

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

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of The Securities Exchange Act of 1934

Date of Report (Date of Earliest Event Reported): May 29, 2018

ZIVO BIOSCIENCE, INC.

(Exact name of registrant as specified in its charter)

<u>Nevada</u>	<u>000-30415</u>	<u>87-0699977</u>
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)

2804 Orchard Lake Road, Suite 202, Keego Harbor, Michigan 48320
(Address of principal executive offices and zip code)

(248) 452-9866
(Registrant's telephone number including area code)

Not applicable
(Registrant's former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging Growth Company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 8.01 Other Events

On May 29, 2018 the Company released the President's Report To Shareholders dated May 29, 2018, a copy of which is filed herewith as Exhibit 99.1.

Item 9.01 Financial Statements and Exhibits

Exhibit [99.1](#) – President's Report to Shareholders dated May 29, 2018.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

ZIVO BIOSCIENCE, INC.

By: /s/ Philip M. Rice II
Name: Philip M. Rice, II
Title: Chief Financial Officer

Dated: May 29, 2018

Exhibit 99.1

ZIVOBioscience

Mid-Year Shareholder Report – May 29, 2018

This report is prepared by ZIVO Bioscience management as a mid-year update to activities and events described in the last shareholder meeting address of November 2017.

NOTICE:

Before proceeding further, this report and any Exhibits to it contain forward-looking statements that involve risks and uncertainties. These statements reflect the Company's future plans, objectives, expectations and intentions, and the assumptions underlying or relating to any of these statements. These statements may be identified by the use of the words "anticipate," "expect," "estimate," "intend," "believe," and similar expressions. The Company's actual results could differ materially from those discussed in these statements. Factors that could contribute to these differences include, but are not limited to, those discussed in this report.

REPORT:

ZIVO Bioscience, Inc. (OTCQB:ZIVO) holds significant intellectual property in the form of bioactive compounds, patented applications and processes, optimized algal strains, and nutritional products derived from a proprietary algal biomass, that can find their way into food, feed, supplements and even therapeutics.

In the 6 months since our last shareholder meeting in November of 2017, the Company has again focused on capital funding activities for FDA compliance, outsourcing of biomass production and research involving the algal biomass as well as high-value therapeutic candidates that may have originated from the biomass or the supernatant in which the algae live. Last year saw significant funding, which allowed ZIVO to move simultaneously on the food and pharma fronts.

The Company pressed forward with biomass cultivation at the Synthetic Genomics, Inc. facility in southern California's Imperial Valley agricultural region despite early heat waves and an unseasonably hot summer, only to be followed by early cold fronts that hampered production yields. By late January 2018, Synthetic Genomics (SGI) was able to amass roughly 17 tons of biomass paste but reprocessing and drying are still required to turn that frozen biomass paste into several tons of useful, compliant product. We're engaged in renegotiating SGI's scope of work and deliverables, so that SGI is no longer producing biomass in bulk, but rather inoculum, or starter culture, for other growers outside the US. Further, we've tailed off the strain development work conducted at SGI and we are considering other potential resources. The genetic sequencing of our proprietary strain of Klebsormidium was conducted by SGI, as well. We are now approaching independent experts to review and validate that work.

In late 2016, we unveiled the food and feed side of the value creation strategy, positioning the algal biomass itself as a viable source of plant protein, vitamins, non-starch polysaccharides and micronutrients. A tradename has been adopted - KALGAE™ -- to simplify the nearly unpronounceable scientific classification. The drive to bring the algal biomass to market has become a very large and complex undertaking in its own right, as the Company simultaneously moves forward with FDA compliance, cultivation process development, cGMP and QC standards, an overseas recruitment drive for algae growers and the buildout of a global supply chain to furnish fully-compliant dried, powdered algal biomass to markets and customers in the US and EU for applications ranging from vegan shakes and treats to aquaculture feed ingredients.

The Company recently announced letters of intent with a Taiwanese producer and an Indian producer. Both have been supplied with inoculum (starter culture) and are growing inoculum for their own uses and to distribute in-country to other producers nearby. It is our intent to accelerate the ramp-up of production with multiple growers in proximity to one another while providing technical and operational support from the US.

As disclosed at the November 2017 shareholder meeting, the former Director of R&D at Hawaii-based algae producer Cellana was retained to identify, vet and engage established algae producers around the world, initially focusing on India, China and parts of Southeast Asia. Since that time, she has also refined the technical information package and offtake agreement that is offered to prospective producers. The exclusive offtake agreement commits them to grow at the scale we demand and meet quality and safety standards set forth in the agreement. At this point, approximately 84 growers in 3 countries have been identified and/or contacted.

ZIVO principals visited mainland China in December 2017 and March 2018 to meet with growers in Inner Mongolia and Shanghai. The Company is now fully immersed in product registration, a Chinese patent filing and importation compliance. A mainland China law firm based in Beijing has been retained to streamline governmental reporting and compliance. A similar process has been simultaneously launched in Taiwan.

ZIVO licensee and marketing partner NutriQuest, which operates in China, has been instrumental in advance marketing of ZIVO products within China itself, and enlisting resources to hasten governmental approvals.

With respect to compliance and GRAS (Generally Recognized as Safe) determination, the Burdock Group has been managing various aspects of the compliance process, which had been hampered in the latter half of 2017 with the lack of biomass samples for a variety of tests and protocol development. Further, stability testing at Covance was delayed in late summer and fall of 2017 because of methodology issues that emerged over time and required a restart of the long-term stability testing process. Product stability testing is a requirement for GRAS determination.

On a parallel track, safety testing of ZIVO algae for human use was successfully wrapped up in late 2017. The safety testing follow-up, analysis and report-writing was not completed until mid-April 2018. Once again, the 90-day toxicology safety test is integral to GRAS determination.

As of this shareholder report, the GRAS manuscript required for scientific panel submission has been drafted by the Burdock Group, reviewed by ZIVO scientific staff, and submitted to a peer-reviewed toxicology journal for pre-publication review.

A nearly-identical track has been developed for poultry GRAS certification that follows a few steps behind the human GRAS certification process. Tox Strategies, based in Austin, TX, was engaged to manage poultry certification, which derives much of its scientific and safety data from the human compliance work, but adds specie-specific testing and reporting, as well scientific review by poultry nutrition and health experts. The GRAS determination is expected at roughly the same time as ZIVO poultry feed ingredient becomes available for sale in the US later this year.

In the background, ZIVO R&D Director Dr. Amy Steffek has been managing dozens of simultaneous safety and quality tests conducted at a half-dozen laboratories and contract research organizations to make sure that ZIVO biomass samples for human and animal safety/compliance trials are pure, safe and free of adulterating substances. This level of testing is required for every single batch of samples produced by ZIVO cultivation resources such as SGI or the Arizona Center for Algae Technology & Innovation (AzCATI) until such time as the ZIVO strain is fully certified.

In May 2017, ZIVO had contracted Algatek, a U.K. enterprise operating a facility in Asturias, Spain to produce ZIVO algal biomass in proprietary photobioreactors. The process did not yield the desired output or price point. However, ZIVO algae was tested by Algatek as an aquaculture feed ingredient and found to be commercially viable. Recently, Algatek has functioned as an inoculum supplier, sending viable starter culture to Indian algae producer Wellisen Nutraceuticals in order to commence scale-up of ZIVO algae in that country.

In April 2017, we entered into a licensing agreement with animal health innovator NutriQuest, which operates in 20 countries. As reported earlier, the poultry studies specifically targeting broilers were very successful in boosting productivity across the board by making the birds healthier and less susceptible to problems common on chicken farms. A much larger econometric pen study is in its last phase, and reports are expected in late May or early June 2018. For those unfamiliar with the poultry industry, the annual amount of poultry feed consumed in the US alone exceeds 61 billion pounds, according to industry analysts. In the global poultry feed market, phytogetic ingredients are the fastest growing segment, currently generating about \$780 million in sales annually, and growing at 8% annually.

We continue to develop and test processes to deliver a stable, healthful and palatable food/feed ingredient for a wide range of applications.

On the therapeutic side, we've conducted various experiments and studies over the past few years to support claims for healthy immune response in humans and animals, joint health and other such benefits. Our research has focused primarily on bovine mastitis, an inflammation of the udder that impacts milk production and is responsible for nearly \$3 billion in annual losses to US dairy producers alone, and billions more worldwide. In fact, the US dairy herd represents less than 3% of the world's 244 million dairy cows.

The bovine mastitis research has been moving toward its final phase of validation for well over 18 months, while analytics continue in step. The validation model has been reviewed by our collaboration partner, and last fall, both parties agreed to narrow the final validation work to a single mode of administration aimed at specific infective pathogens, details of which remain confidential due to strategic and competitive imperatives. Since last year's shareholder meetings, two such validation pilot experiments have been conducted, with two more scheduled to commence shortly.

With respect to active agents that can be derived, refined and synthesized from the original biomass or supernatant, the production of bioactive samples to test in dairy cows is itself a costly, complex and time-consuming process. In an effort to speed up the process and develop a viable alternative, ZIVO collaborated with an independent drug development company using predictive modeling to develop synthetic stand-ins for bioactive compounds produced by ZIVO algae. This resulted in the development of a halogenated phlorotannin for which a patent has been filed, and also a water-soluble matrix consisting of that same phlorotannin, gallic acid and several other synthesized molecules similar to natural metabolites produced by ZIVO algae.

In late November 2017, ZIVO was to move forward with Dairy Experts researchers in Tulare County, California to test refined samples of the ZIVO bioactives. In pre-testing the samples prior to administration to the test subjects, the study team uncovered the presence of bacteria and bacterial by-products in the testing samples. ZIVO principals decided to switch to the aforementioned synthetic phlorotannin and the matrix mixture while the presence of bacterial by-products in ZIVO samples was being evaluated. The validation of ZIVO bioactives in dairy cows was halted while the sample production process was vetted and repeated. In the meantime, the synthetic samples that were tested instead showed mixed results but indicated a promising trend for one of the components, which will likely spur another small test to address dosage levels.

In the same timeframe, one of the Company's premier research partners, the National Center for Natural Product Research (NCNPR) at the University of Mississippi in Oxford, MS advised ZIVO principals that they had isolated and pre-tested bioactive candidates for in vivo testing. The bioactives isolated and identified by NCNPR scientists will replace both the samples and the process for producing the samples that were intended for the November 2017 pilot study. Re-testing in dairy cows will likely commence in early June 2018.

We have also engaged the Boston Institute for Biotechnology, based in Boston, MA and Elicityl, based in Grenoble, France, to work in parallel with NCNPR and isolate the bioactives using different methods in order to have ZIVO bioactive sample volume large enough for in vivo studies. Both entities have completed their isolation/fractionation, and samples await validation.

On a parallel track, Dr. Paul Wooley, nationally-recognized immunologist consulting on behalf of ZIVO, developed a matrixed in-vitro screening study design to quickly assess the bioactivity of supernatant samples from our two production facilities. The in vitro validation of those samples was conducted by SBH Biosciences, based in Natick, MA, over the course of several months, beginning in early December and wrapping up in early April. The study was helpful in reaffirming certain anti-inflammatory and immune modulation benefits, while focusing attention on specific isolates.

We anticipate that the isolation and analytical work conducted at NCNPR, Boston Institute for Biotechnology and Elicityl will dovetail with the *in vivo* and *in vitro* validation work being conducted by Dr. Alfonso Lago at Dairy Experts in California, and Dr. Raphael Nir at SBH Biosciences in Natick, Massachusetts, respectively, as well as other labs engaged in this effort. This would form the package submitted to our drug development partner.

To summarize, ZIVO principals have been working in two separate tracks to deliver licensable intellectual property to strategic partners. It is our opinion there is no shortage of opportunity or demand for our products. We can go in many different directions, but the reality is we need to remain focused on two, maybe three, key opportunities. The others will resolve themselves as revenues are realized.

Some of our stakeholders are concerned about time gaps between studies, results and follow-up work. The Company has no internal testing facilities, no lab or clinical staff. Drug industry veteran William P. Pfund has been named ZIVO Vice-President of R&D. He will work with our longtime Director of R&D, Dr. Amy Steffek, to formalize internal processes, broaden external initiatives and package the intellectual property developed thus far into a form acceptable to our collaboration partner. All R&D work is conducted by independent labs, contract research organizations, academic institutions or independent researchers.

We accommodate the prerogatives and expertise of a dozen or more institutions and individuals, and then coordinate their schedules and deliverables with our timing parameters and capital funding realities. Sometimes, the schedule and deliverables line up perfectly. Other times, they do not. Despite these challenges, we've been able to recruit top researchers in specialized fields of study, make our best deal and adjust to the timeframe available. In the end, we're not married to a single course of action or even the expertise of one individual. The same will hold true with our compliance, manufacturing and marketing partners.

Since the shareholder meeting held in November 2017, the milestones identified at that time are still in front of us, although we are much closer to achieving them:

Conclusion of the bovine mastitis study and negotiation for an option or licensing deal

Obtain GRAS status for human consumption of algal biomass

Obtain GRAS/AAFCO status for poultry feed ingredient

Expand global production capacity through offtake agreements

Concluding ZIVO core business, we address WellMetris LLC:

As reported late last year, the Company successfully obtained a new web domain that has allowed for a subtle change in corporate identification. WellMetris, LLC will now transition to Wellmetrix, LLC, and a new website www.wellmetrix.com went live in late April 2018. Emails to wellmetris.com will be forwarded to new email addresses at wellmetrix.com for the next year. No changes in ownership status has occurred.

We look forward to announcing new developments and progress toward stated milestones over the coming months.