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

FORM 10-K

[X] ANNUAL REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the Fiscal Year ended December 31, 2018

or

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

For the transition period from _____ to _____

Commission File Number: 000-30415

Zivo Bioscience, Inc.

(Name of Registrant as Specified in Its Charter)

Nevada	**87-0699977**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)

2804 Orchard Lake Rd., Suite 202, Keego Harbor, MI 48320
(Address of Principal Executive Offices)

(248) 452 9866
(Issuer's telephone number)

Securities registered under Section 12(b) of the Exchange Act:
None

Securities registered under Section 12(g) of the Exchange Act:
Common Stock, par value $.001 per share
(Title of Class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.
Yes [ ] No [X]

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.
Yes [ ] No [X]

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.
Yes [X] No [ ]

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [ ]

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

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

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

Yes [ ] No [X]

The aggregate market value of the issuer’s voting and non-voting common equity held as of June 30, 2018 by non-affiliates of the issuer was $20,172,951 based on the closing price of the registrant’s common stock on such date.

As of February 11, 2019, there were 180,036,436 shares of $.001 par value common stock issued and outstanding.

FORM 10-K
ZIVO BIOSCIENCE, INC. AND SUBSIDIARIES INDEX

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Some of the statements contained in this report are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). These statements involve known and unknown risks, uncertainties and other factors which may cause our or our industry's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Forward-looking statements include, but are not limited to statements regarding:

- *our ability to raise the funds we need to continue our operations;*
- *our goal to begin to generate revenues and become profitable;*
- *regulation of our product;*
- *market acceptance of our product and derivatives thereof;*
- *the results of current and future testing of our product;*
- *the anticipated performance and benefits of our product; the ability to generate licensing fees; and*
- *our financial condition or results of operations.*

In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "could," "would,", "expects," "plans," "anticipates," "believes," "estimates," "projects," "predicts," "potential," and similar expressions intended to identify forward looking statements. These statements are only predictions and involve known and unknown risks, uncertainties, and other factors that may cause our actual results, levels of activity, performance, or achievements to be materially different from any future results, levels of activity, performance, or achievements expressed or implied by such forward-looking statements. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Also, these forward-looking statements represent our estimates and assumptions only as of the date of this report. Except as otherwise required by law, we expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any forward-looking statement contained in this report to reflect any change in our expectations or any change in events, conditions or circumstances on which any of our forward-looking statements are based. We qualify all of our forward-looking statements by these cautionary statements.

PART I

Item 1. Business.

Unless we state otherwise or the context otherwise requires, references in this Annual Report on Form 10-K to "we," "our," "us," "the Registrant" or "the Company" refer to ZIVO Bioscience, Inc.., a Nevada corporation, and its subsidiaries.

General

We were incorporated under the laws of the State of Nevada on March 28, 1983, under the name of "L. Peck Enterprises, Inc." On May 27, 1999, we changed our name to "Western Glory Hole, Inc." From 1990 until October 2003, we had no business operations; we were in the development stage and were seeking profitable business opportunities. On October 30, 2003, we acquired 100% of the outstanding shares of Health Enhancement Corporation ("HEC") in exchange for 9,000,000 of our shares, making HEC our wholly-owned subsidiary. In connection with this transaction, we changed our name to Health Enhancement Products, Inc. On October 14, 2014, at the annual meeting of the stockholders of the Company, a proposal was passed to change the name of the Company from Health Enhancement Products, Inc. to ZIVO Bioscience, Inc. ("ZIVO"). On October 30, 2014, the Financial Industry Regulatory Authority ("FINRA") approved the name ZIVO Bioscience, Inc. for trading purposes and the symbol change to ZIVO effective November 10, 2014.

We acquired HEC in 2003 because we believed its unique and complex algal culture produced natural bioactive compounds that promoted health benefits. A production facility based in Scottsdale, AZ produced and marketed a liquid dietary supplement with marginal success beginning in 2003 until sales were suspended in January of 2012.

Our new management team, in place since December 2011, determined the sole focus for the near term was to move forward with a research-based product development program. From 2012 through 2018, we engaged fully in such activities, all as more fully explained herein. We hold significant intellectual property in the form of bioactive compounds, patented applications and processes, an optimized algal strain, nutritional products and applications derived from our proprietary algal biomass that can find their way into food, feed, supplements and therapeutics.

From the start of 2017 and moving into 2019, we are conducting the final phase of validation for a discovery-stage bovine mastitis treatment, consisting of *in vitro* and *in vivo* studies, which is intended to dovetail with analytics and characterization of bioactive compounds produced by the algae itself. This body of work will be submitted to Zoetis, Inc. (ZTS) ("Zoetis") a global animal health company, per an option/collaboration agreement dated December 19, 2013 and amended in 2014, to determine if our bioactive compounds exhibit efficacy in addressing bovine mastitis, a common condition afflicting dairy cows that results in milk production losses. Upon completion of the research, we expect to move into negotiations regarding the option payment and subsequent licensing.

Upon the finalization of the negotiations on the aforementioned option and license agreement, we plan to explore our options for further licensing arrangements as they relate to canine joint health and potentially human cholesterol management.

On the food and feed application side of the business, our business model anticipates deriving future income from licensing and selling natural ingredients that may be extracted from or are initially based on our proprietary alga1 cultures. In line with this, on April 20, 2017, we entered into a Limited License Agreement (the "License Agreement") with NutriQuest, LLC ("NutriQuest") a recognized leader in animal health and nutrition solutions. In the License Agreement, we granted to NutriQuest a limited, exclusive license to market, distribute sell and collect the sales proceeds in all of our nutrition, feed additive and supplementation applications relating to naturally-derived algal biomass and extraction products for oral administration in swine and/or poultry species. As mentioned above, we affirmed human GRAS Generally Recognized As Safe, or "GRAS" status as a plant-based ingredient in food products for human consumption. We are in the process of garnering poultry GRAS status as a production feed ingredient and expect that approval in mid-2019. We have also entered into an Exclusive Supply Agreement (the "Exclusive Supply Agreement") with NutriChipz, LLC ("NutriChipz") to supply our algae as an ingredient in chips and crisps. Other applications available for out-licensing include spice mixes, rubs and condiments.

Further, we expect these new product formulations will likely be sold to much larger, well-established animal, food, dietary supplement and medical food manufacturers. The anticipated income streams are to be generated from a) royalties and advances for licensed natural bioactive ingredients, and b) bulk sales of such ingredients. We expect bulk ingredients to be made by contracted algae growers and then sold by us to animal food, dietary supplement and food processors and/or name-brand marketers.

In January 2007, we established HEPI Pharmaceuticals, Inc. as our wholly owned subsidiary ("HEPI Pharma"). The purpose of HEPI Pharma was to develop potential pharmaceutical applications for the bioactive ingredients that may be derived from our algae cultures.

In February 2013, we formed ZIVO Biologic, Inc., a Delaware corporation ("ZIVO Biologic"), for the purpose of manufacturing and commercialization of proprietary ingredients for non-medicinal animal health applications. ZIVO Biologic is 100% owned by ZIVO Bioscience, Inc.

In August 2013, we acquired the assets, consisting primarily of intellectual property rights, of Wellness Indicators, Inc. ("Wellness"), a Michigan corporation based in Illinois. Concurrently, we formed WellMetris, LLC as a 100% owned entity of ZIVO. In 2018, we changed the name of WellMetris, LLC to WellMetrix, LLC ("WellMetrix"). We acquired four patent applications as part of the transaction, in addition to engineering drawings, prototypes, chemical formulae, validation data, laboratory equipment and IT equipment. We assigned all of the intellectual property acquired to WellMetrix with a stated value of $1,391,281.

The mission of WellMetrix is to develop, manufacture, market and sell Wellness Tests. The Wellness Tests are intended to provide individuals the information and opportunity to optimize their health and identify future health risks or to provide insurers, employers and healthcare providers with timely information to intervene with wellness programs, fitness regimes or other preventative measures. During the period of time we have owned WellMetrix, we have drafted and filed an additional eight patent applications around the intellectual property acquired, as noted in the section "Patents and Proprietary Rights." In the summer of 2014, we evaluated the circumstances related to the original four patent applications acquired and determined that two of the existing patent applications could be improved and filed new patents applications to redefine and better protect our intellectual property. We have abandoned one of the initial four patent applications purchased, released two of the four applications purchased and substituted them with two new patent applications, and retained ownership of one of the four applications purchased, which has now converted to a national phase application. In connection with the abandoned patents, we have protected our rights with regards to the original patent applications purchased, however we determined we should record a loss on abandonment of $1,391,281 for the year ended December 31, 2014 as the initial value of the acquired patent applications pending resides in the newly drafted and filed eight patent applications. On December 25, 2018 the U.S Patent and Trademark Office ("USPTO") issued Patent No. 10,161,928 – Wellness Panel, effectively securing the core conceptual premise of the WellMetrix technology platform.

2018 Highlights

On the nutritional side of the business, in November 2018, we affirmed GRAS status for our ZIVO algal strain to be used as a plant based ingredient in food products for human consumption. A tradename was adopted -- KALGAE™ -- to simplify the scientific name of our premier strain. We're also developing a consumer-facing ingredient brand-name, as well, to differentiate our optimized, non-GMO domesticated algal strain from the wild strains present in nature or other, less palatable algae such as spirulina or euglena, which are positioned as healthy food and beverage ingredients.

We also executed a letter of intent with Grekin Laboratories and Dr. Steven Grekin to formulate, test, manufacture and market a suite of anti-aging and skin health supplements and food products featuring our proprietary algal biomass. ZIVO and Grekin have completed the formulation work and are engaged in manufacturing startup, to be followed by clinical trials and market launch.

We are in the process of garnering GRAS status for a poultry feed ingredient and expect that approval in mid-2019. To that end, we have completed a number of studies relating to poultry production that support optimized animal nutrition. At this time, ZIVO will not publicly divulge additional information regarding study performance due to marketing and product positioning considerations. These studies are being performed in conjunction with our licensing partner, NutriQuest, a global innovator in animal nutrition, as well as select contract research organizations. On the pharmaceutical side of the business, ongoing studies during 2018 re-confirmed the presence and efficacy of therapeutic agents which promote a robust immune response and address several inflammatory pathways in human, murine and bovine models. This builds on several years of research and validation to substantiate beneficial effects in combatting bovine mastitis, a condition typically caused by infective pathogens that results in loss of milk production. The elucidation and characterization of the therapeutic agents has continued in parallel, and we have engaged several university labs and private labs to continue this work, as it adds to the discovery-stage intellectual property that can be out-licensed or sold.

Relating to funding, 2018 saw a significant increase in the availability of funding. On the nutrition side, this allowed the Company to commence commercial scale-up with several Indian producers. The Indian producers have moved forward with open pond production, and we expect noticeable volume in Q1 2019. We have also expended considerable effort to bring Chinese producers on line and await formal product registration with the Chinese government to commence production in several regions within mainland China. In late 2018 we signed a formal letter of intent with a Peruvian producer that can ramp up production to significant levels in a relatively short timeframe, and has expressed interest in building new facilities to meet our demand for biomass.

We are continuing with our research partners to conduct classical, non-GMO strain development to improve cultivation efficiencies. On the pharmaceutical side, we are accelerating the discovery and analytics work pertinent to the bovine mastitis therapeutic candidate, and to enter the final arm of the *in vivo* validation study. A number of key research organizations were engaged to work on several fronts simultaneously in order to compress the timeframe and approach the tasks from different functional and analytical perspectives. The research organizations included the National Center for Natural Product Research at the University of Mississippi, Michigan State University School of Veterinary Medicine, University of North Carolina – Greensboro, Donald Danforth Plant Science Center, Boston Institute of Biotechnology, Eurofins, SBH Biosciences, Dairy Experts and Elicityl.

Marketing and Sales

ZIVO Algal Products & Derivatives

The marketing and sale of all future products are subject to compliance with applicable regulations. Based on the findings from ongoing research, we have approached and are continuing to approach potential customers or licensees in the market verticals described below. The products described throughout this document are still in the development stage, and are subject to development risk. There can be no assurance that any of the products described below will prove to be effective, or if found to be effective, will be able to be produced in a commercially viable manner.

Animal Health and Nutrition

A 2007 pilot study in dairy cows indicated that our algal culture may be effective in fending off the onset or significantly reducing symptoms of bovine mastitis – a condition that effectively stops milk production in affected cows. According to the National Mastitis Council, the condition affects 10% of the U.S. dairy herd at any one time, costing producers approximately $1,100 per case. In the U.S. alone, production losses are nearly $3 billion. *Mycoplasma bovis* causes a highly contagious and potentially fatal form of bovine mastitis (an infection of the mammary gland), for which there currently is no treatment. In the cow's udder, mammary epithelial cells form an immunological barrier to protect the mammary gland. When bacteria or other pathogens break through this barrier, an infection can set in, affecting quality and quantity of milk produced. Our compounds showed promising early results for restoration of the immunological barrier in experiments conducted *in vitro*, as conducted by the Principal Researcher at the University of Wisconsin - Madison, Department of Dairy Science.

On December 20, 2013 (amended in 2014), we entered into a Collaboration and Option Agreement (the "Zoetis Agreement") with Zoetis, a global animal health company, in connection with the prevention, treatment, and management of bovine mastitis. In the Zoetis Agreement, we granted to the counterparty an exclusive option to negotiate an exclusive license with us. Specifically, upon completion of a collaborative study (which is in process), and acceptance of the work product by Zoetis, the Zoetis Agreement provides for a 90-day exclusivity period for evaluation of results, followed by a 90-day period to exercise the option and negotiate an option payment.

With respect to livestock and poultry applications, we intend to move on three related fronts – working to bring an algal feed ingredient to market in the United States and EU by amplifying the algae culture; working to produce a dietary supplement or feed additive for global consumption outside the U.S.; and, putting ourselves in a position to license the isolated bioactive molecules to a pharmaceutical or drug development company for synthetic development as a prescribed treatment for production animal applications. The isolated bioactive molecules form the intellectual property of interest to Zoetis. The feed ingredient, feed additive and dietary supplement are intended for other potential collaborators along with NutriQuest, (whose agreement covers swine and/or poultry species only).

A 2008 pilot study in dogs indicated that our algal culture may be effective in relieving the symptoms of osteoarthritis and soreness from overexertion. That same experiment with our amplified algae culture can be repeated in dogs, which if successful could allow a relatively rapid release to production and sales as a companion animal dietary supplement. According to the Nutrition Business Journal, the canine joint-health dietary supplement market segment tops $360 million annually in the U.S. alone. Estimates for the world market may be substantially higher, but such estimates are difficult to obtain. An *in vitro* tissue explant experiment conducted by the Comparative Orthopaedics Laboratory at University of Missouri found that direct stimulation of living canine joint tissue with our bioactive compounds protected cartilage from degradation by IL-1b, an inflammatory cytokine. If our product is proven to be effective *in vivo* and can be produced on an efficient basis, we intend to sell or license our product as a supplement ingredient to larger, well-established and profitable brand names in the pet industry. We have conducted other laboratory studies simulating the effects of canine osteoarthritis with generally positive results.

With all of the above, the isolated bioactive molecules found in the amplified algae product may, subject to successful negotiations, be licensed to a pharmaceutical company for development as a synthetic prescription drug. We expect that the process of developing and testing such a drug could take years. Therefore, as is common practice, we intend to work toward negotiating an upfront discovery-stage licensing fee, milestone payments upon each successful conclusion of a developmental phase, followed by pre-market approval; and finally, a steady stream of royalties in the future. The other revenue streams generated by feed and supplement sales may begin to be realized in 2019, but no assurance can be provided in that regard. Much of the research and licensing progress has been and will continue to be paced by the availability of capital funding and/or debt financing (see Item 7 – Management's Discussion and Analysis of Financial Condition and Results of Operations: Liquidity and Capital Resources).

In April 2017, we entered into the License Agreement with animal health innovator NutriQuest, which provides nutritional services to the biggest brand names in US poultry and pork production. We have completed a number of "pen" studies (pen studies are controlled testing of our ZIVO Algae to groups of incubator chicks ranging in size from 1,000 chicks to 25,000 chicks, ultimately up to 1 million chicks - "broilers"). Broilers consume more than 61 billion pounds of feed annually in the U.S.. The U.S. is the third-largest poultry producing nation. Phytogenic or plant-based ingredients like ours constitute the fastest-growing segment of the global poultry feed industry, currently generating about $780 million in sales annually, and growing at 8% annually. We are well-positioned to take market share if we meet our numbers.

Functional Food Ingredient - Human

According to NutraIngredients-USA, functional foods, or health foods, represent an estimated $20 billion business in the U.S. and a $28 billion business in Europe. The Middle East, although significantly smaller, is growing at a rate of 12-14% annually, followed closely by the newly-affluent in China and India. These foods typically are processed products that contain one or more staple foods augmented with a variety of performance-enhancing ingredients.

We entered into the Exclusive Supply Agreement in 2018 to supply the ZIVO Algae to NutriChipz to gain a presence in the functional food market. As we move forward into 2019, we plan to work with other suppliers in the functional food market vertical as our algae supply expands.

Dietary Supplement & Nutraceutical - Human

The success of spirulina, dried kelp, Omega-3 fish oil, resveratrol, saw palmetto and similar supplements attests to the American public's obsession with 'natural' products. The dietary supplement business is a $24 billion industry in the U.S. alone, and twice that the world over.

Rather than attempting to market as a branded nutraceutical or supplement, we will endeavor to private-label the compound or finished product for larger, well-established marketers and retailers. If we are able to accomplish this, we believe this is a more efficient use of capital and resources, while still retaining control of the intellectual property, the manufacturing process and pricing power. Our goal is not to be placed in a position where our premier product application is commodified and we must compete on price.

As an entry into this market, we have executed a letter of intent with Grekin Laboratories, directed by Dr. Steven K. Grekin, in a joint effort to develop, test and launch an exclusive line of products designed to address skin health and the appearance of aging through novel combinations of all-natural ingredients featuring the ZIVO proprietary algae strain. The initial product line being readied for launch includes a nourishing complex, fatty acid replenishment, collagen/protein mix and phytonutrient booster.

Medicinal Food and Botanical Drug

Doctors prescribe medicinal foods and botanical drugs prior to, during or after various medical procedures, including surgery, chemotherapy, radiation therapy and physical therapy. At times, medicinal foods are used to augment the effects of prescription drugs. These medicinal foods are expensive and typically reimbursed by health insurers. Botanical drugs can also be made available over-the- counter (OTC) after an extensive compliance program.

We believe that this area has potential for us if we can demonstrate that various properties of the algal extract can be isolated and produced as a medicinal food or beverage prescribed by physicians, or as an OTC botanical drug. These sectors are both regulated by the Food and Drug Administration ("FDA"). Medicinal food standards are somewhat less stringent than pharmaceutical applications. Botanical drug standards are similar to other pharmaceutical applications. Under our business model, if we are able to produce a commercial product in these areas, we will endeavor to enter into a private-label arrangement with a larger strategic partner to produce and distribute these product applications.

Pharmaceuticals

We believe that we may be able to pursue prescription drug applications for our product. The process for developing a new prescription drug is costly, complex and time-consuming. It is an undertaking well beyond our financial capabilities and one that may take years to achieve. Our intent is to out-license the natural molecules at discovery stage and allow the licensee to develop the Investigatory New Drug (IND) filing and conduct subsequent safety/efficacy phases in order to bring a therapeutic product to market. If we elect to pursue the development of a prescription drug, we will likely seek a partnership with a co-developer that will share in the risk and expense of the initial development process, and then share in any royalties resulting from the licensing or sale of any synthetic molecule and its homologs we are able to develop and license.

The first such step was the execution of the bovine mastitis Collaboration and Option Agreement with Zoetis. Part of our business plan is to execute agreements that may ultimately result in option payments, licenses fees and royalty payments across animal and human applications, typically at the discovery stage.

WellMetrix

WellMetrix was formed for the purpose of developing, manufacturing, marketing, and selling tests that we believe will allow individuals and their care providers to optimize personal health and identify future health risks. The information obtained will also provide insurers, employers and healthcare providers timely information to intervene with wellness programs, fitness regimes or other preventative measures. We plan to develop and commercialize such tests in three phases:

- In phase one ("Phase One") or, alternately named Gen 1.0, we plan to develop and commercialize a series of tests, which are intended to measure indicators of good health and optimal metabolic function (collectively, the "Phase One Test"). The Phase One Test has been designed to measure biomarkers related to oxidative stress, inflammation, and antioxidant status to establish a metabolic assessment from which intervention can commence, and from which metabolic syndrome can be inferred. A patent that covers this particular combination of biomarkers was issued December 25, 2018.

- In phase two ("Phase Two") or alternately named Gen 1.5, we plan to develop and commercialize a testing technology focused on the positive or negative metabolic effects of metabolizing fat and muscle efficiency due to changes in diet, exertion, hydration and dietary supplements in a self-administered format that integrates with smartphone operating systems.

- In phase three ("Phase Three") or alternately named Gen 2.0, we plan to develop and commercialize additional tests intended to provide a more complete metabolic profile for an individual utilizing the metabolites present in urine. The Company believes the Gen 2.0 tests, in aggregate, will allow identification of healthy versus unhealthy bodily processes in real-time. This technology can also be applied to livestock and companion animals. As capital funding becomes available, the Company will move forward with finalizing its transition cow syndrome test, for which a provisional patent application has already been filed.

We are currently in Phase One of development as described above.

We believe there is a viable market for our Wellness Tests. More than 19% of Americans are afflicted with cardiovascular diseases, diabetes, autoimmune diseases and cancer. The Wellness Tests are intended to identify pre-conditions to such illnesses. Such identification may allow for early intervention and reduce incidence of such illnesses or forestall their onset. This is critically important to large employers, insurers and governmental agencies who are payers for health claims and are facing massive increases in premiums or cash outlays.

The WellMetrix technology also incorporates sophisticated software to analyze, report, record and manage wellness and health data for an individual or large groups such as large employers, pension funds, accountable care organizations, state Medicaid agencies and their actuarial consultants, underwriters, re-insurers and wellness consultants. The software also contains tools to conduct meta-analysis of baseline health benchmarks and monitor the progress of pre-clinical intervention programs within large groups.

Due to funding issues, all development work has been halted until this entity is either sold, funded independently of ZIVO Bioscience, or spun out as a free-standing business.

Competition

ZIVO Algal Products & Derivatives

Generic dietary supplements and functional food ingredients such as vitamins, Omega-3 and antioxidants are made and marketed in a fiercely competitive, price-sensitive market environment. Recently, several algae producers have made health claims for their proprietary algae strains, ranging from alternative treatment for diabetes to controlling some HIV symptoms. Proprietary products offered by some marketers are often dogged by unsubstantiated claims of product efficacy or present potential product safety issues, which in turn draw the attention of regulators. The optimal position for a supplement and ingredient maker is when pricing power can be exerted through well-protected intellectual property and further backed by well-documented safety and efficacy claims.

We believe that our primary competition will come from innovators in food technology such as DSM-Martek, Cognis, ConAgra, Cargill and Nestle, each of which has active M&A efforts, a large scientific staff and a generous R&D budget to develop supplements and ingredients for a wide range of applications. However, we intend to approach these very same competitors as potential strategic partners, in order to leverage their specific expertise in certain food and supplement categories where a mutually beneficial relationship can be established. There can be no assurance that this strategy will be effective.

With respect to animal health, the companion animal dietary supplement segment, and specifically canine joint health, is made up almost exclusively of chondroitin/glutathione supplements, which have dominated that segment for more than a decade. This $360 million segment represents a potentially lucrative opportunity to introduce a completely new product if we are able to demonstrate superior benefits and produce a product at a comparable price. It is likely we will partner with an established animal health brand name.

Further, the animal health market as it pertains to mastitis in dairy cows, and specifically feed ingredients that exhibit beneficial properties, has been largely in the realm of yeast-based products. Only recently has there been a focus on algae-based alternatives, as promoted by Alltech with its $200 million expansion of an algae facility in Kentucky. In the U.S., feed ingredients cannot be promoted using any form of health claim, and dietary supplements for production animals are, to our knowledge, non-existent due to FDA/CVM regulation. However, outside the U.S., the use of dietary supplements is widespread, and we intend to market our refined ingredients to a worldwide market in partnership with a global brand name.

WellMetrix

The biomedical and biotech fields are fiercely competitive. Many of the “wellness” tests available to the healthcare consumer or provider are not necessarily accurate nor reliable because some do not take into account urine concentration as normalized by creatinine or specific gravity, which changes markedly throughout the day. Blood-based wellness tests can be even less reliable because the biomarkers for oxidative stress and inflammation are extremely dynamic and will often change before the blood can be tested, casting doubt on the results.

Although we are not aware that competitors or competing products have entered the market recently, there is no guarantee that our products will be proven to be effective and commercially viable, or that a larger, better-financed competitor may not emerge once we begin promoting our products.

Raw Materials

ZIVO Algal Products & Derivatives

We produce our microbial mixture using third party facilities. At the close of 2018, we continue to use the AzCATI facility at Arizona State University to produce our microbial mixture for continued experimentation and as a source of inoculum to seed ponds of contracted growers overseas. Our initial approach to building a global supply chain is to approach existing spirulina algae growers. Spirulina producers can easily convert their ponds to grow the ZIVO algae strain. This would allow us to rapidly build production capacity with relatively low capital expense. Once a licensed grower supply chain is established, we will endeavor to build larger scale facilities with joint venture partners in locations best suited for our proprietary algal strains. This is intended to provide stability and consistency in the global supply.

In 2018 and into 2019, we have three ZIVO algae contract growers in India. We have signed two Letters of Intent with Chinese companies to commence production of our microbial mixture immediately upon approval from the Chinese Government to import our ZIVO Algae strain into China. We also have a Letter of Intent with a grower in Peru and are awaiting approval from that Government to import our ZIVO Algae strain into Peru. We are actively pursuing other algae producers in other areas of the world.

WellMetrix

In tandem with seeking regulatory approval, we will need two physical components to deliver our services. A dedicated, custom reader device and a test comprised of eight (8) different chemistry tests on a single urine test panel housed in a proprietary disposable cartridge.

The dedicated, custom reader device is manufactured by a third party to our specifications. We do not believe that there is a risk of supply, as there are several manufacturers available to produce the unit.

The test panel and proprietary cartridge are manufactured by a third party to our specifications. We do not believe that there is a risk of supply, as there are several manufacturers available to produce the units.

Dependence on Customers

ZIVO Algal Products & Derivatives

As discussed above, we reoriented the business model to focus on research and development in order to license our product and technology to third parties and to furnish algal biomass in bulk. Our potential customers are larger, well-established brand names in nutrition and health who will likely combine our algal biomass with other ingredients for feed, food and beverage applications. At this time, there are no customers providing any revenue.

WellMetrix

WellMetrix products will initially be private-labeled to established brand-names in the personal health space. Several such brand names have been approached, however, due to funding issues, this initiative has been placed on hold for the near term.

Production

ZIVO Algal Products & Derivatives

As discussed above in the section titled “Raw Materials”, we produce our microbial mixture using third party laboratory facilities. We are producing ZIVO algae at three contract growers in India. We have Letters of Intent to produce our ZIVO Algae in China and Peru upon in-country Government approval to import the ZIVO Algae strain. We are actively pursuing other algae producers in other areas of the world.

WellMetrix

As discussed above, we are using third parties to manufacture our custom reader device and test panel, which we are currently using for development purposes.

Patents and Proprietary Rights

ZIVO Algal Products & Derivatives

We have rights in certain patent applications and trademarks. With respect to patents and trademarks, we have secured patent and federal trademark registrations in the USPTO as described below:

- U.S. Patent No. 7,807,622 issued October 5, 2010, relates to our proprietary complex algal culture. The title of the patent is: "Composition and use of phyto-percolate for treatment of disease." This invention relates generally to a method of preparation of a phyto-percolate that is derived from fresh water mixture including algae. The invention further relates to the potential use of the phyto-percolate in a variety of disease states. This patent was filed on November 30, 2006 and has a term of 20 years from the earliest claimed filing date.

- U. S. Patent No. 8,586,053 issued November 19, 2013, relates to our proprietary algal culture. The title of the patent is: "Composition and Use of Phytopercolate for Treatment of Disease." This invention relates generally to a method of preparation of a phyto-percolate that is derived from fresh water mixture including algae. The invention further relates to the use of the phyto-percolate in a variety of disease states. The phyto-percolate is believed to contain an activity that induces the reduction of soluble and insoluble fibrin. Further, the phyto-percolate is believed to reduce oxidative stress in the body. The patent was filed on April 20, 2006 and has a term of 20 years from the earliest claimed filing date.

- U.S. Patent No. 8,791,060 issued July 29, 2014, relates to our proprietary culture. Title of the patent is the same: "Composition and Use of Phytopercolate for Treatment of disease." This invention relates generally to a method of preparation of a phyto- percolate that is derived from fresh water mixture including algae. The invention further describes proteolytic activity. The patent was filed on October 4, 2010 and has a term of 20 years from the earliest claimed filing date.

- U.S. Patent No. 9,486,005 issued November 8, 2016, relates to our proprietary culture. Title of the patent is: "Agents and Mechanisms for Treating Hypercholesterolemia." This invention relates generally to a method of treating hypercholesterolemia in mammals, by administering an effective amount of microbial fermentation product and regulating genes involved in lipoprotein metabolism.

- U.S. Patent No. 10,161,928, issued December 25, 2018, relates to a panel for monitoring levels of biomarkers. Title of the patient is: "Wellness Panel." This invention relates generally to an assay having at least one inflammation monitoring test, at least one oxidative stress monitoring test, and at least one antioxidant activity monitoring test. A method of monitoring an individual's health, by collecting a sample from the individual applying the sample to an assay panel performing at least one inflammation monitoring test, at least one oxidative stress monitoring test, and at least one antioxidant activity monitoring test in the panel, and determining levels of biomarkers related to inflammation, oxidative stress, and antioxidant activity and therefore providing information regarding the individual's relative health and/or risk of developing one or more disease.

- U.S. Patent No. 10,166,270, issued January 1, 2019 relates to disclosing a composition and method for effecting various cytokines and NF-KB. Title of the patent is: Composition and Method for Affecting Cytokines and NF-KB." This invention relates generally to administering an effective amount of a phyto-percolate composition to an individual. In various exemplary embodiments, the composition is claimed to be useful for the effective treatment of inflammation, cancer, and/or various infections including HIV by regulation of various interleukins, such as IL-10 and Il-2, and of transcription factors including NF-KB.

We also have allowed pending trademark applications for "KALGAE™," and "WELLMETRIX." We may have other common law rights in other trademarks, trade names, service marks, and the like which will continue as long as we use those respective marks.

We have registered the name "WellMetrix" to replace the current "WellMetris" corporate identification, and secured an ICANN domain of the same spelling in late 2017.

The following patent filings are pertinent to the operation of the ZIVO business:

Title	Country	Patent/Application Number	Status
Composition and Use of Phytopercolate For Treatment of Disease	Canada	2,631,773	Office action response submitted on 12/20/18.
Composition and Method For Affecting Cytokines and NF-kB	BR	BR 11 2012 011678.9	Request for examination submitted 11/11/13; awaiting examination.
Composition for Affecting Cytokines, Lactoferrin, and Serum Amyloid A	US	SN 14/898,091	Application filed 12/11/15; notice of allowance sent.
Agents and Mechanisms for Treating Hypercholesterolemia	EU	SN 11745434.8	Filed 2/22/11; undergoing prosecution.
Agents and Mechanisms for Treating Hypercholesterolemia	Canada	SN 2,827,401	Filed 11/7/16; undergoing prosecution.
Agents and Mechanisms for Treating Hypercholesterolemia	US Div.	SN 15/330,830	Filed 11/7/16; undergoing prosecution.
Methods of modulating immune response and inflammatory response via administration of algal biomass	US	15/550,749	Filed 8/11/17; received filing receipt and notice of acceptance 10/16/17; Notice of Publication received 1/25/18; response to office restriction filed 6/21/18; Information Disclosure Statement filed 8/31/18.
Methods of modulating immune response and inflammatory response via administration of algal biomass	EU	EP16752918.9	Voluntary amendment to claims filed April 2018.
Methods of modulating immune response and inflammatory response via administration of algal biomass	BR	1120170175991	Filed 8/16/17.
Methods of Modulating Immune Response and Inflammatory Response Via Administration of Algal Biomass	HK	18108238.5	Standard Hong Kong patent was filed on 6/26/18.
Methods of Modulating Immune Response and Inflammatory Response Via Administration of Algal Biomass	CA	3,011,687	Filed 7/23/18.
Nutritional Support for Animals via Administration of an Algal Derived Supplement	China	201780023561.5	Application filed and request for examination to be filed.
Nutritional Support for Animals via Administration of an Algal Derived Supplement	EU	EU 17753729.7	Filed 5/24/18; amended application filed.
Nutritional Support for Animals via Administration of an Algal Derived Supplement	US	15/998,619	Filed 8/16/18.
Nutritional Support for Animals Via Administration of an Algal Derived Supplement	MX	MX/a/2018/009818	Application filed 8/13/18; Power of Attorney filed.
Nutritional Support for Animals Via Administration of an Algal Derived Supplement	CA	3,014,897	Canadian Application filed 8/16/18;
Nutritional Support for Human via Administration of an Algal Derived Supplement	Taiwan	107104744	Filed 6/11/18.
Dietary Supplements, Food Ingredients and Foods Comprising High-Protein Algal Biomass	US Non Prov.	15/913,712	Application filed 3/16/18; oath & declaration filed; notice of publication and application received 9/13/18.
Dietary Supplements, Food Ingredients and Foods Comprising High-Protein Algal Biomass	US	PCT/US18/21215	Application filed 3/16/18.
Dietary Supplements, Food Ingredients and Foods Comprising High-Protein Algal Biomass	Taiwan	107107720	Application filed 07/2018; Certificate of Biological Material Deposit and complete translation of English text of claims and abstract filed with Taiwan patent office 6/4/18 and 7/9/18.

WellMetris

We have rights in certain patent applications and trademarks. The patent filings below are pertinent to the operation of the Wellness test, its constituent components and the methodology of the test panel.

Title	Country	Patent/Application Number	Status
Stress and Inflammation Biomarker Urine Panel for Dairy Cows and Beef Cattle	US	14/904,274	Filed 1/11/16; response to restriction requirement filed 3/19/18.
Wellness Panel for Companion Animals	US	14/916,068	US national phase based on PCT/US14/53836.
Smartphone Enabled Urinalysis Devise, software and Test Platform	US	15/560,989	US National phased based on PCT/US16/23707; filed 9/22/17; preliminary amendment filed 9/28/17; awaiting first office action.
Smartphone Enabled Urinalysis Devise, software and Test Platform	CA	2979864	Application filed 09/14/2017; request for exam due 3/23/2021.
Smartphone Enabled Urinalysis Devise, software and Test Platform	EU	EP167695572.5	Application Filed 10/10/2017.
Smartphone Enabled Urinalysis Devise, software and Test Platform	JP	2017-549797	Application filed 09/19/2017; request for exam due 03/23/2019.
Smartphone Enabled Urinalysis Devise, software and Test Platform	MX	MX/a/2017/012095	Filed 9/25/17.
Smartphone Enabled Urinalysis Devise, software and Test Platform	HK	HK 18109765.4	Filed 7/27/18.
Sample Collection Device and Method for Urine and other Fluids	CA	2984152	Application filed 10/26/17.
Sample Collection Device and Method for Urine and other Fluids	EU	EP16787127.6	Application field 11/10/17.
Sample Collection Device and Method for Urine and other Fluids	JP	2017-556723	Application filed 10/27/17.
Sample Collection Device and Method for Urine and other Fluids	MX	MX/a/2017/013898	Application filed 10/27/17.
Sample Collection Device and Method for Urine and other Fluids	HK	HK18110967.8	Hong Kong Application filed 8/24/18.
Systems and Methods for Monitoring an Individuals' Health	US	16/054,723	Application continuation in part filed 8/3/18; Information Disclosure Statement filed 9/24/18; Application was published on 11/29/18.
Rapid Health Assessment System, Device, and Method	US	62/667,916	Provision application filed 5/7/18; declaration and assignment filed 05/24/18.

Regulation

ZIVO Algal Products & Derivatives

General Regulatory Framework

In the United States and in any foreign market we may choose to enter, our products are subject to extensive governmental regulations.

In the United States, these laws, regulations and other constraints exist at the federal, state and local levels and at all levels of government in foreign jurisdictions. The majority of these regulations directly relate to (1) the formulation, clinical testing, manufacturing, packaging, labeling, distribution, sale and storage of our products and (2) product claims and advertising, including claims and advertising by us, as well as claims and advertising by distributors for which we may be held responsible.

U.S. product classification

In the U.S., the formulation, testing, manufacturing, packaging, storing, labeling, promotion, advertising, distribution and sale of our products are subject to regulation by various governmental agencies, primarily the FDA and the Federal Trade Commission ("FTC"). Our activities also are regulated by various agencies of the states and localities and foreign countries in which our products are manufactured, promoted, distributed and sold. The FDA, in particular, regulates the formulation, manufacture and labeling of conventional foods, dietary ingredients and dietary supplements (or nutraceuticals).

The FDA is responsible for the oversight of all foods (including dietary supplements), drugs, cosmetics and medical devices in the United States. To the extent that we manufacture finished products for sale to consumers (and in certain other limited circumstances where we sell our product as an ingredient), FDA regulations require us to comply with current good manufacturing practice ("cGMP") regulations for the preparation, packing and storage of dietary supplements. This is a complex series of regulations that have posed significant compliance challenges to the supplement industry. To the extent that we supply our products as ingredients for the use in foods or nutraceuticals, we would be required to comply with cGMP regulations for foods, as well as the provisions of the Food Safety Modernization Act of 2011 which require all companies involved in the production of food and food ingredients to develop and implement a Hazard Analysis and Critical Control Point program.

The Dietary Supplement Health and Education Act of 1994 ("DSHEA") revised the provisions of the Federal Food, Drug and Cosmetic Act by recognizing "dietary supplements" as a distinct category of food and, we believe, is generally favorable to the dietary supplement industry. The legislation grandfathered, with some limitations, dietary ingredients that were on the market before October 15, 1994. A dietary supplement that contains a dietary ingredient that was not on the market before October 15, 1994 will require evidence of a history of use or other evidence of safety establishing that it is reasonably expected to be safe. To the extent that we offer for sale unique, proprietary ingredients we will be required to file with the FDA evidence supporting the conclusion that we have a "reasonable expectation" that they will be safe for human consumption when used as directed. The FDA recently published an "Advance Notice of Proposed Rulemaking" which the nutraceutical industry believes will substantially increase the level of evidence required to satisfy the "reasonable expectation" standard.

DSHEA provides for specific nutritional labeling requirements for dietary supplements. DSHEA permits substantiated, truthful and non- misleading statements of nutritional support to be made in labeling, such as statements describing general well-being from consumption of a nutraceutical ingredient or the role of a nutrient or dietary ingredient in affecting or maintaining structure or function of the body. A company making a statement of nutritional support must possess adequate substantiating scientific evidence for the statement, disclose on the label that the FDA has not reviewed the statement and that the product is not intended to mitigate, treat, cure or prevent disease, and notify the FDA of the statement within 30 days after its initial use. To the extent we produce finished product for use by consumers as nutraceuticals, we will be required to comply with these provisions of DSHEA.

Labeling and advertising regulations

We may market one or more of our products as a conventional food or for use as an ingredient in conventional foods. Within the U.S., this category of products is subject to the Nutrition, Labeling and Education Act ("NLEA") and regulations promulgated under the NLEA. The NLEA regulates health claims, ingredient labeling and nutrient content claims characterizing the level of a nutrient in the product. The ingredients added to conventional foods must either be GRAS or be approved as food additives under FDA regulations.

The FTC, which exercises jurisdiction over the advertising of our product, has for years instituted enforcement actions against companies marketing supplements for alleged false, misleading or unsubstantiated advertising of some of their products. The FTC has specific guides for advertising claim substantiation as well as for the use of testimonials. As a general matter, companies making health related claims for their products or ingredients are required to possess well designed human clinical studies supporting such claims at the time they are made. Enforcement actions have often resulted in consent decrees and significant monetary payments by the companies involved. In addition, the FTC has increased its scrutiny of the use of testimonials which we have and may in the future utilize.

International regulations of our products

In many foreign markets in which we may choose to offer our products for sale, we may be required to obtain an approval, license or certification from the relevant country's ministry of health or comparable agency. This would hold true for jurisdictions such as Canada, the European Union, Japan, Australia and New Zealand. The approval process generally requires us to present each product and product ingredient to appropriate regulators for review of data supporting safety as well as substantiating any claims we may desire to make. We would also be required to comply with product labeling and packaging regulations that vary from country to country. Our failure to comply with these regulations could prevent our products from being legally offered for sale.

California Proposition 65

California's Safe Drinking Water and Toxic Enforcement Act of 1986, also known as Proposition 65, provides that no person in the course of doing business shall knowingly discharge or release a chemical known to the state to cause cancer or reproductive toxicity into water or into land where such chemical passes or probably will pass into any source of drinking water, without first giving clear and reasonable warning. Among other things, the statute covers all consumer goods (including foods) sold in the State of California. Proposition 65 allows private enforcement actions (sometimes called "bounty hunter" actions). While we intend to take appropriate steps to ensure that any of our products that we may market will be in compliance with the Act, given the nature of this statute and the extremely low tolerance limits it establishes (well below federal requirements), there is a risk that we, our contracted producer or a licensee could be found liable for the presence of miniscule amounts of a prohibited chemical in our product. Such liability could be significant.

General

To the extent dictated by our research partners, we will continue to produce research-only feedstock for chemical analysis, safety studies and efficacy studies compliant with applicable state and federal regulations. However, we will rely on our research partners to conduct their respective R&D programs in a manner compliant with applicable regulation and law. Once a product concept has been fully developed, we intend to manufacture that product, either internally or on a contract basis. We intend to adhere to all state and federal food safety and food manufacturing regulations for applicable product categories, and to produce our algal biomass in compliance with standards set forth in our GRAS dossier. In either case, we intend to adhere to all state and federal regulations relative to the safety and efficacy of the product application, as well as relevant regulations covering the safe and consistent manufacture of that product.

Compliance

In November 2018, we affirmed GRAS status for use as a plant-based ingredient for human consumption. We are in the process of affirming poultry GRAS status and expect that approval in mid-2019. We have completed a number of studies relating to the poultry production that supports good animal nutrition. These studies are being performed in conjunction with our licensing partner, NutriQuest, a global innovator in animal nutrition.

WellMetrix

We have worked to make the WellMetrix testing systems compliant with existing FDA regulations and to that end retained FDA counsel and a medical device consulting firm, which have advised us as to the most time and cost-efficient path to classification and approvals. This activity will be reactivated upon availability of additional funding.

Research and Development

ZIVO

Research

Our algal culture has been subjected to product testing in its original form over several years, beginning in 2004. In spring of 2009, we undertook a research and development process with a view to fractioning the existing product into much smaller, concentrated groups of molecules with similar physical properties. These groups were then tested *in vivo* and *in vitro* with successful results noted in maintaining healthy cholesterol levels. A patent application describing a novel method of cholesterol regulation was submitted to the USPTO in spring of 2010 and a PCT filing was submitted in February of 2011.

Since January 2012, we continue to develop our research programs internally and direct outside academic researchers, private laboratories or contract research organizations to conduct experiments, tests and studies on our behalf. We spent approximately $2,815,000 for the year ended December 31, 2018 on research and development, as compared to $2,381,000 in 2017. The resources were spent on external research, mainly to independent facilities involved in the analysis and validation of our bioactive compounds in various applications and animal models. To date, all of these amounts have been directly expensed as they have been incurred.

Beginning in March 2016, the Company moved forward with the following R&D initiatives

- Continuing a large-scale bovine mastitis study utilizing samples validated *in vitro* by the principal researcher at the University of Wisconsin - Madison and further validated *in vivo* by other researchers in the fall of 2016. The pre-pilot and pilot arms of this study have been completed. The primary arm of the study was delayed in 2018 due to inconsistencies in the testing sample, availability of research facilities, and delays in the analytical process. The primary study arm or a portion thereof is expected to commence in Q1 2019. The analytical work that must occur in tandem required the addition of new research resources in order to complete such work in a timely manner.

- A study utilizing cadaver cartilage and joint tissue at the Comparative Orthopaedics Laboratory located at the University of Missouri showed positive early results for protective effects in canine joint health, using our natural bioactive compounds. The study will be repeated and expanded when capital funding is made available.

- A canine whole blood experiment was conducted at an international contract research organization to study the effects of our natural bioactive compounds on inflammatory cytokines and chemokines present in blood to assess whether a systemic or localized mechanism of action can be determined. Although the results trended in a positive direction, Company principals determined that a more definitive *in vivo* study would be more useful. Such study is expected to be conducted when capital funding is available.

- The ongoing elucidation and characterization of the natural bioactive compounds had undergone a data integrity review in early 2014. Further work to develop a more comprehensive understanding of the bioactives had been placed on hold since spring of 2014 pending available funding. In mid-March 2016, the Company re-activated the elucidation and characterization as funding became available. The Center for Complex Carbohydrate Research at the University of Georgia was tasked with sample purification and preliminary analysis. Other laboratories were contracted to conduct bioassays to validate the bioactivity of the purified and isolated samples, with work ongoing at the close of 2018.

- Beginning in spring 2017, we contracted with the National Center for Natural Products Research at the University of Mississippi, the Boston Institute of Biotechnology, the Donald Danforth Plant Science Center, Elicityl SA, SBH Biosciences and other research facilities to accelerate the elucidation and characterization of the bioactive compounds present in the algal biomass, with the intent to converge these findings with the *in vivo* validation conducted for treatment of bovine mastitis, and present this body of work to Zoetis and effectively start the clock on the 90-day evaluation period. Such work resulted in the characterization of numerous bioactive compounds, which requires additional screening and validation to separate bioactives pertinent to bovine mastitis from those pertinent to other human and animal models.

- Beginning in fall 2016, we commenced a significant number of tests to determine the nutritional composition of the algal biomass, its toxicity, genetic mutagenicity, bacterial count and other safety measures for successive batches of biomass produced at AzCATI and other producers to establish consistent production and repeatability in anticipation of GRAS approvals. These tests form the basis for safety and stability claims as part of the requirement to meet GRAS standards applicable to both human and poultry uses.

- As mentioned previously, 2018 saw an increase in R&D spending and the active recruitment of algae growers in India and China, as well as other parts of the world. We engaged an outside consultant to advise us on outsourcing algae production and hired an experienced supply chain and operations manager to develop our internal and external organizational structures to support a global supply chain in anticipation of a market launch in early 2019 pending availability of biomass from contracted growers In addition, we worked closely with our animal feed partner NutriQuest to conduct initial trials and analyses of a potential poultry feed ingredient, with good results. The FDA compliance effort for a poultry feed ingredient is still underway and is expected to dovetail with product availability in mid-2019.

The purposes for these various tests and experiments are manifold: We are not only isolating bioactive molecules, but also testing the method of isolation and then validating that the isolated molecules retain their bioactivity across a select range of human and animal cell lines, and that these molecules exhibit no deleterious effects before they are introduced into humans or animals during *in vivo* studies. We must ensure that this does not occur occasionally, it is required for every production process, every safety validation process and every intended application, such as a canine dietary supplement that is mixed with food, as opposed to a canine dietary supplement that is administered in the form of a chewable caplet.

As of late 2018, as we enter production scale-up, we are required to provide cGMP protocols and Quality Assurance ("QA") protocols that show we can produce the algal biomass and/or the active ingredients safely, consistently and in defined quantities, and therefore rely on these same experiments and methods to substantiate our quality claims. These datasets form the basis for establishing the value of a license agreement. Therefore, every single license that we hope to issue requires its own data set and safety validation for the specific application being licensed. These datasets represent the core of the intellectual property that is being licensed.

Status of Culturing and Production

Independent of identifying the bioactive compound(s) or validating their bioactivity and safety is the process and method of growing and maintaining the algal culture that gives rise to various nutritional and bioactive compound(s) in the first place. This culture and its growing environment were developed decades ago. However, the method was not commercially viable, and the Company has expended considerable resources to develop a single-species, high-volume and commercially viable production methodology.

We made the decision to spread product development risk, resulting in the creation of a product platform strategy whereby four different forms could be developed for future marketing across several categories and applications:

a) the raw algae biomass, which would naturally contain various nutritional and beneficial compounds;
b) a more refined extraction which could be introduced into animal feed or supplements;
c) the isolated natural molecule(s) which could be more appropriate for human consumption in food or supplements; and
d) the synthetic version of any such natural molecule(s) which could be licensed to drug development companies or joint-ventured in a risk-sharing arrangement.

To that end, we contracted with several experts in the field to coordinate isolation of the different organisms present in the culture, grow each of them separately and then subject them to the same life-cycle stressors as the original culture. The stated goal was to grow algae in bulk as a direct source of micro-nutrition and feed ingredient for production animals, namely poultry, beef cattle and dairy cows, as well as companion animal dietary supplementation. The production capability would be licensed or contracted to others. Per the business model, we have no intention of fielding a finished product, but rather coordinating licensees and entering into supply agreements with larger, better-financed brand names or licensing directly with such brand names. There can be no assurance that commercially viable products will be developed, or that they can be successfully and profitably manufactured and marketed.

Over the last several years, our contracted researchers were able to successfully isolate one or more algal species, scale up the production/output of the isolated species and still retain some of the key, desirable bioactive properties associated with the earlier, complex culture. Proof of concept growing techniques, including both pond and bioreactor modes, showed that our target algal specie can be grown in commercially viable quantities, and the harvest time was compressed from several weeks to several days' time. We are uncertain if we can grow biomass in sufficient tonnage for livestock feed, but we believe that the current production methods will allow us to satisfy demand for a more refined product introduced into animal feed and into human supplements as global production capacity ramps up.

In 2018, we updated Standard Operating Procedures ("SOPs") in order to draft contractual terms with contract growers domestically and abroad. The SOPs form the basis for current Good Manufacturing Practice ("cGMP") protocols to which contract growers and processors must adhere as part of the FDA's updated Food Safety Modernization Act of 2011 requirements, regardless of country of origin. We conducted experiments in post-processing, such as spray-drying centrifugal water extraction and other techniques to better understand feed and food handling requirements. We contracted the Burdock Group of Orlando, Florida in summer of 2016 to manage the compliance process on our behalf and we affirmed GRAS self-affirmation in November 2018.

Looking Forward

A significant portion of our research efforts have been directed towards identifying a candidate "class of compound" and one or more "active ingredients," as it relates to autoimmune and anti-inflammatory response. These are very broad categories and work is still required to fully describe the 3D structure of such compounds to fully realize their potential licensing value. One approach among several we've taken is to create synthetic homologs, and from them deduce the composition and 3D structure of the naturally bioactive compounds.

Subject to the availability of sufficient funding, we estimate that we will, in fiscal 2019, be required to expend in excess of $5,000,000 on research and subsequent product development and manufacturing in order to complete the initiatives discussed herein. In addition to the activity in 2019, we plan to continue our research and development efforts as well as manufacturing in 2019 and beyond. These expenditures will need to be met from external funding sources as well as revenues we intend to receive. In the past, we have had difficulty raising funds from external sources. Thus, we may not be able to raise the funding required to continue our research and development activities. In the event that these sources are not available or adequate to meet our research needs, we will be unable to pursue our research activities, in which case our ability to substantiate the accumulated intellectual property with objective clinical support for its characterization, method of action and efficacy will continue to be impeded, thereby severely hindering our ability to generate licensing revenue (or otherwise commercialize our products) and adversely affect our operating results.

In the event that we are successful in raising the necessary capital, we will continue our current research program with our research partners, we will expand our investigations to include various experts and consultants on an as-needed basis and explore new product concepts and applications. Our current contracts with our research partners cover the following activities:

- Ongoing isolation and characterization of individual natural molecules from various production formats in sufficient quantities for downstream analyses, experiments, standards development, compliance, cGMP and QA protocols, whether as the basis for feed or food applications, as a lead compound for a synthetic therapeutic, or as a medical food or botanical drug

- Ongoing validation of samples *in vivo* and *in vitro* to substantiate efficacy and safety for each specific application or claim, i.e., bovine mastitis, poultry nutrition, health, canine osteoarthritis, canine joint health, porcine respiratory/reproductive syndrome, etc., to boost value for each specific license or market vertical

- Synthetic development/validation of individual molecules to boost value of licenses, likely to be conducted by others, either as licensees or joint ventures

- Ongoing validation of samples *in vivo* and *in vitro* for standards development, FDA safety compliance, cGMP and QA protocols

- Product development initiatives such as the joint development project with NutriQuest to develop a successful poultry feed ingredient; the project with NutriChipz to develop products in the functional food market; the project with Dr. Steven K. Grekin to develop skin health with other partners, to develop a protein enhancement ingredient for vegan drinks and smoothies as well as a human dietary supplement formulation

Ancillary development activities would occur in parallel with our research partners.

Development

WellMetrix

WellMetrix was initially focused on large-scale, programmatic applications of its testing and reporting platform. We are interested in supporting the intervention by wellness consultants or medical professionals in the lifestyle choices made by individuals covered by traditional health insurance plans, retiree medical benefits pools, employer-sponsored health initiatives and taxpayer-sponsored programs like Medicaid and the ACA (Affordable Care Act) or its proposed replacement. These interventions, which are typically pre-clinical, have been shown to be successful in delaying the onset of chronic diseases such as diabetes or cardiovascular problems. We believe that targeting asymptomatic individuals and focusing intervention efforts on these individuals may have a positive result for wellness programs, and potentially lower premiums and health claims.

At the close of 2015, the WellMetrix product platform required additional prototype analyzers and additional dry chemistry reagent strips and cartridges to conduct pilot programs for potential customers, and to use the results of these pilot programs to help normalize data for the dry chemistry reagents as part of the FDA submission package.

In early 2016 we refocused product development on self-monitoring of individual health, primarily focused on those individuals who purchase dietary supplements, join health clubs or are otherwise actively pursuing a healthy lifestyle. Since that time, we have redeveloped the sample collection device, the analyzer and the mobile software application to better serve the needs of the consumer, rather than a workplace wellness provider. In 2018, we completed CAD design of all key components, conducted finite element analysis of the sample collection device to make sure that it functioned as intended and prepared CAD files for low-volume tooling of key components. We did not have the financial or scientific resources to complete all aspects of the testing assay, which requires additional development before it is ready for production, or the mobile software application, pending available funding.

The company filed a trademark for "WellMetrix" and purchased the ICANN domain www.wellmetrix.com and www.wellmetrix-bts.com and registered "WellMetrix" as an LLC in the state of Delaware.

Compliance with Environmental Laws

We believe that we are, in all material respects, in compliance with local, state, and federal environmental laws applicable to our production and waste disposal. The cost of this compliance activity to date has not been material, and has been absorbed within our general operations overhead.

Employees

As of December 31, 2018, we had four full-time employees, positioned in executive management. In addition, we have a part-time person acting on a consulting basis as our Director, Research & Development. We believe that our employee relations are good. No employee is represented by a union.

Corporate Communications and Available Information

We maintain our website is www.zivobioscience.com and provide a toll-free number (888) 871-6903. The content of our website is not incorporated by reference into this Form 10-K and should not be considered part of this report or any other filing we make with the SEC. We file annual, quarterly and current reports, and other information with the Securities and Exchange Commission. Our filings with the SEC can be viewed at www.sec.gov.

WellMetrix maintains a separate website: www.wellmetrix.com and provides the same toll-free number as ZIVO Bioscience on its website.

Item 1A. Risk Factors.

There is substantial doubt about our ability to continue as a going concern. Our independent registered public accounting firm has issued an opinion on our consolidated financial statements which states that the consolidated financial statements were prepared assuming we will continue as a going concern and further states that our recurring losses from operations, stockholders' deficit and inability to generate sufficient cash flow to meet our obligations and sustain our operations raise substantial doubt about our ability to continue as a going concern.

We are materially dependent on external sources for continued funding. Unless and until we realize licensing and royalty revenues sufficient to cover our expenses, we will be reliant upon external sources to fund our continued operations. There is no guarantee that this funding will continue. If we are unable to raise additional funds, there will be a material adverse effect on our business, financial condition and results of operations.

We have 700 million shares authorized for issuance. As of December 31, 2018, we had 180,036,435 shares outstanding. We also had contractual commitments to issue 424,482,554 additional shares as of December 31, 2018, consisting of 232,333,598 common shares issuable upon the conversion of convertible debentures and related accrued interest and 192,148,956 common shares issuable upon the exercise of outstanding warrants. This totals a potential 604,518,989 shares outstanding if all debentures were converted and warrants exercised. In order to increase the authorized shares to a higher number, we would need to amend our articles of incorporation, which would require stockholder approval. There is no guarantee that we will be able to obtain the stockholder approval necessary to amend our articles of incorporation to increase our authorized shares.

Our future success is dependent on our ability to establish strategic partnerships. We do not have resources to pursue the development, manufacturing and marketing of products on our own, and we will need to rely on third parties for some of these activities. There is no guarantee that we will be able to successfully establish strategic partnerships.

The ability to market our product is dependent upon the completion of proven, clinical research. While we are currently undergoing studies to further identify the active ingredients in our products, there is no guarantee that the research will successfully achieve this goal. If our current research does not return the results we expect, our business prospects will be materially and adversely affected.

Government regulation of our products may adversely affect sales. Nutraceutical and animal supplement products, although not subject to FDA approval, must follow strict guidelines in terms of production and advertising claims. Our ability to produce and successfully market our products is dependent upon adhering to these requirements. If we fail to comply with applicable government regulations concerning the production and marketing of our product, we could be subject to substantial fines and penalties, which would have a material adverse effect on our business.

We have a history of losses, we expect to continue to incur losses and we may not achieve or sustain profitability in the future. We have incurred losses in each fiscal year of our existence. We cannot assure you that we will reach profitability in the future or at any specific time in the future or that, if and when we do become profitable, we will sustain profitability. If we are ultimately unable to generate sufficient revenue to meet our financial targets, become profitable and have sustainable positive cash flows, investors could lose their investment.

Competition from current competitors and new market entrants could adversely affect us. We compete with a wide range of established companies in a variety of different markets, all of whom have substantially greater name recognition and resources than we do. We face or will face other specialized competitors if we are able to expand into new vertical markets. These competitors may be more efficient and successful than we are. If we fail to compete successfully, our operating results and financial condition will be materially adversely affected.

Changes in laws and/or regulations may cause our business to suffer. The future success of our business depends upon our ability to meet regulatory requirements for the sale of our products. Increased enforcement of existing laws and regulations, as well as any laws, regulations, or changes that may be adopted or implemented in the future, could limit our ability to market our products.

The loss of key employees and technical personnel or our inability to hire additional qualified personnel could have a material adverse effect on our business. Our success depends in part upon the continued service of our senior management personnel. Our success will also depend on our future ability to attract and retain highly qualified technical, managerial and marketing personnel. The market for qualified personnel has historically been, and we expect that it will continue to be, intensely competitive. We cannot assure you that we will continue to be successful in attracting or retaining such personnel. The loss of certain key employees or our inability to attract and retain other qualified employees could have a material adverse effect on our business.

We could incur substantial costs as a result of any claim of infringement of another party's intellectual property rights. In recent years, there has been significant litigation in the U.S. and elsewhere involving patents and other intellectual property rights. Companies are increasingly bringing and becoming subject to suits alleging infringement, misappropriation or other violations of patents, copyrights, trademarks, trade secrets or other intellectual property rights. These risks have been amplified by an increase in the number of third parties whose sole or primary business is to assert such claims. We could incur substantial costs in prosecuting or defending any intellectual property litigation. Additionally, the defense or prosecution of claims could be time-consuming and could divert our management's attention away from the execution of our business plan.

We cannot be certain that our products do not infringe the intellectual property rights of third parties. Claims of alleged infringement or misappropriation could be asserted against us by third parties in the future. We cannot be sure that we would prevail against any such asserted claim.

Moreover, any settlement or adverse judgment resulting from a claim could require us to pay substantial amounts or obtain a license to continue to use the technology that is the subject of the claim, or otherwise restrict or prohibit our use of the technology. We cannot assure you that we would be able to obtain a license from the third patty asserting the claim on commercially reasonable terms, that we would be able to develop alternative technology on a timely basis, or that we would be able to obtain a license to use a suitable alternative technology to permit us to continue offering, and our customers to continue using, our affected products or technology. In addition, we may be required to indemnify our customers for third-party intellectual property infringement claims, which would increase the cost to us. An adverse determination could also prevent us from offering our products or services to others. Infringement claims asserted with or without merit against us may have an adverse effect on our business, financial condition and results of operations.

If we are required to make substantial payments or undertake any of the other actions noted above as a result of any intellectual property infringement claims against us or any obligation to indemnify our customers for such claims, such payments or costs could have a material adverse effect upon our business and financial results. Even if we are not a party to any litigation between a customer and a third party, an adverse outcome in any such litigation could make it more difficult for us to defend our technology in any subsequent litigation in which we are a named party. Moreover, such infringement claims with or without merit may harm our relationships with our existing customers and may deter others from dealing with us.

We may not be able to adequately protect our intellectual property rights and efforts to protect them may be costly and may substantially harm our business. Our ability to compete effectively is dependent in part upon our ability to protect our intellectual property rights. While we hold one issued patent and pending patent applications covering certain elements of our technology, these patents, and, more generally, existing patent laws, may not provide adequate protection for portions of the technology that are important to our business. In addition, our pending patent applications may not result in issued patents.

U.S. patent, copyright, trademark and trade secret laws offer us only limited protection and the laws of some foreign countries do not protect proprietary rights to the same extent. Accordingly, defense of our trademarks and proprietary technology may become an increasingly important issue as we seek to expand our product development into countries that provide a lower level of intellectual property protection than the U.S. Policing unauthorized use of our trademarks and technology is difficult and the steps we take may not prevent misappropriation of the trademarks or technology on which we rely. If competitors are able to use our trademarks or technology without recourse, our ability to compete would be harmed and our business would be materially and adversely affected.

We may elect to initiate litigation in the future to enforce or protect our proprietary rights or to determine the validity and scope of the rights of others. That litigation may not be ultimately successful and could result in substantial costs to us, the reduction or loss in intellectual property protection for our technology, the diversion of our managements attention and harm to our reputation, any of which could materially and adversely affect our business and results of operations.

We do not anticipate paying any dividends on our common stock. We do not anticipate paying any cash dividends on our common stock in the foreseeable future. If we do not pay cash dividends, you could receive a return on your investment in our common stock only if the market price of our common stock has increased when you sell your shares.

Substantial future sales of our common stock in the public market could cause our stock price to fall. Sales of substantial amounts of our common stock in the public market, or the perception that these sales could occur, could cause the market price of our common stock to decline and impede our ability to raise capital through the issuance of additional equity securities. We have outstanding warrants and convertible debt that may result in substantially more outstanding shares, which could cause the price of our common stock to decline.

Sales Risk – WellMetrix products. We have not finished developing our products or sold any products. We have only begun test marketing. We cannot be assured that there is a sufficient market demand for our products. In addition, while we are actively pursuing the relationships necessary to begin manufacturing and marketing the Wellness Tests, we have not yet finalized agreements with potential business partners, including third-party resellers, labs or distributors of the Wellness Tests. Failure to secure these critical alliances on reasonable terms could negatively impact us, our business and future plans.

Dependence on Manufacturers. We do not own or operate, and currently do not plan to own or operate, manufacturing facilities for production of tests or devices which are critical to the successful operation of the business. We plan to target manufacturers and to form alliances for the mass production of our products, but we have no assurance that such alliances will be established. Furthermore, once we enter into such relationships, we may not have sufficient long-term agreements with any third-party manufacturers to ensure adequate supply and price controls. This may result in delays, quality control issues, additional expenses, and failure to meet demand or other customer obligations or needs.

Failure of Manufacturers to Meet Design Specifications. The success of our products is contingent upon one or more third parties manufacturing products according to design specifications. In practice, this is difficult to enforce and guarantee. As a result, we may never realize the expected efficiency, quality or sensitivity of our products and, as a result, may be required to continue research and development with another manufacturer. If a joint venture partner or contractor fails to meet design specifications, we will experience delays in commencing operations or delays in fulfilling orders in the future. Such delays could have a material adverse impact on our financial condition.

Item 1B. Unresolved Staff Comments.

Not required for smaller reporting companies.

Item 2. Properties.

We lease 500 square feet in Bloomfield Hills, Michigan and 2,000 square feet in Keego Harbor, Michigan on a month to month basis to serve as the headquarters of our company. The combined monthly rent is $4,500.

Item 3. Legal Proceedings.

From time to time we are involved in litigation incidental to our business.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities. Market Information

Our common stock is quoted on the OTC Market ("OTCQB") administered by FINRA under the symbol "ZIVO." The following table sets forth the range of high and low bid information as reported on the OTCQB by quarter for the last two fiscal years. These quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not represent actual transactions.

Year ended December 31, 2017

	HIGH	LOW
First Quarter	$ 0.12	$ 0.07
Second Quarter	0.09	0.06
Third Quarter	0.10	0.06
Fourth Quarter	0.14	0.07

Year ended December 31, 2018

	HIGH	LOW
First Quarter	$ 0.12	$ 0.07
Second Quarter	0.18	0.08
Third Quarter	0.19	0.11
Fourth Quarter	0.17	0.12

Holders

As of December 31, 2018, we had 144 shareholders of record.

We have not paid any dividends on our common stock during the last two fiscal years, due to our need to retain all of our cash for operations. We do not anticipate paying any cash dividends on our common stock for the foreseeable future.

Recent Sales of Unregistered Securities.

During the three months ended March 31, 2018, we issued 180,000 shares of common stock valued at $18,000 in connection with $500,000 of convertible debt financings in the first quarter.

During the three months ended June 30, 2018, we issued 307,692 shares of common stock valued at $36,000 in connection with $1,000,000 of convertible debt financings in the second quarter. We issued 392,310 shares in connection the conversion of debt of $30,000 and related accrued interest of $9,310. We issued 5,000,000 shares in connection the conversion of related party loans of $500,000. We issued 13,338,129 shares of common stock valued at $1,333,813.

During the three months ended September 30, 2018 we issued 33,750 shares of common stock valued at $5,400 in connection with $330,000 of convertible debt financings in the third quarter. We issued 3,642,800 shares in connection the conversion of debt of $300,000 and related accrued interest of $64,280. We issued 4,500,000 shares of common stock valued at $450,000.

During the three months ended December 31, 2018, we issued 35,692 shares of common stock valued at $4,997 in connection with $138,801 of convertible debt financings in the fourth quarter. We issued 11,500,000 shares of common stock valued at $1,150,000

The Company believes that the foregoing transactions were exempt from the registration requirements under Rule 506 of Regulation D promulgated under the Securities Act of 1933, as amended ("the Act") or Section 4(a)(2) under the Act, based on the following facts: in each case, there was no general solicitation, there was a limited number of investors, each of whom was an "accredited investor" (within the meaning of Regulation D under the Act, as amended) and/or was (either alone or with his/her purchaser representative) sophisticated about business and financial matters, each such investor had the opportunity to ask questions of our management and to review our filings with the Securities and Exchange Commission, and all shares issued were subject to restrictions on transfer, so as to take reasonable steps to assure that the purchasers were not underwriters within the meaning of Section 2(11) under the Act.

Item 6. Selected Financial Data.

Not required for smaller reporting companies.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Overview

For ZIVO, we have put in place a business model in which we would derive future income from licensing and selling natural bioactive ingredients that may be derived from or are initially based on the algae cultures. We expect that these planned new products will likely be sold to much larger, better-financed animal, food, dietary supplement and medical food manufacturers. The anticipated income streams are to be generated from a) royalties and advances for licensed natural bioactive ingredients, and b) a toll on bulk sales of such ingredients. These bulk ingredients will likely be made by contracted ingredient manufacturers and then sold by us to animal food, dietary supplement and medical food processors and/or name-brand marketers. Further, we expect to license our bioactive molecules as lead compounds or templates for synthetic variants intended for therapeutic applications.

For WellMetrix, we are developing, with the intention to manufacture, market, and sell tests, that we believe will allow people to optimize their health and identify future health risks. We plan to develop and commercialize such tests in three phases:

- In phase one ("Phase One") or, alternately named Gen 1.0, we plan to develop and commercialize a series of tests, which are intended to measure indicators of good health and optimal metabolic function (collectively, the "Phase One Test"). The Phase One Test is being designed to measure biomarkers related to oxidative stress, inflammation, and antioxidant status to establish a metabolic assessment from which intervention can commence, and from which metabolic syndrome can be inferred. A patent that covers this particular combination of biomarkers was issued December 25, 2018.

- In phase two ("Phase Two") or alternately named Gen 1.5, we plan to develop and commercialize a testing technology focused on the positive or negative metabolic effects of metabolizing fat and muscle efficiency due to changes in diet, exertion, hydration and dietary supplements in a self-administered format that integrates with smartphone operating systems.

- In phase three ("Phase Three") or alternately named Gen 2.0, we plan to develop and commercialize additional tests intended to provide a more complete metabolic profile for an individual utilizing the metabolites present in urine. The Company believes the Gen 2.0 tests, in aggregate, will allow identification of healthy versus unhealthy bodily processes in real-time. This technology can also be applied to livestock and companion animals. As capital funding becomes available, the Company will move forward with finalizing its transition cow syndrome test, for which a provisional patent application has already been filed.

The WellMetrix technology also incorporates sophisticated software to analyze, report, record and manage wellness and health data for large groups such as large employers, pension funds, accountable care organizations, state Medicaid agencies and their actuarial consultants, underwriters, re-insurers and wellness consultants. The software also contains tools to conduct meta-analysis of baseline health benchmarks and monitor the progress of pre-clinical intervention programs within large groups.

Results of Operations for Years Ended December 31, 2018 and 2017 Sales

We had no sales for the years ended December 31, 2018 and 2017.

Cost of Sales

The Company had no Costs of Sales for the years ended December 31, 2018 and 2017.

Selling Expenses

The Company had no Selling Expenses for the years ended December 31, 2018 and 2017.

General and Administrative Expenses

General and administrative expenses decreased approximately $775,000 to $1,353,000 in 2018 compared to $2,128,000 in 2017. Of this $775,000 decrease, approximately $1,090,000 related to a reduction in non-cash expenses as noted below, leaving an increase in cash expenses of approximately $315,000. General and administrative expenses decreased in the following areas: a decrease in salaries of $861,000, of which is $1,220,000 is due to an award in 2017 of 10 million warrants to the CEO and 6 million to the CFO (a non-cash expense), offset by awards of warrants to the Vice President – Operations valued at $121,000 (a non-cash expense), an increase of the value of warrants issued to the CFO of $9,000 (a non-cash expense), $230,000 due to the hiring of the Vice President – Operations in October 2017 (partial year salary in 2017 and full year salary in 2018), an increase of $75,000 in insurance expense, an increase of $31,000 in travel expenses and an increase of $9,000 of office expenses, offset by a reduction of depreciation of $19,000 (a non-cash expense), a decrease of $10,000 web-site development and public relations and a decrease in WellMetrix operating expenses of $1,000. Our increase in related cash expenses of general and administrative expenses was due to increased activity.

Professional Fees and Consulting Expense

Professional fees and consulting expense increased approximately $141,000 to $1,962,000 in 2018 compared to $1,821,000 in 2017. Professional fees and consulting expense increased in 2018 due to the following: an increase of $926,000 in the use of an investment banking firm and investor relations firm (of which $500,000 in the forms of stock and warrants issued for services rendered, was a non-cash expense), an increase in Board of Director Fees of $217,000 (this increase was a non-cash expense in the form of 2,500,000 common stock warrants valued at $384,065 issued for services rendered), an increase in legal fees of $125,000 (of which $92,000 related to an increase in patent related services), offset by a decrease of $1,108,000 in the use of financial consultants (of the total expense of $1,208,000 in 2017 related to these activities, $1,087,000 was a non-cash expense in the forms of stock and warrants issued for services rendered), a decrease in accounting fees of $17,000 and a decrease in listing and service fees of $2,000.

Research and Development Expenses

Research and development expenses increased approximately $434,000 to $2,815,000 in 2018 compared to $2,381,000 in 2017 for the comparable period.

Of these expenses, approximately $2,798,000 and $2,294,000 for the years ended December 31, 2018 and 2017, respectively, are costs associated with external research relating to Zivo. Subject to the availability of funding, our research and development costs will grow as we work to complete the research in the development of natural bioactive compounds for use as dietary supplements and food ingredients, as well as biologics for medicinal and pharmaceutical applications in humans and animals. The Company's scientific efforts are focused on the metabolic aspects of oxidation and inflammation, with a parallel program to validate and license products for healthy immune response. The increase of $434,000 from the prior period is due to the prioritization of Zivo research and the greater availability of cash. We expect external research and development to increase in 2019 as we pursue additional external trials, subject to the availability of sufficient funding, which we do not currently have.

With respect to our WellMetrix, LLC subsidiary, we incurred approximately $17,000 and $87,000 in research and development expenses for the year ended December 31, 2018 and 2017, respectively. The R&D effort to date has centered on optimizing dry chemistry, developing lower-cost alternatives for the proprietary analyzer device, negotiating and collaborating with offshore manufacturers and assembling the FDA pre-submission package for product classification and approval. The reduction of $70,000 from the prior period is due to prioritization of ZIVO research.

Other Income (Expenses)

During the year ended December 31, 2017, we recorded approximately $406,000 relating to "Loss on Extinguishment of Debt" relating to the March 1, 2017 restructuring of the Loan Agreements with HEP Investments, LLC ("HEP Investments), a noteholder and significant stockholder of the Company, which represented the remaining unamortized discount as of March 1, 2017. There was no related charge for the year ended December 31, 2018.

Other income for the year ended December 31, 2017 was $7,000. This amount represented a settlement of accounts payable from a vendor dispute. There was no related item for the year ended December 31, 2018.

During the year ended December 31, 2018, we recorded approximately $903,000 relating to amortization of debt discount as compared to $575,000 for the year ended December 31, 2017, an increase $328,000. The increase is due to the funding of the convertible debt and the valuation related to the debt discount calculation. The discounts are amortized on a straight-line basis through April 1, 2019.

During the year ended December 31, 2018, we recorded approximately $97,000 in finance costs as compared to $216,000 in 2017. The decrease of $119,000 was due to a decrease in convertible debt funding in 2018 as compared with 2017.

During the year ended December 31, 2018, we recorded approximately $311,000 in finance costs paid in stock and warrants as compared to $144,000 in 2017. The increase of $167,000 was due to an increase of $246,000 related to a warrant charge in 2018 for extending the maturity date of the convertible debt due to HEP Investments to April 1, 2019, offset by a decrease in convertible debt funding in 2018 as compared to 2017.

During the year ended December 31, 2018, we recorded approximately $7,194,000 in interest expense as compared to $2,374,000 in 2017, an increase of $4,820,000. Included in interest expense is the amortization of debt issuance costs of approximately $5,093,000 and $690,000, respectively. The increase of $4,403,000 is due primarily to additional funding received in 2018 which incurred finance costs of approximately $2,296,000 which are amortized on a straight-line basis through April 1, 2019. Interest expense of approximately $2,101,000 for the year ended December 31, 2018 as compared to $1,684,000 for the year ended December 31, 2017 increased by $417,000 due to the increased indebtedness carried by the Company incurred in 2018 as compared to 2017.

Liquidity and Capital Resources

The consolidated financial statements contained in this report 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. For the reasons discussed herein, there is a significant risk that we will be unable to continue as a going concern, in which case, you would likely suffer a total loss of your investment in our company.

As of February 10, 2019, we had cash in the bank of $35,000. We have incurred significant net losses since inception, including a net loss of approximately $14,635,000 during the year ended December 31, 2018. We have, since inception, consistently incurred negative cash flow from operations. During the year ended December 31, 2018, we incurred negative cash flows from operations of approximately $5,007,000. As of December 31, 2018, we had a working capital deficiency of $22,282,117 and a stockholders’ deficiency of $22,282,117. Although we recently raised a limited amount of capital, we have a near term need for significant additional capital. These factors raise substantial doubt about the Company’s ability to continue as a going concern.

During the year ended December 31, 2018, our operating activities used approximately $5,007,000 in cash, compared with $4,243,000 in cash during the comparable prior period. The approximate $764,000 increase in cash used by our operating activities was due primarily to the following (all of which are approximated): a $4,597,000 increase in net loss, partially offset by a $3,833,000 reduction in cash expense.

During the years ended December 31, 2018 and 2017, there were no investing activities.

During the years ended December 31, 2018 and 2017, our financing activities generated $5,078,000 and $4,053,000 in cash, respectively. The difference of $1,025,000 was primarily related to a net increase of proceeds of $3,434,000 from issuance of common stock, a decrease of $2,031,000 from issuance of convertible debentures (with loans payable converted into convertible debentures), a decrease of $366,000 in net loans from related parties and a decrease in deferred finance costs of $12,000.

During the fourth quarter of 2011, we entered into an agreement with HEP Investments under which HEP Investments agreed to purchase convertible notes in the aggregate principal amount of $2,000,000. Through May 2018, we amended this agreement to provide for funding up to $20,000,000. As of the date of this filing, HEP Investments had advanced a total of approximately $18.4 million pursuant to this arrangement. HEP Investments’s convertible notes are secured by all our assets.

Although we raised a limited amount of capital during 2018, we continue to experience a shortage of capital, which is materially and adversely affecting our ability to run our business. As noted above, we have been largely dependent upon external sources for funding. We have in the past had difficulty in raising capital from external sources. We are still heavily reliant upon external financing for the continuation of our research and development program.

We estimate that we will require approximately $5,000,000 in cash over the next 12 months in order to fund our normal operations and to fund our research and development initiatives. Based on this cash requirement, we have a near term need for additional funding. Historically, we have had substantial difficulty raising funds from external sources; however, we recently were able to raise a limited amount of capital from outside sources. If we are unable to raise the required capital, we will be forced to curtail our business operations, including our research and development activities.

Seasonality

Based on our implemented business model, anticipated income streams will be generated from the following:

a) For ZIVO, (i) royalties and advances for licensed natural bioactive ingredients, isolated natural compounds and synthetic variants thereof, and (ii) bulk sales of such ingredients;

b) For WellMetrix, the (i) sale of wellness tests and data services related to medical records management and (ii) analysis/compilation of data gathered on behalf of payers. For insurers, the primary selling season is November through April of any given year.

We do not anticipate that these will be affected by seasonality.

Staffing

We have conducted all of our activities since inception with a minimum level of qualified staff. We currently do not expect a significant increase in staff.

Off-Balance Sheet arrangements

We have no off-Balance Sheet arrangements that would create contingent or other forms of liability.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk.

Not required for smaller reporting companies.

Item 8. Financial Statements and Supplementary Data.

Reference is made to the Consolidated Financial Statements, the Reports thereon, and the Notes thereto, commencing on page F-1 of this report, which Consolidated Financial Statements, Reports, Notes and data are incorporated herein by reference.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.

(a) ***Evaluation of Disclosure Controls and Procedures.*** Based on their evaluation as of December 31, 2018, our Chief Financial Officer has concluded that our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, were effective as of the end of the period covered by this report to ensure that the information required to be disclosed by us in this Annual Report on Form 10-K was recorded, processed, summarized and reported within the time periods specified in the SEC's rules and instructions for Form 10-K. Our disclosure controls and procedures are designed to ensure that information required to be disclosed in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our Chief Financial Officer, to allow timely decisions regarding required disclosure.

(b) ***Management's Annual Report on Internal Control over Financial Reporting.*** Management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting as defined by Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2018. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control-Integrated Framework*. Based on our assessment of those criteria, management believes that the Company maintained effective internal control over financial reporting as of December 31, 2018.

This annual report does not include an attestation report of the Company's registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Company's registered public accounting firm pursuant to temporary rules of the Securities and Exchange Commission that permit the Company to provide only management's report in this annual report.

This Management's report is not deemed filed for purposes of Section 18 of the Exchange Actor otherwise subject to the liabilities of that section, unless we specifically state in a future filing that such report is to be considered filed.

(c) ***Changes in Internal Control over Financial Reporting.*** There were no changes in our internal control over financial reporting (as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) during the year ended December 31, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information.

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance. Directors and Executive Officers

Incorporated by reference to the Registrant's 2019 Proxy Statement to be filed within 120 days after the Registrant's fiscal year end.

Code of Ethics

We have adopted a Code of Ethics and Business Conduct that defines the standard of conduct expected of our officers, directors and employees. We will upon request and without charge provide a copy of our Code of Ethics. Requests should be directed to Principal Accounting Officer, Zivo Bioscience, Inc., 2804 Orchard Lake Road, Suite 202, Keego Harbor, MI 48320.

Item 11. Executive Compensation

Incorporated by reference to the Registrant's 2019 Proxy Statement to be filed within 120 days after the Registrant's fiscal year end.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

Incorporated by reference to the Registrant's 2019 Proxy Statement to be filed within 120 days after the Registrant's fiscal year end.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

Incorporated by reference to the Registrant's 2019 Proxy Statement to be filed within 120 days after the Registrant's fiscal year end.

Item 14. Principal Accountant Fees and Services

Incorporated by reference to the Registrant's 2019 Proxy Statement to be filed within 120 days after the Registrant's fiscal year end.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

(a) (1) (2) *Financial Statements.*

Financial Statements are listed in the Index to Consolidated Financial Statements on page F-1 of this report.

All schedules have been omitted because they are not applicable or the required information is included in the Consolidated Financial Statements or Notes thereto.

(3) *Exhibits.*

The Exhibit Index and required Exhibits immediately following the Signatures to this Form 10-K are filed as part of, or hereby incorporated by reference into, this Form 10-K.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ZIVO BIOSCIENCE, INC.

Date: February 12, 2019

By: */s/ Philip M. Rice II*
Philip M. Rice II
Chief Financial Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

By: */s/Andrew Dahl*
Andrew Dahl,
Principal Executive Officer CEO, President
February 12, 2019

By: */s/ Philip M. Rice II*
Philip M. Rice II
Principal Financial Officer, Chief Financial Officer, Director
February 12, 2019

By: */s/Christopher Maggiore*
Christopher Maggiore,
Director
February 12, 2019

By: */s/Nola Masterson*
Nola Masterson,
Director
February 12, 2019

By: */s/John Payne*
John Payne,
Director
February 12, 2019

By: */s/Robert Rondeau*
Robert Rondeau,
Director
February 12, 2019

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of
ZIVO Bioscience, Inc. and Subsidiaries

Opinion on the Consolidated financial statements

We have audited the accompanying consolidated balance sheets of ZIVO Bioscience, Inc. and subsidiaries (the "Company") as of December 31, 2018 and 2017, the related consolidated statements of operations, stockholders' deficiency, and cash flows, for each of the two years in the period ended December 31, 2018, 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 financial position of the Company as of December 31, 2018 and 2017, and the results of their operations and their cash flows for each of the two years in the period ended December 31, 2018, 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 control 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 consolidated 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.

The accompanying consolidated financial statements have been prepared assuming the Company will continue as a going concern. As discussed in Note 2 to the consolidated financial statements, the Company has incurred significant operating losses for the years ended December 31, 2018 and 2017 and, as of December 31, 2018, has a significant working capital and stockholders' deficiency. These factors raise substantial doubt about the Company's ability to continue as a going concern. Management's plans regarding those matters are also described in Note 2. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

WOLINETZ, LAFAZAN & COMPANY, P.C.

We have served as the Company's auditor since 2004.
Rockville Centre, NY
February 12, 2019

ZIVO BIOSCIENCE, INC. AND SUBSIDIARIES CONSOLIDATED BALANCE SHEET

	December 31, 2017 (Revised)	December 31, 2018
ASSETS		
CURRENT ASSETS:		
Cash	$ 317,135	$ 388,891
Prepaid Expenses	15,143	22,615
Total Current Assets	332,278	411,506
PROPERTY AND EQUIPMENT, NET	-	-
TOTAL ASSETS	$ 332 ,278	$ 411 ,506
LIABILITIES AND STOCKHOLDERS' DEFICIT CURRENT LIABILITIES:		
Accounts Payable	$ 541,710	$ 422,426
Due to Related Party	475,834	432,429
Loans Payable, Related Parties	394,019	176,405
Convertible Debentures Payable, less unamortized discounts and debt issuance costs of $-0- and $1,862,425 at December 31, 2017 and 2018, respectively	1,490,000	17,978,215
Accrued Interest	1,649,240	3,674,148
Accrued Liabilities – Other	10,000	10,000
Total Current Liabilities	4,560,803	22,693,623
LONG TERM LIABILITIES:		
Convertible Debenture Payable, less unamortized discounts and debt issuance costs of $4,335,873 and $-0- at December 31, 2017 and 2018, respectively	12,075,967	-
TOTAL LIABILITIES	16,636,770	22,693,623
COMMITMENTS AND CONTINGENCIES		
STOCKHOLDERS' DEFICIT:		
Common stock, $.001 par value, 700,000,000 shares authorized; 141,106,061 and 180,036,435 issued and outstanding at December 31, 2017 and 2018, respectively	141,107	180,037
Additional Paid-In Capital	47,366,814	55,985,626
Accumulated Deficit	(63,812,413)	(78,447,780)
Total Stockholders' Deficit	(16,304,492)	(22,282,117)
TOTAL LIABILITIES AND STOCKHOLDERS' DEFICIT	$ 332,278	$ 411,506

The accompanying notes are an integral part of these financial statements

ZIVO BIOSCIENCE, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF OPERATIONS

	For the year ended December 31, 2017 (Revised)	For the year ended December 31, 2018
REVENUES:		
COSTS AND EXPENSES:		
General and Administrative	$ 2,127,979	$ 1,353,319
Professional Fees and Consulting Expense	1,820,985	1,962,333
Research and Development	2,381,222	2,814,991
Total Costs and Expenses	6,330,186	6,130,643
LOSS FROM OPERATIONS	(6,330,186)	(6,130,643)
OTHER INCOME (EXPENSE):		
Loss on Extinguishment of Debt	(406,482)	-
Other Income	7,394	-
Amortization of Debt Discount	(574,716)	(903,317)
Financing Costs	(216,000)	(96,595)
Finance Costs Paid in Stocks and Warrants	(144,000)	(310,892)
Interest Expense – Related Parties	(2,122,018)	(7,060,383)
Interest Expense	(252,366)	(133,537)
Total Other Income (Expense)	(3,708,188)	(8,504,724)
NET LOSS	$ (10,038,374)	$ (14,635,367)
BASIC AND DILUTED LOSS PER SHARE	$ (0.07)	$ (0.09)
WEIGHTED AVERAGE BASIC AND DILUTED SHARES OUTSTANDING	139,243,126	156,678,765

The accompanying notes are an integral part of these financial statements

ZIVO BIOSCIENCE, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF STOCKHOLDERS' DEFICIENCY
FOR THE PERIOD JANUARY 1, 2017 THROUGH DECEMBER 31, 2018

	Common Stock		Additional Paid in Capital	Accumulated Deficit	Total
	Shares	Amount			
Balance, January 1, 2017	136,745,347	$ 136,745	$ 40,016,059	$ (53,774,039)	$ (13,621,235)
Issuance of warrants to board of directors	-	-	166,668	-	166,668
Issuance of warrants for services	-	-	1,086,120	-	1,086,120
Issuance of warrants for services – related party	-	-	1,234,991	-	1,234,991
Issuance of common stock for services	1,875,000	1,875	129,375	-	131,250
Issuance of common stock for settlement of litigation	250,000	250	22,250	-	22,500
Common stock issued on conversion of 11% Convertible Debt	300,000	300	29,700	-	30,000
Discounts on issuance of 11% convertible debentures	-	-	264,826	-	264,826
Warrants issued for debt issuance costs	-	-	4,274,761	-	4,274,761
Common stock issued for financing costs	1,935,714	1,937	142,064	-	144,001
Net loss	-	-	-	(10,038,374)	(10,038,374)
Balance, December 31, 2017	141,106,061	$ 141,107	$ 47,366,814	$ (63,812,413)	$ (16,304,492)
Issuance of warrants to board of directors	-	-	384,065	-	384,065
Issuance of warrants for services	-	-	822,001	-	822,001
Issuance of warrants for services – related party	-	-	187,247	-	187,247
Issuance of common stock for cash	34,338,130	34,338	3,399,477	-	3,433,815
Common stock issued on conversion of 11% Convertible Debt and accrued interest	4,035,110	4,035	399,476	-	403,511
Discounts on issuance of 11% convertible debentures	-	-	819,854	-	819,854
Warrants issued for debt issuance costs	-	-	2,542,852	-	2,542,852
Common stock issued for financing costs	557,134	557	63,840	-	64,397
Net loss	-	-	-	(14,635,367)	(14,635,367)
Balance, December 31, 2018	180,036,435	$ 180,037	$ 55,985,626	$ (78,447,780)	$ (22,282,117)

The accompanying notes are an integral part of these consolidated financial statements.

ZIVO BIOSCIENCE, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENT OF CASH FLOWS

	For the year ended December 31, 2017	For the year ended December 31, 2018
Cash Flows from Operating Activities:		
Net Loss	$ (10,038,374)	$ (14,635,367)
Adjustments to reconcile Net Loss to net cash used in operating activities:		
Stocks and warrants issued for services rendered	1,217,369	822,001
Issuance of warrants for services – related party	1,234,992	187,247
Warrants issued for Directors' Fees	166,668	384,065
Loss on Extinguishment of Debt	406,482	-
Stocks and warrants issued for financing costs	144,000	310,894
Amortization of debt issuance costs	690,079	5,093,001
Amortization of bond discount	574,716	903,317
Depreciation expense	18,750	-
Changes in assets and liabilities:		
(Increase) in prepaid expenses	(1,705)	(7,473)
(Decrease) in accounts payable	(124,656)	(119,285)
Increase (decrease) in due to related party	156,600	(43,405)
Increase in accrued liabilities	1,312,188	2,098,419
Net Cash (Used) in Operating Activities	(4,242,891)	(5,006,586)
Cash Flows from Investing Activities:		
Net Cash (Used) in Investing Activities	-	-
Cash Flow from Financing Activities:		
Proceeds from (payments of) loans payable, related parties	148,040	(217,614)
Debt Issuance Costs	(95,000)	(106,658)
Proceeds from issuance of 11% convertible debentures	4,000,000	1,968,801
Proceeds from sales of common stock	-	3,433,813
Net Cash Provided by Financing Activities	4,053,040	5,078,342
Increase (Decrease) in Cash	(189,851)	71,756
Cash at Beginning of Period	506,986	317,135
Cash at End of Period	$ 317,135	$ 388,891
Supplemental Disclosures of Cash Flow Information:		
Cash paid during the period for:		
Interest	$ -	$ -
Income taxes	$ -	$ -

The accompanying notes are an integral part of these consolidated financial statements.

Supplemental Schedule of Non-Cash Investing and Financing Activities: For the Year Ended December 31, 2018:

During the quarter ended March 31, 2018, the Company recorded $43,520 of discounts on the issuance of $500,000 of 11% convertible debentures.

During the quarter ended June 30, 2018, the Company recorded $576,396 of discounts on the issuance of $1,000,000 of 11% convertible debentures.

During the quarter ended June 30, 2018, $30,000 of 11% Convertible Notes – Related Party as well as $9,231 in related accrued interest were converted at $.10 per share into 392,310 shares of the Company's common stock.

During the quarter ended June 30, 2018, warrants to purchase 30,000,000 shares of the Company's common stock at $.10 valued at $3,592,949 were issued. Of the $3,592,949 in costs, $2,039,448, representing the amount attributable to the sale of common stock, were recorded as a reduction to Additional Paid in Capital and $1,553,501, representing the amount attributable to the issuance of 11% convertible debentures, were recorded as Debt Issuance Costs.

During the quarter ended September 30, 2018, the Company recorded $134,499 of discounts on the issuance of $330,000 of 11% convertible debentures.

During the quarter ended September 30, 2018, $300,000 of 11% Convertible Notes as well as $64,280 in related accrued interest were converted at $.10 per share into 3,642,800 shares of the Company's common stock.

During the quarter ended December 31, 2018, warrants to purchase 25,000,000 shares of the Company's common stock at $.10 valued at $3,377,387 were issued. Of the $3, 377,387 in costs, $2,585,725, representing the amount attributable to the sale of common stock, were recorded as a reduction to Additional Paid in Capital and $791,662, representing the amount attributable to the issuance of 11% convertible debentures, were recorded as Debt Issuance Costs.

During the quarter ended December 31, 2018, the Company recorded $65,439 of discounts on the issuance of $138,801 of 11% convertible debentures.

For the Year Ended December 31, 2017:

During the quarter ended March 31, 2017, the Company recorded $70,388 in discounts on 11% convertible debentures.

During the quarter ended March 31, 2017, the Company recorded a $600,000 debt discount for a restructuring fee related to the debt extinguishment.

During the quarter ended March 31, 2017, the Company reclassified $2,694,639 in Accrued Interest to 11% Convertible Debentures owed to a related party.

During the quarter ended March 31, 2017, the Company issued 250,000 shares of its common stock valued at $22,500 for settlement of litigation (see Note 12 – Settlement of Litigation – Related Party).

During the quarter ended September 30, 2017, the Company recorded $155,065 in discounts on 11% convertible debentures.

During the quarter ended September 30, 2017, a related party, 11% Noteholder converted $30,000 of convertible debt into 300,000 shares of the Company's common stock

During the quarter ended December 31, 2017, the Company recorded $39,373 in discounts on 11% convertible debentures.

The accompanying notes are an integral part of these consolidated financial statements.

NOTE 1 – DESCRIPTION OF BUSINESS

The business model of Zivo Bioscience, Inc. and Subsidiaries (Health Enhancement Corporation, HEPI Pharmaceuticals, Inc., WellMetrix, LLC (fka WellMetris, LLC), and Zivo Biologic, Inc.) (collectively the "Company") is as follows: 1) to derive future income from licensing and selling natural bioactive ingredients derived from their proprietary algae cultures to animal, human and dietary supplement and medical food manufacturers, and 2) developing, manufacturing, marketing, and selling tests that the Company believes will allow people to optimize their health and identify future health risks.

NOTE 2 – BASIS OF PRESENTATION

Going Concern

The Company had a net loss of $14,635,367 and $10,038,374 during the years ended December 31, 2018 and 2017, respectively.

In addition, the Company had a working capital deficiency of $22,282,117 and a stockholders' deficiency of $22,282,117 at December 31, 2018. These factors raise substantial doubt about the Company's ability to continue as a going concern.

There can be no assurance that sufficient funds required during the next year or thereafter will be generated from operations or that funds will be available from external sources such as debt or equity financings or other potential sources. The lack of additional capital resulting from the inability to generate cash flow from operations or to raise capital from external sources would force the Company to substantially curtail or cease operations and would, therefore, have a material adverse effect on its business. Furthermore, there can be no assurance that any such required funds, if available, will be available on attractive terms or that they will not have a significant dilutive effect on the Company's existing shareholders.

The accompanying consolidated financial statements do not include any adjustments related to the recoverability or classification of asset- carrying amounts or the amounts and classification of liabilities that may result should the Company be unable to continue as a going concern.

The Company is attempting to address its lack of liquidity by raising additional funds, either in the form of debt or equity or some combination thereof. There can be no assurances that the Company will be able to raise the additional funds it requires.

During the year ended December 31, 2018, the Company received proceeds of $1,968,801 from the issuance of 11% convertible debt and $3,433,813 from the issuance of Common Stock.

NOTE 3 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation

The consolidated financial statements include the accounts of Zivo Bioscience, Inc. and its wholly-owned Subsidiaries, Health Enhancement Corporation, HEPI Pharmaceuticals, Inc., WellMetrix, LLC, and Zivo Biologic, Inc. All significant intercompany transactions and accounts have been eliminated in consolidation.

Accounting Estimates

The Company's consolidated financial statements have been prepared in conformity with generally accepted accounting principles in the United States of America, which require management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities, at the date of the financial statements and reported amount of revenues and expenses during the reporting period. Actual results could differ from those estimates. Management uses its best judgment in valuing these estimates and may, as warranted, solicit external professional advice and other assumptions believed to be reasonable.

Cash and Cash Equivalents

For the purpose of the statements of cash flows, cash equivalents include time deposits, certificates of deposit and all highly liquid debt instruments with original maturities of three months or less. The Company maintains cash and cash equivalents balances at financial institutions and are insured by the Federal Deposit Insurance Corporation up to $250,000. At times, balances in certain bank accounts may exceed the FDIC insured limits. Cash equivalents consist of highly liquid investments with an original maturity of three months or less when purchased. At December 31, 2018, the Company did not have any cash equivalents.

NOTE 3 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Property and Equipment

Property and equipment consist of furniture and office equipment and are carried at cost less allowances for depreciation and amortization. Depreciation and amortization is determined by using the straight-line method over the estimated useful lives of the related assets, generally five to seven years. Repair and maintenance costs that do not improve service potential or extend the economic life of an existing fixed asset are expensed as incurred.

Debt Issuance Costs

The Company follows authoritative guidance for accounting for financing costs (as amended) as it relates to convertible debt issuance cost. These costs are deferred and amortized over the term of the debt period or until redemption of the convertible debentures. Debt Issuance Costs are reported on the balance sheet as a direct deduction from the face amount of the related notes. Amortization of debt issuance costs amounted to $5,093,001 and $690,079 and are included in Interest Expense and Interest Expense – Related Parties on the Consolidated Statements of Operations for the years ended December 31, 2018 and 2017, respectively. Unamortized Debt Issuance Costs in the amounts of $1,187,817 and $3,877,801 are netted against Convertible Notes Payable on the Consolidated Balance Sheets presented in these financial statements as of December 31, 2018 and 2017, respectively.

Revenue Recognition

We will recognize net product revenue when the earnings process is complete and the risks and rewards of product ownership have transferred to our customers, as evidenced by the existence of an agreement, delivery having occurred, pricing being deemed fixed, and collection being considered probable. We record pricing allowances, including discounts based on contractual arrangements with customers, when we recognize revenue as a reduction to both accounts receivable and net revenue.

Shipping and Handling Costs

Shipping and handling costs are expensed as incurred. For the years ended December 31, 2018 and 2017 no shipping and handling costs were incurred.

Research and Development

Research and development costs are expensed as incurred. The majority of the Company's research and development costs consist of clinical study expenses. These consist of fees, charges, and related expenses incurred in the conduct of clinical studies conducted with Company products by independent outside contractors. External clinical studies expenses were $2,814,991 and $2,381,222 for the years ended December 31, 2018 and 2017, respectively.

Income Taxes

The Company follows the authoritative guidance for accounting for income taxes. Deferred income taxes are determined using the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carry-forwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

The tax effects of temporary differences that gave rise to the deferred tax assets and deferred tax liabilities at December 31, 2018 and 2017 were primarily attributable to net operating loss carry forwards. Since the Company has a history of losses, and it is more likely than not that some portion or all of the deferred tax assets will not be realized, a full valuation allowance has been established. In addition, utilization of net operating loss carry-forwards is subject to a substantial annual limitation due to the "change in ownership" provisions of the Internal Revenue Code. The annual limitation may result in the expiration of net operating loss carry-forwards before utilization.

We have adjusted Deferred Tax Assets and Liabilities in accordance with the December 22, 2017 enactment of the U.S. Tax Cuts and Jobs Act. (See Note 11 – Income Taxes).

NOTE 3 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Stock Based Compensation

We account for stock-based compensation in accordance with FASB ASC 718, *Compensation – Stock Compensation.* Under the provisions of FASB ASC 718, stock-based compensation cost is estimated at the grant date based on the award's fair value and is recognized as expense over the requisite service period. The Company, from time to time, issues common stock or grants common stock warrants to its employees, consultants and board members. At the date of grant, the Company determines the fair value of the stock option award and recognizes compensation expense over the requisite service period. Issuances of common stock are valued at the closing market price on the date of issuance and the fair value of any stock option or warrant awards is calculated using the Black Scholes option pricing model.

During 2018 and 2017, warrants were granted to employees, directors and consultants of the Company. As a result of these grants, the Company recorded compensation expense of $1,393,313 and $2,487,779 during the years ended December 31, 2018 and 2017 respectively.

The fair value of warrants was estimated on the date of grant using the Black-Scholes option-pricing model based on the following weighted average assumptions:

Year Ended December 31,

	2018	2017
Expected volatility	176.10% to 180.13%	175.05% to 177.58%
Expected dividends	0%	0%
Expected term	5 years	5 years
Risk free rate	2.65% to 2.96%	1.63% to 2.11%

The Black-Scholes option-pricing model was developed for use in estimating the fair value of traded options that have no vesting restrictions and are fully transferable. In addition, option-pricing models require the input of highly subjective assumptions, including the expected stock price volatility. Because the Company's employee warrants have characteristics significantly different from those of traded options and because changes in the subjective input assumptions can materially affect the fair value estimate, in management's opinion the existing models may not necessarily provide a reliable single measure of the fair value of the warrants.

Income (Loss) Per Share

Basic loss per share is computed by dividing the Company's net loss by the weighted average number of common shares outstanding during the period presented. Diluted loss per share is based on the treasury stock method and includes the effect from potential issuance of common stock such as shares issuable pursuant to the exercise of warrants and conversions of debentures. Potentially dilutive securities as of December 31, 2018, consisted of 232,333,598 common shares from convertible debentures and related accrued interest and 192,148,956 common shares from outstanding warrants. Potentially dilutive securities as of December 31, 2017, consisted of 196,097,025 common shares from convertible debentures and related accrued interest and 119,301,754 common shares from outstanding warrants. For 2018 and 2017, diluted and basic weighted average shares were the same, as potentially dilutive shares are anti-dilutive.

Advertising Costs

Advertising costs are charged to operations when incurred. There were no Advertising Costs during the years 2018 and 2017.

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist principally of cash and cash equivalents. The Company has historically maintained cash balances at financial institutions which exceed the current Federal Deposit Insurance Corporation ("FDIC") limit of $250,000 at times during the year.

Reclassifications

Certain items in these consolidated financial statements have been reclassified to conform to the current period presentation.

NOTE 3 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Future Impact of Recently Issued Accounting Standards

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update No. 2014-09 (ASU 2014-09), "*Revenue from Contracts with Customers.*" ASU 2014-09 superseded the revenue recognition requirements in "Revenue Recognition (Topic 605)," and requires entities to recognize revenue when it transfers promised goods or services to customers in an amount that reflect the consideration to which the entity expects to be entitled to in exchange for those goods or services. ASU 2014-09 is effective for annual reporting periods beginning after December 15, 2016, including interim periods within that reporting period. Early adoption is not permitted. Historically the Company has had no revenues.

In February 2016, the FASB issued ASU No. 2016-02, Leases, to require lessees to recognize all leases, with certain exceptions, on the balance sheet, while recognition on the statement of operations will remain similar to current lease accounting. The ASU also eliminates real estate-specific provisions and modifies certain aspects of lessor accounting. The ASU is effective for interim and annual periods beginning after December 15, 2018, with early adoption permitted. We currently expect to adopt the ASU on January 1, 2019. We will be required to recognize and measure leases existing at, or entered into after, the beginning of the earliest comparative period presented using a modified retrospective approach, with certain practical expedients available. We intend to elect the available practical expedients upon adoption. Upon adoption, we expect the consolidated balance sheet to include a right of use asset and liability related to substantially all of our lease arrangements. We are continuing to assess the impact of adopting the ASU on our financial position, results of operations and related disclosures and have not yet concluded whether the effect on the consolidated financial statements will be material.

Management does not believe there would have been a material effect on the accompanying financial statements had any other recently issued, but not yet effective, accounting standards been adopted in the current period.

Implementation of ASU 2015-03

The FASB has issued Accounting Standards Update (ASU) No. 2015-03, "Simplifying the Presentation of Debt Issuance Costs," as part of its simplification initiative. The ASU changes the presentation of debt issuance costs in financial statements. Under the ASU, an entity presents such costs in the balance sheet as a direct deduction from the related debt liability rather than as an asset. Amortization of the costs is reported as interest expense.

For public business entities, the guidance in the ASU is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2015. Although the Company adopted ASU-2015-03 in the first quarter of 2016, the Company discovered during the quarter ended June 30, 2018 that ASU-2015-03 was improperly implemented as it pertains to the classification of deferred finance costs (debt issuance costs) on its balance sheet.

NOTE 3 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

The balance sheet below illustrates the presentation of the December 31, 2017 balance sheet as if ASU 2015-03 had been implemented properly:

	As Originally Reported December 31, 2017	Effect of Change December 31, 2017	As Revised December 31, 2017
ASSETS			
CURRENT ASSETS:			
Cash	$ 317,135	$ -	$ 317,135
Prepaid Expenses	15,143	-	15,143
Total Current Assets	332,278	-	332,278
PROPERTY AND EQUIPMENT, NET	-		
OTHER ASSETS			
Deferred Finance Costs, net	3,877,801	(3,877,801) (A)	-
TOTAL ASSETS	4,210,079	(3,877,801)	332,278
LIABILITIES AND STOCKHOLDERS' DEFICIT			
CURRENT LIABILITIES:			
Accounts Payable	$ 541,710	$ -	$ 541,710
Due to Related Party	475,834	-	475,834
Loans Payable, Related Parties	394,019	-	394,019
Convertible Debentures Payable, less unamortized discounts and debt issuance costs of $-0- and $-0- at December 31, 2017- Originally, and December 31, 2017 - As Revised, respectively	1,490,000	-	1,490,000
Accrued Interest	1,649,240	-	1,649,240
Accrued Liabilities – Other	10,000	-	10,000
Total Current Liabilities	4,560,803	-	4,560,803
LONG TERM LIABILITIES:			
Convertible Debentures Payable, less unamortized discounts and debt issuance costs of $458,072 and $4,335,873 at December 31, 2017- Originally, and December 31, 2017 - As Revised, respectively	15,953,768	(3,877,801) (B)	12,075,967
TOTAL LIABILITIES	20,514,571	(3,877,801)	16,636,770
COMMITMENTS AND CONTINGENCIES			
STOCKHOLDERS' DEFICIT:			
Common stock, $.001 par value, 700,000,000 shares authorized; 141,106,061 issued and outstanding at December 31, 2017	141,107		141,107
Additional Paid-In Capital	47,366,814		47,366,814
Accumulated deficit	(63,812,413)		(63,812,413)
Total Stockholders' Deficit	(16,304,492)	-	(16,304,492)
TOTAL LIABILITIES AND STOCKHOLDERS' DEFICIT	$ 4,210,079	$ (3,877,801)	$ 332,278

(A) Total Assets decreased in the amount of $3,877,801 as a result of the reclassification of net deferred finance costs (debt issuance costs).

(B) Long Term and Total Liabilities decreased in the amount of $3,877,801 as a result of the reclassification of net deferred finance costs (debt issuance costs) as a direct deduction of the amount of the related convertible debt.

(C) The revisions related to the implementation of ASU 2015-03 did not have an effect on any previously reported net losses, working capital or stockholders' deficit.

NOTE 4 – PROPERTY AND EQUIPMENT

Property and equipment at December 31, 2018 and 2017 consist of the following:

	December 31, 2018	December 31, 2017
Furniture & fixtures	$ 20,000	$ 20,000
Equipment	80,000	80,000
	100,000	100,000
Less accumulated depreciation and amortization	(100,000)	(100,000)
	$ -	$ -

Depreciation and amortization was $-0- and $18,750 for the years ended December 31, 2018 and 2017, respectively.

NOTE 5 – DUE TO RELATED PARTY

As of December 31, 2018 and 2017, the Company owed HEP Investments, LLC, a noteholder and significant shareholder of the Company, cumulative balances of $432,429 and $475,834, respectively. The basis for the payable is a 5.4% cash finance fee for monies invested in the Company in the form of convertible debt. For the years ended December 31, 2018 and 2017, the Company incurred finance costs related to these transactions of $96,595 and $216,000, respectively.

NOTE 6 – LOAN PAYABLE, RELATED PARTIES

Christopher Maggiore

As of December 31, 2018 and 2017, Mr. Christopher Maggiore, a director and a significant shareholder of the Company, had cumulative balances of $176,405 and $176,405, respectively. The Company has agreed to pay 11% interest on this loan. During the years ended December 31, 2018 and 2017, the Company recorded interest on this indebtedness of $45,172 and $25,966, respectively.

HEP Investments, LLC

In addition to amounts owed to HEP Investments, LLC pursuant to Convertible Debt (see Note 7), as of January 1, 2017, the Company owed HEP Investments, LLC $69,574. During the year ended December 31, 2017, HEP Investments, LLC loaned the Company an additional $4,148,040. Pursuant to the terms of the agreement with HEP Investments, LLC, $4,000,000 of these loans were recorded as 11% Convertible Secured Promissory Notes, leaving a remaining balance of $217,614 as of December 31, 2017.

During the year ended December 31, 2018, HEP Investments, LLC loaned the Company $1,751,187 (see Note 7 - Convertible Debt). Pursuant to the terms of our agreement with HEP Investments, LLC, $1,968,801 of these loans were converted to 11% Convertible Secured Promissory Notes, leaving a remaining balance of $-0- as of December 31, 2018.

NOTE 7 – CONVERTIBLE DEBT

HEP Investments, LLC – Related Party

On December 2, 2011, the Company and HEP Investments, LLC, a Michigan limited liability company (the "Lender"), entered into the following documents, effective as of December 1, 2011, as amended through May 16, 2018: (i) a Loan Agreement under which the Lender has agreed to advance up to $20,000,000 to the Company, subject to certain conditions, (ii) a Convertible Secured Promissory Note in the principal amount of $20,000,000 ("Note") (of which $18,350,640 has been advanced as of December 31, 2018), (iii) a Security Agreement, under which the Company granted the Lender a security interest in all of its assets, (iv) issue the Lender warrants to purchase 1,666,667 shares of common stock at an exercise price of $.12 per share (including a cashless exercise provision) which expired September 30, 2016 (from the original December 1, 2011 agreement), (v) enter into a Registration Rights Agreement with respect to all the shares of common stock issuable to the Lender in connection with the Loan transaction, in each case subject to completion of funding of the full $2,000,000 called for by the Loan Agreement,. and (vi) an Intellectual Property security agreement under which the Company and its subsidiaries granted the Lender a security interest in all their respective intellectual properties, including patents, in order to secure their respective obligations to the Lender under the Note and related documents. In addition, the Company's subsidiaries have guaranteed the Company's obligations under the Note. The Company has also made certain agreements with the Lender which shall remain in effect as long as any amount is outstanding under the Loan. These agreements include an agreement not to make any change in the Company's senior management, without the prior written consent of the Lender. Two representatives of the Lender will have the right to attend Board of Director meetings as non-voting observers.

On March 1, 2017, the Company and the Lender entered into the following documents: (i) an Eighth Amendment to the Loan Agreement under which the Lender has agreed to advance up to a total of $17,500,000 to the Company, subject to certain conditions, and (ii) a Ninth Amended and Restated Senior Secured Convertible Promissory Note. The Eighth Amendment to Loan Agreement amends and restates the Seventh Amendment to Loan Agreement, which was entered into with the Lender on December 31, 2015 and disclosed in the Company's Form 8-K Current Report filed on January 7, 2016. The Ninth Amended and Restated Senior Secured Convertible Promissory Note resets the total outstanding debt as of March 1, 2017 and provides for a maturity date of September 30, 2018. The Company, as consideration for the extension of the maturity date to September 30, 2018, agreed to change the conversion price of the $12,441,839 Convertible Promissory Note from conversion prices ranging from $.10 to $.30 per share to $.10 per share. The total outstanding debt as of March 1, 2017 was $12,721,839. The amount includes unpaid principal of $9,147,200, interest outstanding as of February 28, 2017 of $2,694,639 and restructuring and legal fees of $600,000. The Company recorded a debt discount of $600,000 related to the restructuring of the $12,441,839, 11% convertible note on March 1, 2017. The stated rate of the new debt was unchanged from the previous debt agreement and the estimated fair value of the new debt approximates its carrying amount (principal plus accrued interest at the date of the modification). In accordance with FASB ASC 470-60 "Debt-Troubled Debt Restructurings by Debtors," the Company recorded a "Loss on Extinguishment of Debt" on March 1, 2017 of $406,482 which represented the remaining unamortized discount as of that date.

During the year ended December 31, 2017, the Company recorded debt discounts, related to $4,000,000 of Notes in the amount of $264,826 to reflect the relative fair value of the related warrants pursuant to "FASB ASC 470-20-30 – Debt with Conversion and Other Options: Beneficial Conversion Features" as a reduction to the carrying amount of the convertible debt and an addition to additional paid- in capital. The relative fair value of the debt discounts of $264,826 were calculated using the Black Scholes pricing model relying on the following assumptions: volatility 175.08 to 176.97%; annual rate of dividends 0%; discount rate 1.63% to 2.09%. The $4,000,000 of Notes are convertible at $.10 per share. The Company is amortizing the debt discount over the term of the debt. Amortization of the debt discounts was $574,716 for the year ended December 31, 2017.

On July 14, 2017, the Lender converted $30,000 of the debt into 300,000 shares of the Company's common stock (at $.10 per share).

NOTE 7 – CONVERTIBLE DEBT (continued)

HEP Investments, LLC – Related Party (continued)

On July 19, 2017, the Board of Directors approved the issuance to the Lender of a warrant to purchase 50 million shares of common stock at an exercise price of $.10 for a term of two years on the basis of $2.5 million funding through the 11% convertible note (at a conversion price of $.10). This warrant is in addition to 10% warrant coverage (five-year term) provided to the Lender in connection with investments in convertible debt pursuant to existing agreements. The warrant was issued on November 20, 2017 as the related funding was complete. The warrant has a cashless exercise provision. The warrants were valued at $4,274,761 using the Black Scholes pricing model relying on the following assumptions: volatility 175.10%; annual rate of dividends 0%; discount rate 2.09%.

In an agreement dated July 21, 2017 ("Funding Agreement") between the Lender and Strome Mezzanine Fund LP ("Participant"), the Participant agreed to fund a total of $1.5 million ("the committed funding"), through the Lender's 11% convertible note (at a conversion price of $.10). The Company also agreed to a "Right of First Refusal" (ROFR) with the Participant. The Company would give the Participant the ROFR to invest funds into the Company on the same terms and conditions ("Right of Participation") as negotiated by the Company with a third party, provided that the Right of Participation must be exercised within 10 days. Certain exclusions apply relating to the committed funding from parties unrelated to the Participant. This ROFR terminates on the third (3) anniversary of the Agreement. The Participant has an agreement with the Lender that upon the funding of the Participant's $1.5 million by November 20, 2017, the Lender would allocate a portion (50%) of the warrant to purchase 50 million shares of common stock at a conversion price of $.10 issued to the Participant on the $2.5 million funding through the 11% convertible note as discussed above. On July 24, 2017 the Lender funded $1,000,000 of the $2.5 million (of which $500,000 is from the Lender and $500,000 is from the Participant). Due to this additional funding, the Company issued to the Lender a $1,000,000, 11% convertible note (at a conversion price of $.10) and warrants to purchase 1,000,000 shares of common stock, at a conversion `price of $.10 for a term of five years. On September 25, 2017 the Lender funded an additional $1,000,000 of the $2.5 million (of which $500,000 is from the Lender and $500,000 is from the Participant). Due to this additional funding, the Company issued to the Lender a $1,000,000, 11% convertible note (at a conversion price of $.10) and warrants to purchase 1,000,000 shares of common stock, at a conversion price of $.10 for a term of five years.

On October 18, 2017 the Company, the Lender and Participant entered into an Amended and Restated Registration Rights Agreement ("Amended Agreement"). The Company and the Lender are party to that certain Registration Rights Agreement, dated December 1, 2011 ("Original Agreement") (filed as Exhibit 10.10 filed with the Company's 2011 Form 10-K filed on March 30, 2012). In the Funding Agreement (dated July 21, 2017) between the Lender and Participant, the Participant agreed to fund a total of $1.5 million through the Lender's 11% convertible note (at a conversion price of $.10).

On January 31, 2018, the Company and the Lender entered into the following documents, effective as of January 31, 2018: (i) Ninth Amendment to Loan Agreement under which the Lender has agreed to advance up to a total of $17,500,000 to the Company, subject to certain conditions, and (ii) a Tenth Amended and Restated Senior Secured Convertible Promissory Note. The Ninth Amendment to Loan Agreement amends and restates the Eighth Amendment to Loan Agreement, which was entered into with the Lender on March 1, 2017 and disclosed in the Company's Form 8-K Current Report filed on March 6, 2017. The Tenth Amended and Restated Senior Secured Convertible Promissory Note extends the maturity date for all convertible debt due to HEP Investments to April 1, 2019, including the payment of any interest due and owing at that time. In consideration for extending the maturity date of the Loan to April 1, 2019 in accordance with the Tenth Amended and Restated Senior Convertible Promissory Note, the Company agreed to issue to the Lender warrants to purchase 3,250,000 shares of common stock at an exercise price of $.10 with a term of 5 years. The warrants were valued at $246,496 using the Black Scholes pricing model relying on the following assumptions: volatility 175.81%; annual rate of dividends 0%; discount rate 2.41%. The Company determined that the modification of these Notes was not a substantial modification in accordance with ASC 470-50, "Modifications and Extinguishments."

NOTE 7 – CONVERTIBLE DEBT (continued)

HEP Investments, LLC – Related Party (continued)

On April 30, 2018, the Board of Directors approved the issuance to the Lender of a warrant to purchase 50 million shares of common stock at an exercise price of $.10 for a term of five years on the basis of $4 million funding through a combination of sales of common stock and the issuances of 11% convertible notes (at a conversion price of $.10) to HEP Investments. This warrant is in addition to 10% warrant coverage (five-year term) provided to the Lender in connection with investments in convertible debt pursuant to existing agreements. A warrant for 25 million shares of common stock at an exercise price of $.10 for a term of five years was issued on June 6, 2018 as $2 million of the related $4 million funding was complete. A portion of the warrant has a cashless exercise provision. The related issued warrants were valued at $3,116,485 using the Black Scholes pricing model relying on the following assumptions: volatility 175.02%; annual rate of dividends 0%; discount rate 2.77%. The Company recorded $2,039,448 of these costs, which represents the amount attributable to the sale of common stock, as a reduction to additional paid-in-capital and $1,077,037 was recorded as a Debt Issuance Cost on the Company's Balance Sheet as a direct deduction of 11% convertible notes payable.

On May 12, 2018, the Lender converted $30,000 of the debt and $9,231 of accrued interest into 392,310 shares of the Company's common stock (at $.10 per share).

On May 16, 2018, the Company and the Lender, entered into the following documents, effective as of May 16, 2018: (i) Tenth Amendment to Loan Agreement under which the Lender has agreed to advance up to a total of $20,000,000 to the Company, subject to certain conditions, and (ii) an Eleventh Amended and Restated Senior Secured Convertible Promissory Note. The Tenth Amendment to Loan Agreement amends and restates the Ninth Amendment to Loan Agreement, which was entered into with the Lender on January 31, 2018 and disclosed in the Company's Form 8-K Current Report filed on May 18, 2018. The Eleventh Amended and Restated Senior Secured Convertible Promissory Note increased amount that the Lender can advance to $20,000,000. In consideration for increasing the advance amount to $20,000,000 in accordance with the Eleventh Amended and Restated Senior Convertible Promissory Note, the Company agreed to issue to the Lender warrants to purchase 5,000,000 shares of common stock at an exercise price of $.10 with a term of 5 years. The warrants were valued at $476,464 using the Black Scholes pricing model relying on the following assumptions: volatility 174.80%; annual rate of dividends 0%; discount rate 2.94%. The Company determined that the modification of these Notes was not a substantial modification in accordance with ASC 470-50, "Modifications and Extinguishments."

On June 6, 2018 the Lender and Strome Mezzanine Fund LP and Strome Alpha Fund LP ("Participant") entered into the First Amended and Restated Participation Agreement (amending the June 17, 2017 agreement) whereby the Participant agreed to fund a total of $691,187 ("the committed funding"), through the Lender's 11% convertible note (at a conversion price of $.10). The Company also agreed to a "Right of First Refusal" (ROFR) with the Participant. The Company would give the Participant the ROFR to invest funds into the Company on the same terms and conditions ("Right of Participation") as negotiated by the Company with a third party, provided that the Right of Participation must be exercised within 10 days. Certain exclusions apply relating to the committed funding from parties unrelated to the Participant. This ROFR terminates on the third (3) anniversary of the Agreement. The Participant has an agreement with the Lender and the Company, that upon the funding of the Participant's full $2 million ($1,308,813 though the purchase of common stock from the Company and $691,187 through the purchase of HEP Investments' 11% convertible note (at a conversion price of $.10)), a warrant for 25 million shares of common stock at an exercise price of $.10 for a term of five years would be allocated from the warrant for 50 million shares of common stock authorized in the April 30, 2018 Board of Directors Resolution. The total funding of $2 million was achieved on June 6, 2018.

During the year ended December 31, 2018, the Company recorded debt discounts, related to $1,968,801 of Notes in the amount of $819,854 to reflect the relative fair value of the related warrants pursuant to "FASB ASC 470-20-30 – Debt with Conversion and Other Options: Beneficial Conversion Features" (ASC 470-20) as a reduction to the carrying amount of the convertible debt and an addition to additional paid-in capital. In accordance with ASC 470-20, the Company valued the beneficial conversion feature and recorded the amount of $613,758 as a reduction to the carrying amount of the convertible debt and as an addition to paid-in capital. Additionally, the relative fair value of the warrants was calculated and recorded at $206,096 as a further reduction to the carrying amount of the convertible debt and an addition to additional paid-in capital. The Company is amortizing the debt discount over the term of the debt. The relative fair value of the debt discounts of $206,096 were calculated using the Black Scholes pricing model relying on the following assumptions: volatility 174.59 to 180.14%; annual rate of dividends 0%; discount rate 2.09% to 3.04% The Company is amortizing the debt discount over the term of the debt. Amortization of the debt discounts were $903,317 for the year ended December 31, 2018.

NOTE 7 – CONVERTIBLE DEBT (continued)

HEP Investments, LLC – Related Party (continued)

As of December 31, 2018, the total shares of common stock, if the Lender converted the complete $18,350,640 of convertible debt and the related accrued interest of $3,239,144, would be 215,897,843 shares, not including any future interest charges which may be converted into common stock.

The Company has agreed to pay a closing fee of 9% in connection with the Loan transaction (as funding levels are achieved), consisting of 5.4% in cash and 3.6% paid in shares of common stock valued at various amounts based on the timing of the funding and the related stock price. In one instance, the Lender has agreed to a reduced closing fee based on the involvement of the Investment Banker (Note 9 – Commitments and Contingencies: Investment Banking, M&A and Corporate Advisory Agreement).

Paulson Investment Company, LLC - Related Debt

On August 24, 2016, the Company entered into a Placement Agent Agreement with Paulson Investment Company, LLC (Paulson). The agreement provided that Paulson could provide up to $2 million in financings through “accredited investors” (as defined by Regulation D of the Securities Act of 1933, as amended). As of December 31, 2016, the Company received funding of $1,250,000 through seven (7) individual loans (the “New Lenders”). Each loan included a (i) a Loan Agreement of the individual loan, (ii) a Convertible Secured Promissory Note (“New Lenders Notes”) in the principal amount of the loan, (iii) a Security Agreement under which the Company granted the Lender a security interest in all of its assets and (iv) an Intercreditor Agreement with HEP Investments, LLC (HEP) whereby HEP and the New Lenders agree to participate in all collateral a *pari passu* basis. The loans have a two-year term and mature in September 2018 ($600,000) and October 2018 ($650,000). Paulson received a 10% cash finance fee for monies invested in the Company in the form of convertible debt, along with 5 year, $.10 warrants equal to 15% of the number of common shares for which the debt is convertible into at $.10 per share.

On September 24, 2018, one New Lender converted $300,000 of the debt and $64,280 of accrued interest into 3,642,800 shares of the Company’s common stock (at $.10 per share).

The New Lenders Notes are convertible into the Company’s restricted common stock at $.10 per share and bear interest at the rate of 11% per annum. The New Lenders Notes must be repaid as follows: accrued interest must be paid on the first and second anniversary of the Note and unpaid principal not previously converted into common stock must be repaid on the second anniversary of the Note. The Company has not made the interest payment due on the first anniversary of the Note. As of December 31, 2018, certain of the New Lender Notes were past due, although the Company did not receive a notice of default or demand for payment from the Noteholders. The default interest rate is 16% per annum. The Company is in discussions through intermediaries with the remaining six (6) New Lenders to determine their intentions.

Other Debt

In September 2014, the Lender of the 1% convertible debentures agreed to rolling 30-day extensions until notice is given to the Company to the contrary. The Company determined that the modification of these Notes is not a substantial modification in accordance with ASC 470-50, “Modifications and Extinguishments.”

NOTE 7 – CONVERTIBLE DEBT (continued)

Convertible debt consists of the following:

	December 31, 2018	December 31, 2017 (Revised)
1% Convertible notes payable, due January 2019	$ 240,000	$ 240,000
11% Convertible note payable – HEP Investments, LLC, a related party, net of unamortized discount and debt issuance costs of $1,562,425 and $4,335,873, respectively, due April 1, 2019 (September 30, 2018 at December 31, 2017)	16,788,215	12,075,967
11% Convertible note payable – New Lenders; placed by Paulson, due at various dates ranging from September 2018 to October 2019	950,000	1,250,000
	17,978,215	13,565,967
Less: Current portion	17,978,215	1,490,000
Long term portion	$ -	$ 12,075,967

As of December 31, 2018, the reductions to Notes Payable of $1,562,425 consisted of, unamortized discounts of $374,608 and debt issuance costs of $1,187,817. As of December 31, 2017, the reductions of Notes Payable of $4,335,873 consisted of unamortized discounts of $458,072 and debt issuance costs of $3,877,801.

Amortization of debt discounts was $903,317 and $574,716 for the year ended December 31, 2018 and 2017, respectively.

NOTE 8 - STOCKHOLDERS' DEFICIENCY

Recapitalization

On November 8, 2017, the shareholders of the Company voted for approval and adoption of an amendment to the Articles of Incorporation, as amended, to increase the number of authorized shares of common stock from 450,000,000 shares to 700,000,000 shares. The Certificate of Amendment to the Articles of Incorporation have been filed with the Secretary of State of Nevada.

Board of Directors fees

On September 11, 2017, the board of directors granted to each of its Directors warrants to purchase 500,000 shares of common stock at an exercise price of $.07 per share. The warrants have a term of five years and vest immediately. The warrants were valued at $166,668 using the Black Scholes pricing model relying on the following assumptions: volatility 175.54%; annual rate of dividends 0%; discount rate 1.71%. In addition, each director is entitled to receive $10,000 for each annual term served.

On September 28, 2018, the board of directors granted to each of its five (5) Directors warrants to purchase 500,000 shares of common stock at an exercise price of $.14 per share. The warrants have a term of five years and vest immediately. The 2,500,000 warrants were valued at $384,065 using the Black Scholes pricing model relying on the following assumptions: volatility 178.54%; annual rate of dividends 0%; discount rate 2.96%. In addition, each director is entitled to receive $10,000 for each annual term served.

The Company recorded directors' fees of $424,065 and $206,668 for the years ended December 31, 2018 and 2017, respectively, representing the cash fees and the value of the vested warrants described above.

Stock Based Compensation

On April 20, 2017, the Company entered into a Limited License Agreement ("License Agreement") with NutriQuest, LLC ("NutriQuest"), as disclosed in a Form 8-K filed on April 26, 2017. Pursuant to the License Agreement, the Company issued NutriQuest warrants to purchase 687,227 shares of common stock valued at $39,189 using the Black Scholes pricing model relying on the following assumptions: volatility 175.75%; annual rate of dividends 0%; discount rate 1.78%. The warrants are exercisable at $.08 per share and expire five (5) years from the date of issuance. The License Agreement provides that the Company is obligated to pay a termination fee to NutriQuest if the parties are unable to agree upon quality and volume delivered standards.

NOTE 8 - STOCKHOLDERS' DEFICIENCY (continued)

During the year ended December 31, 2017, the Company issued warrants to purchase 67,600,000 shares of common stock. In the first quarter, the Company issued warrants to purchase 500,000 shares of common stock at an exercise price of $.10 with a term of 5 years pursuant to an agreement as a financial consultant. The warrants were valued at $33,148 using the Black Scholes pricing model relying on the following assumptions: volatility 175.05%; annual rate of dividends 0%; discount rate 1.87%. In the third quarter, the Company issued warrants to purchase 16,250,000 shares of common stock at an exercise price of $.06 to $.07 with a term of 5 years pursuant to agreements with financial consultants. The warrants were valued at $923,430 using the Black Scholes pricing model relying on the following assumptions: volatility 175.61% to 175.58%; annual rate of dividends 0%; discount rate 1.63% to 1.79%. Also, in the third quarter, the Company issued warrants to purchase 250,000 shares of common stock at an at an exercise price of $.07 with a term of 5 years pursuant to an agreement with a research consultant. The warrants were valued at $16,667 using the Black Scholes pricing model relying on the following assumptions: volatility 175.61%; annual rate of dividends 0%; discount rate 1.63%. During the quarter ended December 31, 2017, the Company issued warrants to HEP Investments LLC (a related party) to purchase 50,000,000 shares of common stock at an exercise price of $.10 with a term of 5 years pursuant to an approval of the board of directors relating to the additional funding of $2.5 million through the 11% convertible note. See Note 7 - Convertible Debt. The warrants were valued at $4,274,761 using the Black Scholes pricing model relying on the following assumptions: volatility 175.10%; annual rate of dividends 0%; discount rate 2.09%. Also, in the fourth quarter, the Company issued warrants to purchase 600,000 shares of common stock at an exercise price of $.10 with a term of 5 years pursuant to an agreement as a financial consultant. The warrants were valued at $57,212 using the Black Scholes pricing model relying on the following assumptions: volatility 176.09%; annual rate of dividends 0%; discount rate 2.11%.

During the year ended December 31, 2018, pursuant to Board of Directors authorization, the Company issued warrants to purchase 56,334,081 shares of common stock. In the first quarter, the Company issued warrants to purchase 2,326,504 shares of common stock at an exercise price of $.11 with a term of 5 years to an investment banker. The warrants were valued at $245,040 using the Black Scholes pricing model relying on the following assumptions: volatility 177.09%; annual rate of dividends 0%; discount rate 2.69%. In the second quarter, the Company issued warrants to HEP Investments LLC (a related party) to purchase 25,000,000 shares of common stock at an exercise price of $.10 with a term of 5 years pursuant to an approval of the board of directors relating to the additional funding of $2 million through a combination of sales of common stock and the issuances of 11% convertible notes (at a conversion price of $.10) to HEP Investments through the 11% convertible note. See Note 7 - Convertible Debt. The warrants were valued at $4,274,761 using the Black Scholes pricing model relying on the following assumptions: volatility 175.10%; annual rate of dividends 0%; discount rate 2.09%. Further, the Company issued warrants to purchase 1,000,000 shares of common stock at an exercise price of $.11 with a term of 5 years to a consultant (Executive Director of Asia Operations – see Note 10 – Related Party Transactions). The warrants were valued at $163,798 using the Black Scholes pricing model relying on the following assumptions: volatility 176.10%; annual rate of dividends 0%; discount rate 2.77%. In the fourth quarter, the Company issued warrants to HEP Investments LLC (a related party) to purchase 25,000,000 shares of common stock at an exercise price of $.10 with a term of 5 years pursuant to an approval of the board of directors relating to the additional funding of $2 million through a combination of sales of common stock and the issuances of 11% convertible notes (at a conversion price of $.10) to HEP Investments through the 11% convertible note. See Note 7 - Convertible Debt. The warrants were valued at $3,377,387 using the Black Scholes pricing model relying on the following assumptions: volatility 179.73%; annual rate of dividends 0%; discount rate 2.65%. Also in the fourth quarter, the Company issued warrants to purchase 3,007,577 shares of common stock at an exercise price of $.13 with a term of 5 years to an investment banker. The warrants were valued at $374,511 using the Black Scholes pricing model relying on the following assumptions: volatility 180.13%; annual rate of dividends 0%; discount rate 2.65%.

Stock Issuances

During the year ended December 31, 2017, in connection with the issuance of $4,000,000 in principal of 11% Convertible Debenture the Company issued to HEP Investments 1,935,714 shares of common stock valued at $144,000 and a five-year warrant to purchase 4,000,000 shares of common stock at an exercise price of $.10 per share. The Company also issued 250,000 shares of common stock valued at $22,500 as discussed in Note 10 - Settlement of Litigation – Related Party.

During the year ended December 31, 2018, in connection with the issuance of $1,968,800 in principal of 11% Convertible Debenture the Company issued to HEP Investments 552,672 shares of common stock valued at $64,397 and various five-year warrant(s) to purchase 1,543,801 shares of common stock at an exercise price of $.10 per share (see Note 7 – Convertible Debt). In addition, the Company received proceeds of $3,433,813 from the issuance of 34,338,129 shares of common stock.

NOTE 8 - STOCKHOLDERS' DEFICIENCY (continued)

Executive Compensation

As compensation for serving as Chief Financial Officer, the Company, quarterly, will issue warrants to purchase 50,000 shares of common stock to Philip M. Rice at the prevailing market price with a term of 5 years, provided that the preceding quarterly and annual filings were submitted in a timely and compliant manner, at which time such warrants would vest.

On March 31, 2017, the Company issued the CFO warrants to purchase 50,000 shares of common stock at $.08. The warrants were valued at $3,317 using the Black Scholes pricing model relying on the following assumptions: volatility 175.53%; annual rate of dividends 0%; discount rate 1.93%. On May 12, 2017, the Company issued the CFO warrants to purchase 50,000 shares of common stock at $.09. The warrants were valued at $4,283 using the Black Scholes pricing model relying on the following assumptions: volatility 176.74%; annual rate of dividends 0%; discount rate 1.93%. On August 11, 2017, the Company issued the CFO warrants to purchase 50,000 shares of common stock at $.06. The warrants were valued at $2,863 using the Black Scholes pricing model relying on the following assumptions: volatility 177.01%; annual rate of dividends 0%; discount rate 1.74%. On October 19, 2017, the Company issued warrants to purchase 50,000 shares of common stock at $.09. The warrants were valued at $4,290 using the Black Scholes pricing model relying on the following assumptions: volatility 176.02%; annual rate of dividends 0%; discount rate 1.98%.

On February 21, 2018, the Company issued the CFO warrants to purchase 50,000 shares of common stock at $.11. The warrants were valued at $5,255 using the Black Scholes pricing model relying on the following assumptions: volatility 177.09%; annual rate of dividends 0%; discount rate 2.69%. On April 23, 2018, the Company issued the CFO warrants to purchase 50,000 shares of common stock at $.10. The warrants were valued at $4,762 using the Black Scholes pricing model relying on the following assumptions: volatility 174.51%; annual rate of dividends 0%; discount rate 2.83%. On August 14, 2018, the Company issued the CFO warrants to purchase 50,000 shares of common stock at $.12. The warrants were valued at $5,737 using the Black Scholes pricing model relying on the following assumptions: volatility 177.70%; annual rate of dividends 0%; discount rate 2.77%. On November 14, 2018, the Company issued the CFO warrants to purchase 50,000 shares of common stock at $.14. The warrants were valued at $7,695 using the Black Scholes pricing model relying on the following assumptions: volatility 180.26%; annual rate of dividends 0%; discount rate 2.95%.

On November 8, 2017, the board of directors granted to Andrew Dahl, CEO warrants to purchase 10,000,000 shares of common stock at an exercise price of $.08 per share. The warrants have a term of five years and vest immediately. The warrants were valued at $762,649 using the Black Scholes pricing model relying on the following assumptions: volatility 176.02%; annual rate of dividends 0%; discount rate 1.99%.
.99%.

On November 8, 2017, the board of directors granted to Philip Rice, CFO, warrants to purchase 6,000,000 shares of common stock at an exercise price of $.08 per share. The warrants have a term of five years and vest immediately. The warrants were valued at $457,589 using the Black Scholes pricing model relying on the following assumptions: volatility 176.02%; annual rate of dividends 0%; discount rate 1.99%.

During the year ended December 31, 2018, the Company issued the following warrants pursuant to offers of employment with three employees: 1) to purchase 500,000 shares of common stock at an exercise price of $.10 with a term of 5 years (these warrants were valued at $33,045 using the Black Scholes pricing model relying on the following assumptions: volatility 175.59%; annual rate of dividends 0%; discount rate 2.36%); 2) to purchase 500,000 shares of common stock at an exercise price of $.11 with a term of 5 years (these warrants were valued at $81,897 using the Black Scholes pricing model relying on the following assumptions: volatility 176.04%; annual rate of dividends 0%; discount rate 2.81%); and 3) to purchase 1,000,000 shares of common stock at an exercise price of $.11 with a term of 5 years (these warrants were valued at $163,798 using the Black Scholes pricing model relying on the following assumptions: volatility 176.10%; annual rate of dividends 0%; discount rate 2.77%). These warrants will vest one year from issuance (June 19, 2019) (the Company has recorded $87,508 as stock-based compensation during the year ended December 31, 2018, the remaining cost will be amortized over the course of the vesting period).

NOTE 8 - STOCKHOLDERS' DEFICIENCY (continued)

Common Stock Warrants

A summary of the status of the Company's warrants is presented below.

	December 31, 2018		December 31, 2017	
	Number of Warrants	Weighted Average Exercise Price	Number of Warrants	Weighted Average Exercise Price
Outstanding, beginning of year	119,301,754	$ 0.09	32,071,901	$ 0.10
Issued	74,377,862	0.10	88,737,227	0.09
Exercised	-	-	-	-
Cancelled	-	-	-	-
Expired	(1,530,660)	0.26	(1,507,374)	0.17
Outstanding, end of period	192,148,956	$ 0.09	119,301,754	$ 0.09

Warrants outstanding and exercisable by price range as of December 31, 2018 were as follows:

Outstanding Warrants			Exercisable Warrants		
Range of	Number	Average Weighted Remaining Contractual Life in Years	Exercise Price	Number	Weighted Average Exercise Price
$ 0.05	1,250,000	2.70	$ 0.05	1,250,000	$ 0.05
0.06	16,050,000	3.59	0.06	16,050,000	0.06
0.07	3,000,000	3.70	0.07	3,000,000	0.07
0.08	34,612,227	2.99	0.08	34,612,227	0.08
0.09	775,000	2.53	0.09	775,000	0.09
0.10	126,747,505	4.13	0.10	126,277,642	0.10
0.11	2,550,000	4.42	0.11	2,550,000	0.11
0.12	100,000	3.12	0.12	100,000	0.12
0.13	3,007,557	5.00	0.13	3,007,557	0.13
0.14	2,600,000	4.67	0.14	2,600,000	0.14
0.15	1,356,667	0.70	0.15	1,356,667	0.15
0.17	50,000	0.25	0.17	50,000	0.17
0.19	50,000	0.37	0.19	50,000	0.19
	192,148,956	4.34		191,679,093	$ 0.09

NOTE 9- COMMITMENTS AND CONTINGENCIES

Employment Agreement

The Company's Chief Executive Officer, Andrew Dahl, is serving under the terms of an employment agreement dated December 16, 2011 as amended August 11, 2016. Under the agreement Mr. Dahl serves as CEO for one-year terms, subject to automatic renewal, unless either party terminates the Agreement on sixty days' notice prior to the expiration of the term of the agreement. Mr. Dahl is compensated as follows: he receives an annual base salary of $240,000. In addition, Mr. Dahl is entitled to monthly bonus compensation equal to 2% of the Company's revenue, but only to the extent that such bonus amount exceeds his base salary for the month in question. In addition, Mr. Dahl will be entitled to warrants having an exercise price of $.25 per share, upon the attainment of specified milestones as follows: 1) Warrants for 500,000 shares upon identification of bio-active agents in the Company's product and filing of a patent with respect thereto, 2) Warrants for 500,000 shares upon entering into a business contract under which the Company receives at least $500,000 in cash payments, 3) Warrants for 1,000,000 shares upon the Company entering into a co-development agreement with a research company to develop medicinal or pharmaceutical applications (where the partner provides at least $2 million in cash or in-kind outlays), 4) Warrants for 1,000,000 shares upon the Company entering into a co-development agreement for nutraceutical or dietary supplement applications (where the partner provides at least $2 million in cash or in-kind outlays), 5) Warrants for 1,000,000 shares upon the Company entering into a pharmaceutical development agreement. Further, as it relates to Company's wholly-owned subsidiary, WellMetrix, LLC ("WellMetrix"), in the event the Company ceases to own a controlling interest in WellMetrix for any reason whatsoever, the Company shall cause WellMetrix to grant Mr. Dahl warrants to purchase a seven percent (7%) equity interest in WellMetrix at the time outside funding is closed and/or at the time an event occurs whereby the Company relinquishes majority control of WellMetrix. Such Warrant shall be priced at the per-unit or per-share price at the time of the applicable closing or change of control with respect to WellMetrix. As of December 31, 2018, none of the milestones referred to had been achieved and there has been no notice of contract termination.

Investment Banking, M&A and Corporate Advisory Agreement

On January 17, 2017 the Company entered into a one-year agreement with an Investment Banking, Merger and Acquisition (M&A) and Corporate Advisory firm. Pursuant to the terms of the agreement, if the Company did not terminate the engagement prior to April 18, 2017, it was required to issue 1,875,000 shares of its common stock. As of April 18, 2017, the Company had not terminated the agreement and therefore became obligated to issue the aforementioned shares. The Company recorded the expense in Professional Fees and Consulting Expenses in the amount of $131,250 on its Consolidated Statement of Operations for the year ended December 31, 2017. In addition to the contract fee, the Company could potentially be required to be obligated to pay an 8% M&A transaction fee (as defined in the Agreement) payable in shares of the Company's common stock (reduced by the value of the previously issued shares). On January 17, 2018, this agreement expired with no additional costs to the Company.

On February 21, 2018 the Company entered into a one-year agreement with an Investment Banking, Merger and Acquisition (M&A) and Corporate Advisory firm ("Firm"). Pursuant to the terms of the agreement, issued a warrant to purchase 2,326,504 shares of common stock at an exercise price of $.10 for a term of five years. The warrants were valued at $245,040 using the Black Scholes pricing model relying on the following assumptions: volatility 177.09%; annual rate of dividends 0%; discount rate 2.69%. In addition to the contract fee, the Company could potentially be obligated to pay up to an 8% M&A transaction fee (as defined in the Agreement) plus a warrant to purchase shares of common stock equal to between 0.5% and 1.0%. As of December 31, 2018, the Company issued warrants to purchase 3,007,132 shares of common stock at an exercise price of $.13 with a term of 5 years to an investment banker. The warrants were valued at $374,511 using the Black Scholes pricing model relying on the following assumptions: volatility 180.13%; annual rate of dividends 0%; discount rate 2.65%. As a result of this issuance, any further potential obligation to pay a M&A transaction fee relating to warrants to purchase shares of common stock would be equal to 0.5% of the post financing fully shares outstanding at an exercise price equal to the valuation / share price of the financing (see Note 8 – Stockholders' Deficiency).

NOTE 9- COMMITMENTS AND CONTINGENCIES (continued)

Change of Control Provisions

Effective as of December 31, 2018, the Board of Directors extended to December 31, 2019 the Change in Control Agreements (the "Agreements") with both of its executive officers. The Agreements with each of the executive officers provide that if a Change of Control (as defined in the Agreements) occurs and the participant is not offered substantially equivalent employment with the successor corporation or the participant's employment is terminated without Cause (as defined in the Agreements) during the three month period prior to the Change of Control or the 24 month period following the Change of Control, then 100% of such participant's unvested options will be fully vested and the restrictions on his restricted shares will lapse. The Agreements also provide for severance payments of 500% of base salary and target bonus in such event. The Agreements terminate on December 31, 2019, with the provision that if a Change of Control occurs prior to the termination date, the obligations of the Agreements will remain in effect until they are satisfied or have expired. (See Note 13 – Subsequent Events)

Legal Contingencies

We may become a party to litigation in the normal course of business. In the opinion of management, there are no legal matters involving us that would have a material adverse effect upon our financial condition, results of operation or cash flows.

NOTE 10 - RELATED PARTY TRANSACTIONS

Due to Related Party

See Note 5 Due to Related Party for disclosure of payable to related Party.

Loan Payable – Related Party

See Note 6 Loan Payable – Related Parties for disclosure of loans payable to related Parties

Executive Compensation

See Note 8 – Stockholders' Deficit for disclosure of warrants to purchase 1,000,000 shares of common stock at an exercise price of $.11 with a term of 5 years to the Executive Director of Asia Operations (a consultant). The Executive Director of Asia Operations is the spouse of the Chief Financial Officer. The Executive Director of Asia Operations is contracted on a month to month basis.

See Note 8 – Stockholder' Deficiency for disclosure of compensation to the Chief Executive Officer and Chief Financial Officer.

Employment Agreement

See Note 9 – Commitments and Contingencies for disclosure of the Employment Agreement with the Chief Executive Officer.

NOTE 11 - INCOME TAXES

At December 31, 2017 the Company had available net-operating loss carry-forwards for Federal tax purposes of approximately $62,937,000, which may be applied against future taxable income, if any, at various dates from 2018 through 2038. Certain significant changes in ownership of the Company may restrict the future utilization of these tax loss carry-forwards.

At December 31, 2018 the Company had a deferred tax asset of approximately $16,993,000 representing the benefit of its net operating loss carry-forwards. The Company has not recognized the tax benefit because realization of the tax benefit is uncertain and thus a valuation allowance has been fully provided against the deferred tax asset. The difference between the Federal and State Statutory Rate of 27% and the Company's effective tax rate of 0% is due to an increase in the valuation allowance of approximately $4,848,000 in 2018.

EXHIBIT INDEX

Exhibit Number	Title	
3.13	Articles of Incorporation of Health Enhancement Products, Inc., as amended	(1)
3.11	Amendment to Articles of Incorporation of the Company, dated July 24, 2012	(2)
3.12	Amended Articles of Incorporation dated October 16, 2014 for name change	(3)
3.1	Certificate to Amendment of Articles of Incorporation of Incorporation dated November 14, 2016	(4)
3.2	Amended and restated By-laws of the Company	(5)
10.04	Security Agreement with HEP Investments, LLC ($100K loan) dated September 8, 2011	(6)
10.05	Senior Secured Note with HEP Investments, LLC ($100K loan) dated September 8, 2011	(7)
10.06	Loan Agreement with HEP Investments, LLC ($2M loan) dated December 2, 2011	(8)
10.07	Senior Secured Note with HEP Investments, LLC ($2M loan) dated December 2, 2011	(9)
10.08	Security Agreement with HEP Investments, LLC ($2M loan) dated December 2, 2011	(10)
10.09	IP Security Agreement with HEP Investments, LLC ($2M loan) dated December 2, 2011	(11)
10.24	Amended and Restated Senior Secured Convertible Promissory Note and the First Amendment to Loan Agreement with HEP Investments, LLC dated April 15, 2013	(12)
10.26	Second Amendment to Loan Agreement with HEP Investments, LLC dated December 16, 2013	(13)
10.27	Third Amendment to Loan Agreement with HEP Investments, LLC dated March 17, 2014	(14)
10.28	Third Amendment to Loan Agreement with HEP Investments, LLC dated July 1, 2014	(15)
10.29	Fourth Amended and Restated Senior Secured Convertible Promissory Note with HEP Investments, LLC dated July 1, 2014	(16)
10.31	Fourth Amendment to Loan Agreement with HEP Investments, LLC dated December 1, 2014	(17)
10.32	Fifth Amended and Restated Senior Secured Convertible Promissory Note with HEP Investments, LLC dated December 1, 2014	(18)
10.33	Fifth Amendment to Loan Agreement with HEP Investments, LLC dated April 28, 2015	(19)
10.34	Sixth Amended and Restated Senior Secured Convertible Promissory Note with HEP Investments, LLC dated April 28, 2015	(20)
10.36	Sixth Amendment to Loan Agreement with HEP Investments, LLC dated December 31, 2015	(21)
10.37	Seventh Amended and Restated Senior Secured Convertible Promissory Note with HEP Investments, LLC dated December 31, 2015	(22)
10.39	Amended and Restated Employment Agreement with Andrew Dahl, the Registrant's CEO	(23)
10.40	Seventh Amendment to Loan Agreement with HEP Investments, LLC dated September 30, 2016	(24)
10.41	Eighth Amended and Restated Senior Secured Convertible Promissory Note with HEP Investments, LLC dated September 30, 2016	(25)
10.42	Eighth Amendment to Loan Agreement with HEP Investments, LLC dated March 1, 2017	(26)
10.43	Ninth Amended and Restated Senior Secured Convertible Promissory Note with HEP Investments, LLC dated March 1, 2017	(27)
10.44	Amended and Restated Change of Control Agreement dated April 21, 2017	(28)
10.45	Limited License Agreement with NutriQuest dated April 20, 2017	(29)
10.46	Amended and Restated Registration Rights Agreement with HEP Investments, LLC (Lender) and Strome Mezzanine Fund LP dated October 18, 2017	(30)
10.47	Ninth Amendment to Loan Agreement with HEP Investments, LLC dated January 31, 2018	(31)
10.48	Tenth Amended and Restated Senior Secured Convertible Promissory Note with HEP Investments, LLC dated January 31, 2018	(32)
10.49	Tenth Amended and Restated Senior Secured Convertible Promissory Note with HEP Investments, LLC dated May 16, 2018	(33)
10.50	Eleventh Amendment to Loan Agreement with HEP Investments, LLC dated May 16, 2018	(34)
10.51	Amended and Restated Change of Control Agreement dated December 31, 2018	(35)
14.1	Code of Ethics	*
21.1	Subsidiaries of the Registrant	*
31.1	Certification of the Principal Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended	*
31.2	Certification of the Principal Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended	*
32.1	Certification of the Principal Executive Officer pursuant to U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	*
32.2	Certification of the Principal Financial Officer pursuant to U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	*

*Filed herewith

(1) Filed as Exhibit 3.13 to the Registrant's Form 8K filed with the Commission on June 29, 2015 and incorporated herein by this reference.
(2) Filed as Exhibit 3.11 to the Registrant's Form 10Q filed with the Commission on March 25, 2013 and incorporated by this reference.
(3) Filed as Exhibit 3.12 to the Registrant's Form 10Q filed with the Commission on November 14, 2014 and incorporated by this reference.
(4) Filed as Exhibit 3.1 to the Registrant's Form 10Q filed with the Commission on November 14, 2016 and incorporated by this reference.
(5) Filed as Exhibit 3.2 to the Registrant's Form 10Q filed with the Commission on May 17, 2010 and incorporated by this reference.
(6) Filed as Exhibit 10.04 to Form 10K filed with the Commission on March 30, 2012 and incorporated by this reference.
(7) Filed as Exhibit 10.05 to Form 10K filed with the Commission on March 30, 2012 and incorporated by this reference.
(8) Filed as Exhibit 10.06 to Form 10K filed with the Commission on March 30, 2012 and incorporated by this reference.
(9) Filed as Exhibit 10.07 to Form 10K filed with the Commission on March 30, 2012 and incorporated by this reference.
(10) Filed as Exhibit 10.08 to Form 10K filed with the Commission on March 30, 2012 and incorporated by this reference.
(11) Filed as Exhibit 10.09 to Form 10K filed with the Commission on March 30, 2012 and incorporated by this reference.
(12) Filed as Exhibit 10.24 to Form 10Q filed with the Commission on May 16, 2013 and incorporated by this reference.
(13) Filed as Exhibit 10.26 to Form 10K filed with the Commission on March 31, 2014 and incorporated by this reference.
(14) Filed as Exhibit 10.27 to Form 10K filed with the Commission on March 31, 2014 and incorporated by this reference.
(15) Filed as Exhibit 10.28 to Form 10Q filed with the Commission on August 14, 2014 and incorporated by this reference.
(16) Filed as Exhibit 10.29 to Form 10Q filed with the Commission on August 14, 2014 and incorporated by this reference.
(17) Filed as Exhibit 10.31 to Form 8K filed with the Commission on December 26, 2014 and incorporated by this reference.
(18) Filed as Exhibit 10.32 to Form 8K filed with the Commission on December 26, 2014 and incorporated by this reference.
(19) Filed as Exhibit 10.33 to Form 8K filed with the Commission on May 1, 2015 and incorporated by this reference.
(20) Filed as Exhibit 10.34 to Form 8K filed with the Commission on May 1, 2015 and incorporated by this reference.
(21) Filed as Exhibit 10.36 to Form 8K filed with the Commission on January 7, 2016 and incorporated by this reference.
(22) Filed as Exhibit 10.37 to Form 8K filed with the Commission on January 7, 2016 and incorporated by this reference.
(23) Filed as Exhibit 10.39 to Form 10Q filed with the Commission on August 12, 2016 and incorporated by this reference.
(24) Filed as Exhibit 10.40 to Form 8K filed with the Commission on October 5, 2016 and incorporated by this reference.
(25) Filed as 10.41 to Form 8K filed with the Commission on October 5, 2016 and incorporated by this reference.
(26) Filed as Exhibit 10.42 to Form 8K filed with the Commission on March 6, 2017 and incorporated by this reference.
(27) Filed as Exhibit 10.43 to Form 8K filed with the Commission on March 6, 2017 and incorporated by this reference.
(28) Filed as Exhibit 10.1 to Form 10Q filed with the Commission on May 12, 2017 and incorporated by this reference.
(29) Filed as Exhibit 10.2 to Form 10Q filed with the Commission on May 12, 2017 and incorporated by this reference.
(30) Filed as Exhibit 10.1 to Form 10Q filed with the Commission on October 19, 2017 and incorporated by this reference.
(31) Filed as Exhibit 10.1 to Form 8K filed with the Commission on February 12, 2018 and incorporated by this reference.
(32) Filed as Exhibit 10.2 to Form 8K filed with the Commission on February 12, 2018 and incorporated by this reference.
(33) Filed as Exhibit 10.1 to Form 8K filed with the Commission on May 18, 2018 and incorporated by this reference.
(34) Filed as Exhibit 10.2 to Form 8K filed with the Commission on May 18, 2018 and incorporated by this reference.
(35) Filed as Exhibit 10.1 to Form 8K filed with the Commission on January 7, 2019 and incorporated by this reference.

Exhibit 14.1

ZIVO BIOSCIENCE

EMPLOYEE ETHICS POLICIES

Code of Ethics and Business Conduct for Officers, Directors and Employees

1. Treat in an Ethical Manner Those to Whom Zivo Bioscience Has an Obligation

We are committed to honesty, just management, fairness, providing a safe and healthy environment free from the fear of retribution, and respecting the dignity due everyone.

For the communities in which we live and work we are committed to observe sound environmental business practices and to act as concerned and responsible neighbors, reflecting all aspects of good citizenship.

For our shareholders we are committed to pursuing sound growth and earnings objectives and to exercising prudence in the use of our assets and resources.

2. **Promote a Positive Work Environment**

All employees want and deserve a workplace where they feel respected, satisfied, and appreciated. We respect cultural diversity and recognize that the various communities in which we may do business may have different legal provisions pertaining to the workplace. As such, we will adhere to the limitations specified by law in all of our localities, and further, we will not tolerate harassment or discrimination of any kind -- especially involving race, color, religion, gender, age, national origin, disability, and veteran or marital status.

Providing an environment that supports honesty, integrity, respect, trust, responsibility, and citizenship permits us the opportunity to achieve excellence in our workplace. While everyone who works for the Company must contribute to the creation and maintenance of such an environment, our executives and management personnel assume special responsibility for fostering a work environment that is free from the fear of retribution and will bring out the best in all of us. Supervisors must be careful in words and conduct to avoid placing, or seeming to place, pressure on subordinates that could cause them to deviate from acceptable ethical behavior.

3. **Protect Yourself, Your Fellow Employees, and the World We Live In**

We are committed to providing a drug-free, safe, and healthy work environment, and to observe environmentally sound business practices. We will strive, at a minimum, to do no harm and where possible, to make the communities in which we work a better place to live. Each of us is responsible for compliance with environmental, health, and safety laws and regulations. Observe posted warnings and regulations. Report immediately to the appropriate management any accident or injury sustained on the job, or any environmental or safety concern you may have.

4. **Keep Accurate and Complete Records**

We must maintain accurate and complete Company records. Transactions between the Company and outside individuals and organizations must be promptly and accurately entered in our books in accordance with generally accepted accounting practices and principles. No one should rationalize or even consider misrepresenting facts or falsifying records. It will not be tolerated and will result in disciplinary action.

5. **Obey the Law**

We will conduct our business in accordance with all applicable laws and regulations. Compliance with the law does not comprise our entire ethical responsibility. Rather, it is a minimum, absolutely essential condition for performance of our duties. In conducting business, we shall:

a. **Strictly Adhere to All Antitrust Laws**

Officer, directors and employees must strictly adhere to all antitrust laws. Such laws exist in the United States, the European Union, and in many other countries where the Company may conduct business. These laws prohibit practices in restraint of trade such as price fixing and boycotting suppliers or customers. They also bar pricing intended to run a competitor out of business; disparaging, misrepresenting, or harassing a competitor; stealing trade secrets; bribery; and kickbacks.

b. **Strictly Comply with All Securities Laws**

In our role as a publicly owned company, we must always be alert to and comply with the security laws and regulations of the United States and other countries.

i. **Do Not Engage in Speculative or Insider Trading**

Federal law and Company policy prohibits officers, directors and employees, directly or indirectly through their families or others, from purchasing or selling company stock while in the possession of material, non-public information concerning the Company. This same prohibition applies to trading in the stock of other publicly held companies on the basis of material, non-public information. To avoid even the appearance of impropriety, Company policy also prohibits officers, directors and employees from trading options on the open market in Company stock under any circumstances.

Material, non-public information is any information that could reasonably be expected to affect the price of a stock. If an officer, director or employee is considering buying or selling a stock because of inside information they possess, they should assume that such information is material. It is also important for the officer, director or employee to keep in mind that if any trade they make becomes the subject of an investigation by the government, the trade will be viewed after-the-fact with the benefit of hindsight. Consequently, officers, directors and employees should always carefully consider how their trades would look from this perspective.

Two simple rules can help protect you in this area: (1) Don't use non-public information for personal gain. (2) Don't pass along such information to someone else who has no need to know.

This guidance also applies to the securities of other companies for which you receive information in the course of your employment at Zivo Bioscience.

ii. Be Timely and Accurate in All Public Reports

As a public company, Zivo Bioscience must be fair and accurate in all reports filed with the United States Securities and Exchange Commission. Officers, directors and management of Zivo Bioscience are responsible for ensuring that all reports are filed in a timely manner and that they fairly present the financial condition and operating results of the Company.

Securities laws are vigorously enforced. Violations may result in severe penalties including forced sales of parts of the business and significant fines against the Company. There may also be sanctions against individual employees including substantial fines and prison sentences.

The Chief Executive Officer and Chief Financial Officer will certify to the accuracy of reports filed with the SEC in accordance with the Sarbanes-Oxley Act of 2002. Officers and Directors who knowingly or willingly make false certifications may be subject to criminal penalties or sanctions including fines and imprisonment.

6. **Avoid Conflicts of Interest**

Our officers, directors and employees have an obligation to give their complete loyalty to the best interests of the Company. They should avoid any action that may involve, or may appear to involve, a conflict of interest with the company. Officers, directors and employees should not have any financial or other business relationships with suppliers, customers or competitors that might impair, or even appear to impair, the independence of any judgment they may need to make on behalf of the Company.

Here are some ways a conflict of interest could arise:

- Employment by a competitor, or potential competitor, regardless of the nature of the employment, while employed by Zivo Bioscience.
- Acceptance of gifts, payment, or services from those seeking to do business with Zivo Bioscience.
- Placement of business with a firm owned or controlled by an officer, director or employee or his/her family.
- Ownership of, or substantial interest in, a company that is a competitor, client or supplier.
- Acting as a consultant to a Zivo Bioscience customer, client or supplier.

- Seeking the services or advice of an accountant or attorney who has provided services to Zivo Bioscience.

Officers, directors and employees are under a continuing obligation to disclose any situation that presents the possibility of a conflict or disparity of interest between the officer, director or employee and the Company. Disclosure of any potential conflict is the key to remaining in full compliance with this policy.

7. **Compete Ethically and Fairly for Business Opportunities**

We must comply with the laws and regulations that pertain to the acquisition of goods and services. We will compete fairly and ethically for all business opportunities. In circumstances where there is reason to believe that the release or receipt of non-public information is unauthorized, do not attempt to obtain and do not accept such information from any source.

If you are involved in Company transactions, you must be certain that all statements, communications, and representations are accurate and truthful.

8. **Avoid Illegal and Questionable Gifts or Favors**

The sale and marketing of our products and services should always be free from even the perception that favorable treatment was sought, received, or given in exchange for the furnishing or receipt of business courtesies. Officers, directors and employees of Zivo Bioscience will neither give nor accept business courtesies that constitute, or could be reasonably perceived as constituting, unfair business inducements or that would violate law, regulation or policies of the Company, or could cause embarrassment to or reflect negatively on the Company's reputation.

9. **Maintain the Integrity of Consultants, Agents, and Representatives**

Business integrity is a key standard for the selection and retention of those who represent Zivo Bioscience. Agents, representatives, or consultants must certify their willingness to comply with the Company's policies and procedures and must never be retained to circumvent our values and principles. Paying bribes or kickbacks, engaging in industrial espionage, obtaining the proprietary data of a third party without authority, or gaining inside information or influence are just a few examples of what could give us an unfair competitive advantage and could result in violations of law.

10. **Protect Proprietary Information**

Proprietary Company information may not be disclosed to anyone without proper authorization. Keep proprietary documents protected and secure. In the course of normal business activities, suppliers, customers, and competitors may sometimes divulge to you information that is proprietary to their business. Respect these confidences.

11. **Obtain and Use Company Assets Wisely**

Personal use of Company property must always be in accordance with corporate policy. Proper use of Company property, information resources, material, facilities, and equipment is your responsibility. Use and maintain these assets with the utmost care and respect, guarding against waste and abuse, and never borrow or remove Company property without management's permission.

12. **Follow the Law and Use Common Sense in Political Contributions and Activities**

Zivo Bioscience encourages its employees to become involved in civic affairs and to participate in the political process. Employees must understand, however, that their involvement and participation must be on an individual basis, on their own time, and at their own expense. In the United States, federal law prohibits corporations from donating corporate funds, goods, or services, directly or indirectly, to candidates for federal offices -- this includes employees' work time. Local and state laws also govern political contributions and activities as they apply to their respective jurisdictions, and similar laws exist in other countries.

13. **Board Committees.**

The Company shall establish an Audit Committee empowered to enforce this Code of Ethics. The Audit Committee will report to the Board of Directors at least once each year regarding the general effectiveness of the Company's Code of Ethics, the Company's controls and reporting procedures and the Company's business conduct.

14. **Disciplinary Measures.**

The Company shall consistently enforce its Code of Ethics and Business Conduct through appropriate means of discipline. Violations of the Code shall be promptly reported to the Audit Committee. Pursuant to procedures adopted by it, the Audit Committee shall determine whether violations of the Code have occurred and, if so, shall determine the disciplinary measures to be taken against any employee or agent of the Company who has so violated the Code.

The disciplinary measures, which may be invoked at the discretion of the Audit Committee, include, but are not limited to, counseling, oral or written reprimands, warnings, probation or suspension without pay, demotions, reductions in salary, termination of employment and restitution.

Persons subject to disciplinary measures shall include, in addition to the violator, others involved in the wrongdoing such as (i) persons who fail to use reasonable care to detect a violation, (ii) persons who if requested to divulge information withhold material information regarding a violation, and (iii) supervisors who approve or condone the violations or attempt to retaliate against employees or agents for reporting violations or violators.

Accepted:

Signature:

_____

Date:

_____

Print Name:

_____

Exhibit 21.1

SUBSIDIARIES OF ZIVO BIOSCIENCE, INC.

Name	**Place of Organization**
HEPI Pharmaceuticals, Inc.	Delaware Corporation
ZIVO Biologic, Inc.,	Delaware corporation
WellMetrix, LLC	Delaware Corporation

Exhibit 31.1

Certification Pursuant to pursuant to Rule 13a-14(a) or Rule 15d-14(a)
of the Securities Exchange Act of 1934, as amended

I, Andrew D. Dahl, certify that:

1. I have reviewed this Annual report on Form 10-K of Zivo Bioscience, Inc. (the "Company");

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

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

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

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

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

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

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

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

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

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

Date: February 12, 2019

/s/ Andrew D. Dahl
Andrew D. Dahl
Chief Executive Officer

Exhibit 31.2

Certification Pursuant to pursuant to Rule 13a-14(a) or Rule 15d-14(a)
of the Securities Exchange Act of 1934, as amended

I, Philip M. Rice II certify that:

1. I have reviewed this Annual report on Form 10-K of Zivo Bioscience, Inc. (the "Company");

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

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

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

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

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

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

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

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

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

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

Date: February 12, 2019

/s/ Philip M. Rice II
Philip M. Rice II
Chief Financial Officer

Exhibit 32.1

CERTIFICATION PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002
(Subsections (a) and (b) of Section 1350,
Chapter 63 of Title 18, United States Code)

In connection with the Annual Report of Zivo Bioscience, Inc., a Nevada corporation (the "Company"), on Form 10-K for the year ended December 31, 2018 as filed with the Securities and Exchange Commission (the "Report"), I, Andrew D. Dahl, Chief Administrative Officer of the Company, certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350), that to the best of my knowledge and belief:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and

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

Date: February 12, 2019

/s/ Andrew D. Dahl
Andrew D. Dahl
Chief Executive Officer

A SIGNED ORIGINAL OF THIS WRITTEN STATEMENT REQUIRED BY SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002 HAS BEEN PROVIDED TO ZIVO BIOSCIENCE, INC. AND WILL BE RETAINED BY ZIVO BIOSCIENCE, INC. AND FURNISHED TO THE SECURITIES AND EXCHANGE COMMISSION OR ITS STAFF UPON REQUEST.

Exhibit 32.2

CERTIFICATION PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002
(Subsections (a) and (b) of Section 1350,
Chapter 63 of Title 18, United States Code)

In connection with the Annual Report of Zivo Bioscience, Inc., a Nevada corporation (the "Company"), on Form 10-K for the period ended December 31, 2018 as filed with the Securities and Exchange Commission (the "Report"), I, Philip M. Rice II, Chief Accounting Officer of the Company, certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350), that to the best of my knowledge and belief:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and

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

Date: February 12, 2019

/s/ Philip M. Rice II
Philip M. Rice II
Chief Financial Officer

A SIGNED ORIGINAL OF THIS WRITTEN STATEMENT REQUIRED BY SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002 HAS BEEN PROVIDED TO ZIVO BIOSCIENCE, INC. AND WILL BE RETAINED BY ZIVO BIOSCIENCE, INC. AND FURNISHED TO THE SECURITIES AND EXCHANGE COMMISSION OR ITS STAFF UPON REQUEST.