

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

FORM S-1

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

ZIVO BIOSCIENCE, INC.

(Exact name of registrant as specified in its charter)

Nevada

(State or other jurisdiction of
incorporation or organization)

2836

(Primary Standard Industrial
Classification Code Number)

87-0699977

(I.R.S. Employer
Identification Number)

**21 East Long Lake Road, Suite 100,
Bloomfield Hills, Michigan 48304
(248) 452-9866**

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

**Keith R. Marchiando
Chief Financial Officer
Zivo Bioscience, Inc.**

**21 East Long Lake Road, Suite 100,
Bloomfield Hills, Michigan 48304
(248) 452-9866**

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

Copies to:

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Detroit, MI 48226-3506
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Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement is declared effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box.

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

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

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

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

Large accelerated filer
Non-accelerated filer

Accelerated filer
Smaller reporting company
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

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

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

PRELIMINARY PROSPECTUS, SUBJECT TO COMPLETION, DATED OCTOBER 4, 2023

Zivo Bioscience, Inc.



Up to Shares of Common Stock
Pre-Funded Warrants to Purchase up to Shares of Common Stock
Common Warrants to Purchase up to Shares of Common Stock
Up to Shares of Common Stock Underlying the Pre-Funded Warrants
Up to Shares of Common Stock Underlying the Common Warrants

This is a reasonable best efforts offering of up to shares of common stock, \$0.001 par value per share (the “Common Stock”), together with common warrants (the “Common Warrants”) to purchase up to shares of Common Stock at an assumed initial exercise price of \$. per share. Each share of our Common Stock is being sold together with a Common Warrant to purchase up to shares of our Common Stock in the offering of Zivo Bioscience, Inc., a Nevada corporation (the “Company”), on a best efforts basis (this “Offering”) at an assumed public offering price of \$. per Common Stock (which is based on the last reported sale price of our Common Stock of \$. on October , 2023). The Common Warrants offered hereby may be exercised from time to time beginning on the date of issuance and expire five years from the date of issuance. The shares of our Common Stock and/or Pre-Funded Warrants and the Common Warrants are immediately separable and will be issued separately in this Offering.

We are also offering pre-funded warrants (the “Pre-Funded Warrants”) to purchase up to shares of Common Stock to those purchasers whose purchase of shares of Common Stock in this Offering would result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding Common Stock immediately following the consummation of this Offering, in lieu of shares of Common Stock that would result in beneficial ownership in excess of 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding Common Stock. The purchase price of each Pre-Funded Warrant is equal to the purchase price of the shares of Common Stock in this Offering, minus \$0.001, and the remaining exercise price of each Pre-Funded Warrant will equal \$0.001 per share. Each Pre-Funded Warrant is being offered together with the Common Warrants. The Pre-Funded Warrants and Common Warrants are immediately separable and will be issued separately in this Offering but must be purchased together in this Offering. For each Pre-Funded Warrant that we sell, the number of shares of Common Stock we are offering will be reduced on a one-for-one basis. See “*Description of the Securities*” in this prospectus for more information.

Pursuant to this prospectus, we are also offering the shares of Common Stock issuable upon the exercise of Pre-Funded Warrants and Common Warrants offered hereby. These securities are being sold in this Offering to certain purchasers under a securities purchase agreement dated , 2023 between us and such purchasers.

The shares of our Common Stock, Pre-Funded Warrants and Common Warrants being offered will be sold in a single closing. The shares issuable upon exercise of the Pre-Funded Warrants or Common Warrants will be issued upon the exercise thereof.

There is no minimum number of Common Stock or minimum aggregate amount of proceeds for this Offering to close. Because there is no minimum number of securities or minimum aggregate amount of proceeds for this Offering to close, we may sell fewer than all of the securities offered hereby, and investors in this Offering will not receive a refund in the event that we do not sell an amount of securities sufficient to pursue the business goals outlined in this prospectus. We expect this Offering to be completed not later than two business days following the commencement of this Offering and we will deliver all securities to be issued in connection with this Offering delivery versus payment (“DVP”)/receipt versus payment (“RVP”) upon receipt of investor funds received by the Company. Accordingly, neither we nor the Placement Agent have made any arrangements to place investor funds in an escrow account or trust account since the Placement Agent will not receive investor funds in connection with the sale of the securities offered hereunder. Because there is no escrow account and there is no minimum offering amount, investors could be in a position where they have invested in the Company, but we are unable to fulfill our objectives due to a lack of interest in this Offering.

Our shares of Common Stock and certain of our outstanding warrants trade on The Nasdaq Stock Market LLC (“Nasdaq”) under the symbol “ZIVO” and “ZIVOW”, respectively. On October 10, 2023, the last reported sale price of our Common Stock as reported by Nasdaq was \$ 0.15 per share. The actual public offering price per share and accompanying Common Warrant will be determined between us, the Placement Agent (as defined below) and the investors in the offering and may be at a discount to the current market price of our Common Stock. Therefore, the assumed public offering price used throughout this prospectus may not be indicative of the final public offering price. We do not intend to apply for listing of the Common Warrants or Pre-Funded Warrants on any national securities exchange or trading system. Without an active trading market, the liquidity of the Common Warrants and Pre-Funded Warrants will be limited.

Investing in our securities involves significant risks. You should review carefully the “Risk Factors” beginning on page 11 of this prospectus and those risks described in the section titled “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2022 and in our Quarterly Reports on Form 10-Q for the quarterly periods ended March 31, 2023 and June 30, 2023, and all other information included or incorporated by reference in this prospectus in its entirety, for a discussion of information that should be considered in connection with an investment in our securities.

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

	Per Common Stock and Common Warrant	Per Pre-Funded Warrant and Common Warrant	Total
Public offering price	\$	\$	\$
Placement Agent fees ⁽¹⁾	\$	\$	\$
Proceeds, before expenses, to us ⁽²⁾	\$	\$	\$

- (1) The Placement Agent fees shall equal % of the gross proceeds of the securities sold by us in this Offering. We have also agreed to reimburse the Placement Agent for certain expenses incurred in connection with this Offering. See “Plan of Distribution” for a description of compensation payable to the Placement Agent.
- (2) The amount of offering proceeds to us presented in this table assumes no Pre-Funded Warrants are issued in lieu of shares of Common Stock and does not give effect to any exercise of the Common Warrants.

We have engaged as our exclusive placement agent (“ ” or the “Placement Agent”) to use its reasonable best efforts to solicit offers to purchase our Securities in this Offering. The Placement Agent has no obligation to purchase any of the securities from us or to arrange for the purchase or sale of any specific number or dollar amount of the securities. Because there is no minimum offering amount required as a condition to closing in this Offering the actual public amount, placement agent’s fee, and proceeds to us, if any, are not presently determinable and may be substantially less than the total maximum offering amounts set forth above and throughout this prospectus. We have agreed to pay the Placement Agent the placement agent fees set forth in the table above and to provide certain other compensation to the Placement Agent. See “Plan of Distribution” beginning on page 40 of this prospectus for more information regarding these arrangements.

Delivery of the securities being offered pursuant to this prospectus is expected to be made on or about , 2023, subject to the satisfaction of certain closing conditions.

Sole Placement Agent

The date of this prospectus is , 2023.

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ABOUT THIS PROSPECTUS

The registration statement on Form S-1, of which this prospectus forms a part, that we have filed with the U.S. Securities and Exchange Commission (the “SEC”) includes exhibits that provide more detail of the matters discussed in this prospectus (the “Registration Statement”).

You should read this prospectus, the documents incorporated by reference into this prospectus, and any prospectus supplement or free writing prospectus that we may authorize for use in connection with this Offering in their entirety before making an investment decision. This prospectus is an offer to sell only the securities offered hereby but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in, or incorporated into, this prospectus is current only as of its date. Our business, financial condition, results of operations and prospects may have changed since that date. We may also file a prospectus supplement or post-effective amendment to the registration statement of which this prospectus forms a part that may contain material information relating to these offerings. The prospectus supplement or post-effective amendment may also add, update or change information contained in this prospectus with respect to that offering. If there is any inconsistency between the information in this prospectus and the applicable prospectus supplement or post-effective amendment, you should rely on the prospectus supplement or post-effective amendment, as applicable. We urge you to carefully read this prospectus, together with the information incorporated herein by reference as described under the headings “Where You Can Find More Information” and “Incorporation of Certain Information by Reference.”

We and the Placement Agent are not offering to sell or seeking offers to purchase these securities in any jurisdiction where the offer or sale is not permitted. We and the Placement Agent have not done anything that would permit this Offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus related to this Offering in jurisdictions outside the United States are required to inform themselves about and to observe any restrictions relating to this Offering and the distribution of this prospectus.

Unless the context otherwise requires, the terms “ZIVO,” “Zivo Bioscience,” the “Company,” “we,” “us” and “our” refer to Zivo Bioscience, Inc. and its wholly-owned subsidiaries, Health Enhancement Corporation, HEPI Pharmaceuticals, Inc., Wellmetrix, LLC, Wellmetris, LLC, Zivo Bioscience, LLC, Zivo Biologic, Inc., ZIVOLife, LLC, and Zivo Zoologic, Inc. We also have allowed pending trademark applications in several countries for “KALGAE™,” “ZIVO”, and “ZIVO Bioscience” 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. Other service marks, trademarks and trade names referred to in this prospectus are the property of their respective owners. Except as set forth above and solely for convenience, the trademarks and trade names in this prospectus are referred to without the ®, © and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements. All statements other than statements of historical facts contained in or incorporated into this prospectus, including statements regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans, objectives of management and expected market growth are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

The words “anticipate,” “believe,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “should,” “target,” “will,” “would” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. These forward-looking statements include, among other things, statements about:

- our ability to continue as a going concern and our history of losses;
- our continued listing with Nasdaq;
- our ability to obtain additional financing;
- our use of the net proceeds from this Offering;
- our relatively new business model and lack of significant revenues;
- our ability to prosecute, maintain or enforce our intellectual property rights;
- disputes or other developments relating to proprietary rights and claims of infringement;
- the accuracy of our estimates regarding expenses, future revenues and capital requirements;
- the implementation of our business model and strategic plans for our business and technology;
- the successful development of our sales and marketing capabilities;
- the potential markets for our products and our ability to serve those markets;
- the rate and degree of market acceptance of our products and any future products;
- our ability to retain key management personnel;
- regulatory developments and our compliance with applicable laws;
- our liquidity; and
- other factors beyond our control, including those listed under “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2022 filed with the SEC on March 14, 2023, which is incorporated by reference in this prospectus (the “2022 Annual Report”) and in our Quarterly Reports on Form 10-Q for the quarterly periods ended March 31, 2023 and June 30, 2023, each as incorporated herein by reference, and in other filings we may make from time to time with the SEC.

These statements are only current predictions and are subject to known and unknown risks, uncertainties and other factors that may cause our or our industry’s actual results, levels of activity, performance or achievements to be materially different from those anticipated by the forward-looking statements. We discuss many of these risks in greater detail under the section entitled “*Risk Factors*” and elsewhere in this prospectus. You should not rely upon forward-looking statements as predictions of future events.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. Except as required by law, after the date of this prospectus, we are under no duty to update or revise any of the forward-looking statements, whether as a result of new information, future events or otherwise.

The forward-looking statements in this prospectus represent our views as of the date of this prospectus. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we have no current intention of doing so except to the extent required by applicable law. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this prospectus.

PROSPECTUS SUMMARY

This summary highlights information contained in greater detail elsewhere or incorporated by reference into this prospectus. This summary does not contain all the information that you should consider before investing. You should read the entire prospectus carefully, including the sections titled “Risk Factors” and “Cautionary Note Regarding Forward-Looking Statements” in this prospectus and the historical financial statements and the notes thereto incorporated by reference into this prospectus. You should pay special attention to the information contained under the caption titled “Risk Factors” in this prospectus, in our 2022 Annual Report, in any subsequent Quarterly Reports on Form 10-Q and in our other reports filed from time to time with the SEC, which are incorporated by reference into this prospectus, before deciding to buy our securities.

Business Overview

We are a research and development company operating in both the biotech and agtech sectors, with an intellectual property portfolio comprised of proprietary algal and bacterial strains, biologically active molecules and complexes, production techniques, cultivation techniques and patented or patent-pending inventions for applications in human and animal health.

Biotech (Therapeutic) Business Strategy

We are developing bioactive compounds derived from our proprietary algal culture, targeting human and animal diseases, such as poultry coccidiosis, bovine mastitis, human cholesterol, and canine osteoarthritis. As part of our therapeutic strategy, we will continue to seek strategic partners for late stage development, regulatory preparation and commercialization of its products in key global markets.

After identification and study of isolated active materials obtained from our proprietary algal culture and assessing their potential treatment applications, we have identified an effective product candidate for treating coccidiosis in broiler chickens. The focus on coccidiosis is driven by the potential to rapidly generate significant revenue, primarily due to the widespread prevalence of coccidiosis as a global issue in the poultry industry. Additionally, the clinical testing cycle for chickens is comparatively shorter than that for other species.

The coccidiosis market within the global animal health sector is currently saturated with predominantly antibiotic- or ionophore-based products. What we believe distinguishes Zivo’s product candidate is its innovative non-antibiotic method of action. This approach augments the chicken’s immune system to combat the effects of the coccidiosis parasite and other pathogens. Unlike established treatments, our novel non-antibiotic technology addresses both industry and consumer concerns related to residual antibiotics and chemicals in the global food supply.

We expect that this departure from the conventional approaches that have dominated the market for the past six decades will provide us with a strategic advantage in this market. We aim to bring much-needed innovation to an area that has experienced limited advancements, potentially offering a disruptive and effective solution for treating coccidiosis in broiler chickens. Our emphasis on a non-antibiotic approach aligns with evolving industry-wide expectations and supports a commitment to providing safer and more sustainable solutions in animal health.

Coccidiosis Product Candidate

In numerous prior studies, ZIVO's product candidate has demonstrated multiple benefits, including:

- Minimized or eliminated the negative effects of coccidiosis on the digestive health in broiler chickens by numerous measures of gut health and overall well-being;
- Reduced the incidence of *Campylobacter*, *Salmonella*, *E. coli*, and *Clostridium perfringens*, all significant sources of food-borne illness, in the digestive tract of broiler chickens in the absence of antibiotics or other antimicrobial compounds; and
- Reduced mortality.

The predominant treatment for coccidiosis in the poultry industry, in-feed anticoccidial drugs target the *Eimeria* parasite directly and require constant use over the lifespan of the animal for efficacy and can over time result in the development of resistant *Eimeria* strains. Other treatment strategies, such as vaccines, require several weeks for immunity to manifest, which can significantly impact growth potential. Often, several treatment products are used in combination, increasing costs in an industry already facing heavy inflationary pressures. As a result, the poultry industry is actively searching for a novel solution.

Our treatment alternative represents an innovative new product class that aims to strengthen the immune system through multiple complementary immune pathways to afford a rapid and robust response to the effects of disease-causing pathogens without the adverse effects associated with traditional antimicrobial drugs and chemicals.

Agtech (Nutrition) Business Strategy

For the nutrition or agtech side of our business, we have developed our proprietary algal culture to be commercially viable as a food or food additive. The dried powdered form contains approximately 45% protein, is an excellent source of fiber, vitamins, and other essential nutrients, and is nearly completely odorless and tasteless unlike other algal products. As we reviewed our agtech business early this year, we were very satisfied with the nature of the product given the updated confirmation of the Self Affirmed GRAS (Generally Recognized as Safe) status for our dried whole algal biomass product. Our strategy continues to focus on working with growing and marketing partners to generate and grow revenue in 2023.

Our challenge remains in scale-up technology allowing us to cultivate and process our proprietary algae in quantities to sufficiently meet the potential demand. We have, therefore, focused our agtech strategy on developing a cost effective, commercial-scale growing technology.

Today's algae industry is artisanal and fragmented. There is no major source that can deliver to national brands and co-packers consistent quality and quantity of dried algae, and we aim to fill that market need with our proprietary algae.

In 2021, we initiated a long-term collaboration, commencing a development agreement with Grupo Alimenta, a well-established family-run Peruvian agricultural conglomerate. The Alimenta-ZIVO team has dedicated their efforts to perfecting the cultivation process and constructing commercial-scale algae ponds using ZIVO's proprietary design. By early 2023, the team successfully demonstrated the continuous production of high-quality dried algae at the development site in Peru. Subsequently, our focus has shifted towards commercial production and scaling up operations.

A significant milestone in this partnership is the transition from the development agreement to a commercial agreement. Under this arrangement, Alimenta is set to make essential investments in the Peru site to facilitate production scale-up. In turn, ZIVO, through its ZIVOLife subsidiary, commits to purchasing the entire output from that facility. This collaborative effort marks a pivotal step in advancing our shared goals in the algae production venture.

In June 2023, ZIVOLife commenced commercial shipments of our dried green algae powder intended for human consumption and use as a food or food ingredient. Through a global distribution agreement, ZWorldwide, Inc., based in Miami, has taken on the role of selling the Peruvian-grown product under the brand name Zivolife™. The primary market focus for the product's introduction is the North American green powder food market.

ZWorldwide, functioning as a direct-to-consumer marketing company, is actively retailing the Zivolife™ product directly to consumers through its online platform at www.zivo.life. At this stage, our product volumes remain relatively low and are anticipated to be constrained as we complete the scale-up process with our contract manufacturing partner in Peru. This strategic approach is designed to ensure a controlled expansion of our presence in the market while maintaining product quality and demand considerations.

Additional Indications

Pending additional funding, ZIVO may also pursue the following indications:

Biotech (Therapeutic):

- **Bovine Mastitis:** ZIVO is developing a treatment for bovine mastitis derived from its proprietary algal culture and the bioactive agents contained within.
- **Canine Joint Health:** Studies have indicated the potential of a chondroprotective property when a compound fraction was introduced into *ex vivo* canine joint tissues.
- **Human Immune Modulation:** Early human immune cell *in vitro* and *in vivo* studies have indicated that one of the isolated and characterized biologically active molecules in the Company's portfolio may serve as an immune modulator with potential application in multiple disease situations.

Agtech (Nutrition):

- **Companion Animal Food Ingredient:** The self-affirmed GRAS process was completed for ZIVO algal biomass in late 2018 to validate its suitability for human consumption as an ingredient in foods and beverages. We plan to leverage this work into viable food and nutritional supplements for companion animals.
- **Skin Health:** ZIVO is developing its algal biomass as a skin health ingredient, the Company has engaged in some limited topical skin product testing started in the third quarter of 2020, and we plan to perform clinical efficacy claim studies planned for ingestible and topical products.

Listing on the Nasdaq Capital Market

Our Common Stock and certain of our outstanding warrants are listed on Nasdaq since May 28, 2021 under the symbols "ZIVO" and "ZIVOW", respectively.

Recent Developments

Nasdaq Deficiency

As previously disclosed on May 26, 2023, we received a notification letter from Nasdaq on May 23, 2023, notifying us that we were not in compliance with the stockholders' equity requirement of \$2,500,000, as set forth in Nasdaq Listing Rule 5550(b) (the "Stockholders' Equity Rule"). On May 30, 2023, we requested a hearing with the Nasdaq Hearings Panel ("Nasdaq Hearings Panel"), which was held on July 13, 2023. At the hearing, we presented our plan to regain compliance with the Stockholders' Equity Rule.

On August 4, 2023, we received a notification letter from the Nasdaq notifying us that the Nasdaq Hearings Panel has granted our request to provide an extension until November 20, 2023 (the "Exception Period") to regain compliance with the Stockholders' Equity Rule for continued listing on Nasdaq. The Nasdaq Hearings Panel further noted that the Exception Period for continued listing is subject to a filing of a registration statement on Form S-1 with the SEC on or before October 5, 2023. The Nasdaq Hearings Panel concluded that the Exception Period is justified in this case in light of our efforts to resolve our current equity deficiency and the steps it has taken thus far to prepare for regaining compliance. The Nasdaq Hearings Panel further noted that it does not view our continued listing during the exception period to be an undue risk to the financial markets nor prospective investors (the "Panel's Decision").

In addition, during the Exception Period, the Nasdaq Hearings Panel reserves the right to reconsider the terms of this exception based on any event, condition or circumstance that exists or develops that would, in the opinion of the Nasdaq Hearings Panel, make continued listing of our securities on Nasdaq inadvisable or unwarranted. Furthermore, until the end of the Exception Period, we are required to provide prompt notification to the Nasdaq Hearings Panel of any significant events that may affect our compliance with Nasdaq requirements.

We intend to regain compliance with the Stockholders' Equity Rule prior to the end of the Exception Period set forth in the Panel's Decision. However, until Nasdaq has reached a final determination that we have regained compliance with the applicable Nasdaq requirements, there can be no assurances regarding the continued listing of our securities on Nasdaq. The delisting of our securities from Nasdaq would have a material adverse effect on our access to capital markets and any limitation on market liquidity or reduction in the price of our Common Stock as a result of that delisting would adversely affect our ability to raise capital on terms acceptable to us, if at all.

There can be no assurance that we will be successful in implementing our plan to regain compliance with the Stockholders' Equity Rule. See the section entitled *Risk Factors* and elsewhere in this prospectus.

June 2023 Registered Direct Offering and Private Placement

On June 30, 2023, we sold 1,030,000 shares of common stock, par value \$0.001 per share, at an offering price of \$2.67 per share, and pre-funded warrants to purchase up to an aggregate of 468,130 shares of Common Stock at an offering price of \$2.6699 per pre-funded warrant, to a single institutional investor. In a concurrent private placement, we also directly sold to the purchaser Series A Common Warrants to purchase up to an aggregate of 1,498,130 shares of common stock, at an exercise price of \$2.80 per share and Series B Common Warrants to purchase up to an aggregate of 1,498,130 shares of Common Stock, at an exercise price of \$2.80 per share. The Series A Common Warrants are immediately exercisable, subject to a beneficial ownership limitation of the holder provided in the Series A Common Warrants, at any time on or after the date of issuance and will expire two years from the initial exercise date. The Series B Common Warrants are immediately exercisable, subject to a beneficial ownership limitation of the holder provided in the Series B Common Warrants, at any time on or after the date of issuance and will expire five years from the initial exercise date. The gross proceeds to us from the registered direct offering and concurrent private placement were \$3,999,960 (before deducting the placement agent's fees and other estimated offering expenses payable by us). Net proceeds to us were \$3,634,963.

Corporate Information

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 112,500 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. On October 30, 2014, the Financial Industry Regulatory Authority approved the name Zivo Bioscience, Inc. for trading purposes and the symbol change to ZIVO effective November 10, 2014.

Our principal executive offices are located at 21 East Long Lake Road, Suite 100, Bloomfield Hills, Michigan 48304, and our phone number is (248) 452-9866.

THE OFFERING

Issuer	Zivo Bioscience, Inc.
Securities offered by us	<p>We are offering up to shares of Common Stock in the aggregate represented by shares of Common Stock, or Pre-Funded Warrants to purchase up to shares of Common Stock, and Common Warrants to purchase up to shares of Common Stock. Each share of Common Stock and Pre-Funded Warrant will be sold together with one Common Warrant.</p> <p>We are also offering to certain purchasers whose purchase of shares of Common Stock in this Offering would otherwise result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% of our outstanding shares of Common Stock immediately following the closing of this Offering, the opportunity to purchase, if such purchasers so choose, Pre-Funded Warrants, in lieu of shares of Common Stock that would otherwise result in any such purchaser's beneficial ownership, together with its affiliates and certain related parties, exceeding 4.99% (or, at the election of such purchaser, 9.99%) of our outstanding shares of Common Stock immediately following the consummation of this Offering. The purchase price per pre-funded warrant will be equal to the price per Common Stock, minus \$0.001, and the exercise price of each pre-funded warrant will equal \$0.001 per share. The Pre-Funded Warrants will be immediately exercisable (subject to the beneficial ownership limit) and may be exercised at any time in perpetuity until all of the Pre-Funded Warrants are exercised in full. For each Pre-Funded Warrant we sell, the number of shares of Common Stock we are offering will be decreased on a one-for-one basis. This offering also relates to the shares of Common Stock issuable upon exercise of any pre-funded warrants sold in this Offering. For more information regarding the pre-funded warrants, you should carefully read the section titled "<i>Description of the Securities - Pre-Funded Warrants</i>" in this prospectus.</p>
Offering price per share of Common Stock	Assumed public offering price of \$ per share of Common Stock and accompanying Common Warrant or \$ per Pre-Funded Warrant and accompanying Common Warrant, as applicable. The final offering price will be determined by the Company, the Placement Agent and the investors in this Offering and may be at a discount to the market price of the Common Stock.

Description of the Common Warrants	Each share of Common Stock will be sold together with one Common Warrant. Each Common Warrant has an exercise price per share equal to 100% of the public offering price of shares in this Offering and expires on the fifth anniversary of the original issuance date. Each Common Warrant is exercisable for one share of Common Stock, subject to adjustment in the event of stock dividends, stock splits, stock combinations, reclassifications, reorganizations or similar events affecting our Common Stock as described herein. A holder may not exercise any portion of a Common Warrant to the extent that the holder, together with its affiliates and any other person or entity acting as a group, would own more than 4.99% of the outstanding Common Stock after exercise, as such percentage ownership is determined in accordance with the terms of the Common Warrants, except that upon notice from the holder to us, the holder may waive such limitation up to a percentage, not in excess of 9.99%. Each Common Warrant will be exercisable immediately upon issuance and will expire five years after the initial issuance date. The terms of the Common Warrants will be governed by the provisions contained therein. Because we will issue a Common Warrant for each share of Common Stock and for each Pre-Funded Warrant sold in this Offering, the number of Common Warrants sold in this Offering will not change as a result of a change in the mix of shares of Common Stock and Pre-Funded Warrants sold. This prospectus also relates to the offering of the shares of Common Stock issuable upon exercise of the Common Warrants. This offering also relates to shares of Common Stock issuable upon exercise of any Common Warrants sold in this Offering. For more information regarding the Common Warrants, you should carefully read the section titled “ <i>Description of the Securities - Common Warrants</i> ” in this prospectus.
Common Stock to be outstanding immediately after this Offering	shares (based on 10,449,660 shares of Common Stock outstanding as of September 30, 2023).
Reasonable Best Efforts	We have agreed to issue and sell the securities offered hereby to the purchasers through the Placement Agent. The Placement Agent is not required to buy or sell any specific number or dollar amount of the securities offered hereby, but they will use their reasonable best efforts to solicit offers to purchase the securities offered by this prospectus. See the section entitled “ <i>Plan of Distribution</i> ” on page 40 of this prospectus
Use of proceeds	We estimate that the net proceeds from this Offering will be approximately \$ million, at the assumed public offering price of \$ per share and accompanying Common Warrant (assuming a public offering price equal to the last reported sales price of our Common Stock on Nasdaq on October , 2023, which was \$ per share), assuming the number of shares of Common Stock offered by us, as set forth on the cover page of this prospectus, remains the same, assuming no sale of any Pre-Funded Warrants and no exercise of the Common Warrants issued in connection with this Offering, and after deducting the placement agent fees and estimated offering expenses payable by us. We currently intend to use the net proceeds for general corporate purposes, which include, but are not limited to, the funding of research and development, expansion of production of algal biomass and working capital, after deducting Placement Agent fees and estimated offering expenses payable by us. Because this is a best efforts offering, we may not sell all or any of the securities offered hereby. As a result, we may receive significantly less in net proceeds than we currently estimate. See “ <i>Use of Proceeds</i> ” on page 25 for more information.

Lock-up	Our directors, executive officers, and stockholders who own 5% or more of the outstanding shares of our Common Stock have agreed with the Placement Agent not to offer for sale, issue, sell, contract to sell, pledge or otherwise dispose of any of our Common Stock or securities convertible into Common Stock for a period of 90 days commencing on the date of this prospectus. See “ <i>Plan of Distribution</i> ”.
Risk factors	For a discussion of certain factors to consider carefully before deciding to purchase any of our securities, you should read the “ <i>Risk Factors</i> ” section and other information appearing elsewhere in this prospectus, the risks described under the caption “Risk Factors” in our 2022 Annual Report and in our Quarterly Reports on Form 10-Q for the quarterly periods ended March 31, 2023 and June 30, 2023, which are incorporated herein by reference.
Listing	Our shares of Common Stock and certain of our outstanding warrants trade on Nasdaq Nasdaq under the symbol “ZIVO” and “ZIVOW”, respectively. We do not intend to list the Common Warrant or pre-funded warrants offered hereunder on any stock exchange.
Outstanding Common Stock	<p>The number of shares of Common Stock to be outstanding immediately following this Offering is based on 10,449,660 shares of Common Stock outstanding as of September 30, 2023 and assumes (i) no sale of Pre-Funded Warrants in this Offering, which, if sold, would reduce the number of Common Stock that we are offering on a one-for-one basis, (ii) no exercise of the Common Warrants issued in this Offering, and (iii) excludes:</p> <ul style="list-style-type: none">· 1,755,175 shares of our Common Stock issuable upon the exercise of outstanding stock options as of June 30, 2023, with an approximate weighted-average exercise price of \$5.93 per share;· 1,393,680 shares of our Common Stock issuable upon the exercise of unregistered warrants outstanding as of June 30, 2023 with an approximate weighted-average exercise price of \$6.53 per share;· 2,975,497 shares of our Common Stock issuable upon exercise of registered warrants outstanding as of June 30, 2023 with an approximate weighted-average exercise price of \$5.50 per share;· 549,291 shares of our Common Stock reserved for future issuance under our 2021 Equity Incentive Plan (the “2021 Plan”) as of June 30, 2023;· 468,130 shares of our Common Stock issuable upon exercise of pre-funded warrants sold to a single institutional investor as of July 5, 2023;· 1,498,130 shares of our Common Stock issuable upon exercise of Series A Warrants sold to a single institutional investor as of July 5, 2023;· 1,498,130 shares of our Common Stock issuable upon exercise of Series B Warrants sold to a single institutional investor as of July 5, 2023; and· 365,625 shares of our Common Stock reserved for future issuance under our 2019 Equity Incentive Plan (the “2019 Plan”) as of June 30, 2023.

SUMMARY CONSOLIDATED FINANCIAL DATA

The following summary consolidated financial data as of December 31, 2022, and for the years ended December 31, 2022 and 2021, have been derived from our audited consolidated financial statements and the related notes included in our 2022 Annual Report, which are incorporated by reference herein in their entirety. The summary statements of operations data for the three months ended June 30, 2023 and 2022 and the summary balance sheet data as of June 30, 2023 were derived from our unaudited financial statements included in our Quarterly Report on Form 10-Q for the quarter ended June 30, 2023 filed with the SEC on August 14, 2023 (the "Form 10-Q"), which is incorporated by reference in this prospectus.

You should read this table in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes and the other financial and statistical information included in our 2022 Annual Report and the Form 10-Q, which are incorporated by reference in this prospectus. See the section in this prospectus entitled "Incorporation of Certain Information by Reference" for more information regarding documents incorporated by reference herein. The summary consolidated financial and other data provided below does not purport to indicate results of operations as of any future date or for any future period.

	For the Six Months Ended June 30, (unaudited)		For the Years Ended December 31,	
	2023	2022	2022	2021
Revenue				
Total revenue	\$ 4,050	\$ -	\$ -	\$ -
Total cost of goods sold	701	-	-	-
Gross margin	3,349	-	-	-
Costs and Expenses:				
General and administrative	1,385,102	1,629,553	6,491,704	6,694,619
Research and development	442,113	438,048	2,240,270	1,950,500
Total costs and expenses	1,827,215	2,067,601	8,731,974	8,645,119
Loss from operations	(1,823,866)	(2,067,601)	(8,731,974)	(8,645,119)
Other income (expense):				
Interest (expense)			(13,319)	(233,282)
Gain on forgiveness of debt and accrued interest			-	122,520
Total other (expense), net	(246,706)	(4,238)	(13,319)	(110,762)
Net loss	(2,070,572)	(2,071,839)	(8,745,293)	(8,755,881)
			As of June 30,	
			2023	2022
			(unaudited)	
Balance Sheet Data:				
Cash and cash equivalents			\$ 21,067	\$ 5,083,720
Total assets			\$ 710,330	\$ 5,864,608
Total current liabilities			\$ 3,804,242	\$ 2,697,181
Total long-term liabilities			\$ 50,920	\$ 157,004
Total liabilities and stockholders' equity			\$ 710,330	\$ 5,864,608

RISK FACTORS

Investing in our securities involves risks. Before making an investment decision, you should carefully consider the specific risks described below, the risks described under the caption “Risk Factors” in our 2022 Annual Report and in our Quarterly Reports on Form 10-Q for the quarterly periods ended March 31, 2023 and June 30, 2023, which are incorporated herein by reference, as well as other risk factors described under the caption “Risk Factors” included or incorporated by reference in the prospectus, including our other filings with the SEC, before making an investment decision. Please refer to these subsequent reports for additional information relating to the risks associated with investing in our Common Stock or Pre-Funded Warrants and the accompanying Common Warrants. If any of such risks and uncertainties actually occurs, our business, financial condition, and results of operations could be severely harmed.

Risks Related to this Offering

Resales of our Common Stock, including the Common Stock issuable upon exercise of the Common Warrants being offered in this Offering, in the public market by our stockholders as a result of this Offering may cause the market price of our Common Stock to fall.

Sales of a substantial number of shares of our Common Stock, including the shares of Common Stock issuable upon exercise of the Common Warrants being offered in this Offering, in the public market could occur at any time. The issuance of new shares of our Common Stock, including the shares of Common Stock issuable upon exercise of the Common Warrants being offered in this Offering, could result in resales of our Common Stock by our current stockholders concerned about the potential ownership dilution of their holdings. In turn, these resales could have the effect of depressing the market price for our Common Stock and consequently our Common Warrants.

There may be future sales or other dilution of our equity, which may adversely affect the market price of our Common Stock.

If our existing stockholders sell, or indicate an intention to sell, substantial amounts of our Common Stock in the public market after applicable legal restrictions on resale and the lock-up agreements, the trading price of our stock could decline. As of September 30, 2023, we had 10,449,660 shares of Common Stock outstanding. As of June 30, 2023 we had outstanding options that in aggregate would be exercisable for 1,755,175 shares (including unvested options), unregistered and registered warrants exercisable for 4,369,177 shares and convertible debt. Substantially all of such shares of Common Stock may be sold in the public market. If outstanding options or warrants are exercised, if substantial additional shares are sold, or if it is perceived that they will be sold, in the public market, the trading price of our Common Stock, and consequently our Common Warrants, could decline.

Our management will have broad discretion over the use of the net proceeds from this Offering, you may not agree with how we use the proceeds and the proceeds may not be invested successfully.

Our management will have broad discretion as to the use of the net proceeds from this Offering and could use them for purposes other than those contemplated at the time of commencement of this Offering. Accordingly, you will be relying on the judgment of our management with regard to the use of these net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. It is possible that, pending their use, we may invest the net proceeds in a way that does not yield a favorable, or any, return for our Company.

You may experience immediate and substantial dilution in the book value per share of the Common Stock you purchase.

The public offering price per Common Stock is substantially higher than the net tangible book value per share of our Common Stock. Therefore, if you purchase securities in this Offering, you will pay an effective price per share of Common Stock you acquire that substantially exceeds our net tangible book value per share after this Offering. Assuming no exercise of the Common Warrants being offered in this Offering, no value is attributed to such Common Warrants and such Common Warrants are classified as and accounted for as equity, you will experience immediate dilution of \$ per share, representing the difference between our as adjusted net tangible book value per share after giving effect to this Offering and the public offering price per Common Stock. In addition, if previously issued options and warrants to acquire Common Stock are exercised at prices below the offering price or the accompanying Common Warrants being offered in this Offering are accounted for as liabilities, you will experience further dilution.

In addition, we have a significant number of stock options and warrants outstanding, and, in order to raise additional capital, we may in the future offer additional shares of our Common Stock or other securities convertible into or exchangeable for our Common Stock at prices that may not be the same as the price per share in this Offering. In the event that the outstanding options or warrants are exercised or settled, or that we make additional issuances of Common Stock or other convertible or exchangeable securities, you could experience additional dilution. We cannot assure you that we will be able to sell shares or other securities in any other offering at a price per share that is equal to or greater than the price per share paid by investors in this Offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders, including investors who purchase shares of Common Stock in this Offering. The price per share at which we sell additional shares of our Common Stock or securities convertible into Common Stock in future transactions, may be higher or lower than the price per share in this Offering. As a result, purchasers of the shares we sell, as well as our existing stockholders, will experience significant dilution if we sell at prices significantly below the price at which they invested. See “Dilution” for a more detailed discussion of the dilution you may incur in connection with this Offering.

This Offering may cause the trading price of our Common Stock to decrease.

The price per share, together with the number of shares of Common Stock we propose to issue and ultimately will issue if this Offering is completed, may result in an immediate decrease in the market price of our Common Stock. This decrease may continue after the completion of this Offering.

The Common Stock price determined for this Offering is not an indication of the fair value of our Common Stock.

In determining the Common Stock price, our board of directors (the “Board of Directors”) considered a number of factors, including, but not limited to, our need to raise capital in the near term to continue our operations, the current and historical trading prices of our Common Stock, a price that would increase the likelihood of participation in this Offering, the cost of capital from other sources, the value of the Common Warrants being issued as components of the Common Stock and comparable precedent transactions. The Common Stock price does not necessarily bear any relationship to any established criteria for value. No valuation consultant or investment banker has opined upon the fairness or adequacy of the Common Stock price. You should not consider the Common Stock price as an indication of the value of our Company or our Common Stock.

This is a reasonable best efforts offering, no minimum amount of securities is required to be sold, and we may not raise the amount of capital we believe is required for our business plans.

The Placement Agent has agreed to use its reasonable best efforts to solicit offers to purchase the securities being offered in this Offering. The Placement Agent has no obligation to buy any of the securities from us or to arrange for the purchase or sale of any specific number or dollar amount of the securities. There is no required minimum number of securities or amount of proceeds that must be sold as a condition to completion of this Offering. Because there is no minimum offering amount required as a condition to the closing of this Offering, the actual offering amount, Placement Agent fees and proceeds to us are not presently determinable and may be substantially less than the maximum amounts set forth above. We may sell fewer than all of the securities offered hereby, which may significantly reduce the amount of proceeds received by us, and investors in this Offering will not receive a refund in the event that we do not sell an amount of securities sufficient to fund for our operations as described in the “Use of Proceeds” section herein. Thus, we may not raise the amount of capital we believe is required for our operations in the short-term and may need to raise additional funds, which may not be available or available on terms acceptable to us.

Our ability to utilize loss carry forwards may be limited.

Generally a change of more than fifty percent (50%) in the ownership of a company's stock, by value, over a three-year period constitutes an ownership change for U.S. federal income tax purposes. An ownership change may limit our ability to use our net operating loss carryforwards attributable to the period prior to the change. As a result, if we earn net taxable income, our ability to use our pre-change net operating loss carryforwards to offset U.S. federal taxable income may become subject to limitations.

Risks Related to the Common Warrants and Pre-Funded Warrants

There is no public market for the Common Warrants or Pre-Funded Warrants being offered in this Offering and we do not expect one to develop.

There is no established public trading market for the Pre-Funded Warrants and Common Warrants being offered in this Offering, and we do not expect a market to develop. In addition, we do not intend to apply to list the Pre-Funded Warrants and Common Warrants on any securities exchange or nationally recognized trading system. Without an active market, the liquidity of the Pre-Funded Warrants and Common Warrants will be limited.

The United States federal income taxation of the Pre-Funded Warrants is uncertain.

We and holders of our Pre-Funded Warrants may have to take positions that are not yet settled under current U.S. federal income tax law with respect to the Pre-Funded Warrants. The IRS may disagree with the positions taken by the Company, which could result in adverse U.S. federal income tax consequences for us and our shareholders, including holders of the Pre-Funded Warrants. Prospective investors are urged to consult their personal income tax advisers in this regard.

Purchasers of our Common Warrants or Pre-Funded Warrants will not have any rights of common stockholders until such Common Warrants or Pre-Funded Warrants are exercised.

The Common Warrants and Pre-Funded Warrants being offered do not confer any rights of Common Stock ownership on their holders, such as voting rights or the right to receive dividends, but rather merely represent the right to acquire Common Stock at a fixed price. Upon exercise of such Common Warrants or Pre-Funded Warrants, holders will be entitled to exercise the rights of a Common Stockholder only as to matters for which the record date occurs after the exercise date.

If we do not maintain a current and effective prospectus relating to the Common Stock issuable upon exercise of the Pre-Funded Warrants and Common Warrants, holders will only be able to exercise such Pre-Funded Warrants and Common Warrants on a "cashless basis."

If we do not maintain a current and effective prospectus relating to the shares of Common Stock issuable upon exercise of the Pre-Funded Warrants or the Common Warrants at the time that holders wish to exercise such warrants, they will only be able to exercise them on a "cashless basis," and under no circumstances would we be required to make any cash payments or net cash settle such warrants to the holders. As a result, the number of shares of Common Stock that holders will receive upon exercise of the Pre-Funded Warrants or the Common Warrants will be fewer than it would have been had such holders exercised their Pre-Funded Warrants or the Common Warrants for cash. Under the terms of the Pre-Funded Warrants or the Common Warrants, we have agreed to use our reasonable best efforts to maintain a current and effective prospectus relating to the shares of Common Stock issuable upon exercise of such warrants until the expiration of such warrants. However, we cannot assure you that we will be able to do so. If we are unable to do so, the potential "upside" of the holder's investment in our company may be reduced.

Our outstanding warrants may have an adverse effect on the market price of our Common Stock and make it more difficult to effect a business combination.

We will be issuing Common Warrants to purchase shares of Common Stock as part of this Offering. To the extent we issue shares of Common Stock to effect a future business combination, the potential for the issuance of a substantial number of additional shares upon exercise of these Common Warrants could make us a less attractive acquisition vehicle in the eyes of a target business. Such securities, when exercised, will increase the number of issued and outstanding ordinary shares and reduce the value of the shares issued to complete the business combination. Accordingly, our Common Warrants may make it more difficult to effectuate a business combination or increase the cost of acquiring a target business. Additionally, the sale, or even the possibility of sale, of the shares of Common Stock underlying the Common Warrants could have an adverse effect on the market price for our securities or on our ability to obtain future financing. If and to the extent these Common Warrants are exercised, you may experience dilution to your holdings.

The Pre-Funded Warrants and the Common Warrants are speculative in nature and may not have any value.

The Pre-Funded Warrants and Common Warrants offered hereby do not confer any rights of Common Stock ownership on their holders, such as voting rights or the right to receive dividends, but rather merely represent the right to acquire shares of Common Stock at a fixed price. Specifically, commencing on the date of issuance, holders of the Pre-Funded Warrants may acquire the Common Stock issuable upon exercise of such warrants at an exercise price of \$0.001 per share and holders of the Common Warrants may acquire the Common Stock issuable upon exercise of such warrants at an exercise price per share equal to the public offering price of shares of Common Stock in this Offering. Moreover, following this Offering, the market value of the Pre-Funded Warrants and the Common Warrants is uncertain, and there can be no assurance that the market value of the Pre-Funded Warrants or the Common Warrants will equal or exceed their public offering price.

Each Common Warrant has an exercise price per share equal to the public offering price of shares of Common Stock in this Offering and expires on the fifth anniversary of its original issuance date. In the event the market price per share of Common Stock does not exceed the exercise price of the Common Warrants during the period when the Common Warrants are exercisable, the Common Warrants may not have any value.

Certain provisions of the Pre-Funded Warrants and Common Warrants could discourage an acquisition of us by a third party.

Certain provisions of the Pre-Funded Warrants and Common Warrants could make it more difficult or expensive for a third party to acquire us. The Pre-Funded Warrants and Common Warrants prohibit us from engaging in certain transactions constituting “fundamental transactions” unless, among other things, the surviving entity assumes our obligations under the Pre-Funded Warrants and Common Warrants. Further, the Common Warrants provide that, in the event of certain transactions constituting “fundamental transactions,” with some exception, holders of such warrants will have the right, at their option, to require us to repurchase such Common Stock Warrants at a price described in such warrants. These and other provisions of the Pre-Funded Warrants and Common Warrants could prevent or deter a third party from acquiring us even where the acquisition could be beneficial to you.

Risks Relating to Our Business

Worldwide economic and social instability could adversely affect our revenue, financial condition, or results of operations.

The health of the global economy, and the credit markets and the financial services industry in particular, as well as the stability of the social fabric of our society, affects our business and operating results. For example, the credit and financial markets may be adversely affected by the current conflict between Russia and Ukraine and measures taken in response thereto. If the credit markets are not favorable, we may be unable to raise additional financing when needed or on favorable terms. Our customers may experience financial difficulties or be unable to borrow money to fund their operations, which may adversely impact their ability to purchase our products or to pay for our products on a timely basis, if at all. In addition, adverse economic conditions, such as recent supply chain disruptions and labor shortages and persistent inflation may adversely impact our suppliers’ ability to provide our manufacturer with materials and components, which may negatively impact our business. These economic conditions make it more difficult for us to accurately forecast and plan our future business activities.

The Company is exposed to risks of political instability and changes in government policies, laws and regulations in Peru.

The Company's algae ponds are located in the Republic of Peru, and may be adversely affected in varying degrees by political instability, government regulations relating to agriculture and foreign investment therein, and the policies of other nations in respect of Peru. Any changes in regulations or shifts in political conditions are beyond the Company's control and may adversely affect the Company's business. New laws, regulations and requirements may be retroactive in their effect and implementation. The Company's operations may be affected in varying degrees by government regulations, including those with respect to restrictions on production, price controls, export controls, income taxes, expropriation of property, employment, land use, water use, and environmental legislation.

Since December 2022, Peru has experienced an increased level of civil unrest and political protests. Civil unrest has led to disruptions in the ability of foreign nationals to travel to and from Peru. The Company continues to closely monitor the situation and its potential impact on Company operations.

We have incurred, and may continue to incur increased costs and demands upon management as a result of being a public company.

As a public company in the United States, listed on the Nasdaq Capital Market, we incur significant legal, accounting and other costs. These additional costs could negatively affect our financial results. In addition, changing laws, regulations and standards relating to corporate governance and public disclosure, including regulations implemented by the SEC and Nasdaq, may increase legal and financial compliance costs and make some activities more time-consuming. These laws, regulations and standards are subject to varying interpretations and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. We intend to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management's time and attention from revenue-generating activities to compliance activities. If, notwithstanding our efforts to comply with new laws, regulations and standards, we fail to comply, regulatory authorities may initiate legal proceedings against us and our business may be harmed.

Failure to comply with these rules might also make it more difficult for us to obtain some types of insurance, including director and officer liability insurance, and we might be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. The impact of these events could also make it more difficult for us to attract and retain qualified persons to serve on our Board, on committees of our Board or as members of senior management.

We have a history of operating losses, and we may not be able to achieve or sustain profitability. In addition, we may be unable to continue as a going concern.

We have incurred net losses during each of our fiscal years since our inception. Our net loss for the year ended June 30, 2023 was approximately \$4 million and our accumulated deficit totaled approximately \$119.8 million as of June 30, 2023. We do not know whether or when we will become profitable, if ever. We currently expect operating losses and negative cash flows to continue for at least the next several years.

Our ability to generate sufficient revenue to achieve profitability depends on our ability, either alone or with strategic collaboration partners, to successfully complete the development of, and obtain the regulatory approvals necessary to commercialize our product candidates.

Our audited consolidated financial statements as of and for the years ended December 31, 2022 and 2021 have been prepared on the basis that we will continue as a going concern, which contemplates the realization of assets and satisfaction of liabilities in the normal course of business. Our auditor's report for the year ended December 31, 2022 contains an explanatory paragraph that we have incurred significant losses since our inception and we expect that we will continue to incur losses as we aim to successfully execute our business plan and will be dependent on additional public or private financings, collaborations or licensing arrangements with strategic partners, or additional credit lines or other debt financing sources to fund continuing operations. Based on our cash balances, recurring losses since inception and our existing capital resources to fund our planned operations for a twelve-month period, there is substantial doubt about our ability to continue as a going concern. As noted below, we will need to obtain additional funding from equity or debt financings, which may require us to agree to burdensome covenants, grant security interests in our assets, enter into collaboration and licensing arrangements that require us to relinquish commercial rights, or grant licenses on terms that are not favorable. No assurance can be given at this time as to whether we will be able to achieve our fundraising objectives, regardless of the terms. If adequate funds are not available, the Company may be required to reduce operating expenses, delay or reduce the scope of its product development programs, obtain funds through arrangements with others that may require the Company to relinquish rights to certain of its technologies or products that the Company would otherwise seek to develop or commercialize itself, or cease operations.

We will require substantial additional financing to achieve our goals, and our failure to obtain this necessary capital when needed could force us to delay, limit, reduce or terminate our product development efforts.

Our operations have consumed substantial amounts of cash since inception. We expect to continue to incur significant expenses and operating losses for the foreseeable future in connection with our planned research, development and product commercialization efforts. In addition, we will require additional financing to achieve our goals and our failure to do so could adversely affect our commercialization efforts. We anticipate that our expenses will increase substantially if and as we:

- continue our development process for our product candidates;
- seek to maintain, protect and expand our intellectual property portfolio; and
- seek to attract and retain skilled personnel.

If we were to experience any delays or encounter issues with any of the above, it could further increase the costs associated with the above. Further, the net operating losses we incur may fluctuate significantly from quarter to quarter and year to year, such that a period-to-period comparison of our results of operations may not be a good indication of our future performance.

Our production of algae involves an agricultural process, subject to such risks as weather, disease, contamination and water availability.

The production of our proprietary algae strain involves complex agricultural systems with inherent risks including weather, disease and contamination. These risks are unpredictable, and the efficient and effective cultivation of algae requires consistent light, warm temperatures, low rainfall and proper chemical balance in a very nutrient rich environment.

If the chemical composition of a pond changes from its required balance, unusually high levels of contamination due to the growth of unwanted organisms or other biological problems may occur and would result in a loss of harvestable output. These often arise without warning and sometimes there are few or no clear indicators as to appropriate remediation or corrective measures. However, environmental factors cannot be controlled in an open-air environment, therefore, we cannot, and do not attempt to, provide any form of assurance with regard to our systems, processes, location, or cost-effectiveness. In the event that our growers need to take steps to correct any chemical imbalance or contamination of their ponds, including by re-inoculating the ponds, such measures may not be effective and could interrupt production. To the extent that our production is negatively impacted by environmental factors, we may be unable to fill large orders for one or more months until such time that production improves.

We rely on third parties to grow our proprietary algae strains and conduct research, and preclinical and clinical testing, and these third parties may not perform satisfactorily.

We do not currently, and do not expect to in the future, independently conduct any aspects of the growth of our proprietary algae strains, research and monitoring and management of our ongoing preclinical and clinical programs. We currently rely, and expect to continue to rely, on third parties with respect to these items, and control only certain aspects of their activities.

Any of these third parties may terminate their engagements with us at any time unless otherwise stated in contractual agreements. If we need to enter into alternative arrangements, our commercialization activities or our therapeutic candidate development activities may be delayed or suspended. Our reliance on these third parties for research and development activities, reduces our control over these activities but does not relieve us of our responsibility to ensure compliance with all required legal, regulatory and scientific standards and any applicable trial protocols.

Any of these events could lead to delays in the development of our product candidates, including delays in our trials, or failure to obtain regulatory approval for our product candidates, or it could impact our ability to successfully commercialize our current product candidates.

Because our ZIVO algae is currently produced by only one grower, the loss of this grower would have a material adverse impact on our operating results and cash flows.

Currently only one facility grows our ZIVO algae. Any termination of a business relationship with, or a significant sustained reduction in business received from this grower could delay our production efforts and could have a material adverse effect on our operating results and cash flows. We must materially increase the number of our growers and if we cannot, it will adversely impact our financial condition and our business.

If we fail to attract and keep our Chief Executive Officer and Chief Financial Officer, senior management and key scientific personnel, we may be unable to successfully develop our therapeutic candidates, conduct our clinical trials and commercialize our therapeutic candidates.

We are highly dependent on the members of our executive team, including our Chief Executive Officer and Chief Financial Officer, the loss of whose services may adversely impact the achievement of our objectives. Any of our executive officers could leave our employment at any time, as all of our employees are “at will” employees. Recruiting and retaining other qualified employees, consultants and advisors for our business, including scientific and technical personnel, will also be critical to our success.

Recruiting and retaining qualified scientific, clinical, manufacturing, sales and marketing personnel will also be critical to our success. We may not be able to attract and retain these personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us.

If we are unable to enter into agreements with third parties to market and sell our product candidates, if approved, we may be unable to generate any revenues.

We currently do not have internal sales, marketing and distribution capability for our products and the cost of establishing and maintaining such an organization may exceed the cost-effectiveness of doing so. In order to market any products that may be eligible for commercialization, we must build our sales, distribution, marketing, managerial and other non-technical capabilities or make arrangements with third parties to perform these services. We have limited prior experience in the marketing, sale or distribution of approved products and there are significant risks involved in building and managing a sales organization, including our ability to hire, retain, and incentivize qualified individuals, generate sufficient sales leads, provide adequate training to sales and marketing personnel, and effectively manage a geographically dispersed sales and marketing team. Any failure or delay in the development of our internal sales, marketing and distribution capabilities would adversely impact the commercialization of our therapeutic candidates.

Because the results of preclinical studies and clinical trials are not necessarily predictive of future results, we can provide no assurances that our other product candidates will have favorable results in future studies or trials.

Positive results from preclinical studies or clinical trials should not be relied on as evidence that later or larger-scale studies or trials will succeed. Even if our product candidates achieve positive results in early-stage preclinical studies or clinical trials, there is no guarantee that the efficacy of any product candidate shown in early studies will be replicated or maintained in future studies and/or larger populations. Similarly, favorable safety and tolerability data seen in short-term studies might not be replicated in studies of longer duration and/or larger populations. If any product candidate demonstrates insufficient safety or efficacy in any preclinical study or clinical trial, we would experience potentially significant delays in, or be required to abandon, development of that product candidate.

Further, data obtained from clinical trials are susceptible to varying interpretations. If we delay or abandon our efforts to develop any of our product candidates, we may not be able to generate sufficient revenues to become profitable, and our reputation in the industry and in the investment community would likely be significantly damaged, each of which would cause our stock price to decrease significantly.

Development of certain of our products involves a lengthy and expensive process, with uncertain outcomes. We may, and our current or future licensees may, incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of any product.

We may, and our current or future licensees may, experience numerous unforeseen events during or as a result of clinical trials that could delay or prevent our ability to receive marketing approval or commercialize our products, including:

- regulators may not authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- the failure to successfully complete pre-clinical testing requirements required by the FDA and international organizations;
- delays may occur in reaching, or fail to reach, agreement on acceptable clinical trial contracts with third parties or clinical trial protocols with prospective trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different trial sites;
- the cost of clinical trials of our products may be greater than we anticipate;
- delays or difficulties in obtaining an FDA No Objection letter for human consumption of our algal biomass; and

If we are required to conduct additional clinical trials or other testing of our biotech product candidates under development or algal biomass beyond those that we contemplate, if we are unable to successfully complete clinical trials of our product candidates under development or algal biomass or other testing, if the results of these trials or tests are not favorable or if there are safety concerns, we may, or our existing or future licensees may:

- not obtain marketing approval at all;
- be delayed in obtaining marketing approvals in a jurisdiction; or
- be subject to additional post-marketing testing requirements.

Increased regulatory scrutiny of nutritional supplements as well as new regulations that are being adopted in some of our markets with respect to nutritional supplements could result in more restrictive regulations and harm our results if our supplements or advertising activities are found to violate existing or new regulations or if we are not able to effect necessary changes to our products in a timely and efficient manner to respond to new regulations.

There has been an increasing movement in the United States and other markets to increase the regulation of dietary supplements, which could impose additional restrictions or requirements on us and increase the cost of doing business. On February 11, 2019, the FDA issued a statement from FDA Commissioner, Dr. Scott Gottlieb, regarding the agency's efforts to strengthen the regulation of dietary supplements. The FDA will be prioritizing and focusing resources on misbranded products bearing unproven claims to treat, cure, or mitigate disease. Commissioner Gottlieb established a Dietary Supplement Working Group tasked with reviewing the agency's organizational structure, process, procedures, and practices to identify opportunities to modernize the oversight of dietary supplements. Additionally, on December 21, 2015, the FDA created the Office of Dietary Supplements ("ODSP"). The creation of this new office elevates the FDA's program from its previous status as a division under the Office of Nutrition and Dietary Supplements. ODSP will continue to monitor the safety of dietary supplements.

In August 2016, the FDA published its revised draft guidance on Dietary Supplements: New Dietary Ingredient Notifications and Related Issues. If a company sells a dietary supplement containing an ingredient that FDA considers either not a dietary ingredient or a new dietary ingredient ("NDI") that needs an NDI notification, the agency may threaten or initiate enforcement against such company. For example, it might send a warning letter that can trigger consumer lawsuits, demand a product recall, or even work with the Department of Justice to bring a criminal action. Our operations could be harmed if new guidance or regulations require us to reformulate products or effect new registrations, if regulatory authorities make determinations that any of our products do not comply with applicable regulatory requirements, if the cost of complying with regulatory requirements increases materially, or if we are not able to effect necessary changes to our products in a timely and efficient manner to respond to new regulations. In addition, our operations could be harmed if governmental laws or regulations are enacted that restrict the ability of companies to market or distribute nutritional supplements or impose additional burdens or requirements on nutritional supplement companies.

The growth of our agtech sector depends in part on market acceptance of products that contain our algae.

The success of our agtech business involves the use of our algal biomass in various animal and human products. There can be no assurance regarding the successful distribution and market acceptance of products containing our algae. The expenses or losses associated with lack of market acceptance of our products could harm our ability to find or maintain new licensees for these products.

If our computer systems are hacked, or we experience any other cybersecurity incident, we may face a disruption to our operations, a compromise or corruption of our confidential information and/or damage to our business relationships, all of which could negatively impact our business, results of operations or financial condition.

We rely on information technology networks and systems, including the Internet, to process, transmit and store electronic information, and to manage or support a variety of business processes and activities. Additionally, we collect and store certain data, including proprietary business information, and may have access to confidential or personal information in certain of our businesses that is subject to privacy and security laws and regulations. These technology networks and systems may be susceptible to damage, disruptions or shutdowns due to failures during the process of upgrading or replacing software, databases or components; power outages; telecommunications or system failures; terrorist attacks; natural disasters; employee error or malfeasance; server or cloud provider breaches; and computer viruses or cyberattacks. Cybersecurity threats and incidents can range from uncoordinated individual attempts to gain unauthorized access to information technology networks and systems to more sophisticated and targeted measures, known as advanced persistent threats, directed at us, our products, customers and/or our third-party service providers. It is possible a security breach could result in theft of trade secrets or other intellectual property or disclosure of confidential customer, supplier or employee information. Should we be unable to prevent security breaches or other damage to our information technology systems, disruptions could have an adverse effect on our operations, as well as expose us to costly litigation, liability or penalties under privacy laws, increased cybersecurity protection costs, reputational damage and product failure.

The animal health industry is highly competitive.

The animal health industry is highly competitive. Our competitors include standalone animal health businesses, the animal health businesses of large pharmaceutical companies, specialty animal health businesses and companies that mainly produce generic products. We believe many of our competitors are conducting R&D activities in areas served by our products and in areas in which we are developing products. Several new start-up companies also compete in the animal health industry. We also face competition from manufacturers of drugs globally, as well as producers of nutritional health products. These competitors may have access to greater financial, marketing, technical and other resources. As a result, they may be able to devote more resources to developing, manufacturing, marketing and selling their products, initiating or withstanding substantial price competition or more readily taking advantage of acquisitions or other opportunities.

Competitive pressure could arise from, among other things, more favorable safety and efficacy product profiles, limited demand growth or a significant number of additional competitive products being introduced into a particular market, price reductions by competitors, the ability of competitors to capitalize on their economies of scale, the ability of competitors to produce or otherwise procure animal health products at lower costs than us and the ability of competitors to access more or newer technology than us.

Our R&D relies on evaluations of animals, which may become subject to bans, additional restrictive regulations or increased attention from activism movements.

We are required to evaluate the effect of our product candidates in animals. Animal testing in certain industries has been the subject of controversy and adverse publicity. Some organizations and individuals have attempted to ban animal testing or encourage the adoption of new regulations applicable to animal testing. To the extent that the activities of such organizations and individuals are successful, our R&D, and by extension our business, financial condition and results of operations, could be materially adversely affected. In addition, negative publicity about us or our industry could harm our reputation. For example, farm animal producers may experience decreased demand for their products or reputational harm as a result of evolving consumer views of animal rights, nutrition, health-related or other concerns. Any reputational harm to the farm animal industry may also extend to companies in related industries, including our Company. Adverse consumer views related to the use of one or more of our product candidates in farm animals also may result in a decrease in the use of such products and could have a material adverse effect on our operating results and financial condition.

Use of social media could give rise to liability or reputational harm.

We and our employees use social media to communicate externally. There is risk that the use of social media by us or our employees to communicate about our product candidates or business may give rise to liability, lead to the loss of trade secrets or other intellectual property or result in public exposure of personal information of our employees, clinical trial patients, customers, and others. Furthermore, negative posts or comments about us or our product candidates in social media could seriously damage our reputation, brand image, and goodwill. Any of these events could have a material adverse effect on our business, prospects, operating results, and financial condition and could adversely affect the price of our Common Stock.

We are at risk of litigation.

We are party to an arbitration dispute with AEGLE Partners, 2 LLC. Additionally, in the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because biotechnology companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management's attention and resources, which could harm our business.

Additionally, on January 4, 2022 we terminated our former Chief Executive Officer for cause, and do not believe that we owe him any severance payments.

Even if we successfully defend against these claims, litigation could result in substantial costs place a significant strain on our financial resources, divert the attention of management from our core business and harm our reputation.

Risks Related to Our Common Stock

The Company is not in compliance with Nasdaq's continued listing requirements. If we are unable to comply with Nasdaq's continued listing requirements, our Common Stock could be delisted, which could affect our Common Stock's market price and liquidity and reduce our ability to raise capital.

Our Common Stock is currently listed on the Nasdaq Capital Market. Nasdaq imposes, among other requirements, continued listing standards including minimum bid, public float and stockholders' equity requirements.

As we previously disclosed on May 26, 2023, we received a notification letter from Nasdaq on May 23, 2023, notifying the Company that it was not in compliance with the stockholders' equity requirement of \$2,500,000, as set forth in Nasdaq Listing Rule 5550(b). On May 30, 2023, the Company requested a hearing with the Nasdaq Hearings Panel, which was held on July 13, 2023. At the hearing, the Company presented its plan to regain compliance with the Stockholders' Equity Rule.

On August 4, 2023, the Company received a notification letter from the Nasdaq notifying the Company that the Nasdaq Hearings Panel has granted the Company's request to provide an extension until November 20, 2023, to regain compliance with the Stockholders' Equity Rule for continued listing on Nasdaq. The Panel further noted that the Exception Period for continued listing is subject to a filing of a registration statement on Form S-1 by the Company with the SEC on or before October 5, 2023. The Nasdaq Hearings Panel concluded that the Exception Period is justified in this case in light of the Company's efforts to resolve its current equity deficiency and the steps it has taken thus far to prepare for regaining compliance. The Nasdaq Hearings Panel further noted that it does not view the Company's continued listing during the exception period to be an undue risk to the financial markets nor prospective investors.

In addition, during the Exception Period, the Nasdaq Hearings Panel reserves the right to reconsider the terms of this exception based on any event, condition or circumstance that exists or develops that would, in the opinion of the Nasdaq Hearings Panel, make continued listing of the Company's securities on Nasdaq inadvisable or unwarranted. Furthermore, until the end of the Exception Period, the Company is required to provide prompt notification to the Nasdaq Hearings Panel of any significant events that may affect the Company's compliance with Nasdaq requirements.

We intend to regain compliance with the Stockholders' Equity Rule prior to the end of the Exception Period set forth in the Panel's Decision. However, until Nasdaq has reached a final determination that the Company has regained compliance with the applicable Nasdaq requirements, there can be no assurances regarding the continued listing of the Company's securities on Nasdaq. The delisting of our securities from Nasdaq would have a material adverse effect on our access to capital markets, and any limitation on market liquidity or reduction in the price of our Common Stock as a result of that delisting would adversely affect our ability to raise capital on terms acceptable to us, if at all.

The market price and trading volume of our securities may be volatile and may be affected by economic conditions beyond our control.

The market price of our securities is likely to be volatile. Some specific factors that could negatively affect the price of our securities or result in fluctuations in its price and trading volume include:

- results of trials of our product candidates;
- results of trials of our competitors' products;
- regulatory actions with respect to our therapeutic candidates or products or our competitors' products;
- actual or anticipated fluctuations in our quarterly operating results or those of our competitors;
- our failure or the failure of our competitors to meet analysts' projections or guidance that we or our competitors may give to the market;
- issuances by us of debt or equity securities;
- litigation involving our Company, including stockholder litigation; investigations or audits by regulators into the operations of our company; or proceedings initiated by our competitors or clients;
- strategic decisions by us or our competitors, such as acquisitions, divestitures, spin-offs, joint ventures, strategic investments or changes in business strategy;
- trading volume of our common stock;
- announcement or expectation of additional financing efforts;
- terrorist acts, acts of war or periods of widespread civil unrest;
- natural disasters and other calamities;
- changes in market conditions for biotech or agtech stocks;
- influence of retail investors and/or social media on our common stock, such as a massive short squeeze rally; and
- conditions in the U.S. financial markets or changes in general economic conditions.

Our principal stockholders and management own a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.

As of June 30, 2023, our largest shareholder, HEP Investments, LLC ("HEP" or "HEP Investments"), beneficially owns approximately 16.8% of our Common Stock. Therefore, HEP Investments will have the ability to influence us through this ownership position. This stockholder may be able to determine all matters requiring stockholder approval, including elections of directors, amendments of our organizational documents, or approval of any merger, sale of assets, or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for our common stock that an individual may believe are in the stockholders' best interest.

Our management has identified certain internal control deficiencies, which management believes constitute material weaknesses. Our failure to establish and maintain an effective system of internal controls could result in material misstatements of our financial statements or cause us to fail to meet our reporting obligations or fail to prevent fraud in which case, our stockholders could lose confidence in our financial reporting, which would harm our business and could negatively impact the price of our common stock.

We review and update our internal controls, disclosure controls and procedures, and corporate governance policies as our Company continues to evolve. In addition, we are required to comply with the internal control evaluation and certification requirements of Section 404 of the Sarbanes-Oxley Act of 2002 ("SOX") and management is required to report annually on our internal control over financial reporting. Our independent registered public accounting firm will not be required to formally attest to the effectiveness of our internal control over financial reporting pursuant to Section 404 of SOX until the date we are no longer a "smaller reporting company" as defined by applicable SEC rules.

Our management's evaluation of the effectiveness of our internal controls over financial reporting as of December 31, 2022 concluded that our controls were not effective, due to material weaknesses resulting from an ineffective overall control environment. The material weaknesses stem primarily from our small size and include the inability to (i) maintain appropriately designed information technology general controls in the areas of user access, vendor management controls, and segregation of duties, including controls over the recording of journal entries, related to certain information technology systems that support the Company's financial reporting process; and (ii) design and maintain effective controls over complex accounting areas and related disclosures including income tax, stock-based compensation, and deferred research and development obligations - participation agreements. Specifically, management did not identify controls over the review of the tax provision, including the valuation analysis relating to deferred tax assets, considerations for uncertain tax positions, the preparation of income tax footnote and required disclosures and selecting and applying accounting policies, proper review of the financial statements and the application of GAAP relating to the accounting and classification of deferred research and development obligations - participation agreements. Management did not identify controls over the review of stock-based compensation, including the valuation of options granted under the Company's equity-based compensation plans.

The effects of the accounting errors related to stock-based compensation and income taxes resulted in a revision of our 2022 Annual Report. Please see "Note 2 - Revision of Previously Issued Financial Statements" in our 2022 Annual Report for more information.

Such shortcomings could have an adverse effect on our business and financial results. Any system of internal controls, however well designed and operated, is based in part on certain assumptions and can provide only reasonable, not absolute, assurances that the objectives of the system are met. Any failure or circumvention of the controls and procedures or failure to comply with regulation concerning control and procedures could have a material effect on our business, results of operation and financial condition. Any of these events could result in an adverse reaction in the financial marketplace due to a loss of investor confidence in the reliability of our financial statements, which ultimately could negatively affect the market price of our shares, increase the volatility of our stock price and adversely affect our ability to raise additional funding. The effect of these events could also make it more difficult for us to attract and retain qualified persons to serve on our Board and as executive officers.

Subject to limitations on liquidity, the Company is planning to take steps to remediate these material weaknesses. However, we cannot assure you that any of the measures we implement to remedy any such deficiencies will effectively mitigate or remedy such deficiencies.

As a smaller reporting company, we are subject to scaled disclosure requirements that may make it more challenging for investors to analyze our results of operations and financial prospects.

Currently, we are a "smaller reporting company," as defined by Rule 12b-2 of the Exchange Act. As a "smaller reporting company," we are able to provide simplified executive compensation disclosures in our filings and have certain other decreased disclosure obligations in our filings with the SEC, including being required to provide only two years of audited financial statements in annual reports. Consequently, it may be more challenging for investors to analyze our results of operations and financial prospects.

Furthermore, we are a non-accelerated filer as defined by Rule 12b-2 of the Exchange Act, and, as such, are not required to provide an auditor attestation of management's assessment of internal control over financial reporting, which is generally required for SEC reporting companies under Section 404(b) of the Sarbanes-Oxley Act. Because we are not required to, and have not, had our auditor provide an attestation of our management's assessment of internal control over financial reporting, a material weakness in internal controls may remain undetected for a longer period.

Our annual and quarterly operating results may fluctuate significantly or may fall below the expectations of investors or securities analysts, each of which may cause our stock price to fluctuate or decline.

We expect our operating results to be subject to annual and quarterly fluctuations. Our net loss and other operating results will be affected by numerous factors, including:

- variations in the level of expenses related to our product candidates, products or future development programs;
- if any of our product candidates receives regulatory approval, the level of underlying demand for these product candidates and wholesalers' buying patterns;
- addition or termination of trials or funding support;
- our execution of any collaborative, licensing or similar arrangements, and the timing of payments we may make or receive under these arrangements;
- any intellectual property infringement lawsuit in which we may become involved;
- regulatory developments affecting our products or those of our competitors;
- the timing and cost of, and level of investment in, research and development activities relating to our product candidates, which may change from time to time;
- our ability to attract, hire and retain qualified personnel;
- expenditures that we will or may incur to acquire or develop additional product candidates and technologies;
- future accounting pronouncements or changes in our accounting policies; and
- the timing and success or failure of clinical studies for our therapeutic candidates or competing product candidates, or any other change in the competitive landscape of our industry, including consolidation among our competitors or partners.

If our annual or quarterly operating results fall below the expectations of investors or securities analysts, the price of our securities could decline substantially. Furthermore, any annual or quarterly fluctuations in our operating results may, in turn, cause the price of our stock to fluctuate substantially. We believe that annual and quarterly comparisons of our financial results are not necessarily meaningful and should not be relied upon as an indication of our future performance.

Future sales and issuances of our common stock or rights to purchase our common stock, including pursuant to our equity incentive plans, could result in additional dilution of the percentage ownership of our stockholders and could cause our stock price to fall.

We expect that significant additional capital will be needed in the future to continue our planned operations. To the extent we raise additional capital by issuing equity securities, our stockholders may experience substantial dilution. We may sell our common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time. If we sell our common stock, convertible securities or other equity securities in more than one transaction, investors may be materially diluted by subsequent sales. These sales may also result in material dilution to our existing stockholders, and new investors could gain rights superior to our existing stockholders.

We do not intend to pay dividends on our common stock so any returns will be limited to the value of our stock.

We have never declared or paid any cash dividends on our common stock. We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Any return to stockholders will therefore be limited to the appreciation of their stock.

USE OF PROCEEDS

Assuming we sell all Common Stock offered pursuant to this prospectus, we estimate that our net proceeds from the sale of Common Stock by us in this Offering will be approximately \$ million, based on an assumed offering price of \$ per share and accompanying Common Warrant, assuming no sale of any Pre-Funded Warrants and no exercise of the Common Warrants issued in connection with this Offering, after deducting Placement Agent fees and estimated offering expenses payable by us. However, because this is a best efforts offering and there is no minimum offering amount required as a condition to the closing of this Offering, the actual offering amount, Placement Agent's fees and net proceeds to us are not presently determinable and may be substantially less than the maximum amounts set forth on the cover page of this prospectus.

We expect to use the proceeds that we receive from this Offering as follows:

Use of Proceeds	
Proceeds:	
Gross Proceeds	\$
Fees and Expenses	
Net Proceeds	\$
Uses:	
Agtech - Research and Development	\$
Biotech - Research and Development	\$
Production scale up of algal biomass	
Working Capital	
Total Uses	\$

These expected uses represent our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our development, the status of and results from clinical trials, and any unforeseen cash needs. As a result, our management will have broad discretion in the application of the net proceeds from this Offering, and investors will be relying on the judgment of our management regarding the application of the net proceeds from this Offering. The timing and amount of our actual expenditures will be based on many factors, including cash flows from operations and the anticipated growth of our business.

Accordingly, our management will have discretion and flexibility in applying the net proceeds of this Offering.

CAPITALIZATION

The following table presents a summary of our cash and cash equivalents and capitalization as of June 30, 2023:

- on an actual basis;
- on a *pro forma* basis to give effect to: (i) the issuance and sale by us of 1,030,000 shares of our Common Stock in a registered direct offering at a public offering price of \$2.67 per share and pre-funded warrants at a price of \$2.6699 per pre-funded warrant to purchase up to an aggregate of 468,130 shares of Common Stock on June 30, 2023; (ii) the issuance, in a concurrent private placement on June 30, 2023, of Series A Common Warrants to purchase up to an aggregate of 1,498,130 shares of Common Stock, at an exercise price of \$2.80 per share and Series B Common Warrants to purchase up to an aggregate of 1,498,130 shares of Common Stock, at an exercise price of \$2.80 per share; and
- on a *pro forma* as adjusted basis giving effect to the sale and the issuance of shares of Common Stock and Common Warrants to purchase Common Stock in this Offering at an assumed public offering price of \$ per share and accompanying Common Warrant, after deducting Placement Agent fees and other estimated offering expenses payable by us. The as adjusted basis assumes no Pre-Funded Warrants are sold in this Offering and excludes the proceeds, if any, from the exercise of any Common Warrants issued in this Offering.

You should read this capitalization table together with the section titled “Use of Proceeds” in this prospectus, and the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and the related notes included in our 2022 Annual Report and our Form 10-Q, which are incorporated by reference in this prospectus.

Capitalization in U.S. Dollars	As of June 30, 2023		
	Actual (unaudited)	Pro Forma	Pro Forma As Adjusted
Assets			
Cash	\$ 21,067	\$ 3,656,030	\$ -
Liabilities			
Convertible debentures payable	\$ 240,000	\$ 240,000	\$ -
Stockholders’ Equity (Deficit)			
Common Stock, \$0.001 par value, 150,000,000 shares authorized; actual: 9,419,660 shares issued and outstanding as of June 30, 2023; pro forma: 10,449,660 shares issued and outstanding; pro forma as adjusted: shares issued and outstanding.	9,420	10,450	
Additional paid-in capital	116,693,992	120,327,925	
Accumulated deficit	(119,848,244)	(119,848,244)	(0)
Total Stockholders’ Equity (Deficit)	(3,144,832)	490,131	
Capitalization	\$ 710,330	\$ 4,345,293	\$ -

The foregoing *pro forma* as adjusted information is illustrative only, and our capitalization following the completion of this Offering will be adjusted based on the actual public offering price and other terms of this Offering determined at pricing. Each \$0.25 increase or decrease in the assumed public offering price of \$ per share, which is the last reported sales price of our Common Stock on Nasdaq on October , 2023, would increase or decrease, as applicable, our pro forma as-adjusted net tangible book value per share after this Offering by \$ per share and increase or decrease, as applicable, the dilution to new investors purchasing shares in this Offering by \$ per share, in each case assuming the number of shares of Common Stock offered by us, as set forth on the cover page of this prospectus, remains the same, assuming no sale of any Pre-Funded Warrants and no exercise of the Common Warrants issued in connection with this Offering, and after deducting placement agent fees and estimated offering expenses payable by us. Similarly, an increase of 1,000,000 in the number of shares of Common Stock offered by us would increase the pro forma as-adjusted net tangible book value after this Offering by \$ per share and decrease the dilution per share to new investors participating in this offering by \$ per share, and a decrease of 1,000,000 shares of Common Stock offered by us would decrease the pro forma as-adjusted net tangible book value by \$ per share, and increase the dilution per share to new investors in this Offering by \$ per share, in each case assuming the assumed public offering price of \$ per share, which is the last reported sales price of our Common Stock on Nasdaq on October , 2023, remains the same, assuming no sale of any Pre-Funded Warrants and no exercise of the Common Warrants issued in connection with this Offering, and after deducting placement agent fees and estimated offering expenses payable by us.

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The table and discussion set forth in the table above are based on 10,449,660 shares of Common Stock outstanding as of September 30, 2023 and excludes:

- 1,755,175 shares of our Common Stock issuable upon the exercise of outstanding stock options as of June 30, 2023, with an approximate weighted-average exercise price of \$5.93 per share;
- 1,393,680 shares of our Common Stock issuable upon the exercise of unregistered warrants outstanding as of June 30, 2023 with an approximate weighted-average exercise price of \$6.53 per share;
- 2,975,497 shares of our Common Stock issuable upon exercise of registered warrants outstanding as of June 30, 2023 with an approximate weighted-average exercise price of \$5.50 per share;
- 468,130 shares of our Common Stock issuable upon exercise of pre-funded warrants sold to a single institutional investor as of July 5, 2023;
- 1,498,130 shares of our Common Stock issuable upon exercise of Series A Warrants sold to a single institutional investor as of July 5, 2023;
- 1,498,130 shares of our Common Stock issuable upon exercise of Series B Warrants sold to a single institutional investor as of July 5, 2023;
- 549,291 shares of our Common Stock reserved for future issuance under our 2021 Plan as of June 30, 2023; and
- 365,625 shares of our Common Stock reserved for future issuance under our 2019 Plan as of June 30, 2023.

The capitalization as further adjusted does not assume proceeds from the exercise of the Common Warrants issued in this Offering. Furthermore, the accounting treatment of Common Warrants has not been finalized as of the date hereof. The accounting treatment of the Common Warrant is being evaluated to assess if the arrangement qualifies as an equity classified instrument or a liability classified instrument. If the arrangement is required to be accounted for as a liability, then the Common Warrant will be recognized as a liability at fair value upon the closing and remeasured to fair value at each balance sheet date in the future reporting periods with changes in fair value recorded in the consolidated statement of operations.

The capitalization assumes no sale of Pre-Funded Warrants in this Offering, which, if sold, would reduce the number of Common Stock that we are offering on a one-for-one basis.

MARKET FOR OUR COMMON STOCK

Our Common Stock and certain of our outstanding warrants trade on Nasdaq under the symbol “ZIVO” and “ZIVOW”, respectively.

Holders

As of September 30, 2023, there were approximately 219 holders of record of our Common Stock. The number of holders of record is based on the actual number of holders registered on the books of our transfer agent and does not reflect holders of shares in “street name” or persons, partnerships, associations, corporations, or other entities identified in security position listings maintained by depository trust companies.

Dividend Policy

We have never declared or paid cash dividends on our Common Stock. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not anticipate paying any dividends on our Common Stock in the foreseeable future. Any future determination to declare dividends will be made at the discretion of our board of directors and will depend on our financial condition, operating results, capital requirements, general business conditions and other factors that our board of directors may deem relevant.

DILUTION

If you invest in the Securities being offered by this prospectus, your interest will be diluted immediately to the extent of the difference between the public offering price per share of Common Stock and the adjusted net tangible book value per share of our Common Stock after this Offering.

The historical net tangible book deficit of our Common Stock as of June 30, 2023, was approximately \$(3.1) million, or approximately \$(0.33) per share based on 9,499,560 shares outstanding as of such date. Net tangible book deficit per share represents the amount of our total tangible assets, excluding goodwill and intangible assets, less total liabilities, divided by the total number of shares of our Common Stock outstanding. Dilution per share to new investors represents the difference between the effective amount per share paid by purchasers for each share of Common Stock in this Offering and the net tangible book value per share of our Common Stock immediately following the completion of this Offering.

Our pro forma net tangible book value of our Common Stock as of June 30, 2023, was approximately \$0.5 million, or approximately \$0.05 per share, after giving effect to: (i) the issuance and sale by us of 1,030,000 shares of our Common Stock in a registered direct offering at a public offering price of \$2.67 per share and pre-funded warrants at a price of \$2.6699 per pre-funded warrant to purchase up to an aggregate of 468,130 shares of Common Stock on June 30, 2023; (ii) the issuance, in a concurrent private placement on June 30, 2023, of Series A Common Warrants to purchase up to an aggregate of 1,498,130 shares of Common Stock, at an exercise price of \$2.80 per share and Series B Common Warrants to purchase up to an aggregate of 1,498,130 shares of Common Stock, at an exercise price of \$2.80 per share. Our pro forma net tangible book value gives effect to the issuance in this Offering of shares of Common Stock, at an assumed public offering price of \$ per share, after deducting Placement Agent fees and other estimated offering expenses payable by us.

Dilution in net tangible book value per share represents the difference between the amount per share paid by purchasers in this Offering and the net tangible book value per share of our Common Stock immediately after this Offering. After giving effect to the sale of shares of Common Stock in this Offering at an assumed public offering price of \$ per share, and after deducting the Placement Agent fees and the estimated offering expenses payable by us, our as adjusted net tangible book value as of June 30, 2023 would have been approximately \$ per share of Common Stock. This represents an immediate increase in net tangible book value of \$ per share to our existing stockholders and an immediate dilution of \$() per share to investors purchasing shares of Common Stock in this Offering. Amounts do not include exercise of Common Warrants in this Offering and no sale of Pre-Funded Warrants in this Offering, which, if sold, would reduce the number of shares of Common Stock that we are offering on a one-for-one basis.

Assumed public offering price per share of Common Stock		\$
Historical Net tangible book value per share at June 30, 2023	\$	(0.33)
Increase in pro forma net tangible book value per share of common stock attributable to registered direct offering and a concurrent private placement on June 30, 2023	\$	0.35
Increase to pro forma net tangible book value per share attributable to investors purchasing our Common Stock in this Offering	\$	
Pro forma net tangible book value per share as of June 30, 2023, after giving effect to this Offering		\$
Dilution per share to investors purchasing our Common Stock in this Offering		\$

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The table and discussion set forth in the table above are based on 10,449,660 shares of Common Stock outstanding as of September 30, 2023 and assumes (i) no sale of Pre-Funded Warrants in this Offering, which, if sold, would reduce the number of Common Stock that we are offering on a one-for-one basis, (ii) no exercise of the Common Warrants issued in this Offering, and excludes:

- 1,755,175 shares of our Common Stock issuable upon the exercise of outstanding stock options as of June 30, 2023, with an approximate weighted-average exercise price of \$5.93 per share;
- 1,393,680 shares of our Common Stock issuable upon the exercise of unregistered warrants outstanding as of June 30, 2023 with an approximate weighted-average exercise price of \$6.53 per share;
- 2,975,497 shares of our Common Stock issuable upon exercise of registered warrants outstanding as of June 30, 2023 with an approximate weighted-average exercise price of \$5.50 per share;
- 468,130 shares of our Common Stock issuable upon exercise of pre-funded warrants sold to a single institutional investor as of July 5, 2023;
- 1,498,130 shares of our Common Stock issuable upon exercise of Series A Warrants sold to a single institutional investor as of July 5, 2023;
- 1,498,130 shares of our Common Stock issuable upon exercise of Series B Warrants sold to a single institutional investor as of July 5, 2023;
- 549,291 shares of our Common Stock reserved for future issuance under our 2021 Plan as of June 30, 2023; and
- 365,625 shares of our Common Stock reserved for future issuance under our 2019 Plan as of June 30, 2023.

Each \$0.25 increase (decrease) in the assumed public offering price of \$ per share of Common Stock would increase (decrease) our pro forma as adjusted net tangible book value per share after this Offering by approximately \$, and the dilution per share to new investors purchasing shares in this Offering by \$, assuming the number of shares of Common Stock offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting Placement Agent fees and estimated offering expenses payable by us, assuming no sale of any Pre-Funded Warrants and no exercise of the Common Warrants issued in connection with this Offering. Similarly, each increase (decrease) of 1,000,000 in the number of shares of Common Stock offered by us would increase (decrease) the pro forma net tangible book value, as adjusted to give effect to this Offering, by \$ per share, and the dilution to new investors by \$ per share. The information discussed above is illustrative only and will be adjusted based on the actual public offering price and other terms of this Offering as determined between us and the Placement Agent at pricing.

To the extent that any of these outstanding options are exercised or warrants are exercised or we issue additional shares under our equity incentive plans, there may be further dilution to new investors. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The following table sets forth certain information regarding each person who is known to us to beneficially own more than 5% of our issued and outstanding shares of Common Stock, and the number of shares of our Common Stock beneficially owned by each of our directors and named executive officers, and all officers and directors as a group. All percentages are based on 10,449,660 shares of Common Stock issued and outstanding as of September 30, 2023, and where applicable, beneficial ownership includes shares which the beneficial owner has the right to acquire within 60 days.

Security Ownership of Certain Beneficial Owners:

Name and Address	Number of Shares Beneficially Owned (1)	% of Class	% After Offering
HEP Investments, LLC 2804 Orchard Lake Rd. Suite 205 Keego Harbor, MI 48302	1,751,900(2)	16.8%	%
Strome 1688 Meridian Ave, Suite 727 Miami Beach, FL 33139	657,536(3)	6.3%	%
Christopher D. Maggiore 4788 Nobles Pond Dr. NW Canton, OH 44718	981,234(4)(5)(6)	9.4%	%

Security Ownership of Management:

Name and Address	Number of Shares Beneficially Owned (1)	% of Class	% After Offering
Christopher D. Maggiore	981,234(4)(5)(6)	9.4%	%
Andrew A. Dahl	83,324(7)	*	*
John B. Payne	541,333(8)	5.4%	%
Keith Marchiando	259,500(9)	2.7%	%
Nola E. Masterson	82,895(10)	*	*
Alison A. Cornell	207,051(11)	*	*
All current Directors and Officers as a group (5 persons)	2,155,377(12)	20.6%	%

*** Less than 1%**

- (1) “Beneficially” owned shares, as defined by the SEC, are those shares as to which a person has voting or investment power, or both, and which the beneficial owner has the right to acquire within 60 days. Unless otherwise indicated, the persons or entities identified in this table have sole voting and investment power with respect to all shares shown as beneficially owned by them. “Beneficial” ownership does not necessarily mean that the named person is entitled to receive the dividends on, or the proceeds from the sale of, the shares.
- (2) Includes 295,487 shares of Common Stock issuable upon the exercise of certain warrants. Laith Yaladoo, the manager and controlling member of HEP Investments, LLC, may be deemed to have voting and dispositive power over the shares held by HEP Investments.

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- (3) Represents shares held by Strome Mezzanine Fund, L.P. ("Strome Mezz"), Mark E. Strome, Strome Alpha Fund, L.P. ("Strome Alpha"), and Strome Investment Management, L.P. ("Strome Investment," and together with Strome Mezz and Strome Alpha, "Strome Group"), the general partner of each of the entities in the Strome Group is Mark E. Strome. Includes 331,250 shares of Common Stock issuable upon the exercise of certain warrants. Mark E. Strome, the sole director, president, and chief executive officer of Strome Group, may be deemed to have voting and dispositive power over the shares held by Strome.
- (4) Pursuant to a Schedule 13D/A filed with the SEC on February 14, 2023, Christopher D. Maggiore has sole power to vote 898,285 shares, sole power to dispose 898,285 shares, shared power to vote 81,459 shares and shared power to dispose 81,459 shares.
- (5) Includes options to purchase 74,947 shares of Common Stock and warrants to purchase 101,546 of shares of Common Stock.
- (6) Includes 81,459 beneficial shares held in the estate of the Robert S. McLain Estate of which Mr. Maggiore is the controlling trustee.
- (7) Includes warrants to purchase 75,000 shares of Common Stock. Mr. Dahl's position as an executive officer of the Company ended in January 2022.
- (8) Includes options to purchase 394,432 shares of Common Stock and warrants to purchase 137,500 shares of Common Stock.
- (9) Includes options to purchase 259,500 shares of Common Stock.
- (10) Includes options to purchase 58,871 shares of Common Stock and warrants to purchase 18,750 shares of Common Stock.
- (11) Includes options to purchase 180,051 shares of Common Stock.
- (12) Includes options to purchase 951,484 shares of Common Stock and warrants to purchase 257,796 shares of Common Stock.

DESCRIPTION OF SECURITIES

Our authorized capital stock consists of consists of 150,000,000 Common Stock, \$0.001 par value. As of the date of this prospectus, there were 10,449,660 shares of Common Stock outstanding.

We are offering our Common Stock, together with a Common Warrant to purchase one share of our Common Stock, at an assumed public offering price of \$. per share.

We are also offering to each purchaser whose purchase of Common Stock in this Offering would otherwise result in the purchaser, together with its affiliates, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding Common Stock immediately following the consummation of this Offering, the opportunity to purchase, if the purchaser so chooses, Pre-Funded Warrants in lieu of Common Stock that would otherwise result in the purchaser's beneficial ownership exceeding 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding Common Stocks. For each pre-funded warrant we sell (without regard to any limitation on exercise set forth therein), the number of Common Stock we are offering will be decreased on a one-for-one basis. Because one Common Warrant is being sold together in this Offering with each Common Stock or, in the alternative, each Pre-Funded Warrants to purchase one Common Stock, the number of Common Warrants sold in this Offering will not change as a result of a change in the mix of the Common Stock and Pre-Funded Warrants sold.

We are also registering the Common Stock and the Common Stock issuable from time to time upon exercise of the Pre-Funded Warrants and Common Warrants. The shares of our Common Stock and/or Pre-Funded Warrants and the Common Warrants are immediately separable and will be issued separately in this Offering.

Common Stock

Holders of Common Stock are entitled to one vote per share on all matters submitted to a vote of the stockholders. Our holders of Common Stock do not have cumulative voting rights. Holders of Common Stock will be entitled to receive ratably such dividends as may be declared by the Board of Directors out of funds legally available therefor, which may be paid in cash, property, or in shares of the Company's capital stock. Upon liquidation, dissolution or winding up of the Company, either voluntarily or involuntarily, the holders of Common Stock will be entitled to receive their ratable share of the net assets of the Company legally available for distribution after payment of all debts and other liabilities. There are no conversion, preemptive or other subscription rights and there are no sinking fund or redemption provisions applicable to the Common Stock.

Common Warrants

The following summary of certain terms and provisions of the Common Warrants that are being offered hereby is not complete and is subject to, and qualified in its entirety by, the provisions of the Common Warrants, the form of which is filed as an exhibit to the registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions of the form of Common Warrant for a complete description of the terms and conditions of the Common Warrants.

Overview. Certain provisions of the Common Warrants are set forth herein but are only a summary and are qualified in their entirety by the relevant provisions of the form of Common Warrant, which is filed as an exhibit to the registration statement of which this prospectus is a part. Prospective investors should carefully review the terms and provisions set forth in the form of Common Warrant.

The Common Warrants issued in this Offering entitle the holder to purchase one share of our Common Stock at a price equal to \$ per share, subject to adjustment as discussed below.

Exercisability. The Common Warrants are exercisable at any time after their original issuance and at any time up to the date that is five (5) years after their original issuance. The Common Warrants may be exercised by delivering a duly executed exercise notice on or prior to the expiration date at the offices of the Company, accompanied by full payment of the exercise price, by certified or official bank check payable to the Company, for the number of Common Warrants being exercised. Under the terms of the Common Warrants, we must use our best efforts to maintain the effectiveness of the registration statement and current prospectus relating to Common Stock issuable upon exercise of the Common Warrants until the expiration of the Common Warrants. If we fail to maintain the effectiveness of the registration statement and current prospectus relating to the Common Stock issuable upon exercise of the Common Warrants, the holders of the Common Warrants shall have the right to exercise the Common Warrants solely via a cashless exercise feature provided for in the Common Warrants, until such time as there is an effective registration statement and current prospectus. The Common Warrant also provides for automatic cashless exercise on the Termination Date, as defined therein.

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Exercise Limitation. A holder may not exercise any portion of a Common Warrant to the extent that the holder, together with its affiliates and any other person or entity acting as a group, would own more than 4.99% of the outstanding Common Stock after exercise, as such percentage ownership is determined in accordance with the terms of the Common Warrant, except that the holder may waive such limitation up to a percentage not in excess of 9.99%.

Exercise Price. The exercise price per whole share of Common Stock purchasable upon exercise of the Common Warrants is \$ per share. The exercise price is subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our Common Stock and also upon any distributions of assets, including cash, stock or other property to our stockholders. However, the Common Warrants will not be adjusted for issuances of Common Stock at prices below its exercise price.

Fractional Shares. No fractional shares of Common Stock will be issued upon exercise of the Common Warrants. If, upon exercise of the Common Warrant, a holder would be entitled to receive a fractional interest in a share, we will, upon exercise, pay a cash adjustment in respect of such fraction in an amount equal to such fraction multiplied by the exercise price. If multiple Common Warrants are exercised by the holder at the same time, we shall pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the exercise price.

Transferability. Subject to applicable laws, the Common Warrants may be offered for sale, sold, transferred or assigned without our consent.

Fundamental Transactions. In the event of a fundamental transaction, as described in the Common Warrants and generally including any reorganization, recapitalization or reclassification of our Common Stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding Common Stock, or any person or group becoming the beneficial owner of 50% of the voting power represented by our outstanding Common Stock, upon any subsequent exercise of the Common Warrants, the holders of the Common Warrants will be entitled to receive the kind and amount of securities, cash or other property that the holders would have received had they exercised the U Common nit Warrants immediately prior to such fundamental transaction. Additionally, in the event of a fundamental transaction, we or any successor entity will, at the option of the holder of a Common Warrant exercisable at any time concurrently with or within 30 days after the consummation of the fundamental transaction (or, if later, the date of the public announcement thereof), purchase the Common Warrant from the holder by paying to the holder an amount of consideration equal to the value of the remaining unexercised portion of such Common Warrant on the date of consummation of the fundamental transaction based on the Black-Scholes option pricing model, determined pursuant to a formula set forth in the Common Warrants. The consideration paid to the holder will be the same type or form of consideration that was offered and paid to the holders of common stock in connection with the fundamental transaction; provided that if no such consideration was offered or paid, the holders of common stock will be deemed to have received common stock of the successor entity in such fundamental transaction for purposes of this provision of the Common Warrants.

Rights as a Stockholder. The warrant holders do not have the rights or privileges of holders of Common Stock or any voting rights until they exercise their Common Warrants and receive shares of Common Stock. After the issuance of shares of Common Stock upon exercise of the Common Warrants, each holder will be entitled to one vote for each share held of record on all matters to be voted on by stockholders.

Governing Law. The Common Warrants are governed by New York law.

Pre-Funded Warrants

The following summary of certain terms and provisions of Pre-Funded Warrants that are being offered hereby is not complete and is subject to, and qualified in its entirety by, the provisions of the Pre-Funded Warrant, the form of which is filed as an exhibit to the registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions of the form of Pre-Funded Warrant for a complete description of the terms and conditions of the Pre-Funded Warrants.

We are also offering to each purchaser whose purchase of Common Stock in this Offering would otherwise result in the purchaser, together with its affiliates, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding Common Stock immediately following the consummation of this Offering, the opportunity to purchase, if the purchaser so chooses, Pre-Funded Warrants in lieu of Common Stock that would otherwise result in the purchaser's beneficial ownership exceeding 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding Common Stock. For each Pre-Funded Warrants we sell (without regard to any limitation on exercise set forth therein), the number of Common Stock we are offering will be decreased on a one-for-one basis.

Exercisability. The Pre-Funded Warrants are exercisable at any time after their original issuance until they are exercised in full. Each of the Pre-Funded Warrants will be exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice and, at any time a registration statement registering the issuance of the common shares underlying the Pre-Funded Warrants under the Securities Act of 1933, as amended (the "Securities Act") is effective and available for the issuance of such shares, or an exemption from registration under the Securities Act is available for the issuance of such shares, by payment in full in immediately available funds for the number of common shares purchased upon such exercise. If a registration statement registering the issuance of the common shares underlying the Pre-Funded Warrants under the Securities Act is not effective or available and an exemption from registration under the Securities Act is not available for the issuance of such shares, the holder may, in its sole discretion, elect to exercise the Pre-Funded Warrants through a cashless exercise, in which case the holder would receive upon such exercise the net number of common shares determined according to the formula set forth in the Pre-Funded Warrant. No fractional common shares will be issued in connection with the exercise of a Pre-Funded Warrant. In lieu of fractional shares, we will pay the holder an amount in cash equal to the fractional amount multiplied by the exercise price.

Exercise Limitation. A holder will not have the right to exercise any portion of the Pre-Funded Warrants if the holder (together with its affiliates) would beneficially own in excess of 4.99% (or, upon election by a holder prior to the issuance of any Pre-Funded Warrants, 9.99%) of the number of shares of our common shares outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the warrants. However, any holder may increase or decrease such percentage to any other percentage not in excess of 9.99%, upon at least 61 days' prior notice from the holder to us with respect to any increase in such percentage.

Exercise Price. The exercise price for the Pre-Funded Warrants is \$0.001 per share.

Transferability. Subject to applicable laws, the Pre-Funded Warrants may be offered for sale, sold, transferred or assigned without our consent.

Exchange Listing. We do not intend to apply for the listing of the Pre-Funded Warrants offered in this Offering on any stock exchange. Without an active trading market, the liquidity of the Pre-Funded Warrants will be limited.

Rights as a Shareholder. Except as otherwise provided in the Pre-Funded Warrants or by virtue of such holder's ownership of our common shares, the holder of a Pre-Funded Warrants does not have the rights or privileges of a holder of our common shares, including any voting rights, until the holder exercises the warrant.

Fundamental Transactions. In the event of a fundamental transaction, as described in the Pre-Funded Warrants and generally including, with certain exceptions, any reorganization, recapitalization or reclassification of our common shares, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding common shares, or any person or group becoming the beneficial owner of 50% of the voting power represented by our outstanding common shares, the holders of the Pre-Funded Warrants will be entitled to receive upon exercise of the warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the warrants immediately prior to such fundamental transaction.

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Governing Law. The Pre-Funded Warrants are governed by New York law.

Other Convertible Securities

As of July 30, 2023, in addition to the securities described above, there are (i) 1,392,675 options have been issued under the 2021 Plan, and 549,291 shares remained available for issuance and (ii) 781,250 stock options had been issued under the 2019 Plan with terms between 5 years and 10 years, of which 365,625 remained outstanding.

Dividends

We have not declared or paid any dividends on our Common Stock since our inception and do not anticipate paying dividends for the foreseeable future. The payment of dividends is subject to the discretion of our Board of Directors and will depend, among other things, upon our earnings, our capital requirements, our financial condition, and other relevant factors. We intend to reinvest any earnings in the development and expansion of our business. Any cash dividends in the future to common stockholder will be payable when, as and if declared by our Board of Directors, based upon the board's assessment of our financial condition and performance, earnings, need for funds, capital requirements, prior claims of preferred stock to the extent issued and outstanding, and other factors, including income tax consequences, restrictions and applicable laws. There can be no assurance, therefore, that any dividends on our Common Stock will ever be paid.

Anti-Takeover Effects of Provision of our Articles of Incorporation, Bylaws and Nevada Law

The following is a brief description of the provisions in our Articles of Incorporation, Bylaws and Nevada Law that could have an effect of delaying, deferring, or preventing a change in control of the Company.

Anti-Takeover Effects of Nevada Law

Business Combinations

We are a Nevada corporation and are generally governed by the Nevada Private Corporations Code, Title 78 of the Nevada Revised Statutes, or "NRS".

The "business combination" provisions of Sections 78.411 to 78.444, inclusive, of the NRS, generally prohibit a Nevada corporation with at least 200 stockholders from engaging in various "combination" transactions with any interested stockholder for a period of two years after the date of the transaction in which the person became an interested stockholder, unless the transaction is approved by the board of directors prior to the date the interested stockholder obtained such status or the combination is approved by the board of directors and thereafter is approved at a meeting of the stockholders by the affirmative vote of stockholders representing at least 60% of the outstanding voting power held by disinterested stockholders, and extends beyond the expiration of the two-year period, unless:

- the combination was approved by the board of directors prior to the person becoming an interested stockholder or the transaction by which the person first became an interested stockholder was approved by the board of directors before the person became an interested stockholder or the combination is later approved by a majority of the voting power held by disinterested stockholders; or
- price per share paid by the interested stockholder within the two years immediately preceding the date of the announcement of the combination or in the transaction in which it became an interested stockholder, whichever is higher, (a) the market value per share of Common Stock on the date of announcement of the combination and the date the interested stockholder acquired the shares, whichever is higher, or (b) for holders of preferred stock, the highest liquidation value of the preferred stock, if it is higher.

A "combination" is generally defined to include mergers or consolidations or any sale, lease exchange, mortgage, pledge, transfer, or other disposition, in one transaction or a series of transactions, with an "interested stockholder" having: (a) an aggregate market value equal to 5% or more of the aggregate market value of the assets of the corporation, (b) an aggregate market value equal to 5% or more of the aggregate market value of all outstanding shares of the corporation, (c) 10% or more of the earning power or net income of the corporation, and (d) certain other transactions with an interested stockholder or an affiliate or associate of an interested stockholder.

In general, an "interested stockholder" is a person who, together with affiliates and associates, owns (or within two years, did own) 10% or more of a corporation's voting stock. The statute could prohibit or delay mergers or other takeover or change in control attempts and, accordingly, may discourage attempts to acquire our Company even though such a transaction may offer our stockholders the opportunity to sell their stock at a price above the prevailing market price.

Control Share Acquisitions

The "control share" provisions of Sections 78.378 to 78.3793, inclusive, of the NRS apply to "issuing corporations" that are Nevada corporations with at least 200 stockholders, including at least 100 stockholders of record who are Nevada residents, and that conduct business directly or indirectly in Nevada. The control share statute prohibits an acquirer, under certain circumstances, from voting its shares of a target corporation's stock after crossing certain ownership threshold percentages, unless the acquirer obtains approval of the target corporation's disinterested stockholders. The statute specifies three thresholds: one-fifth or more but less than one-third, one-third but less than a majority, and a majority or more, of the outstanding voting power.

Generally, once an acquirer crosses one of the above thresholds, those shares in an offer or acquisition and acquired within 90 days thereof become "control shares" and such control shares are deprived of the right to vote until disinterested stockholders restore the right. These provisions also provide that if control shares are accorded full voting rights and the acquiring person has acquired a majority or more of all voting power, all other stockholders who do not vote in favor of authorizing voting rights to the control shares are entitled to demand payment for the fair value of their shares in accordance with statutory procedures established for dissenters' rights.

A corporation may elect to not be governed by, or "opt out" of, the control share provisions by making an election in its articles of incorporation or bylaws, provided that the opt-out election must be in place on the 10th day following the date an acquiring person has acquired a controlling interest, that is, crossing any of the three thresholds described above. We have not opted out of the control share statutes, and will be subject to these statutes if we are an "issuing corporation" as defined in such statutes.

The effect of the Nevada control share statutes is that the acquiring person, and those acting in association with the acquiring person, will obtain only such voting rights in the control shares as are conferred by a resolution of the stockholders at an annual or special meeting. The Nevada control share law, if applicable, could have the effect of discouraging takeovers of our Company.

Number of Directors; Vacancies; Removal

Our Bylaws provide that our Board of Directors may fix the number of directors at no less than one and no more than nine. Any vacancy on the Board of Directors may be filled by the affirmative vote of a majority of the remaining directors though less than a quorum of the Board of Directors. A director elected to fill a vacancy shall be elected for the unexpired term of his predecessor in office, and shall hold such office until his successor is duly elected and qualified. Any directorship to be filled by reason of an increase in the number of directors shall be filled by the affirmative vote of a majority of the directors then in office or by an election at an annual meeting, or at a special meeting of stockholders called for that purpose. A director chosen to fill a position resulting from an increase in the number of directors shall hold office only until the next election of directors by the stockholders.

Our Bylaws provide that any director or directors of the corporation may be removed from office at any time, with or without cause, by the vote or written consent of stockholders representing not less than a majority of the issued and outstanding capital stock entitled to voting power.

Authorized Shares

Without any action by our shareholders, we may increase or decrease the aggregate number of shares or the number of shares of any class we have authority to issue at any time. The board shall have authority to establish more than one class or series of shares of this corporation, and the different classes and series shall have such relative rights and preferences, with such designations, as the board may by resolution provide. Issuance of such a new class or series could, depending upon the terms of the class or series, delay, defer, or prevent a change of control of the Company.

Advance Notice Requirements for Stockholder Proposals and Director Nominations

Our Bylaws contain advance notice provisions that a stockholder must follow if it intends to bring business proposals or director nominations, as applicable, before a meeting of stockholders. These provisions may preclude our stockholders from bringing matters before the annual meeting of stockholders or from making nominations at the annual meeting of stockholders.

No Cumulative Voting

Holders of our Common Stock do not have cumulative voting rights in the election of Directors. The absence of cumulative voting may make it more difficult for shareholders owning less than a majority of our Common Stock to elect any Directors to our Board of Directors.

Limitation on Liability and Indemnification of Directors and Officers

Section 78.138 of the NRS provides that, unless the corporation's articles of incorporation provide otherwise, a director or officer will not be individually liable unless it is proven that (i) the director's or officer's acts or omissions constituted a breach of his or her fiduciary duties, and (ii) such breach involved intentional misconduct, fraud, or a knowing violation of the law.

Section 78.7502 of the NRS permits a company to indemnify its directors and officers against expenses, judgments, fines, and amounts paid in settlement actually and reasonably incurred in connection with a threatened, pending, or completed action, suit, or proceeding, if the officer or director (i) is not liable pursuant to NRS 78.138, or (ii) acted in good faith and in a manner the officer or director reasonably believed to be in or not opposed to the best interests of the corporation and, if a criminal action or proceeding, had no reasonable cause to believe the conduct of the officer or director was unlawful. Section 78.7502 of the NRS requires a corporation to indemnify a director or officer that has been successful on the merits or otherwise in defense of any action or suit. Section 78.7502 of the NRS precludes indemnification by the corporation if the officer or director has been adjudged by a court of competent jurisdiction, after exhaustion of all appeals, to be liable to the corporation or for amounts paid in settlement to the corporation, unless and only to the extent that the court determines that in view of all the circumstances, the person is fairly and reasonably entitled to indemnity for such expenses and requires a corporation to indemnify its officers and directors if they have been successful on the merits or otherwise in defense of any claim, issue, or matter resulting from their service as a director or officer.

Section 78.751 of the NRS permits a Nevada company to indemnify its officers and directors against expenses incurred by them in defending a civil or criminal action, suit, or proceeding as they are incurred and in advance of final disposition thereof, upon determination by the stockholders, the disinterested board members, or by independent legal counsel. If so provided in the corporation's articles of incorporation, bylaws, or other agreement, Section 78.751 of the NRS requires a corporation to advance expenses as incurred upon receipt of an undertaking by or on behalf of the officer or director to repay the amount if it is ultimately determined by a court of competent jurisdiction that such officer or director is not entitled to be indemnified by the company. Section 78.751 of the NRS further permits the company to grant its directors and officers additional rights of indemnification under its articles of incorporation, bylaws, or other agreement.

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Section 78.752 of the NRS provides that a Nevada company may purchase and maintain insurance or make other financial arrangements on behalf of any person who is or was a director, officer, employee, or agent of the company, or is or was serving at the request of the company as a director, officer, employee, or agent of another company, partnership, joint venture, trust, or other enterprise, for any liability asserted against him and liability and expenses incurred by him in his capacity as a director, officer, employee, or agent, or arising out of his status as such, whether or not the company has the authority to indemnify him against such liability and expenses.

We have entered into indemnification agreements with each of our officers and directors to provide indemnification to the fullest extent permitted by the NRS against expense, liability, and loss reasonably incurred or suffered by them in connection with their service as an officer or director. The agreements provide for advance costs and expenses incurred with respect to any proceeding to which a person is made a party as a result of being a director or officer prior to or after final disposition of such proceeding upon receipt of an undertaking by or on behalf of the director or officer to repay such amount if it is ultimately determined that such person is not entitled to indemnification. We may purchase and maintain liability insurance, or make other arrangements for such obligations or otherwise, to the extent permitted by the NRS.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to the Company's directors, officers or controlling persons pursuant to the provisions described above, or otherwise, the Company has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

Transfer Agent and Registrar

The transfer agent and registrar for our Common Stock is Issuer Direct Corporation.

Listing

Our Common Stock and certain of our outstanding warrants trade on Nasdaq under the symbol "ZIVO" and "ZIVOW", respectively.

SHARES AVAILABLE FOR FUTURE SALES

Future sales of our Common Stock in the public market, or the availability of such shares for sale in the public market, could adversely affect market prices prevailing from time to time. As described below, the sale of a portion of our shares will be limited after this Offering due to contractual and legal restrictions on resale. Nevertheless, sales of our Common Stock in the public market after such restrictions, lapse, or the perception that those sales may occur, could adversely affect the prevailing market price at such time and our ability to raise equity capital in the future.

Based on the number of shares of our Common Stock outstanding as of September 30, 2023, upon the completion of this Offering shares of our Common Stock will be outstanding, assuming shares of Common Stock are issued in this Offering.

Except for shares subject to lock-up agreement, substantially all of our outstanding shares will be freely tradable except that any shares held by our affiliates, as that term is defined in Rule 144 under the Securities Act, may only be sold in compliance with the limitations described below.

Rule 144

In general, under Rule 144 of the Securities Act, as in effect on the date of this prospectus, any person who is not our affiliate at any time during the preceding three months, and who has beneficially owned the relevant shares of our Common Stock for at least six months, including the holding period of any prior owner other than one of our affiliates, would be entitled to sell an unlimited number of shares of our Common Stock into the public markets provided current public information about us is available, and, after owning such shares for at least one year, including the holding period of any prior owner other than one of our affiliates, would be entitled to sell an unlimited number of shares of our Common Stock into the public markets without restriction.

A person who is our affiliate or who was our affiliate at any time during the preceding three months, and who has beneficially owned restricted securities for at least six months, including the affiliates, is entitled to sell within any three-month period a number of shares that does not exceed the greater of:

- % of the number of shares of our Common Stock then outstanding, which will equal approximately shares immediately following this Offering, based on the number of shares of our Common Stock outstanding as of September 30, 2023; or
- the average weekly trading volume of our Common Stock during the four calendar weeks preceding the filing of a Form 144 notice by such person with respect to such sale, if our class of Common Stock is listed on Nasdaq, the New York Stock Exchange, or the NYSE American.

Sales under Rule 144 by our affiliates are also subject to certain manner of sale provisions and notice requirements and to the availability of current public information about us.

Lock-up Agreements

See the section titled “*Plan of Distribution*” below for a detailed discussion.

PLAN OF DISTRIBUTION

Pursuant to a placement agency agreement, we have engaged [redacted] to act as our exclusive placement agent to solicit offers to purchase the securities offered by this prospectus. The Placement Agent is not purchasing or selling any securities, nor is it required to arrange for the purchase and sale of any specific number or dollar amount of securities, other than to use its “reasonable best efforts” to arrange for the sale of the securities by us. Therefore, we may not sell the entire amount of securities being offered. There is no minimum amount of proceeds that is a condition to closing of this Offering.

We will enter into a securities purchase agreement directly with certain investors, at the investor’s option, who purchase our securities in this Offering. Investors who do not enter into a securities purchase agreement shall rely solely on this prospectus in connection with the purchase of our securities in this Offering. The Placement Agent may engage one or more subagents or selected dealers in connection with this Offering.

The placement agency agreement provides that the Placement Agent’s obligations are subject to conditions contained in the placement agency agreement.

We will deliver the securities being issued to the investors upon receipt of investor funds for the purchase of the securities offered pursuant to this prospectus. We expect to deliver the securities being offered pursuant to this prospectus on or about [redacted], 2023, subject to the satisfaction of customary closing conditions.

Placement Agent Fees, Commissions and Expenses

Upon the closing of this Offering, we will pay the Placement Agent a cash transaction fee equal to [redacted] % of the aggregate gross cash proceeds to us from the sale of the securities in the offering. In addition, we will reimburse the Placement Agent for its out-of-pocket expenses incurred in connection with this Offering, including the fees and expenses of the counsel for the Placement Agent, up to \$ [redacted].

The following table shows the public offering price, Placement Agent fees and proceeds, before expenses, to us.

	Per Share and Common Warrant	Per Pre- Funded Warrant and Common Warrant	Total
Public offering price	\$ [redacted]	\$ [redacted]	\$ [redacted]
Placement agent fees ⁽¹⁾	\$ [redacted]	\$ [redacted]	\$ [redacted]
Proceeds, before expenses, to us ⁽²⁾	\$ [redacted]	\$ [redacted]	\$ [redacted]

- (1) We have agreed to pay the Placement Agent a cash placement commission equal to [redacted] % of the aggregate proceeds from this Offering. We have also agreed to reimburse the Placement Agent for certain expenses incurred in connection with this Offering.
- (2) The amount of the offering proceeds to us presented in this table does not give effect to any exercise of the Pre-Funded Warrants or Common Warrants being issued in this Offering.

We estimate that the total expenses of the offering payable by us, including registration, filing and listing fees, printing fees and legal and accounting expenses, but excluding Placement Agent fees, will be approximately \$ [redacted], \$ [redacted] of which was paid in advance for anticipated accountable expenses and will be returned to us to the extent such accountable expenses are not actually incurred in accordance with FINRA Rule 5110(g)(4)(A). This figure includes the Placement Agent’s accountable expenses, including, but not limited to, legal fees for Placement Agent’s legal counsel, that we have agreed to pay at the closing of the offering.

Lock-Up Agreements

We, each of our officers and directors, and holder(s) of five percent (5%) or more of the outstanding common stock as of the date of this prospectus have agreed, subject to certain exceptions, not to offer, issue, sell, contract to sell, encumber, grant any option for the sale of or otherwise dispose of any of our common stock or other securities convertible into or exercisable or exchangeable for our common stock for a period of 90 days after this Offering is completed without the prior written consent of the Placement Agent.

The Placement Agent may in its sole discretion and at any time without notice release some or all of the shares subject to lock-up agreements prior to the expiration of the lock-up period. When determining whether or not to release shares from the lock-up agreements, the Placement Agent will consider, among other factors, the security holder's reasons for requesting the release, the number of shares for which the release is being requested and market conditions at the time.

Listing

Our Common Stock and certain of our outstanding warrants trade on Nasdaq under the symbol "ZIVO" and "ZIVOW", respectively.

Indemnification

We have agreed to indemnify the Placement Agent against certain liabilities, including liabilities under the Securities Act, and to contribute to payments that the Placement Agent may be required to make for these liabilities.

Determination of Offering Price and Exercise Price

The actual public offering price of the securities we are offering, and the exercise price of the Common Warrants and the Pre-Funded Warrants that we are offering, will be negotiated between us and the investors in the offering based on the trading of our Common Stock prior to the offering, among other things. Other factors considered in determining the public offering price of the securities we are offering, as well as the exercise price of the Common Warrants and the Pre-Funded Warrants that we are offering, will include the stage of development of our business, our business plans for the future and the extent to which they have been implemented, an assessment of our management, the general conditions of the securities markets at the time of the offering and such other factors as are deemed relevant.

Regulation M

The Placement Agent may be deemed to be an underwriter within the meaning of Section 2(a)(11) of the Securities Act, and any commissions received by it and any profit realized on the resale of the securities sold by it while acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. As an underwriter, the Placement Agent would be required to comply with the requirements of the Securities Act and the Exchange Act, including, without limitation, Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of our securities by the Placement Agent acting as principal. Under these rules and regulations, the Placement Agent (i) may not engage in any stabilization activity in connection with our securities and (ii) may not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until it has completed its participation in the distribution.

Electronic Distribution

A prospectus in electronic format may be made available on a website maintained by the Placement Agent. In connection with the offering, the Placement Agent or selected dealers may distribute prospectuses electronically. No forms of electronic prospectus other than prospectuses that are printable as Adobe® PDF will be used in connection with this Offering.

Other than the prospectus in electronic format, the information on the Placement Agent's website and any information contained in any other website maintained by the Placement Agent is not part of the prospectus or the registration statement of which this prospectus forms a part, has not been approved and/or endorsed by us or the Placement Agent in its capacity as placement agent and should not be relied upon by investors.

Certain Relationships

The Placement Agent and its affiliates have and may in the future provide, from time to time, investment banking and financial advisory services to us in the ordinary course of business, for which they may receive customary fees and commissions.

Selling Restrictions

Canada. The securities may be sold in Canada only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31 103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the securities must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus supplement (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33 105 Underwriting Conflicts (NI 33 105), the Placement Agent is not required to comply with the disclosure requirements of NI 33-105 regarding underwriters conflicts of interest in connection with this Offering.

European Economic Area. In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a "Relevant Member State") an offer to the public of any securities may not be made in that Relevant Member State, except that an offer to the public in that Relevant Member State of any securities may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

- to any legal entity which is a qualified investor as defined in the Prospectus Directive;
- to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the representatives for any such offer; or
- in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of securities shall result in a requirement for the publication by us or any underwriters of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer to the public" in relation to any securities in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and any securities to be offered so as to enable an investor to decide to purchase any securities, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression "Prospectus Directive" means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State), and includes any relevant implementing measure in the Relevant Member State, and the expression "2010 PD Amending Directive" means Directive 2010/73/EU.

United Kingdom. The Placement Agent has represented and agreed that it:

- has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000 (the FSMA) received by it in connection with the issue or sale of the securities in circumstances in which Section 21(1) of the FSMA does not apply to us; and
- has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the securities in, from or otherwise involving the United Kingdom.

Switzerland. The securities may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange (the SIX) or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the securities or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, or the securities have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of securities will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA, and the offer of securities has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes (CISA). Accordingly, no public distribution, offering or advertising, as defined in CISA, its implementing ordinances and notices, and no distribution to any non-qualified investor, as defined in CISA, its implementing ordinances and notices, shall be undertaken in or from Switzerland, and the investor protection afforded to acquirers of interests in collective investment schemes under CISA does not extend to acquirers of securities.

Australia. No placement document, prospectus, product disclosure statement or other disclosure document has been lodged with the Australian Securities and Investments Commission (ASIC), in relation to the offering.

This prospectus does not constitute a prospectus, product disclosure statement or other disclosure document under the Corporations Act 2001 (the Corporations Act) and does not purport to include the information required for a prospectus, product disclosure statement or other disclosure document under the Corporations Act.

Any offer in Australia of the securities may only be made to persons (the Exempt Investors) who are “sophisticated investors” (within the meaning of section 708(8) of the Corporations Act), “professional investors” (within the meaning of section 708(11) of the Corporations Act) or otherwise pursuant to one or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the securities without disclosure to investors under Chapter 6D of the Corporations Act.

The securities applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring securities must observe such Australian on-sale restrictions.

This prospectus contains general information only and does not take account of the investment objectives, financial situation or particular needs of any particular person. It does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this prospectus is appropriate to their needs, objectives and circumstances, and, if necessary, seek expert advice on those matters.

Notice to Prospective Investors in the Cayman Islands. No invitation, whether directly or indirectly, may be made to the public in the Cayman Islands to subscribe for our securities.

Taiwan. The securities have not been and will not be registered with the Financial Supervisory Commission of Taiwan pursuant to relevant securities laws and regulations and may not be sold, issued or offered within Taiwan through a public offering or in circumstances which constitutes an offer within the meaning of the Securities and Exchange Act of Taiwan that requires a registration or approval of the Financial Supervisory Commission of Taiwan. No person or entity in Taiwan has been authorized to offer, sell, give advice regarding or otherwise intermediate the offering and sale of the securities in Taiwan.

Notice to Prospective Investors in Hong Kong. The contents of this prospectus have not been reviewed by any regulatory authority in Hong Kong. You are advised to exercise caution in relation to the offer. If you are in any doubt about any of the contents of this prospectus, you should obtain independent professional advice. Please note that (i) our shares may not be offered or sold in Hong Kong, by means of this prospectus or any document other than to “professional investors” within the meaning of Part I of Schedule 1 of the Securities and Futures Ordinance (Cap.571, Laws of Hong Kong) (SFO) and any rules made thereunder, or in other circumstances which do not result in the document being a “prospectus” within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong) (CO) or which do not constitute an offer or invitation to the public for the purpose of the CO or the SFO, and (ii) no advertisement, invitation or document relating to our shares may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere) which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to the shares which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” within the meaning of the SFO and any rules made thereunder.

Notice to Prospective Investors in the People’s Republic of China. This prospectus may not be circulated or distributed in the People’s Republic of China (“PRC”) and the securities may not be offered or sold, and will not offer or sell to any person for re-offering or resale directly or indirectly to any resident of the PRC except pursuant to applicable laws, rules and regulations of the PRC. For the purpose of this paragraph only, the PRC does not include Taiwan and the special administrative regions of Hong Kong and Macau.

Israel. This document does not constitute a prospectus under the Israeli Securities Law, 5728-1968, or the Securities Law, and has not been filed with or approved by the Israel Securities Authority. In the State of Israel, this document is being distributed only to, and is directed only at, and any offer of the securities is directed only at, investors listed in the first addendum, or the Addendum, to the Israeli Securities Law, consisting primarily of joint investment in trust funds, provident funds, insurance companies, banks, portfolio managers, investment advisors, members of the Tel Aviv Stock Exchange, underwriters, venture capital funds, entities with equity in excess of NIS 50 million and “qualified individuals,” each as defined in the Addendum (as it may be amended from time to time), collectively referred to as qualified investors (in each case purchasing for their own account or, where permitted under the Addendum, for the accounts of their clients who are investors listed in the Addendum). Qualified investors will be required to submit written confirmation that they fall within the scope of the Addendum, are aware of the meaning of same and agree to it.

LEGAL MATTERS

The validity of the securities offered by this prospectus will be passed upon by Fennemore Craig, P.C., Reno, Nevada and Honigman LLP, Detroit, Michigan. is acting as counsel for the Placement Agent in this Offering.

EXPERTS

The consolidated financial statements of Zivo Bioscience, Inc. as of December 31, 2022 and 2021 and for the years then ended incorporated by reference in this Prospectus have been so incorporated in reliance on the report of BDO USA, LLP, (n/k/a BDO USA, P.C.) an independent registered public accounting firm, incorporated herein by reference given on the authority of said firm as experts in auditing and accounting. The report on the consolidated financial statements contains an explanatory paragraph regarding the Company’s ability to continue as a going concern.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to “incorporate by reference” in this prospectus much of the information we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information we incorporate by reference is an important part of this prospectus, and certain information that we will later file with the SEC will automatically update and supersede this information. Later information that we file with the SEC will automatically update and supersede the information that is either contained, or incorporated by reference, in this prospectus, and will be considered to be a part of this prospectus from the date those documents are filed.

We incorporate by reference into this prospectus and the registration statement of which this prospectus forms a part the information or documents listed below that we have filed with the SEC, and any future filings we will make with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act (other than information furnished under Item 2.02 or Item 7.01 of Form 8-K or Schedule 14A), including all filings filed pursuant to the Exchange Act after the date of the registration statement and prior to effectiveness of the registration statement, and following effectiveness of the registration statement and until the termination or completion of the offering of the securities covered by this prospectus:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2022, filed with the SEC on [March 14, 2023](#);
- our Quarterly Reports on Form 10-Q for the fiscal quarter ended March 31, 2023, filed with the SEC on [May 10, 2023](#), and for the quarter ended June 30, 2023, filed on [August 14, 2023](#);
- our Current Reports on Form 8-K filed with the SEC on [February 10, 2023](#), [April 5, 2023](#), [May 26, 2023](#), [June 16, 2023](#), [July 6, 2023](#), and [August 9, 2023](#); and
- the description of our Common Stock contained in our Registration Statement on Form 8-A initially filed on [May 27, 2021](#), including any amendment or report filed for the purpose of updating such description.

As a smaller reporting company, we also incorporate by reference into this prospectus all documents (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) that are filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (i) after the date of the initial filing of this prospectus, or (ii) after the date of this prospectus but prior to the termination of the offering. These documents include periodic reports, such as Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as well as proxy statements.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, without charge upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus but not delivered with the prospectus, including exhibits which are specifically incorporated by reference into such documents. Requests should be directed to:

Zivo Bioscience, Inc.
21 East Long Lake Road, Suite 100,
Bloomfield Hills, Michigan 48304
Telephone: (248) 452-9866

Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus will be deemed modified, superseded or replaced for purposes of this prospectus to the extent that a statement contained in this prospectus modifies, supersedes or replaces such statement. Any statement contained herein or in any document incorporated or deemed to be incorporated by reference shall be deemed to be modified or superseded for purposes of the registration statement of which this prospectus forms a part to the extent that a statement contained in any other subsequently filed document which also is or is deemed to be incorporated by reference modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed to constitute a part of the registration statement of which this prospectus forms a part, except as so modified or superseded.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act relating to the offering of these securities. The registration statement, including the attached exhibits and schedules, contains additional relevant information about us and the securities. This prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules thereto. For further information respecting our Company and the shares offered by this prospectus, you should refer to the registration statement, including the exhibits and schedules thereto.

We file annual, quarterly and other reports, proxy statements and other information with the SEC. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, including any amendments to those reports, and other information that we file with or furnish to the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act can be accessed free of charge through the Internet. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at <http://www.sec.gov>. You may access the registration statement of which this prospectus is a part at the SEC's Internet site.

We make available through our website, free of charge, copies of our SEC filings as soon as reasonably practicable after we electronically file or furnish them to the SEC on our Internet site, www.zivobioscience.com. We have not incorporated by reference into this prospectus the information on our website, and you should not consider it to be a part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.



Up to shares of Common Stock
Pre-Funded Warrants to Purchase up to shares of Common Stock
Common Warrants to Purchase up to shares of Common Stock
Up to shares of Common Stock Underlying the Pre-Funded Warrants
Up to shares of Common Stock Underlying the Common Warrants

PROSPECTUS

Sole Placement Agent

, 2023

PART II

INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth all expenses to be paid by the Registrant, other than Placement Agent fees, upon the completion of this Offering. All amounts shown are estimates except for the SEC registration fee and the FINRA filing fee.

SEC registration fee	\$	881.60
FINRA filing fee		*
Legal fees and expenses		*
Accounting fees and expenses		*
Printing and engraving expenses		*
Transfer agent and registrar fees		*
Miscellaneous expenses		*
Total	\$	*

* To be provided by amendment.

Item 14. Indemnification of Directors and Officers.

We are incorporated in Nevada. Section 78.7502(1) of the NRS, provides that a corporation may indemnify, pursuant to that statutory provision, any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that he is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him or her in connection with such action, suit or proceeding if he is not liable pursuant to NRS 78.138 or if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. NRS 78.138(7) provides that, subject to limited statutory exceptions and unless the articles of incorporation or an amendment thereto (in each case filed on or after October 1, 2003) provide for greater individual liability, a director or officer is not individually liable to the corporation or its stockholders or creditors for any damages as a result of any act or failure to act in his or her capacity as a director or officer unless the presumption established by NRS 78.138(3) has been rebutted and it is proven that (i) his or her act or failure to act constituted a breach of his or her fiduciary duties as a director or officer, and (ii) such breach involved intentional misconduct, fraud or a knowing violation of the law.

NRS 78.7502(2) permits a corporation to indemnify, pursuant to that statutory provision, any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that such person acted in any of the capacities set forth above against expenses, including amounts paid in settlement and attorneys' fees actually and reasonably incurred by him or her in connection with the defense or settlement of such action or suit if he acted under similar standards, except that no indemnification pursuant to NRS 78.7502 may be made in respect of any claim, issue or matter as to which such person shall have been adjudged by a court of competent jurisdiction, after any appeals taken therefrom, to be liable to the corporation or for amounts paid in settlement to the corporation, unless and only to the extent that the court in which such action or suit was brought or other court of competent jurisdiction determines that, in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses as the court deems proper. NRS 78.751(1) provides that a corporation shall indemnify any person who is a director, officer, employee or agent of the corporation, against expenses actually and reasonably incurred by the person in connection with defending an action (including, without limitation, attorney's fees), to the extent that the person is successful on the merits or otherwise in defense of any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, including, without limitation, an action by or in the right of the corporation, by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, or any claim, issue or matter in such action.

NRS 78.751 provides that the indemnification pursuant to NRS 78.7502 shall not be deemed exclusive or exclude any other rights to which the indemnified party may be entitled (except that indemnification may not be made to or on behalf of any director or officer finally adjudged by a court of competent jurisdiction, after exhaustion of any appeals taken therefrom, to be liable for intentional misconduct, fraud or a knowing violation of the law and such intentional misconduct, fraud or a knowing violation of the law was material to the cause of action) and that the indemnification shall continue as to directors, officers, employees or agents who have ceased to hold such positions, and to their heirs, executors and administrators. NRS 78.752 permits a corporation to purchase and maintain insurance on behalf of a director, officer, employee or agent of the corporation against any liability asserted against him or her or incurred by him or her in any such capacity or arising out of his or her status as such whether or not the corporation would have the power to indemnify him or her against such liabilities.

Bylaws

Our bylaws include express provisions providing for the indemnification of our directors and officers to the fullest extent permitted under the NRS, and the mandatory payment by us of expenses incurred by such persons in defending a civil or criminal action, suit or proceeding in advance of the final disposition of the action, suit or proceeding, upon receipt of an undertaking by or on behalf of the director or officer to repay the amount if it is ultimately determined that such person is not entitled to be indemnified by us. Our bylaws also permit us to purchase and maintain insurance or make other financial arrangements on behalf of any such person for certain liability and expenses, whether or not we have the authority to indemnify such person against such liability and expenses.

See also the undertakings set out in response to Item 17 herein.

Item 15. Recent Sales of Unregistered Securities.

The following is a summary of all securities that we have issued since January 1, 2020 without registration under the Securities Act of 1933, as amended (the “Securities Act”):

Common Stock:

Name	Form	Date	Common Stock Shares	Amount Received
Alex Oakes	Warrant exercise from Warrant transfer	13-Jan-20	12,500	\$100,000
Santa Marina Group	Conversion of loan payable and accrued interest	15-Jan-20	8,514	\$68,113
Apregan Family Trust	Conversion of loan payable and accrued interest	15-Jan-20	8,514	\$68,113
Thomas Cox	Warrant exercise (cashless)	17-Jan-20	1,286	-
Minish Joe Hede	Warrant exercise (cashless)	17-Jan-20	609	-
Cory Mann	Warrant exercise (cashless)	17-Jan-20	21,562	-
Timothy Eliot-Cone	Warrant exercise from Warrant transfer	27-Jan-20	6,250	\$50,000
Santa Marina Group	Warrant exercise	27-Jan-20	62	\$500
Apregan Family Trust	Warrant exercise	27-Jan-20	62	\$500
Nicholas Stone	Warrant exercise from Warrant transfer	11-Feb-20	6,250	\$50,000
Michael Gildea	Warrant exercise from Warrant transfer	18-Feb-20	12,500	\$100,000
Jascha Raadtgever	Warrant exercise from Warrant transfer	28-Feb-20	3,125	\$25,000
John Katoula	Purchase of Common Stock	09-Mar-20	1,953	\$25,000

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Javier Abreu	Warrant exercise from Warrant transfer	17-Mar-20	6,250	\$50,000
Nola Masterson	Warrant exercise (cashless)	08-Apr-20	3,977	-
Cory Mann	Warrant exercise	14-Apr-20	23,437	\$150,000
Michael Silverstein	Warrant exercise from Warrant transfer	08-May-20	625	\$4,400
Jeanye Irwin	Warrant exercise from Warrant transfer	11-May-20	6,250	\$50,000
Cory Mann	Warrant exercise (cashless)	26-Jun-20	193	-
Nola Masterson	Warrant exercise (cashless)	27-Aug-20	520	-
Christopher Maggiore	Warrant exercise	15-Sep-20	2,500	\$20,000
Christopher Maggiore	Warrant exercise (cashless)	15-Sep-20	46	-
Philip Rice	Warrant exercise (cashless)	15-Sep-20	176	
John Payne	Warrant exercise (cashless)	21-Sep-20	176	
Yun il yi	Purchase of Common Stock	07-Oct-20	12,500	\$100,000
Christopher Maggiore	Purchase of Common Stock	21-Oct-20	156	\$1,254
Alex Oakes	Purchase of Common Stock	22-Oct-20	5,000	\$40,000
Steve Kalabat	Purchase of Common Stock	22-Oct-20	1,875	\$15,000
Platform Securities Nominees Ltd	Purchase of Common Stock	23-Oct-20	7,500	\$60,000
Penelope Mountbatten	Purchase of Common Stock	27-Oct-20	6,250	\$50,000
Novtek International Ltd.	Warrant exercise from Warrant transfer		31,250	
Phil Rice	Warrant exercise (cashless)	20-Nov-20	291	
Fergus Wright	Purchase of Common Stock	08-Feb-21	2,678	\$30,000
Edward Yaldao	Purchase of Common Stock	08-Feb-21	4,464	\$50,000
Meldelson Family Investments, LLC.	Purchase of Common Stock	08-Feb-21	6,696	\$75,000
Jonny Creagh-Cohen,	Purchase of Common Stock	10-Feb-21	4,464	\$50,000
Nicholas Sibley	Purchase of Common Stock	23-Feb-21	24,038	\$250,000
Damian Sibley	Purchase of Common Stock	23-Feb-21	24,038	\$250,000
Isaya Sasiprapha	Purchase of Common Stock	23-Feb-21	2,172	\$24,329
Nutriquest LLC	Purchase of Common Stock	23-Feb-21	918	\$10,283
Voormolen	Purchase of Common Stock	23-Feb-21	2,232	\$25,000
Phil Rice	Warrant exercise (cashless)	17-Mar-21	287	
Derek Montgomery LLC	Purchase of Common Stock	25-Mar-21	3,125	\$35,000
James Byrne	Purchase of Common Stock	17-Mar-21	8,928	\$100,000
David Mendelson	Purchase of Common Stock	22-Mar-21	13,392	\$150,000
RBI Private Investments III	Purchase of Common Stock	24-Mar-21	8,928	\$100,000
KIM D	Purchase of Common Stock	8-Apr-21	1,785	\$20,000
KIM M	Purchase of Common Stock	8-Apr-21	1,785	\$20,000
KIM C	Purchase of Common Stock	8-Apr-21	2,678	\$30,000
KIM K	Purchase of Common Stock	8-Apr-21	892	\$10,000
KIM W	Purchase of Common Stock	8-Apr-21	4,464	\$50,000
LEE Y	Purchase of Common Stock	8-Apr-21	892	\$10,000
CHOI M	Purchase of Common Stock	8-Apr-21	892	\$10,000
Eliot-Cohen	Purchase of Common Stock	13-Apr-21	4,807	\$50,000
Hanna	Purchase of Common Stock	14-Apr-21	8,928	\$100,000
Luz Investments	Purchase of Common Stock	22-Apr-21	4,464	\$50,000
Sridharan	Purchase of Common Stock	23-Apr-21	6,696	\$75,000
River Integrity Investments LLC	Warrant exercise (cashless)	16-Apr-21	299	
Phil Rice	Warrant exercise (cashless)	4-May-21	234	
Cypress Cove	Warrant exercise (cashless)	30-Apr-21	53,828	
Corprominence LLC	Share issuance	12-Aug-21	5,000	N/A
Corprominence LLC	Share issuance	01-Nov-21	2,500	N/A

Warrant Issuances:

Name	Date	Exercise Price	Shares Underlying Warrant	Consideration
Ted Kennedy	04/13/20	\$9.60	3,750	Per Co-Development Participation Agreement
Pok Chang	04/13/20	\$9.60	5,625	Per Co-Development Participation Agreement
Young Chang	04/13/20	\$9.60	5,625	Per Co-Development Participation Agreement
Johnny Karmo	05/07/20	\$9.60	9,375	Per Co-Development Participation Agreement
Jeffery Mendelson	06/01/20	\$8.80	10,312	Per Co-Development Participation Agreement
Sarah B Kornblum Living Trust	06/03/20	\$8.80	8,437	Per Co-Development Participation Agreement
David Richmond	07/08/20	\$9.60	3,750	Per Co-Development Participation Agreement
Veyo Partners LLC	08/17/20	\$9.60	1,875	Service as Consultant
Norman Yaldao	08/24/20	\$9.60	4,687	Per Co-Development Participation Agreement
Chitayat-Mahboubian Family Trust	09/14/20	\$9.60	5,625	Per Co-Development Participation Agreement
Emanuel Mansour	09/15/20	\$9.60	1,875	Per Co-Development Participation Agreement
John Mansour	09/15/20	\$9.60	1,875	Per Co-Development Participation Agreement
Veyo Partners LLC	09/18/20	\$9.60	1,875	Service as Consultant
Veyo Partners LLC	09/18/20	\$9.60	1,875	Service as Consultant
Perry Johnson	09/25/20	\$9.60	5,625	Per Co-Development Participation Agreement
John Payne	09/30/20	\$9.60	125,000	Service on Board of Directors
Nola Masterson	09/30/20	\$9.60	6,250	Service on Board of Directors
Robert Rondeau	09/30/20	\$9.60	6,250	Service on Board of Directors
Chris Maggiore	09/30/20	\$9.60	6,250	Service on Board of Directors
HEP Investments	10/04/20	\$9.60	3,750	Per Co-Development Participation Agreement
Sea Green	10/04/20	\$9.60	9,375	Per Co-Development Participation Agreement
Mark Strome	10/08/20	\$9.60	18,750	Per Co-Development Participation Agreement
J Abreu Investments LLC	10/09/20	\$9.60	1,875	Per Co-Development Participation Agreement
Julian Leese	11/24/20	\$8.00	37,500	Service as Consultant
Julian Leese	11/24/20	\$9.60	6,250	Service as Consultant
Pat Kennedy	12/16/20	\$9.60	375	Per Co-Development Participation Agreement
Travis Heidt	01/22/21	\$11.20	1,500	Per Co-Development Participation Agreement
HEP Investments	01/25/21	\$11.20	1,500	Per Co-Development Participation Agreement
Mendelson Family Investments, LLC	01/27/21	\$11.20	937	Per Co-Development Participation Agreement
MKY FTS Sales LLC	05/14/21	\$10.40	1,687	Per Co-Development Participation Agreement
Armistice Capital	07/05/23	\$2.80	1,498,130	Private Placement
Armistice Capital	07/05/23	\$2.80	1,498,130	Private Placement

None of the foregoing transactions involved any underwriters, underwriting discounts or commissions, or any public offering. We believe the offers, sales and issuances of the above securities were exempt from registration under the Securities Act by virtue of Section 4(a)(2) of the Securities Act because the issuance of securities to the recipients did not involve a public offering, or in reliance on Rule 701 because the transactions were pursuant to compensatory benefit plans or contracts relating to compensation as provided under such rule. The recipients of the securities in each of these transactions represented their intentions to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were placed upon the stock certificates issued in these transactions. All recipients had adequate access, through their relationships with us, to information about us. The sales of these securities were made without any general solicitation or advertising. The recipients of the securities in each of these transactions represented their intentions to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were placed upon the stock certificates issued in these transactions. All recipients had adequate access, through their relationships with us, to information about Zivo Bioscience, Inc. ("Zivo").

Item 16. Exhibits and Financial Statement Schedules.

(a) See the Exhibit Index on the page immediately preceding the signature page hereto for a list of exhibits filed as part of this registration statement on Form S-1, which Exhibit Index is incorporated herein by reference.

Item 17. Undertakings.

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

- (i) To include any prospectus required by section 10(a)(3) of the Securities Act;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

provided, however, that, paragraphs (i), (ii) and (iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in this registration statement or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
 - (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the Offering.
 - (4) That, for the purpose of determining liability under the Securities Act to any purchaser, if the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. *Provided, however,* that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.
 - (5) That for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
 - (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the Offering required to be filed pursuant to Rule 424;
 - (ii) Any free writing prospectus relating to the Offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
 - (iii) The portion of any other free writing prospectus relating to the Offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
 - (iv) Any other communication that is an offer in the Offering made by the undersigned registrant to the purchaser.
 - (2) for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (h) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.
- (i) The undersigned registrant hereby undertakes that:
- (1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
 - (2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

EXHIBIT INDEX

(a) Exhibits.

EXHIBIT NUMBER	DESCRIPTION OF DOCUMENT
3.1	Articles of Incorporation of the Registrant as amended (previously filed as Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q filed on August 22, 2011)
3.2	Certificate of Amendment to Articles of Incorporation dated October 16, 2014 (previously filed as Exhibit 3.12 to the Registrant's Quarterly Report on Form 10-Q filed on November 14, 2014)
3.3	Certificate to Amendment dated May 28, 2021 (previously filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on June 2, 2021)
3.4	Amended and Restated By-laws of the Registrant (previously filed as Exhibit 3.2 to the Registrant's Quarterly Report on Form 10-Q filed on May 17, 2010)
3.5	Second Amended and Restated By-laws of the Registrant (previously Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on July 7, 2022)
4.1	Form of Series A Common Warrant (previously filed as Exhibit 4.1 to the Registrant's Current Report on Form 8-K, filed on July 6, 2023)
4.2	Form of Series B Common Warrant (previously filed as Exhibit 4.2 to the Registrant's Current Report on Form 8-K, filed on July 6, 2023)
4.3	Form of Pre-Funded Warrant (previously filed as Exhibit 4.3 to the Registrant's Current Report on Form 8-K, filed on July 6, 2023)
4.4**	Form of Common Stock Purchase Warrant
4.5**	Form of Pre-Funded Warrant
5.1*	Opinion of Fennemore Craig, P.C.
5.2*	Opinion of Honigman LLP
10.1+	2019 Omnibus Long-Term Incentive Plan (previously filed as Exhibit 10.34 to the Registrant's Annual Report on Form 10-K filed on March 26, 2020)
10.1.1+	Stock Option Grant Notice for 2019 Omnibus Long-Term Incentive Plan (previously filed as Exhibit 10.37 to the Registrant's Annual Report on Form 10-K filed on March 26, 2020)
10.2+	2021 Equity Incentive Plan (previously filed as Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on February 16, 2022)
10.3	Supply Chain Agreement with Aegle Partners 2 LLC, dated February 27, 2019 (previously filed as Exhibit 10.38 to the Registrant's Registration Statement on Form S-1/A filed on May 26, 2021)

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<u>10.3.1</u>	<u>First Amendment to Supply Chain Agreement with Aegle Partners 2 LLC, dated September 14, 2019 (previously filed as Exhibit 10.39 to the Registrant's Registration Statement on Form S-1/A filed on May 26, 2021)</u>
<u>10.3.2</u>	<u>Second Amendment to Supply Chain Agreement with Aegle Partners 2 LLC, dated November 24, 2020 (previously filed as Exhibit 10.40 to the Registrant's Registration Statement on Form S-1/A filed on May 26, 2021)</u>
<u>10.4+</u>	<u>Employment Agreement, dated as of February 15, 2022, by and between John Payne and the Company (previously filed as Exhibit 10.1 of the Registrant's Current Report on Form 8-K filed on February 16, 2022)</u>
<u>10.4.1+</u>	<u>Amendment No. 1 to Employment Agreement, dated as of December 16, 2022, by and between John Payne and the Company (previously filed as Exhibit 10.4.1 to the Registrants Registration Statement on Form S-1 filed on March 22, 2023)</u>
<u>10.5+</u>	<u>Letter Agreement between Keith Marchiando and Zivo Bioscience, Inc., dated January 1, 2021 (previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on January 7, 2021)</u>
<u>10.6</u>	<u>Form of Paulson Convertible Note (previously filed as Exhibit 10.45 to the Registrant's Registration Statement on Form S-1/A filed on May 26, 2021)</u>
<u>10.7</u>	<u>Form of Shapiro Convertible Note (previously filed as Exhibit 10.46 to the Registrant's Registration Statement on Form S-1/A filed on May 26, 2021)</u>
<u>10.8</u>	<u>Zivo Bioscience, Inc. Non-Employee Director Compensation Policy (previously filed as Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 15, 2021)</u>

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10.9	Stock Option Grant Notice and Agreement to Zivo Bioscience, Inc. 2021 Equity Incentive Plan (incorporated by reference to Exhibit 10.2 filed with the Securities and Exchange Commission on November 15, 2021)
10.10	Form of Securities Purchase Agreement, dated June 20, 2023 (previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K, filed on July 6, 2023)
10.11**	Form of Securities Purchase Agreement
10.12**	Form of Lock-Up Agreement
10.13**	Form of Placement Agency Agreement
21.1	Subsidiaries of the Registrant (previously filed as Exhibit 21.1 to the Registrant Annual Report on Form 10-K on March 14, 2023)
23.1*	Consent of BDO USA, P.C.
23.2*	Consent of Fennemore Craig, P.C. (included in Exhibit 5.1 hereto)
23.3*	Consent of Honigman, LLP (included in Exhibit 5.2 hereto)
24.1*	Power of Attorney (included on signature page hereto)
107*	Filing Fee Table
101.INS*	Inline XBRL Instance Document
101.SCH*	Inline XBRL Taxonomy Extension Schema Document
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document
104*	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

* Filed herewith.

** To be filed by amendment.

+ Indicates a management contract or compensatory plan.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Bloomfield Hills, State of Michigan, on October 4, 2023.

ZIVO BIOSCIENCE, INC.

By: /s/ Keith Marchiando
Keith Marchiando
Chief Financial Officer, and Secretary

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that the undersigned officers and directors of Zivo Bioscience, Inc., a Nevada corporation, do hereby constitute and appoint each of Keith Marchiando and John B. Payne as his or her true and lawful attorney-in-fact and agent, with full power of substitution and re-substitution, for him and in his name, place, and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments, exhibits thereto and other documents in connection therewith) to this Registration Statement and any subsequent registration statement filed by the registrant pursuant to Rule 462(b) of the Securities Act of 1933, as amended, which relates to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement on Form S-1 has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ John B. Payne</u> John B. Payne	President, Chief Executive Officer, and Director (Principal Executive Officer)	October 4, 2023
<u>/s/ Keith Marchiando</u> Keith Marchiando	Chief Financial Officer, and Secretary (Principal Accounting and Financial Officer)	October 4, 2023
<u>/s/ Christopher Maggiore</u> Christopher Maggiore	Director	October 4, 2023
<u>/s/ Nola Masterson</u> Nola Masterson	Director	October 4, 2023
<u>/s/ Alison A. Cornell</u> Alison A. Cornell	Director	October 4, 2023

FENNEMORE.

7800 Rancharrah Parkway
Reno, NV 89511
PH (775) 788-2200 | FX (775) 786-1177
fennemorecraig.com

October 4, 2023

Zivo Bioscience, Inc.
21 East Long Lake Road, Suite 100
Bloomfield Hills, Michigan 48304

Re: Registration Statement on Form S-1 for Zivo Bioscience, Inc.

Ladies and Gentlemen:

We are acting as special Nevada counsel for Zivo Bioscience, Inc., a Nevada corporation (the “Company”), in connection with the registration of additional securities of the Company under a Registration Statement on Form S-1, defined below, under the Securities Act of 1933, as amended (the “Act”). The Registration Statement relates to the proposed issuance (collectively, the “Offering”) of up to \$8,000,000 in the aggregate sale price of (i) shares (the offered shares, the “Shares”) of common stock, par value \$0.001 per share (“Common Stock”), (ii) for some purchasers, in lieu of Shares, pre-funded warrants to purchase Common Stock (the “Pre-Funded Warrants”), and (iii) immediately exercisable warrants to purchase Common Stock (the “Common Warrants” and collectively with the Pre-Funded Warrants, the “Warrants.” The shares of Common Stock underlying the Warrants are referred to herein as the “Warrant Shares.”

We have examined originals or copies of each of the documents listed below:

1. The Articles of Incorporation of the Company, as amended, as certified by an officer of the Company;
 2. The Second Amended and Restated Bylaws of the Company, as certified by an officer of the Company;
 3. The form of the Securities Purchase Agreement (the “SPA”) and the form of Placement Agency Agreement (the “PAA”);
 4. The form of the Common Warrants;
 5. The form of the Pre-Funded Warrants;
 6. Resolutions of the Board of Directors of the Company (the “Board”), dated as of October 4, 2023, relating to approval of the SPA and the PAA and the registration and issuance of the Common Stock, the Warrants, and the Warrant Shares as certified by an officer of the Company (collectively, the “Resolutions”); and
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FENNEMORE.

Zivo Bioscience, Inc.

Re: Registration Statement on Form S-1 for Zivo Bioscience, Inc.

October 4, 2023

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7. The Registration Statement on Form S-1 to be filed by the Company with the Securities and Exchange Commission (“SEC”) on October 4, 2023 (the “Registration Statement”).

We have examined originals or copies of such other corporate records, certificates of corporate officers and public officials and other agreements and documents as we have deemed necessary or advisable for purposes of this opinion letter. We have relied upon the certificates of all public officials and corporate officers with respect to the accuracy of all factual matters contained therein.

Without limiting the generality of the foregoing, in our examination, we have, with your permission, assumed without independent verification, that (i) all documents submitted to us as originals are authentic, the signatures on all documents that we examined are genuine, and all documents submitted to us as certified, conformed, photostatic, electronic or facsimile copies conform to the original document; and (ii) all corporate records made available to us by the Company and all public records we have reviewed are accurate and complete.

We note that the Board has reserved, and assume that the Company will continue to maintain reserved prior to the issuance of any Shares or Warrant Shares, a sufficient number of its duly authorized, but unissued, shares of Common Stock as is necessary to provide for the issuance of the Shares and the Warrant Shares. We further assume that, prior to issuance of any of the securities subject to this opinion letter, the Company will have entered into the SPA and the PAA and such agreements will be in full force and effect.

Based on the foregoing, and subject to the qualifications, exceptions, and limitations set forth herein it is our opinion that:

1. The issuance of the Shares has been duly authorized by the Company and, when issued and paid for in accordance with the terms of the Registration Statement, the SPA, the PAA and the Resolutions, and duly adopted resolutions of the Board or a duly constituted and authorized committee thereof, setting the price per Share, the Shares will be validly issued, fully paid and nonassessable.

2. The issuance of the Common Warrants and the Common Stock to be issued thereunder has been duly authorized by the Company and, when issued and paid for in accordance with the terms of the Registration Statement, the SPA, the PAA and duly adopted Resolutions of the Board or a duly constituted and authorized committee thereof, setting the exercise price (a) the Common Warrants will be validly issued, and (b) the Common Stock to be issued thereunder, when issued in accordance with a Common Warrant, will be validly issued, fully paid and nonassessable.

FENNEMORE.

Re: Registration Statement on Form S-1 for Zivo Bioscience, Inc.
October 4, 2023
Page 3

3. Issuance of the Pre-Funded Warrants has been duly authorized by the Company and, when issued and paid for in accordance with the SPA, the PAA and duly adopted resolutions of the Board or a duly constituted and authorized committee thereof, setting the price per Pre-Funded Warrant (a) the Pre-Funded Warrants will be validly issued, and (b) the Common Stock to be issued thereunder, when issued in accordance with a Pre-Funded Warrant, will be validly issued, fully paid and nonassessable.

We express no opinion as to the laws of any jurisdiction other than the laws of the State of Nevada. The opinions expressed above concern only the effect of the laws (excluding the principles of conflict of laws) of the State of Nevada currently in effect. We assume no obligation to supplement this opinion if any applicable laws change after the date of this opinion, or if we become aware of any facts that might change the opinions expressed above after the date of this opinion.

This opinion is issued in the State of Nevada. By issuing this opinion, Fennemore Craig, P.C. (i) shall not be deemed to be transacting business in any other state or jurisdiction other than the State of Nevada and (ii) does not consent to the jurisdiction of any state other than the State of Nevada. Any claim or cause of action arising out of the opinions expressed herein must be brought in the State of Nevada. Your acceptance of this opinion shall constitute your agreement to the foregoing.

We consent to your filing of this opinion as an exhibit to the Registration Statement and further consent to the use of our name wherever appearing in the Registration Statement. In giving these consents, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Act, the rules and regulations of the Securities and Exchange Commission promulgated thereunder, or Item 509 of Regulation S-K. The opinions expressed in this letter are rendered as of the date hereof, and we express no opinion as to circumstances or events that may occur subsequent to such date.

FENNEMORE.

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Reno, NV 89511
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fennemorecraig.com

Our opinion is expressly limited to the matters set forth above and we render no opinion, whether by implication or otherwise, as to any other matters relating to the Company, the Common Stock, the Common Warrants, the Pre-Funded Warrants, or the Warrant Shares.

Very truly yours,

/s/ Fennemore Craig, P.C.

FENNEMORE CRAIG, P.C.

CETE/lpeek



October 4, 2023

Zivo Bioscience, Inc.
21 E. Long Lake Road, Suite 100
Bloomfield Hills, MI 48304

Re: Registration Statement on Form S-1

Ladies and Gentlemen:

We have acted as counsel to Zivo Bioscience, Inc., a Nevada corporation (the “**Company**”), in connection with preparing and filing with the Securities and Exchange Commission (the “**Commission**”) pursuant to the Securities Act of 1933, as amended (the “**Securities Act**”), of a Registration Statement on Form S-1 (as amended and supplemented from time to time, the “**Registration Statement**”) relating to the offer and sale by the Company of up to \$8,000,000 in the aggregate sale price of (i) shares (“**Shares**”) of the Company’s common stock, par value \$0.001 per share (“**Common Stock**”), (ii) for some purchasers, in lieu of Shares, pre-funded warrants, each to purchase one share of Common Stock (the “**Pre-Funded Warrants**”), and (iii) immediately exercisable warrants, each to purchase one share of Common Stock (the “**Common Warrants**” and collectively with the Pre-Funded Warrants, the “**Warrants**”), and (iv) the shares of Common Stock underlying the Warrants (the “**Warrant Shares**,” and together with the Shares and the Warrants, the “**Securities**”) issuable upon exercise of the Warrants. The Securities are to be offered and sold to the public as described in the Registration Statement and pursuant to the placement agency agreement referred to in the Registration Statement between the Company and the placement agent as referred to in the Registration Statement and named on the signature page thereto (the “**Placement Agency Agreement**”) and pursuant to a securities purchase agreement referred to in the Registration Statement by and among the Company, the placement named on the signature page thereto and the purchasers signatory thereto (the “**Securities Purchase Agreement**”).

We have assumed that the sale of the Shares, the Warrant Shares and the Warrants and the exercise price of the Warrants will be at a price established by the Pricing Committee of the Board of Directors of the Company at a price no less than the minimum price authorized by the Board of Directors as of the date hereof, in accordance with the Nevada Private Corporations law. We have also assumed that (i) the Shares, when offered, sold, issued and delivered by the Company as described in the Registration Statement and the related prospectus and in accordance with, and in the manner set forth in, the Placement Agency Agreement and the Securities Purchase Agreement (including, without limitation, the payment in full of all applicable consideration therefor), against payment therefore, will be validly issued, fully paid and non-assessable and (ii) the Warrant Shares, when they and the Warrants are offered, sold, issued and delivered by the Company as described in the Registration Statement and the related prospectus and in accordance with, and in the manner set forth in, the Placement Agency Agreement, the Securities Purchase Agreement, and the Warrants (including, without limitation, the payment in full of all applicable consideration therefor, including the exercise price, and issuance and delivery to the persons exercising the Warrants of certificates for the underlying Warrant Shares in the form approved by the Company’s Board of Directors), against payment therefore, will be validly issued, fully paid and non-assessable. With respect to the Warrant Shares, we express no opinion to the extent that, notwithstanding the Company’s current reservation of shares of Common Stock, future issuances of securities of the Company, including the Warrant Shares, and/or anti-dilution adjustments to outstanding securities of the Company, including the Warrants, may cause the Warrants to be exercisable for more shares of Common Stock than the number that then remain authorized but unissued and available for issuance.

Honigman LLP 2290 First National Building 660 Woodward Avenue Detroit, Michigan 48226-3506

We have also assumed that the Company (a) is a corporation validly existing and in good standing under the laws of the State of Nevada, and (b) has the requisite corporate power and authority to execute and deliver, and to perform its obligations under, the Placement Agency Agreement, the Securities Purchase Agreement and the Warrants. We have also assumed that (x) the execution, delivery and performance by the Company of the Placement Agency Agreement, the Securities Purchase Agreement and the Warrants (i) have been duly authorized by all necessary corporate action by the Company, and (ii) do not violate the Articles of Incorporation, as amended, or the Second Amended and Restated Bylaws of the Company or any applicable Nevada law, and (y) the Placement Agency Agreement, the Securities Purchase Agreement and the Warrants have been duly executed and delivered by the Company to the extent such execution and delivery is governed by Nevada law.

We note that various matters concerning the Company and Nevada law are addressed in the opinion letter of Fennemore Craig, P.C., separately filed, and we express no opinion with respect to those matters.

For the purpose of rendering this opinion, we examined originals or copies of such documents as we deemed relevant. In conducting our examination, we assumed the genuineness of all signatures, the correctness of all certificates, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted as copies, and the authenticity of the originals of such copies, and the accuracy and completeness of all records made available to us by the Company.

Our opinion is limited solely to matters set forth herein. The law covered by the opinion expressed herein is limited to the internal laws of the State of New York as it relates to the Warrants.

Based upon our examination of such documents and other matters as we deem relevant, we are of the opinion that the Warrants, when offered, sold, issued, duly executed and delivered by the Company in accordance with and in the manner described in the Registration Statement, the Placement Agency Agreement, the Securities Purchase Agreement and the Warrants, will constitute binding obligations of the Company.

We hereby consent to the filing of this opinion as Exhibit 5.2 to the Registration Statement and to the reference to our firm under the caption "Legal Matters" in the Registration Statement. In giving such consent, we do not admit that we are within the category of persons whose consent is required by Section 7 of the Securities Act or the rules and regulations promulgated thereunder by the Commission. This opinion is expressed as of the date hereof, and we disclaim any undertaking to advise you of any subsequent changes in the facts stated or assumed herein or of any subsequent changes in applicable law.

Very truly yours,

/s/ Honigman LLP
Honigman LLP

DJK/IP/AJB/RZK/GSWA

Honigman LLP 2290 First National Building 660 Woodward Avenue Detroit, Michigan 48226-3506

Consent of Independent Registered Public Accounting Firm

Zivo Bioscience Inc. and Subsidiaries
Bloomfield Hills, Michigan

We hereby consent to the incorporation by reference in the Prospectus constituting a part of this Registration Statement of our report dated March 14, 2023, relating to the consolidated financial statements of Zivo Bioscience Inc. and subsidiaries appearing in the Company's Annual Report on Form 10-K for the year ended December 31, 2022. Our report contains an explanatory paragraph regarding the Company's ability to continue as a going concern.

We also consent to the reference to us under the caption "Experts" in the Prospectus.

/s/ BDO USA, P.C.

Troy, Michigan
October 4, 2023

Calculation of Filing Fee Table

FORM S-1
(Form Type)

Zivo Bioscience, Inc.
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

	Security Type	Security Class Title	Fee Calculation Rate	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price (1)	Fee Rate	Amount of Registration Fee
Fees to be paid	Equity	Common Stock, par value \$0.001 per share ⁽²⁾⁽³⁾	457(o)	-	-	\$ 8,000,000	0.00014760	\$
Fees to be Paid	Equity	Common Warrants ⁽⁴⁾	457(g)	-	-	\$	-	-
Fees to be Paid	Equity	Shares of Common Stock issuable upon exercise of Common Warrants ⁽²⁾	457(o)	-	-	\$ 8,000,000	0.00014760	\$
Fees to be Paid	Equity	Pre-Funded Warrants ⁽⁴⁾⁽³⁾	457(g)	-	-	-	-	-
Fees to be Paid	Equity	Common Stock issuable upon exercise of Pre-Funded Warrants ⁽²⁾⁽³⁾	457(o)	-	-	-	0.00014760	-
		Total Offering Amount				\$ 16,000,000.00		\$ 2,361.60
		Total Fees Previously Paid						-
		Total Fee Offsets						-
		Net Fee Due						\$ 2,361.60

- (1) Estimated solely for the purpose of calculating the registration fee pursuant Rule 457(o) under the Securities Act of 1933, as amended (the "Securities Act").
- (2) Pursuant to Rule 416(a) under the Securities Act, this registration statement shall also cover an indeterminate number of shares that may be issued and resold resulting from stock splits, stock dividends or similar transactions.
- (3) The proposed maximum aggregate offering price of the common stock will be reduced on a dollar-for-dollar basis based on the offering price of any pre-funded warrants issued in the offering, and the proposed maximum aggregate offering price of the pre-funded warrants to be issued in the offering will be reduced on a dollar-for-dollar basis based on the offering price of any common stock issued in the offering. Accordingly, the proposed maximum aggregate offering price of the common stock, pre-funded warrants and Common Warrants (including the common stock issuable upon exercise of the pre-funded warrants), if any, is \$8,000,000.
- (4) No fee pursuant to Rule 457(g) of the Securities Act.