting the personal liability of directors or officers, then the liability of our directors or officers shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended.

The provision regarding indemnification of our directors and officers in our amended and restated certificate of incorporation generally does not limit liability under state or federal securities laws.

Delaware law and our amended and restated certificate of incorporation and bylaws provide that we will, in certain situations, indemnify any person made or threatened to be made a party to a proceeding by reason of that person's former or present official capacity with our company against judgments, penalties, fines, settlements and reasonable expenses including reasonable attorney's fees. Any person is also entitled, subject to certain limitations, to payment or reimbursement of reasonable expenses in advance of the final disposition of the proceeding.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duty. These provisions may also have the effect of reducing the likelihood of derivative litigation against directors and officers, even though such an action, if successful, might otherwise benefit us and our stockholders. In addition, your investment may be adversely affected to the extent that, in a class action or direct suit, we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers or persons controlling the Company pursuant to Delaware law, we are informed that in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

# Item 21. Exhibits and Financial Statement Schedules.

# (a) Exhibits

Exhibit No.	Description
2.1	Agreement and Plan of Merger, dated as of November 27, 2013, by and among Koffee Korner Inc., Cardax Acquisition, Inc., Cardax Pharmaceuticals, Inc. and Cardax Pharma, Inc. (1)
2.2	First Amendment to the Agreement and Plan of Merger, dated as of January 10, 2014, by and among Koffee Korner Inc., Cardax Acquisition, Inc., Cardax Pharmaceuticals, Inc. and Cardax Pharma, Inc. (2)
2.3	Second Amendment to the Agreement and Plan of Merger, dated as of February 7, 2014, by and among Koffee Korner Inc., Cardax Acquisition, Inc., Cardax Pharmaceuticals, Inc. and Cardax Pharma, Inc. (3)
2.4	Amended and Restated Agreement and Plan of Merger, dated as of November 24, 2015 by and among Cardax Pharmaceuticals, Inc. and Cardax, Inc. (4)
3.1	Certificate of Incorporation, as amended, of Cardax, Inc. (2)
3.2	Amended and Restated Bylaws of Cardax, Inc. (2)
4.1	Form of specimen certificate representing Common Stock of Cardax, Inc. (3)
4.2	Form of Class A Warrant (3)
4.3	Form of Noteholder Warrant (3)
4.4	Form of Placement Agent Warrant (3)
4.5	Form of Financial Consultant Warrant (3)
4.6	Form of Warrant issued to JLS Ventures, LLC(3)
5.1	Opinion of Herrick, Feinstein LLP**
10.1	Cardax, Inc. 2014 Equity Compensation Plan <sup>(2)</sup>
10.2	Form of Stock Option Agreement under the 2014 Equity Compensation Plan <sup>(3)</sup>
10.3	Form of Notice of Stock Option Grant under the 2014 Equity Compensation Plan <sup>(3)</sup>
10.4	Form of Notice of Stock Option Grant In Substitution of Stock Option Grant under the Cardax Pharmaceuticals, Inc. 2006  Equity Compensation Plan <sup>(3)</sup>
10.5	Stock Purchase Agreement, dated as of January 10, 2014, by and among Koffee Korner Inc., Cardax Pharmaceuticals, Inc. and Cardax Pharma, Inc. (2)
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10.6	Spin-off Agreement, dated as of February 7, 2014, between Koffee Korner Inc. and Nazneen D'Silva <sup>(3)</sup>
10.7	Senior Executive Employment Agreement, dated February 7, 2014, of David G. Watumull and the supplement thereto dated June 30, 2015 (3)
10.8	Senior Executive Employment Agreement, dated February 7, 2014, of David M. Watumull (3)
10.9	Senior Executive Employment Agreement, dated February 7, 2014, of Gilbert M. Rishton <sup>(3)</sup>
10.10	Senior Executive Employment Agreement, dated February 7, 2014, of Timothy J. King(3)
10.11	Agreement for Services as the Executive Chairman dated February 7, 2014, by and between Cardax, Inc. and Nicholas Mitsakos <sup>(3)</sup>
10.12	Form of Indemnification Agreement (5)
10.13	Form of Independent Board of Directors Agreement (5)
10.14	Joint Development and Supply Agreement effective on November 15, 2006, by and between BASF Aktiengesellschaft and Cardax Pharmaceuticals, Inc., as amended by Amendment No. 1 to Joint Development and Supply Agreement effective on April 15, 2007.
10.15	Collaboration Agreement, dated as of August 18, 2014, by and between Capsugel US, LLC and its affiliates and Cardax, Inc. and its affiliates (7)
10.16	Form of Registration Rights Agreement <sup>(8)</sup>
10.17	Form of Subscription Agreement (8)
10.18	Form of Class D Warrant <sup>(8)</sup>
10.19	Form of Class E Warrant (8)
10.20	Supplement to Agreement of the Executive Chairman (9)
10.21	Independent Directors' Compensation Agreement (9)
10.22	Supplement to Senior Executive Employment Agreement of David G. Watumull (9)
10.23	Payment Deferral and Acceptance Agreement of JBR Business Solutions, LLC (9)
10.24	Form of Payment Deferral and Acceptance Agreement (9)
10.25	Form of Subscription Agreement (10)
10.26	Form of Equity Purchase Agreement (11)
10.27	Form of Subscription Agreement (12)
10.28	Form of Subscription Agreement (13)
10.29	Exclusivity Agreement, dated as of October 16, 2017, by and between Cardax, Inc. and General Nutrition Corporation (13)
21.1	Subsidiaries of Cardax, Inc. (3)
23.1	Consent of KBL, LLP*
23.2	Consent of Herrick, Feinstein LLP (contained in the Opinion of Herrick, Feinstein, LLP under Exhibit 5.1)
99.1	Letter to Warrant Holders*
99.2	<u>Letter of Transmittal*</u>
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101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

- \* Filed herein.
- \*\* To be provided by amendment.
- (1) Filed as an exhibit to the Current Report on Form 8-K of the Company dated November 27, 2013.
- (2) Filed as an exhibit to the Current Report on Form 8-K of the Company dated January 13, 2014.
- (3) Filed as an exhibit to the Current Report on Form 8-K of the Company dated February 10, 2014.
- (4) Filed as an exhibit to the Current Report on Form 8-K of the Company dated November 24, 2015.
- (5) Filed as an exhibit to Amendment No. 1 of the Registration Statement on Form S-1 of the Company dated September 2, 2014.
- (6) Filed as an exhibit to the Current Report on Form 8-K/A of the Company dated April 16, 2014. Confidential treatment has been requested for this exhibit, and confidential portions have been filed separately with the SEC.
- (7) Filed as an exhibit to the Current Report on Form 8-K/A of the Company dated December 3, 2014.
  - Confidential treatment has been requested for this exhibit, and confidential portions have been filed separately with the SEC.
- (8) Filed as an exhibit to the Current Report on Form 8-K of the Company filed March 9, 2015.
- (9) Filed as an exhibit to the Current Report on Form 8-K of the Company filed July 7, 2015.
- (10) Filed as an exhibit to the Quarterly Report on Form 10-Q of the Company filed May 13, 2016.
- (11) Filed as an exhibit to the Current Report on Form 8-K of the Company dated July 13, 2016.
- (12) Filed as an exhibit to the Annual Report on Form 10-K of the Company filed March 31, 2017.
- (13) Filed as an exhibit to the Current Report on Form 8-K of the Company filed November 14, 2017.

#### (b) Financial Statement Schedules

All financial statement schedules are included in the Registrant's consolidated financial statements and the related notes thereto, or are inapplicable or otherwise not required.

#### Item 22. Undertakings

The undersigned Registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
  - (i) to include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended (the "Act");
- (ii) to reflect in the prospectus any facts or events arising after the effective date of this registration statement (or the most-recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

- (iii) to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.
- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act of 1933, as amended, to any purchaser: if the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.
- (5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933, as amended, to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
  - (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
  - (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
  - (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
    - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (6) The undersigned registrant hereby undertakes as follows: that prior to any public reoffering of the securities registered hereunder through use of a prospectus, which is a part of this Registration Statement, by any person or party who is deemed to be an underwriter within the meaning of Rule 145(c), the issuer undertakes that such reoffering prospectus will contain the information called for by the applicable registration form with respect to reofferings by persons who may be deemed underwriters, in addition to the information called for by the other items of the applicable form.
- (7) The registrant undertakes that every prospectus: (i) that is filed pursuant to the immediately preceding paragraph, or (ii) that purports to meet the requirements of Section 10(a)(3) of the Securities Act of 1933, as amended, and is used in connection with an offering of securities subject to Rule 415, will be filed as a part of an amendment to the registration statement and will not be used until such amendment is effective, and that, for purposes of determining any liability under the Securities Act of 1933, as amended, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

- (8) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers or persons controlling the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.
- (9) The undersigned registrant hereby undertakes to respond to requests for information that is incorporated by reference into the prospectus pursuant to Items 4, 10(b), 11 or 13 of this Form, within one business day of receipt of such request, and to send the incorporated documents by first class mail or other equally prompt means. This includes information contained in documents filed subsequent to the effective date of the registration statement through the date of responding to the request.
- (10) The undersigned registrant hereby undertakes to supply by means of a post-effective amendment all information concerning a transaction, and the company being acquired involved therein, that was not the subject of and included in the registration statement when it became effective.

# **SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, the Registrant has duly caused this registration statement to be filed on its behalf by the undersigned, thereunto duly authorized in the City and County of Honolulu, State of Hawaii on May 2, 2018.

# CARDAX, INC.

By: /s/David G. Watumull

Name: David G. Watumull

Title: President & Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement on Form S-4 has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ David G. Watumull David G. Watumull	President, Chief Executive Officer, and Director	May 2, 2018
/s/ John B. Russell John B. Russell	Chief Financial Officer and Treasurer	May 2, 2018
/s/ George W. Bickerstaff, III George W. Bickerstaff, III	Chairman	May 2, 2018
/s/ Terence A. Kelly Terence A. Kelly, Ph.D.	Director	May 2, 2018
/s/ Michele Galen Michele Galen	Director	May 2, 2018
	II-8	

#### POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints David G. Watumull, as his or her true and lawful attorney-in-fact and agent, with full power of substitution, for him in any and all capacities, to sign this Registration Statement and any and all amendments to this Registration Statement, including post-effective amendments or any abbreviated registration statement and any amendments thereto filed pursuant to Rule 462(b) increasing the number of securities for which registration is sought, and to file the same, with all exhibits thereto and other documents in connection therewith, with the SEC, granting unto said attorney-in-fact and agents, with full power of each to act alone, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully for all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or his or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the date indicated.

Signature	<u>Title</u>	Date
/s/ David G. Watumull David G. Watumull	President, Chief Executive Officer, and Director	May 2, 2018
/s/ John B. Russell John B. Russell	Chief Financial Officer and Treasurer	May 2, 2018
/s/ George W. Bickerstaff, III George W. Bickerstaff, III	Chairman	May 2, 2018
/s/ Terence A. Kelly Terence A. Kelly, Ph.D.	Director	May 2, 2018
/s/ Michele Galen Michele Galen	Director	May 2, 2018
	II-9	



### CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the inclusion of our report on the consolidated financial statements of Cardax, Inc. and Subsidiary dated March 26, 2018 and the inclusion of the reference as "Experts" in the Registration Statement on Form S-4 dated May 2, 2018.

/s/ KBL, LLP

KBL, LLP New York, NY May 2, 2018

535 Fifth Avenue, 30<sup>th</sup> Floor, New York, NY 10017

212.785-9700

Dear Cardax Warrant Holder,

We are very pleased to provide you with an opportunity to exchange your Cardax \$0.625 warrants expiring in February 2019, together with a payment of only \$0.15 per share, for registered shares of Cardax common stock.

This offer is available to original holders, such as yourself, and anyone that acquires these warrants. We believe this offer presents a way to utilize your existing warrants to increase your participation in our future growth.

We plan to use proceeds from this offering for general corporate purposes including our ZanthoSyn® sales and marketing program, which is focused on outreach to healthcare providers and GNC stores. We may also use proceeds from this offering for clinical development.

A registration statement relating to these securities has been filed with the Securities and Exchange Commission but has not yet become effective. These securities may not be sold nor may offers to buy be accepted prior to the time the registration statement becomes effective.

The prospectus and transmittal letter will be provided to you promptly after the effective date of the registration statement. The registration statement that was filed with the Securities and Exchange Commission is available at <a href="https://www.sec.gov">www.sec.gov</a>.

This one-time offer will expire 20 business days after the effective date of the registration statement, unless extended by the Company. Any warrants that are not exchanged will remain outstanding on their original terms.

No offer to buy the securities can be accepted and no part of the purchase price can be received until the registration statement has become effective, and any such offer may be withdrawn or revoked, without obligation or commitment of any kind, at any time prior to notice of its acceptance given after the effective date.

For questions or requests for information, you can contact us or our solicitation agent, CIM Securities:

Cardax, Inc. Investor Relations 2800 Woodlawn Drive, Suite 129 Honolulu, Hawaii 96822 investors@cardaxpharma.com 808-457-1400

Sincerely,

David

David G. Watumull President and CEO Cardax, Inc. CIM Securities, LLC Andrew Daniels, Managing Director 509 Madison Ave., 9th Floor New York, NY 10022 Andrew.Daniels@brooklinecm.com 646-603-6717

### LETTER OF TRANSMITTAL

The undersigned, hereby elects to exchange and exercise, pursuant to the provisions of the Cardax, Inc. Warrant Exchange Offer, an outstanding warrant held by the undersigned to purchase shares of common stock of the Company at \$0.625 per share (the "Original Warrant"), together with payment of \$0.15 per share (the "Exchange Payment"), for shares of common stock of the Company (the "Exchange Shares").

Original Warrant:		
Warrant Certificate Number:	Number of Shares Un	derlying Warrant:
Registered Name of Warrant Holder:		
Beneficial Owner Name:		
Beneficial Owner Title:		
Address:		
Email:	Phone:	
Tax Identification Number (please attach	Form W-9):	<del>_</del>
Evidence of Ownership (please attach):	[ ] Original Warrant	[ ] Application for Lost Instrument Bond (if you do not have the Original Warrant)
Number of Exchange Shares:		<u></u>
Exchange Payment:		
Payment Amount (Number of Exchange	Shares x \$0.15 per share): \$	
Method of Payment:	[ ]Check payable to: Cardax Pharma, Inc. 2800 Woodlawn Drive Suite 129 Honolulu, HI 96822	[ ]Wire transfer directed to:    Bank Name:    Routing Number:    Account Name:    Account Number:
	ll be placed in DRS Book Entry. If	Shares to be issued. Note, if you do not specify how you would you wish to have your shares delivered via DWAC, you must
[ ] PLEASE CHECK THIS BO	X FOR DRS BOOK ENTRY ONLY	(RECOMMENDED)
[ ] PLEASE CHECK THIS BO	X FOR DELIVERY OF CERTIFIC	ATED SHARES
[ ] PLEASE CHECK THIS BO	X FOR DWAC. PROVIDE INSTRU	UCTIONS AND MEDALLION BELOW
Recipient Brokerage Firm:		
DTC Participant Number:		
Account Name:		Place Medallion Stamp Here
Account Number:		
their own personal investment; (ii) they Exchange Shares; (iii) they are not an "a dealer, they are not engaged in and do not they will receive Exchange Shares for the	have no arrangement or understan ffiliate" of Company as defined in Foot intend to engage in the distribution eir own account in exchange for Original Company of the Compa	will be acquired in the ordinary course of their business or for ding with any person to participate in the distribution of the Rule 405 under the Securities Act; (iv) if they are not a brokeron of the Exchange Shares; and (v) if they are a broker-dealer, ginal Warrants that were acquired as a result of market-making connection with any resale of such Exchange Shares.
Signature:		Date:
Name:		Title: