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

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2019

OR

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

For the transition period from to

Commission File Number: 0-21990

Mateon Therapeutics, Inc.
(Exact name of registrant as specified in its charter)

Delaware **(State or other jurisdiction of incorporation or organization)**	**13-3679168** **(I.R.S. Employer Identification No.)**
29397 Agoura Road, Suite 107 **Agoura Hills, CA** **(Address of principal executive offices)**	**91301** **(Zip Code)**

Registrant's telephone number, including area code: (650) 635-7000

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

Title of Each Class	**Name of Each Exchange on Which Registered**
None	

Securities registered pursuant to Section 12(g) of the Exchange Act:
Common stock, par value $0.01 per share

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

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

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

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K, or any amendment to this Form 10-K. [X]

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. (Check one):

Large accelerated filer	[ ]	Accelerated filer	[ ]
Non-accelerated filer	[ ]	Smaller reporting company	[X]

Emerging growth company [ ]

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. [ ]

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes [ ] No [X]

The aggregate market value of the registrant's voting and non-voting common stock held by non-affiliates of the registrant (without admitting that any person whose shares are not included in such calculation is an affiliate) computed by reference to the price at which the common stock was last sold, as of June 28, 2019 was approximately $11,546,000.

As of May 8, 2020 the aggregate number of outstanding shares of common stock of the registrant was 87,012,809

DOCUMENTS INCORPORATED BY REFERENCE

None.

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FORWARD-LOOKING STATEMENTS

This Annual Report on form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934 (the "Exchange Act") that involve substantial risks and uncertainties. We generally identify forward-looking statements by terminology such as "may," "will," "should," "expect," "plan," "anticipate," "could," "would," "intend," "target," "aim," "project," "believe," "estimate," "predict," "potential," "seek," "indicate," or "continue" or the negative of these terms or other similar words, although not all forward-looking statements contain these words. Forward-looking statements include, but are not limited to, statements regarding our or our management's expectations, hopes, beliefs, intentions or strategies regarding the future, such as our estimates regarding anticipated operating losses, future performance, future revenues and projected expense, including that to fund our clinical programs; our liquidity and our expectations regarding our needs for and ability to raise additional capital; our ability to continue as a going concern; our ability to select and capitalize on commercially desirable product opportunities as a result of limited financial resources; our ability to manage our expenses effectively and raise the funds needed to continue our business; our ability to retain the services of our current executive officers, directors and principal consultants; the competitive nature of our industry and the possibility that our products or product candidates may become obsolete; our ability to obtain and maintain regulatory approval of our existing products and any future products we may develop; the development of and the process of commercializing AI/Blockchain, OT-101, including development of OT-101 for COVID-19, OXi4503 and CA4P;; the initiation, timing, progress and results of our preclinical and clinical trials, research and development programs; regulatory and legislative developments in the United States and foreign countries; the timing, costs and other limitations involved in obtaining regulatory approval for any product; the further preclinical or clinical development and commercialization of our product candidates; our ability to obtain and maintain orphan drug exclusivity for some of our product candidates; the potential benefits of our product candidates over other therapies; our ability to enter into and maintain any collaboration with respect to product candidates; our ability to continue to develop or commercialize our products or product candidates in the event any license agreements in place with third parties expire or are terminated; the performance and conduct of third parties, including our third-party manufacturers and third party service providers used in our clinical trials; our ability to obtain and maintain intellectual property protection for our products and operate our business without infringing upon the intellectual property rights of others; the potential liability exposure related to our products and our insurance coverage for such exposure; the successful development of our sales and marketing capabilities; the size and growth of the potential markets for our products and our ability to serve those markets; the rate and degree of market acceptance of any future products; the volatility of the price of our common stock; the ability to achieve secondary trading of our stock in certain states; the dilutive effects of potential future equity issuances; our expectation that no dividends will be declared on our common stock in the foreseeable future; our ability to maintain an effective system of internal controls; the payment and reimbursement methods used by private or governmental third-party payers; our ability to retain adequate staffing levels; unfavorable global economic conditions; a failure of our internal computer systems or those of our contractors and consultants; potential misconduct or other improper activities by our employees, contractors or consultants; the ability of our business continuity and disaster recovery plans to protect us in the event of a natural disaster; and other factors discussed elsewhere in this document or any document incorporated by reference herein or therein.

The forward-looking statements contained in this document are based on our current expectations and beliefs concerning future developments and their potential effects on us. There can be no assurance that future developments affecting us will be those that we have anticipated. These forward-looking statements involve a number of risks, uncertainties (some of which are beyond our control) or other assumptions that may cause actual results or performance to be materially different from those expressed or implied by these "forward-looking statements." Should one or more of these risks or uncertainties materialize, or should any of our assumptions prove incorrect, actual results may vary from those projected in these forward-looking statements. We undertake no obligation to update or revise any forward- looking statements, whether as a result of new information, future events or otherwise, except as may be required under applicable securities laws. The sections captioned "Risk Factors" as well as other sections in this document or incorporated by reference into this document discuss some of the factors that could contribute to these differences.

The forward-looking statements made in this document relate only to events as of the date on which the statements are made. We undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events.

This Annual Report also contains market data related to our business and industry. These market data include projections that are based on a number of assumptions. While we believe these assumptions to be reasonable and sound as of the date of this Annual Report, if these assumptions turn out to be incorrect, actual results may differ from the projections based on these assumptions. As a result, the markets for our product candidates may not grow at the rates projected by these data, or at all. The failure of these markets to grow at these projected rates may have a material adverse effect on our business, results of operations, financial condition and the market price of our common stock.

PART I

ITEM 1. BUSINESS

Company Background

Mateon Therapeutics, Inc. ("Mateon" or the "Company") was originally incorporated in 1988 in New York as OXiGENE, Inc. and reincorporated in Delaware in 1992. In 2016, we changed our name to Mateon Therapeutics, Inc. Mateon was formed through the reverse merger of Oncotelic Inc. ("Oncotelic") into Mateon in April 2019 followed by the acquisition of PointR Data Inc. ("PointR") in November 2019. Our principal corporate office is in the United States at 29397 Agoura Road, Suite 107, Agoura Hills, CA 91301 (telephone: 650-635-7000). Our Internet address is www.mateon.com.

Overview

We are a clinical-stage biopharmaceutical developing drugs for the treatment of orphan oncology indications. As a result of the merger of the Company and Oncotelic and the acquisition of PointR in April and November 2019, respectively, we believe we are well positioned as a biotech company with: 1) PointR AI/blockchain for superfast back office support, 2) Oncotelic's antisense platform with OT-101- the flagship drug candidate- targeting high value TGF-beta2 target, and 3) the Company's vascular disruptor proven safe in more than 500 pts capable of causing massive antigen release which would stimulate immune response against the tumor.

Mateon is a developer of antisense RNA therapeutic ("OT-101") against TGF-beta as immunotherapy for broad range of cancers. Cancers overexpress TGF-beta, which suppresses host innate immune response to the cancers. Treatment with OT-101 lifts the TGF-beta cloaking effect and allows innate or therapeutic immunity to attack and eliminate the cancers. We have completed phase 2 for pancreatic cancer and melanoma and phase 2 in glioblastoma with robust efficacy and safety. Last year, the Food and Drug Administration (FDA) granted us Rare Pediatric Designation ("RPD") for pediatric DIPG. We are pushing forward into phase 3 through a proposed joint venture with a Chinese entity with clinical trial in China for pancreatic cancer to start within Q2 of 2020. Other indications are to follow subsequently. In the United States of America (United States, USA or US) we will be focusing pediatric DIPG with the clinical trial to start Q4 of 2020. This strategy of doing phase 3 in adult in China and doing rare pediatric pivotal trial in US will allow us to capitalize on the voucher program in the US and subsequently leverage on the China data for indication expansion into adult. By focusing on RPD we will: 1) reduce cost of clinical development- smaller and faster clinical trial, 2) accelerate approval, 3) obtain regulatory/ marketing exclusivity for 12 years for small molecules and 17 years for biologics, and 4) obtain a voucher worth upward of $100 million on approval. In the case of Diffuse Intrinsic Pontine Glioma ("DIPG") for OT-101 we are anticipating the trial would last no more than 2 years with 30 pts costing approximately $5 million with ROI of >20X. This is the same strategy that we are adopting for our other pipeline drugs- CA4P and Oxi4503. These are vascular disruptor agents with extensive phase 1/2 testing which we feel are ready to enter into meaningful pivotal clinical trials. We are also developing OT-101, an antisense against TGF-beta2 – for the treatment of various viruses, including the Severe Acute Respiratory Syndrome ("SARS") and the current coronavirus ("COVID-19"), on its own and in conjunction with other compounds.

As we move into clinical and commercial development of our various products enumerated below, we are implementing AI & vision powered Blockchain technology into our drug development process so that clinical development, clinical trials, and drug manufacturing can be done real time with full data integrity using AI/Vision powered blockchain technology. We are a clinical stage biopharmaceutical company developing antisense and small molecule injectable drugs for the treatment of cancer with a focus on rare pediatric cancers.

We have six primary programs we are seeking to advance:

● OT-101 - an antisense against TGF-beta2 – for the treatment of solid tumors with focus on brain cancer in adult and DIPG in children. RPD for pediatric DIPG granted by US FDA.

● OT-101 - an antisense against TGF-beta2 –for the treatment of various viruses, including the SARS and the current COVID-19, on its own and in conjunction with other compounds.

● Artemisinin – a natural derivative from an Asian herb Artemisia Annua - Artemisinin has shown to be highly potent at inhibiting the ability of the COVID-19 causing virus to multiply while also having an excellent safety index. Artemisinin has been used to treat malaria

● CA4P- a vascular disrupting agent (“VDA”)- in combination with Ipilimumab for the treatment of solid tumors with focus on melanoma in adult and pediatric melanoma. On May 4th, 2020, FDA granted Rare Pediatric Disease Designation for CA4P/ Fosbretabulin for the treatment of stage IIB–IV melanoma due to genetic mutations that disproportionately affect pediatric patients as a drug for a “rare pediatric disease”.

● Oxi4503- a second generation VDA- for the treatment of liquid tumors with focus on childhood leukemia. RPD application for pediatric AML submitted to US FDA and favorable initial response obtained.

● Backoffice support using PointR fabric cluster computing grids for blockchain/AI for pharmaceutical manufacturing and clinical monitoring and PointR AI Navigator for drug development.

OT-101: An Antisense Against TGF-beta2

Trabedersen (AP12009, OT-101) is a novel antisense oligodeoxynucleotide (ODN) developed by Oncotelic for the treatment of patients with pancreatic carcinoma, malignant melanoma, colorectal carcinoma, high-grade glioma (HGG), and other transforming growth factor beta 2 (TGF-β2) overexpressing malignancies (e.g. prostate carcinoma, renal cell carcinoma, etc.). Trabedersen is a synthetic 18-mer phosphorothioate oligodeoxynucleotide (S-ODN) complementary to the messenger ribonucleic acid (mRNA) of the human TGF-β2 gene.

TGF-β is a multifunctional cytokine with a key role in promoting tumor growth and progression including cell proliferation, cell migration, and angiogenesis. Above all, TGF-β is a highly potent immunosuppressive molecule. Inhibition of TGF-β overexpression in tumor tissue represents a novel multimodal treatment principle leading to the reduction of tumor growth, inhibition of metastasis, and restoration of host antitumor immune responses. Despite its recognized pivotal role in cancer, therapeutics targeting TGF-β have not been successful and many have failed due to toxicity issues possibly due to inhibition of TGF-β1 essential functions. The high level of homology between the various TGF-β isoforms is making it impossible to create mAb or small molecule inhibitor without TGF-β1 cross-inhibition. Therefore, Oncotelic chose to target TGF-β2 only using OT-101 antisense approach. The sequence of OT-101 can only target TGF-β2 and does not have any impact on other TGF-β isotypes. However, suppression of TGF-β2 directly by OT-101 would also result in suppression of TGF-β2 indirectly, but not TGF-β3.

Trabedersen is believed to reverse TGF-β’s immunosuppressive effects, rendering the tumor visible to a patient’s immune system and resulting in priming and specific activation of the patient’s anti-tumor immune response. OT-101 has completed multiple clinical trials with promising outcomes. OT-101, is being developed as a broad-spectrum anti-cancer drug that can also be used in combination with other standard cancer therapies to establish an effective multi-modality treatment strategy for difficult-to-treat cancers. Oncotelic plans to initiate phase 3 clinical trials for OT-101 in both high-grade glioma and pancreatic cancer. During phase 2 clinical trials in pancreatic cancer, melanoma, and colorectal cancers (Study P001) and in high-grade gliomas (Study G004), meaningful single agent activity with meaningful tumor reduction was observed, and OT-101 exhibited a favorable safety profile. Both partial and complete responses have been observed in the G004 Phase 2 clinical trial of OT-101 as a single agent in patients with aggressive brain tumors.

Oncotelic's self-immunization protocol (SIP©) is based on the novel and proprietary sequential treatment of cancers with OT-101 (antisense against TGF-β2) and chemotherapies. Proper Sequencing of treatments is key to optimal immunotherapy. Leveraging from its in-depth knowledge of TGF-beta immunotherapy, Oncotelic ordered the various treatments in the following sequence: (1) expand immune reserve through IL-2 treatment or infusion of immune cells; (2) prime immune response with TGF-β inhibitor OT-101; (3) boost immune response with chemotherapy; and (4) revitalize the exhausted of immune response with checkpoint inhibitors. This sequential treatment strategy is aimed at achieving effective self-immunization against a patients' own cancer, resulting in robust therapeutic immune response and consequently better control of the cancer and improved survival. Prolonged states of being cancer-free have been observed in some patients with the most aggressive forms of cancer, raising a renewed hope for a potential cure. The use of OT-101 lifts the suppression of the patient's immune cells around the cancer tissue, providing the foundation for an effective initial priming, which is critical for a successful immune response. The subsequent chemotherapy results in the release of neoantigens that result in a robust boost of the immune response. This process is termed Xenogenization process and can be: (1) hypermutation by temozolomide in the treatment of brain cancer, (2) immunogenic cell death by taxanes and 5FU in pancreatic cancer, or (3) necrotic cell death by VDA (vascular disrupting agent) in melanoma and MDS. Additionally, the Company believes that a rational combination of the Oncotelic SIP platform with immune-modulatory drugs like interleukin 2 (IL-2) and/or immune checkpoint inhibitors has the potential to help achieve sustained and robust immune responses in patients with the most difficult-to-treat forms of cancer. The combinations with IL-2 and NK are already partnered with external corporate partners.

Pancreatic Cancer

Pancreatic cancer is associated with the poorest prognosis of gastrointestinal cancers and is expected to become the second leading cause of cancer-related mortality in the USA by 2030. Pancreatic cancer is traditionally considered to be an immune-resistant disease. There is a lack of effector T cells, an abundance of myeloid-derived suppressor T cells, and a dearth of key immune effector and regulatory cells. This may be part of the reason why single-agent checkpoint inhibitors are not as effective in comparison to other diseases. Here is where breaking immune tolerance by inhibiting TGF-β with OT-101 will have a significant impact.

The P001 trial was an open-label, multicenter dose-escalation study to evaluate the safety and tolerability of OT-101 (TGF-β2-specific Phosphorothioate Antisense Oligodeoxynucleotide) in adult patients with advanced tumors known to overproduce TGF- β2, which are not or no longer amenable to established therapies. The primary objective of the study was to determine the maximum tolerated dose (MTD) and the dose-limiting toxicities (DLTs) of two cycles of trabedersen administered intravenously (i.v.) on a 7-days-on/7-days-off or 4-days-on/10-days-off schedule. Secondary objectives included were: (1) determining the safety and tolerability of OT-101 administered intravenously at weekly intervals for four days every other week; (2) assessing the plasma pharmacokinetic profile of OT-101 administered intravenously at weekly intervals and for four days every other week; (3) establishing a suitable determination method and to assess the urine pharmacokinetic profile of OT-101 administered intravenously for four days every other week; (4) determining the effect of OT-101 administered intravenously at weekly intervals and for four days every other week on TGF-β2 plasma concentration levels; and (5) Assessing the potential antitumor activity of OT-101 administered intravenously at weekly intervals and for four days every other week, as assessed by the effect on tumor size and tumor markers.

Of the 61 patients treated, 37 had advanced treatment failure pancreas cancer, a very difficult-to-treat cancer with an overall survival that is measured in months even with the best available chemotherapy regimens. Globally, over 400,000persons die of pancreas cancer each year. MTD was not reached for the 4-days-on/10-days-off schedule, which became the schedule adopted for the phase 2 expansion phase of the trial. Disease control (complete response (CR)), partial response (PR) or stable disease (SD)) was achieved in 19 of 35 evaluable pancreas cancer patients (54%). Among liver mets only patients, there are exceptional single-agent activity and survival. Patient 1006 was pushed to complete response (CR) and survived as far out as 77 mos. This patient failed multiple lines of therapies: (1) surgery: Whipple's procedure, (2) 1st line: 5-FU/LV, Dose 425 mg/m2, (3) 2nd line: 5-FU/LV, Dose 2600 mg/m2/24hr, (4) 3rd line: Gemcitabine, Dose 1000 mg/m2/week, and (5) went on to OT-101with liver mets and complete response. Patient 1022 was pushed to stable disease (SD) with overall survival of 40 months. This patient had also failed multiple lines of therapies: (1) surgery: Whipple's procedure, (2) 1st line: radiation therapy (50 Gy), (3) 2nd line: 5FU, and (4) went on to OT-101 with liver mets and stable disease.

OT-101 treatment more than doubled the ratio of patients being able to go onto subsequent chemotherapy versus not being able, and consistent with the expected immunization boost coming from Xenogenization with subsequent chemotherapies (taxanes and 5FU/Cisplatin) as discussed for SIP, those with subsequent chemotherapy exhibited increased mOS and more than doubled their 1 year survival. Patients treated with the non-SIP agent did not exhibit these properties.

Gliomas

Brain tumors in the United States are rare and only accounted for 2% of all adult cancers. However, the rate of brain tumors on the rise for the last 30 years. The more common and most malignant form of brain tumors – glioblastoma ("GBM") has more than doubled from 2.4 to 5.0 per 100,000. In the face of this increase, treatment remained essentially unchanged during the last decade. And despite aggressive surgery followed by radiation and/or chemotherapy, GBM has the worst five–year survival rates among all human cancers, with an average survival from diagnosis of only about 1 year and less than 5% of the patient survived after 5 years. On top of it all, GBM will recur or regrow in most patients. Treatment of recurring a high-grade GBM that has recurred does not always improve survival compared with hospice care alone and deciding when to stop treating the cancer and entering into hospice care is frequently recommended when the patient is unlikely to live longer than six months.

GBM resilience and persistence is in stark contrast with the recent excitement in oncology where Immuno Oncology (IO) agents have shown promise to be curative by driving the immune cells to attack the tumors. Though extraordinarily effective against the growing number of tumors, IOs have been ineffective against GBM. GBM is generally considered immunologically "cold" with few immune effector cells needed for successful immunotherapy. The overexpression of transforming growth factor-beta 2 ("TGF-β2") is associated with poor prognosis of tumors and plays a key role in malignant progression of various tumors including GBM by inducing proliferation, metastasis, angiogenesis, and immunosuppression. Oncotelic is developing a novel TGF- β2 antisense agent (OT-101) as immunotherapy against GBM.

G004 is a multinational, multicenter, open-label, randomized, active-controlled, parallel-group study in adult patients with either recurrent or refractory AA (WHO grade III) or recurrent or refractory GBM (WHO grade IV). There were 3 treatment groups: (1) 10 µM Trabedersen, (2) 80 µM Trabedersen, and (3) standard chemotherapy (mostly TMZ). Tumor control rate at 6 months was the primary endpoint. Response assessment included the tumor control rate and the overall response rate, which were assessed at 6, 12, and 14 months by central MRI reading. The tumor control rate was defined as the percentage of patients with either CR, PR, or SD and the overall response rate was defined as percentage of patients with either CR or PR. An independent blinded central MRI reading was performed to obtain a standardized response assessment for the efficacy analysis. Central reading was performed by 2 independent neuroradiologists with an additional adjudicator deciding in case of conflicting opinions.

All patients had previous tumor surgery, almost all patients had previous radiation therapy, and more than half of the patients had received previous chemotherapy. A total of 134 patients, 89 patients in the OT-101 test group and 45 patients in the standard chemotherapy control group were assessed. The findings of a randomized Phase II study further confirmed the feasibility of intratumoral application of OT101 via convection enhanced delivery (CED) for up to 6 months and showed that it results in early disease control at 6 months at a rate comparable to that achieved with temozolomide. OT101 was administered to 89 R/R high-grade glioma (HGG) (Anaplastic Astrocytoma/AA:27; Glioblastoma multiforme/GBM: 62) patients with an intratumoral catheter using a convection enhanced delivery (CED) system. 77 patients (Efficacy population; GBM: 51; AA: 26) received at least the intended minimum number of 4 OT101 treatment cycles. Response determinations were based on central review of MRI scans according to McDonald criteria. Standard statistical methods were applied for the analysis of data. Nineteen patients had a complete response (CR) or partial response (PR) following a slow but robust size reduction of their target lesions. In addition, 7 patients had stable disease (SD) lasting ≥6 months. For the combined group of 26 AA/GBM patients with favorable responses, the median PFS was >3 years and OS was >3.5 years (16, 17). Hence, OT101 administered intratumorally exhibits clinically meaningful single-agent activity and induces durable CR/PR/SD in R/R HGG patients. These results provided the proof of concept that targeting TGFβ2 with intratumoral OT101 therapy can result in a favorable survival outcome for R/R HGG patients (AA, WHO grade 3 and GBM, WHO Grade 4).

OT-101: Pediatric DIPG

Diffuse intrinsic pontine glioma (DIPG), the second most common malignant pediatric brain tumor, has a dismal outcome with available standard treatment modalities. No significant therapeutic advances have been accomplished in the treatment of this poor prognosis brain tumor and the average overall survival has remained <1 year with a 2-year survival rate of <10%. In solid tumors, the expression level of the transforming growth factor (TGF) beta ("TGFβ") has been identified as a significant contributor to disease progression and poor prognosis as well as resistance to standard therapy and metastasis. In particular, TGFβ has been implicated in treatment resistance to targeted therapeutics, chemotherapy as well as immune-oncology drugs. Importantly, TGFβ restrains anti-tumor immunity by restricting cytotoxic T-cell infiltration, recruiting regulatory T cells and inhibiting the maturation as well as function of natural killer (NK) cells. Amplified activity of the TGFβ-Smad signaling pathway enhances tumor growth, invasion, as well as angiogenesis and has been implicated in the malignant phenotype and poor prognosis of high-grade gliomas in adults. Therefore, TGF-β has emerged as an attractive target for the therapeutic intervention of high-grade gliomas.

We recently performed a meta-analysis of TGFβ2 gene expression in primary tumor specimens from 29 pediatric DIPG patients in the publicly available archived datasets. Our data provided unprecedented evidence that TGFβ2 is expressed at high levels in pediatric DIPG. Three TGFβ2 probesets exhibited 1.8-2.5-fold increased levels of expression in DIPG patients. Our meta-analysis provided new evidence that TGFβ2 gene and its interactome are expressed in pediatric DIPG at significantly higher levels than in normal tissues or low-grade gliomas. Hence, TGFβ2 is an attractive molecular target for immunotherapy of pediatric DIPG.

OT-101 for Treatments of Corona Viruses

When COVID-19 emerged in China, Mateon and Golden Mountain Partners (GMP) contemplated a collaboration to develop drug candidates for COVID-19. Oncotelic and GMP entered into a research and services agreement (the "Agreement") on February 3, 2020 memorializing their collaborative efforts to develop and test COVID-19 antisense therapeutics. On March 18, 2020, Mateon reported the anti-viral activity of OT-101 – its lead drug candidate currently in phase 3 testing in pancreatic cancer and glioblastoma. In an in vitro antiviral testing performed by an independent laboratory, OT-101 showed that it was highly active against COVID-19. On March 23, 2020, Mateon, Oncotelic and GMP entered into a supplement to the Agreement (the "Supplement") to confirm the inclusion of OT-101 within the scope of the Agreement, pending positive confirmatory testing against COVID-19. In consideration for the financial support provided by GMP for the research, pursuant to the terms of the Agreement (as amended by the Supplement) GMP is entitled to obtain certain exclusive rights to the use of the Product in the COVID Field on a global basis, and an economic interest in the use of the Product in the COVID Field including 50/50 profit sharing. As described in the Supplement, the Mateon Entities intend to license or assign intellectual property rights, including the 2020 Patent Application and any other intellectual property rights owned or controlled by the Mateon Entities relating to the Product, OXi4503 and CA4P, to a joint venture company to be established jointly between Oncotelic and GMP (or its designee), as well as providing management services and other expertise to the joint venture company; GMP intends that it (or its designee, as the case may be) shall provide funding to the joint venture company to support its development and commercial activities in the joint venture company's territories; in each case, on terms to be agreed by the parties; and GMP shall be entitled to use its governmental relations and local expertise in Greater China to assist with coordinating the research, development and commercialization of (i) the Products in the COVID Field, (ii) the Products in the OT101 Oncology Field, (iii) OXi4503; and (iv) CA4P, in each case in Greater China. The joint venture company is intended to be owned 50% by Oncotelic and 50% by GMP (or its designee), and its principal activities shall be to research, develop, bring to market and commercialize: (i) the Products in the COVID Field on a global basis, (ii) the Products in the OT101 Oncology Field in the Licensed Territory, (iii) OXi4503 in the Licensed Territory; and (iv) CA4P in the Licensed Territory. Upon completion of due diligence by one another and subject to GMP's satisfactory due diligence review, the parties intend to enter into written definitive agreements for the Joint Venture Transaction within the Exclusivity Period of 90 days. On April 6, 2020, the Company announced that it had delivered the requisite testing results to GMP confirming the applicability and potential use of OT-101 for the treatment of COVID-19. OT-101 exhibited potent activity against both COVID-19 and SARS with a robust safety index of >500. Also, the Company has submitted a Pre-Investigational New Drug ("Pre-IND") application package to the FDA.

On March 18, 2020, the Company reported the anti-viral activity of OT-101 – its lead drug candidate currently in phase 3 testing in pancreatic cancer and glioblastoma, in an in vitro antiviral testing performed by an independent laboratory, OT-101 has an 50% effective concentration (EC50) of 7.6 µg/mL and is not toxic at the highest dose of 1000 µg/mL giving a safety index (SI) value of >130, which is considered highly active. Further, on April 8, 2020, Mateon Therapeutics, Inc. (the "Company") issued a press release announcing that its COVID-19 directed antiviral screening program discovered that Artemisinin is highly potent at inhibiting the ability of the COVID-19 causing virus (SARS-CoV-2) to multiply while also having an excellent safety index. Artemisinin is a natural derivative from the Asian herb Artemisia annua and has been used to treat malaria.

In April 2020, the Company filed the IND with the FDA to permit Mateon to commence clinical trials to evaluate if OT-101 is effective to treat COVID-19. The proposed randomized, double-blind, placebo-controlled Phase 2 study is intended to evaluate the safety and efficacy of OT-101 in adult patients hospitalized with positive SARS-CoV-2 and pneumonia in the US. By suppressing TGF-β, OT-101 suppresses SAR-CoV2 replication directly and has the potential to also suppressed viral induced pneumonia and fibrosis. OT-101 exhibited potent inhibition of SAR-CoV2 replication with efficacy and safety index on par or superior to Remdesivir- a Gilead's drug. Unlike Remdesivir- OT-101 targets not only the virus replication but also the virus induced pneumonia and fibrosis. OT-101 is a new chemical entity and is a proprietary, first-in-class, TGF-β antisense with broad efficacy against solid tumors including pancreatic cancer, glioblastoma, and melanoma.

Provisional Patent Filing

On March 18, 2020 and March 20, 2020, Oncotelic, a wholly-owned subsidiary of the Company, filed three provisional patent applications on the method of use and composition of matter for the treatment of COVID-19. The filings represent the culmination of internal research programs, including efforts with our external partner, and position our antisense platforms for further development for the treatment of epidemics and pandemics.

Artemisinin for Treatment of COVID-19

Artemisinin derived from Chinese herb Artemisia annua L. (Sweet wormwood) has been used medicinally to treat fevers for centuries in China. Like other potential COVID-19 therapeutic agents such as Hydrochloroquine and Remesidivir, the efficacy of Artemisinin remains to be tested in well controlled and sufficiently powered clinical trials.

We discovered that Artemisinin is highly potent at inhibiting the ability of the COVID-19 causing virus (SARS-CoV-2) to multiply while also having an excellent safety index. Artemisinin is a natural derivative from the Asian herb Artemisia annua and has been used to treat malaria. We plan to seek additional support to evaluate clinical proof of concept studies to show the potential of Artemisinin to treat SARS-CoV-2 virus infection and COVID-19 complications. The addition of Artemisinin provides us with a number of candidates to address the SARS-CoV-2 virus with a combination of therapies including its leading drug candidate OT-101 and its antisense platform targeting the COVID-19 viral sequence. However, given the known safety profile and the widespread use of Artemisinin the company anticipates that clinical development of Artemisinin can be abridged to effectively deal with the current COVID-19 pandemic.

The discovery of Artemisinin, identified through our collaboration with GMP, could be the solution for COVID-19 pandemic. This discovery is particularly important since we have the potential to advance the program rapidly because it is based on technology and product that are readily available. Like other potential COVID-19 therapeutic agents such as Hydrochloroquine and Remesidivir, the efficacy of Artemisinin remains to be tested in well controlled and sufficiently powered clinical trials but Artemisinin has many advantages against COVID-19. The newly reported results indicated that Artemisinin had an EC50 = 0.45 ug/ml and Safety Index = 140.

The availability of Artemisinin as a pre-existing dietary supplement may allow it to be deployed immediately in developing countries where the healthcare system can easily be overwhelmed. Its safety is clearly superior to chloroquine and remesidivir. The company intends to work with partners who have distribution networks in developing countries to provide a clean supply to avert a humanitarian crisis.

CA4P as an Immuno-Oncology Agent

Radiation therapy, recognized for its potent cytotoxic effect on cancer cells by inducing direct DNA damage, can sometimes elicit a systemic antitumoral response. Irradiation releases a plethora of neoantigens and pro-inflammatory cytokines, acting like an in-situ vaccine, resulting in tumor regression within the primary site, but may also occasionally result in regression of distant secondary lesions. This regression of distant cancer metastases when the primary tumor is irradiated is defined as the abscopal effect. Yet, an abscopal effect with radiotherapy alone occurs infrequently, signifying that the antitumor immunity caused by radiation is not sufficient enough to abolish the tumor and its metastases nor able to prevent the metastatic process or the immunosuppressing effect the cancer exhibits on the host's systemic macroenvironment. Recently, several studies have confirmed the synergistic antitumoral immunity caused by the combination of radiation with immunotherapy, which has demonstrated a durable abscopal effect in patients with advanced malignancies. Postow, et al, Golden, et al, Hinicker, et al and others have all described early findings of a reproducible abscopal effect when combining irradiation with Ipilimumab and/or Nivolumab.

Similarly, CA4P causes rapid and widespread tumor cell necrosis. A number of laboratories have shown that the type of tumor cell death induced by ischemic necrosis not only controls the presence or absence of specific tumor antigens, but also can result in immunological responses ranging from immunosuppression to anti-tumor immunity. The terms ‘‘immunogenicity of cell death’’ or ‘‘immunogenic cell death’’ (ICD) is often used by scientists to describe the ability of dead/dying cells (especially of tumor cells) to mount antigen-specific and particularly CD8 + T-cell-mediated adaptive immune responses and not simply lead to innate inflammation. CD8 + T-cells play significant role in tumor protection and development of this type of immunity. A modernized concept has emerged which defines immunogenic cell death in general because of mutual or consequent processes including endoplasmic reticulum stress release of ‘‘find-me’’ signals (e.g., ATP), exposure of ‘‘eat-me’’ signals (e.g., calreticulin, phosphatidylserine) and damage-associated molecular patterns (DAMPs [HMGB1, F-actin]). These molecular changes might occur in the cells undergoing necrotic death. These and other signals appear to be relevant to the potential for CA4P to increase immunogenicity following induction of ischemic necrosis.

Preclinical studies in which CA4P was combined with an anti-CTLA4 antibody using an EMT-6 mammary tumor model showed that 7 out of 8 mice receiving a combination of CA4P and an anti-CTLA4 antibody experienced complete remission of their tumors, compared to only 1 of 8 in the CA4P monotherapy arm and 2 of 8 in the anti-CTLA4 antibody monotherapy.

Three of four follow-up preclinical studies confirmed that CA4P combined with immuno-oncology agents could delay tumor growth. Follow-up studies were conducted in a CT26-32 colon cancer model, a larger tumor EMT-6 mammary cancer model, and a C3H mammary cancer model. Studies in a CT-26-32 colon cancer animal model using CA4P combined with anti-CTLA4 antibodies demonstrated a 77% reduction in tumor size compared to immuno-oncology agents alone, and an 89% reduction in tumor size compared to control. This large tumor model also showed a survival benefit for the animals receiving combination therapy, with all animals in the combination therapy group surviving to the end of the study, compared to no animals surviving on the control and only half of the animals surviving that received immuno-oncology agents alone.

Additional analyses of changes induced within tumors following combination therapy have shown that CA4P increases the immunogenic effect of checkpoint inhibitors when used alone as monotherapy. Tumor-fighting white blood cell counts, T-cells and cytotoxic T-cells compared to immuno-oncology agents alone. Tumor necrosis with the combination of CA4P and immuno-oncology agents is nearly double the necrosis with only immuno-oncology agents (63.9% compared to 32.8%, control = 25.8%).

The overall data from all these studies provides evidence that CA4P may enhance the activity of immuno-oncology agents for the treatment of cancer, including anti-CTLA4 antibodies. Furthermore, CA4P has clinical activity in melanoma in early clinical testing and repeated demonstration of CA4P mediated necrotic tumor cell death across 17 completed clinical trials and >500 patients. During various phase 1 studies, we found that CA4P treatment resulted significant disease control among patients with solid tumors who progressed on standard therapies. CA4P treatment resulted in 2 Stable Disease (SD) of 5 melanoma pts treated. The combination of CA4P with carboplatin and paclitaxel was well tolerated in the majority of patients with adequate premedication and had antitumor activity in patients who were heavily pretreated. Patients with advanced cancer refractory to standard therapy were treated with CA4P as a 10-min infusion, 20 h before carboplatin, paclitaxel, or paclitaxel, followed by carboplatin. Responses were seen in 10 of 46 (22%) patients with ovarian, esophageal, small-cell lung cancer, and melanoma. One Partial Response (PR) was observed of 6 melanoma patients treated follow progressing during first-line trial therapy with dacarbazine and sorafenib. In melanoma animal model- B16-F10 murine melanoma experimental tumors- seventy-four hours after drug administration, a decrease in the number of tumor blood vessels was apparent and necrotic areas within tumors were visible. Building on the single agent activity of CA4P, we are expecting that combination of CA4P with Ipilimumab or other immune-oncology drug would result in improved tumor control for these patients above the 2 PR out of 17 pts treated with Ipilimumab alone which supported the approval of Ipilimumab in pediatric melanoma.

CA4P: Pediatric Melanoma

Until the recent approval of ipilimumab as the first immunotherapy agent approved for children, metastatic or nonresectable pediatric melanoma did not have any FDA-approved therapies available. As for adult melanoma patients, the mainstay of care is surgical excision. Studies also show that children treated for melanoma should be closely monitored as they are at increased risk of recurrence later in life. However, there are only very limited data on the efficacy of systemic therapy in children and adolescents with advanced melanoma and new effective therapies are urgently needed. There are only very limited data on the efficacy of systemic therapy in children and adolescents with advanced melanoma. Several phase I/II trials have been designed to evaluate therapies for pediatric cancer patients that included subsets of patients with advanced melanoma.

Ipilimumab was evaluated in a phase I clinical study in children with unresectable stage IIIC or IV melanoma and in a pediatric phase II trial (NCT01696045) that included children aged 12 years or older with previously treated or untreated, unresectable stage III or IV malignant melanoma. Of the 17 melanoma patients older than 12 years treated with ipilimumab across both studies, two experienced objective responses. Immune-related adverse events included pancreatitis, pneumonitis, endocrinopathies, colitis, and transaminitis, with dose-limiting toxicities observed at 5 mg/kg. No grade 2 or higher immune-related toxicities were identified at doses of 3 mg/kg or less. Based upon the results of these studies and evidence from studies in adult patients, in July 2017, the FDA approved ipilimumab for the treatment of unresectable or metastatic melanoma in children aged 12 years and older.

It is expected that combination of CA4P with Ipilimumab or other immune-oncology drugs would result in improved tumor control for these pts above the 2 PR out of 17 patients treated with ipilimumab.

The FDA granted Rare Pediatric Disease Designation for CA4P/ Fosbretabulin tromethamine for the treatment of stage IIB–IV melanoma due to genetic mutations that disproportionately affect pediatric patients as a drug. Preclinical studies in which CA4P was combined with an anti-CTLA4 antibody using an EMT-6 mammary tumor model showed that 7 out of 8 mice receiving a combination of CA4P and an anti-CTLA4 antibody experienced complete remission of their tumors, compared to only 1 of 8 in the CA4P monotherapy arm and 2 of 8 in the anti-CTLA4 antibody monotherapy. This application is based on observed CA4P activity in melanoma in early clinical testing. During various phase 1 studies, we found that CA4P treatment resulted significant disease control among patients with solid tumors who progressed on standard therapies. CA4P treatment resulted in 2 Stable Disease (SD) of 5 melanoma pts treated. One Partial Response (PR) was observed of 6 melanoma patients treated follow progressing during first-line trial therapy with dacarbazine and sorafenib. Building on the single agent activity of CA4P, we are expecting that combination of CA4P with Ipilimumab or other immune-oncology drug would result in improved tumor control for the target pediatric population above the 2 PR out of 17 pts treated with Ipilimumab alone which supported the approval of Ipilimumab in pediatric melanoma.

OXi4503 for Acute Myeloid Leukemia

OXi4503 (combretastatin A1-diphsphate; CA1P) is a novel investigational vascular disrupting agent (VDA) that has been shown to have a significant in vitro cytotoxic as well as chemo-sensitizing activity against human AML cells. OXi4503 also exhibited in vivo anti-leukemic activity in xenografted mice with human AML.

OXi4503 employs a new, broader strategy against AML than currently exists for standard chemotherapy, as it provides a dual mechanism of action involving both anti-vascular effects and direct cytotoxicity to AML cells. Vascular and/or Bone marrow endothelial cells (ECs) appear to provide a protective effect for AML cells, keeping them dormant within the bone marrow. VDAs may target these ECs and reverse their chemo protective effect, providing a novel approach to the treatment of AML which may otherwise be resistant to other chemotherapeutic therapies. Preclinical data indicate that OXi4503 alone and in combination with traditional AML treatments such as cytarabine may provide significant benefit in eliminating AML cells. Results from two completed Phase I clinical trials demonstrated the clinical impact potential of OXi4503 against relapsed AML when it is alone or in combination with the standard chemotherapy drug cytarabine (ARA-C) can induce complete remissions in relapsed AML patients. Notably, OXi4503 showed single agent activity in a clinical Phase I trial and resulted in complete remission of a relapsed AML patient. Sustained complete remissions were also achieved in relapsed AML patients who were treated with OXi4503 in combination with cytarabine (ARA-C).

OXi4503 has received orphan designation for AML in both the United States (Designation No. 12-3824) and the European Union (Designation No. EU/3/15/1587 - EMA/OD/144/15). In 2017, the FDA has granted fast-track designation to OXi4503 for the treatment of relapsed/refractory AML. Oxi4503 met the qualifying criteria for the Fast Track designation since AML is a serious and life-threatening condition, and a large unmet medical need exists for additional treatment strategies for this disease.

The Investigator-Sponsored trial (IST) UF OXi4503 AML MDS Ph 1 (UF4503), “A Phase 1 Clinical Trial of OXi4503 for Relapsed and Refractory Acute Myelogenous Leukemia (AML) and Myelodysplastic Syndromes (MDS)” was designed to evaluate the safety profile and the maximum tolerated dose (MTD) as well as a recommended Phase 2 dose (RP2D) of OXi4503 in patients with recurrent/refractory (R/R) AML and MDS (ClinicalTrials.gov NCT01085656) (14, 50). The clinical single agent activity of OXi4503 was also assessed within the confines of a Phase 1 clinical trial setting. A total of 18 patients enrolled in the study from February 2011 to January 2016. The patients were predominantly male (78%) and the median age was 62.5 years. Of the 15 patients with AML, 4 (27%) had primary refractory AML, 2 (13%) were in first relapse, and 9 (60%) had refractory AML beyond CR1.

Eight patients (44%) completed at least one cycle of CA1P and were evaluable for efficacy assessments. Of the eight patients evaluable, one achieved morphologic remission with incomplete blood count recovery (CRi) after 1 cycle but came off study in cycle 2 due to fungal pneumonia. Three patients had stable disease after at least one cycle of CA1P. Three patients experienced progressive disease after 1 cycle of CA1P and were withdrawn from the study.

The Phase 1 dose-escalation combination of Mateon-sponsored study OX1222 (NCT02576301) was a Phase 1b dose escalation study of OXi4503 as a single agent and in combination with Cytarabine with subsequent combination Phase 2 cohorts for subjects with relapsed/refractory (R/R) acute myelogenous leukemia (“AML”) and Myelodysplastic Syndromes (“MDS”). 29 subjects were treated with OXi4503 in combination with Cytarabine.

Of these 29 patients, one was evaluable for safety analysis, but no EFS/OS data or response data were available for activity evaluations. Of the 28 patients evaluable for EFS/OS outcome analyses, 26 had AML and 2 had MDS. For the 26 AML patients, there were 4 CRs. The CR responses were associated with prolonged overall survival substantially better the median OS time: One patient who became eligible for allogeneic PBSCT remains alive, free-of-leukemia at 720+ days. The overall survival times were 434 days, 521 days, 535 days and 720 days, respectively. The median OS time for the 4 patients who achieved a CR/CRi was 528 (95% CI: 434 - NA) days which was significantly better than the median OS time of 113 (95% CI: 77 - 172) days for the remaining 22 AML patients who did not achieve a CR (Log Rank = 11.8, P-value = 0.0006).

Three of the 4 CR/CRis were achieved in 1st relapse patients while one patient with CRi had failed 5 previous regimens, including 7:3, HiDAC, and PBSCT. Patients who achieved a CR/CRi went on to receive other treatments after receiving 4-6 cycles of OXi4503. The median OS for all 26 AML patients who received therapy was 119 (95% CI: 87 - 232) days. Patients who had rapidly progressive disease or developed toxicity could not get as many OXi4503 doses as patients who responded to their treatment favorably. The median OS time for 18 patients receiving 1-3 doses Of OXi4503 was 82 (95% CI: 66 - 135) days and these patients exhibited a worse survival outcome compared to 9 patients receiving 4-6 doses which was recorded at 434 (95% CI: 191 - NA) days (Log Rank = 12.3, P-value = 0.0004).

OXi4503: Pediatric AML

Pediatric is most common during the first 2 years of life and during the teenage years. In the United States, about 730 people under age 20 are diagnosed with AML each year. The number of deaths was 0.6 per 100,000 children per year. These rates are age-adjusted and based on 2012-2016 cases.

Compared with pediatric ALL, the outlook for pediatric AML patients is far worse. Even though pediatric AML cases are far fewer than pediatric ALL, the mortality rate is about the same, clearly illustrating that AML is a devastating disease and the need for continuing research to identify effective treatments for these children. The prognosis for AML in children remains relatively poor, with a 5-year survival rate of 64% compared with 90% in ALL.

Patients with poor-risk cytogenetics include those that lack any favorable changes and harbor any of the following cytogenetic abnormalities: monosomy 7, monosomy 5, deletion of 5q, abnormalities of 3q, t(6;9)(p23;q34), and complex karyotype which is defined as three or more cytogenetic abnormalities. Children and adolescents harboring these unfavorable features have survival of less than 50 percent, and in many cases less than 20 percent.

The standard of care for management of pediatric AML involves predominantly induction therapy intended to put the patient into remission and consolidation chemotherapy designed to eradicate leukemia cells that may have escaped front line induction therapy. Whereas, >80% of pediatric AML patients will achieve remission, only about half will remain disease-free for an appreciable period of time. Approximately 30 percent of children with AML will experience relapse and only one third of them become long-term survivors after salvage therapy. Although cure rates for children and adolescents with AML have improved, outcomes for pediatric AML patients with adverse prognostic biologic features (e.g. high risk genetic mutations or chromosomal abnormalities) and refractory or relapsed disease who failed or did not respond to their initial standard induction chemotherapy remains poor and limited treatment options are available for these patients. Novel therapies for these high-risk patients are urgently needed. OXi4503 shows clinical potential and promise for this indication based on the proof of concept data obtained from nonclinical and clinical studies.

AI/Blockchain: EdgePoint

PointR, an acquisition made in November of 2019, develops and deploys high performance cluster computers and artificial intelligence (“AI”) technologies as a supercomputing grid that can be layered in and interconnected to create an all-point mesh to harvest operational data within manufacturing plant, hospitals, clinics, phase I units. These grids provide real-time, localized decision-making harvesting complex data from structured and unstructured sources. The deployment of this supercomputing grid enables data capture and insight extraction in real time in blocks which are chained into blockchain ledger records serving as immutable transactions for stakeholders such as regulatory agencies, caretakers, insurers, payers, and manufacturers. The PointR grid can integrate and fuse data from any type of sensors or collection devices. For example, the Vision platform is a network of activity detection cameras functionalized with AI algorithms to monitor, evaluate, and archive real time visual data as a series of metadata entries in a Blockchain ledger.

In the pharmaceutical industry PointR’s AI combined with Blockchain will be used in the entire life cycle of a drug: discovery, clinical trials and manufacturing. Leveraging its deep partnership with IBM, the PointR team will combine its own AI Vision technology with industry standard Blockchain to transform drug manufacturing and real-world evidence monitoring for clinical trials. The combined system has the potential to automatically record individual key steps in cGMP manufacturing operations including the flow of people, raw materials and operations in trusted perpetual blockchain ledgers that are indisputable. This has the potential to create much more efficient GMP manufacturing operations while simultaneously improving reliability and data security.

Data integrity is a large and unsolved problem within drug development and manufacturing. Data from 5 1/2 years of FDA inspection records, from 2014 to the present, for four major markets: China, India, Europe, and the United States, revealed endemic data integrity issues including data manipulation. These stipulate that all manufacturing data must be preserved — unaltered — and made available to regulators. For example- out of more than 12,000 FDA inspections of drug plants in the United States, about 7% uncovered violations of the FDA's data integrity rules including data manipulation. In India, about 24% of the plants inspected committed some sort of data violation, while in China, that figure is 31%. The consequences of data manipulation would be the invalidation of clinical data based on the adulterated drug product, safety concerns and liabilities to the pts, and FDA sanction and legal action.

Country	Number of inspections	Number (percentage) of violation forms (Form 483) issued	Percentage of Form 483s that cite data integrity violations	Percentage of Form 483s that cite data manipulation
China	916	617 (67.4%)	48%	31%
India	1,693	976 (57.6%)	44%	24%
Europe	2,969	1,445 (48.7%)	36%	18%
USA	13,650 (estimated)	6,794 (49.8%)	26%	7%

The local real time AI processing of the data through grid computing allows for flexibility in data processing and AI training. Federated learning through grid supercomputing is inherently faster and more effective than mainframe supercomputing. In general, AI methods excel at automatically recognizing complex patterns in imaging data and providing quantitative assessments of the underlying characteristics. PointR AI deep learning algorithms have the capability of detecting meaningful relationships in image-recognition tasks in radiology and pathology. The coupling of image algorithm with Vision allows us to integrate imaging data frequently encountered during patient care into coherent metadata for blockchain ledgers. This can transform the design and implementation of clinical trials and accelerate outcomes. Combined with Blockchain the technologies will create trusted irrefutable ledgers which track real world monitoring and evidence gathering.

The Company intends to form an entity, EdgePoint AI, LLC ("EdgePoint") to bring a solution that addresses both issues using proven technology. We intend to solve this problem with AI "machine vision" based on our proprietary technology, which is integrated with IBM and re-sold by IBM and its partners. We address the data integrity problem in a step-wise fashion. We start with streamlining the warehouse supply chain component. Later we add modules that spread across the plant in a comprehensive manner.

We expect our warehouse modules will streamline many labor issues in a manner very similar to Amazon-Go stores that run without cashiers. Monitored by a camera grid, shoppers simply enter, grab items and leave. A shopper can grab a sandwich and soda and leave within few minutes without checkout lines and delays. Amazon's AI machine vision automation identifies the shoppers, the items they picked-up, consummates the transaction and sends receipt. Sounds like science fiction but there are 11 such stores nationwide and disrupting the retail industry.

Taking Retail AI to Drug Manufacturing

Using it's Amazon-Go-like cashier-less AI proprietary technology, EdgePoint intends to address the human element in the drug manufacturing industry. Its TrustPoint product is designed to track men and materials with a camera grid and commit each transaction to a series of immutable blockchain records that are irrefutable permanent record of men and materials. The addition of blockchain technology, specifically our partner IBM's version called Hyper-Ledger, enables manufacturers to conduct audits in a reliable and streamlined manner in a trustworthy system.

This automation of manual verification eliminates wasted and indeterministic human cycles. The product is a novel and potentially disruptive application of AI neural networks and blockchain to ensure compliance with drug sponsors and the FDA while ensuring ROI for manufacturers by slashing labor costs.

The EdgePoint technology is already proven in the retail sector and generating revenues at a US east-coast, convenience store chain in partnership with IBM and its business partner Meridian IT. Meridian is a $0.5 billion systems conglomerate that ranked top-25 of managed services providers with 775 employees worldwide. The ceiling of the Amazon-Go retail store is a few hundred camera grid that track and shoppers with precision and monitor products they collect from shelves. When the shopper leaves the store, the AI automatically recognizes the shopper and items retrieved to issue a receipt. No human cashier is involved.

TrustPoint is a re-deployment of this type of tested technology for GMP drug manufacturing relieving human errors in supply chain and increasing compliance with warehouse operating procedures. For example, the warehouse module of TrustPoint will automatically create a shopping list from standard templates and alert supply chain personnel to collect and deliver a list of raw materials to manufacturing.

TrustPoint will track personnel authorized to collect materials of the shelves in compliance with picklist and generate alerts if the wrong materials are picked. It will commit the data to an immutable block chain ledger for later retrieval in case of compliance issues. Blockchain records are irrefutable and can be reproduced to trace with fidelity operating activities, e.g. authorized personnel, what they picked, who they delivered to with date and timestamps of each action.

In manufacturing plants, the implementation is even simpler Amazon-Go. The shoppers (supply chain personnel) are limited in number, not random and the raw materials are stable, and their shopping-list is automated by the machines that track the "shopping". In this simplified version of Amazon-Go TrustPoint tracks supply chain personnel and monitors list of items collected from shelves. The automation is designed to reduce the overall human error element and increase compliance with standard operating procedures of the manufacturer, its customers and governmental oversight agencies.

Market

Human labor costs represent the most expensive element in drug manufacturing. In the $70.0 billion CDMO (contract development manufacturing operations) industry, personnel costs of $30 billion are ripe for computer automation. Until now, computer technologies like MRP and ERP created more problems than resolved. The labor problem is compounded by the cost of personnel onboarding and turnover. It takes 6-9 months to train a quality control employee only to lose them to a competitor.

The market is large. Approximately 10,000 drug manufacturing facilities worldwide are FDA and EMA (European FDA) registered, representing a significant addressable market for EdgePoint. Many such facilities run on paper-based, handwritten forms ripe for modernization by the TrustPoint product. The $70.0 billion CDMO industry is poised to grow to $123.0 billion by 2025 according to industry experts. EdgePoint has first mover advantage and expects to lead the industry's transition. It expects to garner significant share of the labor automation market. Addressing the $30.0 billion labor market and more specifically the $12.0 billion supply-chain segment, EdgePoint expects to improve efficiencies and create additional value for shareholders. EdgePoint intends to addresse $12.0 billion market with AI Vision, BlockChain and NLP

Go-to-Market: IBM

The Company's go-to-market plan is to execute a proof-of-concept project with a biologic substance manufacturer called iBIO Inc. based in Texas. The expected outcome is a re-sellable product for materials release deployed by iBIO with production level data to attract a rich pipeline of paying customers. The company has partnered with IBM in multiple areas including sales and distribution. The significant value to IBM in this partnership is the enrichment EdgePoint provides to the IBM product suites vertically targeting cGMP manufacturing. There are three areas of technology enrichment and technology collaboration.

1. AI Vision: IBM has developed data center hardware and software for machine vision training. While EdgePoint complements IBM products with its in-plant, on-premises low profile cluster computers called BRICKs and cameras. The integration between EdgePoint and IBM machine vision products (IBM Power AI Vision software running on state-of-the-art IBM AC922 GPU cluster computer) and EdgePoint enables continuous updates to the AI models.

2. Blockchain: IBM has created an open source product called Hyper-Ledger which has been endorsed by multiple vertical markets including Life Sciences and Financial industries. Integrating AI machine vision and Hyper-ledger will enrich the IBM's offerings in the cGMP manufacturing market.

3. Warehouse Management Software: IBM's Sterling software is an industry leader in warehouse management and supply-chain optimization. In addition, IBM is in the process of integrating its Power AI Vision software (PAIV) with Sterling. Since EdgePoint AI vision is integrated with PAIV it will enable EdgePoint to extend the Sterling platform for GMP in an easy and flexible manner.

The technology enrichment and integration by EdgePoint extends the already committed relationship with IBM. The main benefits of the IBM relationship are three-fold: (1 Sales: IBM direct sales focus enables penetration into top 10 large pharma companies, while IBM value-added-sellers (VARs), (2) focus on smaller CDMOs by region.MSP: IBM and partners provide turnkey cloud managed services with high reliability, availability and monitoring and (3) TRUST: The industry relies on the core reputation of IBM's backing to deploy EdgePoint.

EdgePoint is addressing an unsolved problem with a proprietary technology and first mover advantage to capture a significant share of the GMP manufacturing market. The product is a novel and potentially disruptive application of AI neural networks and block-chain to ensure compliance with drug sponsors and the FDA while ensuring ROI for manufacturers by slashing labor costs. The side benefit is that it brings this industry into the fourth industrial revolution which includes AI, cloud computing, blockchain, and IoT sensor fusion.

Our Strategy and Development Plan

We have been operating with significant capital constraints for over a year since the reverse merger between the Company and Oncotelic, and for this time period we have been seeking to secure sufficient funding to continue our operations while we simultaneously seek to advance our all our investigational drugs for the treatment of cancer, coronaviruses and AI technology. Subject to our ability to secure additional capital, we would seek to further develop our product candidates. However, our inability to access capital may significantly impair our ability to develop these compounds, as it has to date. If we are able to advance any or all of our drug candidates, we would seek to develop them till commercialization, however, there is no guarantee that we would be able to fully develop our products, obtain regulatory approvals and successfully commercialize them.

We continue to discuss collaboration opportunities with other biopharmaceutical companies, although to date have not secured any agreements with companies that are willing to purchase the products from us or license the development and commercialization rights. We intend to continue to seek a partner to acquire the marketing rights to our product candidates and to finance further clinical studies and will seek to complete a transaction if we are able to reach mutual agreement on terms. We are also in discussions with certain entities in Asia to further the development of OT-101 primarily for COVID-19 and pancreatic cancer. We are looking to form a joint venture to further the development of OT-101 wherein Mateon would provide the technical expertise and the other party would fund the development expenses.

In addition to entering into a transaction that would provide funding for the further development of our product candidates, other elements of our development strategy would currently include:

- Initiating a clinical trial (or clinical trials) of OT-101 for COVID-19: We have filed an IND with the FDA to permit us to conduct a Phase 2 clinical trial for COVID-19. This trial will rely on the safety and efficacy of OT-101 based on trials in humans for cancers. This trial is designed to make determinations of whether the results improve patient outcomes, including safety, overall survival and other parameters. The study is planned to be expanded into China and other countries, or initiated under such countries drug development programs and agencies, as well. For China, we could conduct such trials in conjunction with our development partners, Golden Mountain Partners (GMP).

- Initiating clinical trials of OT-101 in pancreatic cancer and other cancers: We have yet to initiate any trials but we are evaluating conducting such trials in the US as well as other countries like China in conjunction with GMP.

- Initiating a clinical trial of CA4P in combination with an immuno-oncology agent: Based on preclinical data generated to date and support of two well-known immuno-oncology clinical investigators, we have developed a protocol for a clinical trial that would be the first human clinical trial combining CA4P and an approved immuno-oncology agent. This trial is designed to make initial determinations of whether the combination results in improved patient outcomes, including safety, overall survival, progression free survival, objective response rate, tumor size and other parameters.

- Continuing to evaluate OXi4503 in a clinical trial: We have completed six ascending dose cohorts of OXi4503 in combination with cytarabine in Study OX1222 in patients with relapsed/refractory AML and/or MDS. In the highest dose cohort, the sixth cohort of the study, we observed potential safety signals which triggered stopping rules for the study and resulted in a partial clinical hold from the U.S. Food and Drug Administration until we and the FDA assess additional safety data, particularly at the fifth dose cohort level. In the fifth dose cohort of OX1222, we have observed the best potential signs of efficacy to date in the trial and believe treatment of additional patients would provide additional evidence regarding the efficacy of OXi4503 in these indications.

REGULATORY MATTERS

Government Regulation and Product Approval

Government authorities in the United States and other countries extensively regulate, among other things, the research, development, testing, manufacture, quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, marketing and export and import of products such as those we are developing. Our drug candidates must be approved by the FDA through the New Drug Application, or NDA, process before they may be legally marketed in the United States.

U.S. Drug Development Process

In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act, or FDCA, and implementing regulations. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local, and foreign statutes and regulations require the expenditure of substantial time and financial resources. Failure to comply with the applicable United States requirements at any time during the product development process, approval process or after approval, may subject an applicant to administrative or judicial sanctions. These sanctions could include the FDA's refusal to review or approve pending applications, withdrawal of an approval, a clinical hold, warning letters, product recalls, product seizures, total or partial suspension of production or distribution injunctions, fines, refusal of government contracts, restitution, disgorgement, or civil or criminal penalties. Any agency or judicial enforcement action could have a material adverse effect on us. The process required by the FDA before a drug may be marketed in the United States generally involves the following:

- completion of preclinical laboratory tests, animal studies and formulation studies according to Good Laboratory Practices (GLP) or other applicable regulations;
- submission to the FDA of an Investigational New Drug Application, or IND, which must be first approved by the FDA before human clinical trials may begin;
- performance of adequate and well-controlled human clinical trials according to Good Clinical Practices (GCP) to establish the safety and efficacy of the proposed drug for its intended use;
- submission to the FDA of an NDA;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the drug is produced to assess compliance with current good manufacturing practice, or cGMP, to assure that the facilities, methods and controls are adequate to preserve the drug's identity, strength, quality and purity;
- satisfactory completion of FDA inspections of clinical sites and GLP toxicology studies; and
- FDA review and approval of the NDA.

The testing and approval process require substantial time, effort and financial resources, and we cannot be certain that any approvals for our product candidates will be granted on a timely basis, if at all.

Once a pharmaceutical candidate is identified for development, it enters the preclinical testing stage. Preclinical tests include laboratory evaluations of product chemistry, toxicity and formulation, as well as animal studies. An IND sponsor must submit the results of the preclinical tests, together with manufacturing information and analytical data, to the FDA as part of the IND. The sponsor will also include a protocol detailing, among other things, the objectives of the clinical trial, the parameters to be used in monitoring safety, and the effectiveness criteria to be evaluated, if the first phase lends itself to an efficacy evaluation. Preclinical testing continues even after the IND is submitted. The IND becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, places the clinical trial on a clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. Clinical holds also may be imposed by the FDA at any time before or during clinical trials due to safety concerns or non-compliance.

All clinical trials must be conducted under the supervision of qualified investigators in accordance with GCP regulations. These regulations include the requirement that all research subjects provide informed consent. Further, an institutional review board, or IRB, must review and approve the plan for any clinical trial before it commences at any institution. An IRB considers, among other things, whether the risks to individuals participating in the trials are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the information regarding the trial and the consent form that must be provided to each trial subject or his or her legal representative and must monitor the clinical trial until completed.

Each new clinical protocol must be submitted to the IND for FDA review, and to the IRBs for approval. Protocols detail, among other things, the objectives of the clinical trial, dosing procedures, subject selection and exclusion criteria, and the parameters to be used to monitor subject safety and efficacy in Phase 2 and 3 clinical trials.

Human clinical trials are typically conducted in three sequential phases that may overlap or be combined:

- Phase 1: The drug is initially introduced into human subjects and tested for safety, dosage tolerance, absorption, metabolism, distribution and excretion.

- Phase 2: Involves clinical trials in a limited patient population to identify possible adverse effects and safety risks, to evaluate preliminary efficacy of the product for specific targeted diseases and to determine dosage tolerance and optimal dosage.

- Phase 3: Clinical trials are undertaken to further evaluate dosage, clinical efficacy and safety in an expanded patient population. These studies are intended to establish the overall risk-benefit ratio of the product and provide, if appropriate, an adequate basis for product labeling.

Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA. IND Safety Reports must be submitted to the FDA, IRBs and the investigators for (a) any suspected adverse reaction that is both serious and unexpected; (b) any findings from epidemiological studies, pooled analysis of multiple trials, or clinical trials (other than those already reported in (a)); (c) any findings from animal or *in vitro* testing, whether or not conducted by the sponsor, that suggest a significant risk in humans exposed to the drug, such as reports of mutagenicity, teratogenicity, or carcinogenicity or reports of significant organ toxicity at or near the expected human exposure; and (d) any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator brochure. Phase 1, phase 2, and phase 3 testing may not be completed successfully within any specified period, if at all. The FDA or the sponsor may suspend a clinical trial at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the drug has been associated with unexpected serious harm to patients.

Concurrent with clinical trials, companies usually complete additional animal studies and must also develop additional information about the chemistry and physical characteristics of the drug and finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product candidate and, among other things, the manufacturer must develop methods for testing the identity, strength, quality and purity of the final drug. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the product candidate does not undergo unacceptable deterioration over its shelf life.

U.S. Review and Approval Processes

The results of product development, preclinical studies and clinical trials, along with descriptions of the manufacturing process, analytical tests conducted on the chemistry of the drug, proposed labeling, and other relevant information are submitted to the FDA as part of an NDA requesting approval to market the product. The submission of an NDA is subject to the payment of user fees; a waiver of such fees may be obtained under certain limited circumstances, which may include orphan drug status and the first NDA application for a company.

In addition, under the Pediatric Research Equity Act, or PREA, an NDA or supplement to an NDA must contain data to assess the safety and effectiveness of the drug for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the drug is safe and effective. The FDA may grant deferrals for submission of data or full or partial waivers. Unless otherwise required by regulation, PREA does not apply to any drug for an indication for which orphan designation has been granted.

The FDA reviews all NDAs submitted to ensure that they are sufficiently complete for substantive review before it accepts them for filing. The FDA may request additional information rather than accept an NDA for filing. In this event, the NDA must be resubmitted with the additional information. The resubmitted application also is subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review. The FDA also may refer the NDA to an advisory committee for review, evaluation and recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendation of an advisory committee, but it generally follows such recommendations. The approval process is lengthy and difficult and the FDA may refuse to approve an NDA at its discretion or the FDA may require additional clinical or other data and information. Even if such additional data and information are submitted, the FDA may ultimately decide that the NDA does not satisfy its criteria for approval. Data obtained from clinical trials are not always conclusive, and the FDA may interpret data differently than we or others may interpret the same data. The FDA may issue a complete response letter, which may require additional clinical or other data or impose other conditions that must be met in order to obtain approval of the NDA. The FDA reviews an NDA to determine, among other things, whether a product is safe and effective for its intended use and whether its manufacturing is cGMP-compliant to assure and preserve the product's identity, strength, quality and purity. Before approving an NDA, the FDA will generally inspect the facility or facilities where the product is manufactured. The FDA will also generally inspect selected clinical sites that participated in the clinical studies and may inspect the testing facilities that performed the GLP toxicology studies cited in the NDA.

NDAs receive either standard or priority review. A drug representing a significant improvement in treatment, prevention or diagnosis of disease may receive priority review. In addition, products studied for their safety and effectiveness in treating serious or life-threatening illnesses and that provide meaningful therapeutic benefit over existing treatments may receive accelerated approval and may be approved on the basis of adequate and well-controlled clinical trials establishing that the drug product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit or on the basis of an effect on a clinical endpoint other than survival or irreversible morbidity. As a condition of approval, the FDA may require that a sponsor of a drug receiving accelerated approval perform adequate and well-controlled post-marketing clinical trials. Priority review and accelerated approval do not change the standards for approval, but may expedite the approval process.

If a product receives regulatory approval, the approval may be limited to specific diseases or patient subpopulations and dosages or the indications for use may otherwise be limited, which could restrict the commercial value of the product. In addition, approval by the FDA may include a requirement for phase 4 testing, which involves clinical trials designed to further assess a drug's safety and effectiveness, and the FDA may require testing and surveillance programs to monitor the safety of approved products which have been commercialized.

Orphan Drug Designation

Under the Orphan Drug Act, the FDA may grant orphan drug designation to a drug intended to treat a rare disease or condition, which is generally a disease or condition that affects fewer than 200,000 individuals in the United States. After the FDA grants orphan drug designation, the identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Orphan drug designation does not convey any advantage in or shorten the duration of the regulatory review and approval process.

If a product that has orphan drug designation subsequently receives the first FDA approval for the disease for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications to market the same drug for the same indication for seven years, except in very limited circumstances.

In the European Union and Japan, orphan drug exclusivity regulations provide for 10 years of market exclusivity.

CA4P has been awarded orphan drug status by the FDA for the treatment of anaplastic, medullary, Stage IV papillary and Stage IV follicular thyroid cancers, ovarian cancer, neuroendocrine tumors and glioma. OXi4503 has been awarded orphan drug status by the FDA for the treatment of acute myelogenous leukemia. CA4P has been awarded orphan drug status by the FDA for the treatment of pancreatic cancer, melanoma, and glioblastoma.

CA4P has also been awarded orphan drug status by the European Commission in the European Union for the treatment of anaplastic thyroid cancer, ovarian cancer and neuroendocrine tumors. OXi4503 has been awarded orphan drug status by the European Commission in the European Union for the treatment of acute myelogenous leukemia. OT-101 has been awarded orphan drug status by European Commission in the European Union for the treatment of pancreatic cancer, melanoma, and glioblastoma.

Rare Pediatric Disease Designation

The FDA grants rare pediatric disease designation for diseases with serious or life-threatening manifestations that primarily affect people aged from birth to 18 years, and that affect fewer than 200,000 people in the U.S. Under the FDA's Rare Pediatric Disease Priority Review Voucher program, a sponsor who receives an approval of a new drug application or biologics license application for a product for the prevention or treatment of a rare pediatric disease may be eligible for a voucher, which can be redeemed to obtain priority review for any subsequent marketing application, and may be sold or transferred.

The FDA granted Rare Pediatric Disease Designation for OT101/Trabedersen for the treatment of diffuse intrinsic pontine glioma (“DIPG”) as a drug for a rare pediatric disease.

The FDA granted Rare Pediatric Disease Designation for CA4P/ Fosbretabulin tromethamine for the treatment of stage IIB–IV melanoma due to genetic mutations that disproportionately affect pediatric patients as a drug.

Expedited Review and Approval

The FDA has various programs, including Fast Track, priority review, accelerated approval and breakthrough therapy, which are intended to expedite or simplify the process for reviewing drugs, and/or provide for approval on the basis of surrogate endpoints. Even if a drug qualifies for one or more of these programs, the FDA may subsequently decide the drug no longer meets the conditions for qualification or the FDA may not shorten the review or approval time period. Generally, drugs that may be eligible for these programs are those for serious or life-threatening conditions, those with the potential to address unmet medical needs, and those that offer meaningful benefits over existing treatments. Fast Track designation applies to the combination of the product and the specific indication for which it is being studied. Although Fast Track and priority review do not affect the standards for approval, the FDA will attempt to facilitate early and frequent meetings with a sponsor of a Fast Track designated drug and expedite review of the application for a drug designated for priority review. Drugs that receive an accelerated approval may be approved on the basis of adequate and well-controlled clinical trials establishing that the drug product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit or on the basis of an effect on a clinical endpoint other than survival or irreversible morbidity. As a condition of approval, the FDA may require that a sponsor of a drug receiving accelerated approval perform post-marketing clinical trials.

OXi4503 has been awarded Fast Track designation for the treatment of AML.

Foreign Regulation

In addition to regulations in the United States, we are subject to a variety of foreign regulations governing clinical trials and if any of our product candidates are approved, we will be subject to additional regulations regarding commercial sales and distribution. Whether or not we obtain FDA approval to test a product candidate in the United States, we must obtain approval by the comparable regulatory authorities of foreign countries before we can commence testing any product candidate in those countries. Likewise, whether or not we obtain FDA approval to market a product, we must obtain approval by the comparable regulatory authorities of foreign countries before we can commence marketing of any product candidate in those countries. The approval process varies from country to country and the time may be longer or shorter than that required for FDA approval. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary greatly from country to country.

Under European Union regulatory systems, a company may submit marketing authorization applications, or MAAs, either under a centralized or decentralized procedure. The centralized procedure, which is compulsory for medicines produced by biotechnology or those medicines intended to treat AIDS, cancer, neurodegenerative disorders or diabetes and optional for those medicines which are highly innovative, provides for the grant of a single marketing authorization that is valid for all European Union member states. The decentralized procedure provides for mutual recognition of national approval decisions. Under this procedure, the holder of a national marketing authorization may submit an application to the remaining member states. Within 90 days of receiving the applications and assessments report, each member state must decide whether to recognize approval. If a member state does not recognize the marketing authorization, the disputed points are eventually referred to the European Commission, whose decision is binding on all member states.

As in the United States, the European Medicines Agency, or EMA, may grant orphan drug status for specific indications if the request is made before an MAA is submitted. The EMA considers an orphan medicinal product to be one that affects less than five of every 10,000 people in the European Union. A company whose application for orphan drug designation in the European Union is approved is eligible to receive, among other benefits, regulatory assistance in preparing the marketing application, protocol assistance and reduced application fees. Orphan drugs in the European Union receive up to ten years of market exclusivity for the approved indication.

Reimbursement

Sales of any of our product candidates, if approved, will depend, in part, on the extent to which the costs of the products will be covered by third-party payors, including government health programs such as Medicare and Medicaid, commercial health insurers and managed care organizations. These third-party payors are increasingly challenging the prices charged for health care products and services. The U.S. government, state legislatures and foreign governments have shown significant interest in implementing cost-containment programs, including price controls, restrictions on reimbursement and requirements for substitution of generic products. Adoption or application of price controls and cost-containment measures could limit our revenue. If third-party payors do not consider our products to be cost-effective, they may not pay for our products even if we receive approval, or their level of payment may not be sufficient to allow us to sell our products on a profitable basis.

The Medicare Prescription Drug, Improvement, and Modernization Act of 2003, or the MMA, imposes requirements for the distribution and pricing of prescription drugs for Medicare beneficiaries. Under Part D (the Medicare prescription drug benefit), Medicare beneficiaries may enroll in prescription drug plans offered by private entities that provide coverage of outpatient prescription drugs not covered under Medicare Part B. Part D prescription drug plan sponsors are not required to pay for all covered Part D drugs. Each drug plan can develop its own drug formulary that identifies which drugs it will cover and at what tier or level. Federal regulations require Part D prescription drug formularies to include drugs within each therapeutic category and class of covered Part D drugs, although not necessarily all the drugs in each category or class.

In general, government payment for some of the costs of prescription drugs may increase demand for products for which we receive marketing approval. However, any negotiated prices for our products covered by a Part D prescription drug plan will likely be lower than the prices we might otherwise obtain. Moreover, while the MMA applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own payment rates. Any reduction in payment that results from the MMA or other Medicare regulations may result in a similar reduction in payments from non-governmental payors.

The Patient Protection and Affordable Care Act and the Health Care and Education Affordability Reconciliation Act of 2010 (collectively, the "Affordable Care Act" or "ACA") mandated prescription drug coverage as one of ten essential health benefits that most health plans must offer, requiring coverage of at least one drug in every category and class. The ACA increased in the number of individuals covered by insurance and as a result commercial insurers and government programs have increased their emphasis on cost controls to reduce overall spending. A number of federal government leaders have expressed their intentions to repeal and replace the ACA. If full or partial repeal is enacted, many if not all of the provisions of the ACA may no longer apply to prescription drugs. As a result, we expect that there will continue to be uncertainty regarding drug product pricing, reimbursement and other factors impacting the revenue we may receive if our product candidates are ultimately approved, which could have a material adverse effect on our business, financial condition and results of operations.

In addition, in some foreign countries, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing vary widely from country to country. For example, the European Union provides options for its member states to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of our products. Historically, products launched in the European Union do not follow price structures of the United States and tend to be significantly lower.

PATENTS AND PROPRIETARY RIGHTS

We actively seek to protect the proprietary technology that we consider important to our business, including chemical species, compositions and forms, their methods of use and processes for their manufacture, as well as modified forms of naturally-expressed receptors, in the United States and other jurisdictions internationally that we consider key pharmaceutical markets. We also rely upon trade secrets and contracts to protect our proprietary information.

As of May 12, 2020, we were the exclusive licensee, sole assignee or co-assignee of fifteen granted U.S. patents, one pending U.S. patent application, and granted patents and/or pending applications in several other major markets, including the European Union, Canada and Japan. Our policy is to file U.S. and foreign patent applications to protect technology, inventions and improvements to inventions that are commercially important to the development of our business. There can be no assurance that any of these patent applications will result in the grant of a patent either in the United States or elsewhere, or that any patents granted will be valid and enforceable, or will provide a competitive advantage or will afford protection against competitors with similar technologies. We also intend to rely upon trade secret rights to protect other technologies that may be used to discover and validate targets and that may be used to identify and develop novel drugs. We seek protection, in part, through confidentiality and proprietary information agreements.

We consider the following U.S. patents and applications owned by or exclusively licensed to us to be particularly important to the protection of our most advanced product candidates.

Product Candidate	Patent Scope	Patent Expiration
CA4P	Lyophilized or crystalline combretastatin A4-phosphate tromethamine*	September 2021
	Use of VDAs to Enhance Immunomodulating Therapies Against Tumors**	August 2036
OXi4503	Composition of Matter for OXi4503 (combretastatin A1-disodium-phosphate (OXi4503) pro-drug)***	October 2021
	Method of Treating Myeloid Neoplasm by Administering OXi4503	November 2028
OT-101	Portable Equipment for Administration of Fluids into Tissues And Tumors by Convection Enhanced Delivery Technique	April, 2024
	Pharmaceutical composition	December 2024
	Use of An Oligonucleotide or Its Active Derivative for the Preparation of a Pharmaceutical Composition for Inhibiting the Formation of Metastases in Cancer Treatment	February 2025
	Use of Low Doses of Oligonucleotides to TGF-beta, VEGF, interleukin-10, c-jun, c-fos or Prostaglandin E2 Genes In the Treatment of Tumors	May 2026
	Oligonucleotide-, Protein and/or Peptide-polymer Conjugates	December 2027
	Dosage of Oligonucleotides Suitable for the Treatment of Tumors	November 2029
	Combination of A Chemotherapeutic Agent and An Inhibitor of the TGF-beta System	July 2030
	Combination Therapy for Treatment of Pancreatic Cancer	February 2036
	Compositions and Methods for Treating Cancer	February 2036

* In-licensed from Bristol-Myers Squibb

** Patent filed, awaiting grant

*** In-licensed from Arizona State University

In addition to these patents, for some of our product candidates, we have patents and/or applications that cover a particular form or composition, use for a particular indication, use as part of combination therapy or method of preparation or use, as well as other pending patent applications. These issued patents, including any patents that issue from pending applications, could provide additional or a longer period of protection. We also have patent applications pending that seek equivalent or substantially comparable protection for our product candidates in jurisdictions internationally that we consider key pharmaceutical markets.

The patent expiration dates referenced above do not reflect any potential patent term extension that we may receive under the federal Drug Price Competition and Patent Term Restoration Act of 1984, known as the Hatch-Waxman Act. The Hatch-Waxman Act generally permits a patent extension term of up to five years as compensation for patent term lost during the FDA regulatory review process. Patent extension cannot extend the remaining term of a patent beyond a total of 14 years. The patent term restoration period is generally one-half of the time between the effective date of an investigational new drug application, or IND, and the submission date of a new drug application, or NDA, plus the time between the submission date and approval date of an NDA. Only one patent applicable to an approved drug is eligible for the extension, and the extension must be applied for prior to expiration of the patent. The United States Patent and Trademark Office, in consultation with the FDA, reviews and approves applications for patent term extension.

As previously noted, the FDA and European Union have granted CA4P and OXi4503 orphan drug status for certain indications. We are also pursuing, and may continue to in the future to pursue, orphan drug status for other product candidates and indications. Our ability to obtain and maintain the exclusivity for our products and product candidates by virtue of their orphan drug status is an important part of our intellectual property strategy. Also as previously noted, we emphasizing on Rare Pediatric Designation to leverage on the regulatory exclusivity and voucher program associated with these designations.

COMPETITION

The industry in which we are engaged is characterized by rapidly evolving technology and intense competition. Our competitors include, among others, major pharmaceutical, biopharmaceutical and biotechnology companies, nearly all of which have financial, technical and marketing resources significantly greater than ours. In addition, many of the small companies in our industry have also formed collaborative relationships with large, established companies to support research, development and commercialization of products that may be competitive with ours. Academic institutions, governmental agencies and other public and private research organizations are also conducting research activities and patenting new technologies in our line of business and any of these entities may commercialize products that may be competitive with ours.

We expect that, if any of our products gain regulatory approval for sale, they will compete primarily on the basis of product efficacy, safety, patient convenience, reliability, price and patent protection. Our competitive position will also depend on our ability to attract and retain qualified scientific and other personnel, develop effective proprietary products and implement joint ventures or other alliances with large pharmaceutical companies in order to jointly market and manufacture our products.

EMPLOYEES

We had thirteen full-time employees as of December 31, 2019. We rely on external consultants or outsource nearly all our research, development, preclinical testing and clinical trial activity, although we maintain managerial and quality control over our clinical trials. We also rely on external consultants for various administrative tasks that are required for a public company. We expect to continue to rely on external service providers and to maintain a small number of executives and other employees.

ITEM 1A. RISK FACTORS

Statements in this Annual Report under the captions "Business" and "Management's Discussion and Analysis of Financial Condition and Results of Operations," as well as oral statements that may be made by us or by officers, directors or employees acting on our behalf, that are not historical fact constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that could cause our actual results to be materially different from the historical results or from any results expressed or implied by such forward-looking statements. Such factors include, but are not limited to, the risk factors set forth below.

We do not intend to update any forward-looking statements to reflect events or circumstances after the date of such statements or to reflect the occurrence of anticipated or unanticipated events.

If we are unable to obtain additional funding, we may be forced to cease operations.

We have experienced net losses every year since inception. On April 17, 2019, the Company entered into an Agreement and Plan of Merger (the "Merger Agreement") with Oncotelic, a clinical-stage biopharmaceutical company developing investigational drugs for the treatment of orphan oncology indications and the Company's wholly-owned subsidiary Oncotelic Acquisition Corporation (the "Merger Sub"). Upon the terms of and subject to the satisfaction of the conditions described in the Merger Agreement, the Merger Sub would be merged with and into Oncotelic (the "Merger"), with Oncotelic surviving the Merger as a wholly-owned subsidiary of the Company. On April 22, 2019, the Company completed the Merger and Oncotelic became a wholly-owned subsidiary of the Company. The Merger was treated as a recapitalization and reverse acquisition for financial accounting purposes. Oncotelic is considered the acquirer for accounting purposes, and the Company's historical financial statements before the Merger have been replaced with the historical financial statements of Oncotelic prior to the Merger in the financial statements and filings with the Securities and Exchange Commission. Even though Oncotelic is considered as the acquirer for accounting purposes, the Company, as of December 31, 2019, had an accumulated deficit of approximately $12.1 million, including a net loss of approximately $6.6 million in 2019. We have no source of revenue and do not expect to receive any product revenue in the near future. We may generate revenues from services rendered in the future, but we cannot expect that to be a regular and of recurring nature. If we remain in business, we expect to incur additional operating losses over the next several years, principally as a result of our plans to continue clinical trials for our investigational drugs. As of December 31, 2019 we had approximately $82,000 in cash and current liabilities of approximately $6.8 million, of which $2.6 million would be issuable in shares of common stock of the Company. Based on our planned operations, we expect our cash to only support our operations for a short period of time. Therefore, we will need to secure near-term funding or we would be forced to curtail or terminate operations. Because we do not currently have a guaranteed source of capital that will sustain operations for at least the next twelve months, Management has determined that there is substantial doubt about our ability to continue as a going concern.

The principal source of our working capital to date has been the proceeds from the sale of equity and debt, a majority of which has been provided by officers and certain insiders. If we are unable to access additional funds in the near term, whether through the sale of additional equity, debt or another means, we may not be able to continue in business. We also may not be able to continue the development of our investigational drugs. Any additional equity or debt financing, if available to us, may not be available on favorable terms and would most likely be dilutive to stockholders. Any debt financing, if available, may involve restrictive covenants and also be dilutive to current stockholders. If we obtain funds through collaborative or licensing arrangements, we may be required to relinquish rights to some of our technologies or product candidates on terms that are not favorable to us. Our ability to access capital when needed is not assured.

In their audit report with regard to our financial statements as of December 31, 2019, we as well as our independent registered public accountants have expressed an opinion that substantial doubt exists as to whether we can continue as a going concern. Because we have limited cash resources, we believe that it will be necessary for us to either raise additional capital in the near term or to enter into a license or other agreement with a larger pharmaceutical company. If we do not succeed in doing so, we may be required to suspend or cease our business, which would likely materially harm the value of our common stock.

We will require additional capital funding, the receipt of which may impair the value of our common stock.

Our future capital requirements depend on many factors, including our research, development, sales and marketing activities. We will need to raise additional capital through public or private equity or debt offerings or through arrangements with strategic partners or other sources in order to continue to develop our product candidates. There can be no assurance that additional capital will be available when needed or on terms satisfactory to us, if at all. To the extent we raise additional capital by issuing equity securities, our shareholders may experience substantial dilution and the new equity securities may have greater rights, preferences or privileges than our existing common stock.

Due in part to our limited financial resources, we may fail to select or capitalize on the most scientifically, clinically or commercially promising or profitable indications or therapeutic areas for our product candidates, and we may be unable to pursue and complete the clinical trials that we would like to pursue and complete.

We have limited financial and technical resources to determine the indications on which we should focus the development efforts for our product candidates. Due to our limited available financial resources, we have curtailed clinical development programs and activities that might otherwise have led to more rapid progress of our product candidates through the regulatory and development processes. We currently have insufficient financial resources to complete any additional drug development work.

If we are able to raise funds and continue developing investigational drugs for cancer, we may make incorrect determinations with regard to the indications and clinical trials on which to focus the available resources that we do have. Furthermore, we cannot assure you that we will be able to retain adequate staffing levels to run our operations and/or to accomplish all of the objectives that we otherwise would seek to accomplish. The decisions to allocate our research, management and financial resources toward particular indications or therapeutic areas for our product candidates may not lead to the development of viable commercial products and may divert resources from better opportunities. Similarly, our decisions to delay or terminate drug development programs may also cause us to miss valuable opportunities. In addition, from time to time, we may in-license or otherwise acquire product candidates to supplement our internal development activities. Those activities may use resources that otherwise would have been devoted to our internal programs, and with research and development programs there is no way to assure that the outcome of any trials or other activities will be positive, whether the program was internally generated or in-licensed.

If we are unable to obtain required regulatory approvals, we will be unable to market and sell our product candidates.

Our product candidates are subject to extensive governmental regulations relating to development, clinical trials, manufacturing, oversight of clinical investigators, recordkeeping and commercialization. Rigorous preclinical testing and clinical trials and an extensive regulatory review and approval process are required to be successfully completed in the United States, in the European Union and in many other foreign jurisdictions before a new drug can be sold. Satisfaction of these and other regulatory requirements is costly, time consuming, uncertain, and subject to unanticipated delays. The time required to obtain approval by the FDA or the European Medicines Agency, or EMA, is unpredictable and often takes many years following the commencement of clinical trials.

In connection with the clinical development of our product candidates, we face risks that:

- our product candidates may not prove to be safe and efficacious;
- patients may die or suffer serious adverse effects for reasons that may or may not be related to the product candidate being tested;
- we fail to maintain adequate records of observations and data from our clinical trials, to establish and maintain sufficient procedures to oversee, collect data from, and manage clinical trials, or to monitor clinical trial sites and investigators to the satisfaction of the FDA, EMA or other regulatory agencies;
- we may not have sufficient financial resources to complete the clinical trials that would be necessary to obtain regulatory approvals;
- the results of later-phase clinical trials may not confirm the results of earlier clinical trials; and
- the results from clinical trials may not meet the level of statistical significance or clinical benefit-to-risk ratio required by the FDA, EMA or other regulatory agencies for marketing approval.

Only a small percentage of product candidates for which clinical trials are initiated are the subject of NDAs and even fewer receive approval for commercialization. Furthermore, even if we do receive regulatory approval to market a product candidate, any such approval may be subject to limitations such as those on the indicated uses for which we may market the product.

If we or the third parties on which we rely for the conduct of our clinical trials and results do not perform our clinical trial activities in accordance with good clinical practices and related regulatory requirements, we may not be able to obtain regulatory approval for or commercialize our product candidates.

We currently use independent clinical investigators in all of our clinical trials and, in many cases, also utilize contract research organizations, or CROs, and other third-party service providers to conduct and/or oversee the clinical trials of our product candidates and expect to continue to do so for the foreseeable future. We rely heavily on these parties for successful execution of our clinical trials. Nonetheless, we are responsible for confirming that each of our clinical trials is conducted in accordance with the FDA's requirements and our general investigational plan and protocol. Currently, we have clinical trial activities involving CA4P and OXi4503 being conducted by clinical investigators who are independent of us, but with whom we have agreements for them to provide the results of their clinical trials to us. In order for us to rely on data from these ongoing clinical trials in support of a New Drug Application, or NDA, for approval of any of our product candidates by the FDA or similar types of marketing applications that are required by other regulatory authorities, the independent investigators are required to comply with applicable good clinical practice requirements.

The FDA and corresponding foreign regulatory authorities require us and our clinical investigators to comply with regulations and standards, commonly referred to as good clinical practices, or GCPs, for conducting and recording and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the trial participants are adequately protected. Our reliance on third parties that we do not control does not relieve us of these responsibilities and requirements. Third parties may not complete activities on schedule or may not conduct our clinical trials in accordance with regulatory requirements or the respective trial plans and protocols. The failure of these third parties to carry out their obligations could delay or prevent the development, approval and commercialization of our product candidates or result in enforcement action against us.

We have taken and continue to take steps to strengthen our procedures and practices, but we cannot assure you that the FDA will be satisfied with our procedures or that the FDA will not issue warning letters or take other enforcement action against us in the future. The steps we take to strengthen our procedures and conduct future clinical trials necessary for approval will be time-consuming and expensive.

We may encounter difficulties in expanding our operations successfully if and when we evolve from a company that is primarily involved in clinical development to a company that is also involved in commercialization.

As we advance our product candidates through later stages of clinical trials, we will need to expand our development, regulatory, manufacturing, marketing and sales capabilities or contract with third parties to provide these capabilities for us. As our operations expand, we expect that we will need to manage additional relationships with such third parties, as well as additional collaborators, distributors, marketers and suppliers.

Maintaining third party relationships for these purposes will impose significant added responsibilities on members of our management and other personnel. We must be able to manage our development efforts effectively, manage our participation in the clinical trials in which our product candidates are involved effectively, and improve our managerial, development, operational and finance systems, all of which may impose a strain on our administrative and operational infrastructure.

If, following any approval of our product candidates, we enter into arrangements with third parties to perform sales, marketing or distribution services, any product revenues that we receive, or the profitability of these product revenues to us, are likely to be lower than if we were to market and sell any products that we develop ourselves. In addition, we may not be successful in entering into arrangements with third parties to sell and market our products or in doing so on terms that are favorable to us. We likely will have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our products effectively. If we do not establish sales and marketing capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our products.

If we were to submit an NDA for our drug candidates in the United States or a marketing application in the EU, we would need to undertake commercial scale manufacturing activities at significant expense to us in order to proceed with the application for approval for commercialization. We or our external vendors may encounter technical difficulties that preclude us from successfully manufacturing the required registration and validation batches of active pharmaceutical ingredient, or API, and/or drug product and we may be unable to recover any financial losses associated with the manufacturing activities. Further, our research or product development efforts may not be successfully completed, any compounds currently under development by us may not be successfully developed into drugs, any potential products may not receive regulatory approval on a timely basis, if at all, and competitors may develop and bring to market products or technologies that render our potential products obsolete. If any of these problems occur, our business would be materially and adversely affected.

We have no manufacturing capacity and have relied on, and expect to continue to rely on, third-party manufacturers to produce our product candidates.

We do not own or operate manufacturing facilities for the production of clinical or commercial quantities of our product candidates or any of the compounds that we are testing in our preclinical programs, and we lack the resources and the capabilities to do so. As a result, we currently rely, and we expect to rely for the foreseeable future, on third-party manufacturers to supply our product candidates. Reliance on third-party manufacturers entails risks to which we would not be subject if we manufactured our product candidates or products ourselves, including:

- reliance on third-parties for manufacturing process development, regulatory compliance and quality assurance;
- limitations on supply availability resulting from capacity and scheduling constraints of third-parties;
- the possible breach of manufacturing agreements by third-parties because of factors beyond our control; and
- the possible termination or non-renewal of the manufacturing agreements by the third-party, at a time that is costly or inconvenient to us.

If we do not maintain our developed important manufacturing relationships, we may fail to find replacement manufacturers or develop our own manufacturing capabilities, which could delay or impair our ability to obtain regulatory approval for our products and substantially increase our costs or deplete profit margins, if any. If we do find replacement manufacturers, we may not be able to enter into agreements with them on terms and conditions favorable to us, and there could be a substantial delay before new facilities could be qualified and registered with the FDA, EMA and other foreign regulatory authorities.

The FDA, EMA and other foreign regulatory authorities require manufacturers to register manufacturing facilities. The FDA and corresponding foreign regulators also inspect these facilities to confirm compliance with current good manufacturing practices, or cGMPs. Contract manufacturers may face manufacturing or quality control problems causing drug substance production and shipment delays or a situation where the contractor may not be able to maintain compliance with the applicable cGMP requirements. Any failure to comply with cGMP requirements or other FDA, EMA and comparable foreign regulatory requirements could adversely affect our clinical research activities and our ability to develop our product candidates and market our products after approval.

Our current and anticipated future dependence upon others for the manufacture of our product candidates may adversely affect our ability to develop our product candidates, our ability to commercialize any products that receive regulatory approval and our potential future profit margins on these products.

Our product candidates have not completed clinical trials, and may never demonstrate sufficient safety and efficacy in order to do so.

Our product candidates are in the clinical stage of development. In order to achieve profitable operations, we alone or in collaboration with others, must successfully develop, manufacture, introduce and market our products. The time frame necessary to achieve market success for any individual product is long and uncertain. The products currently under development by us may require significant additional research and development and additional preclinical and clinical testing prior to application for commercial use. A number of companies in the biotechnology and pharmaceutical industries have suffered significant setbacks in clinical trials, even after showing promising results in early or later-stage studies or clinical trials. Although we have obtained some favorable results to date in preclinical studies and clinical trials of certain of our potential products, such results may not be indicative of results that will ultimately be obtained in or throughout such clinical trials, and clinical trials may not show any of our products to be safe or capable of producing a desired result. Additionally, we may encounter problems in our clinical trials that may cause us to delay, suspend or terminate those clinical trials.

Adverse events observed to date and associated with CA4P and OXi4503 have generally been found to be manageable for drugs treating the indications for which we are developing our product candidates. However, we will be required to continue to test and evaluate the safety of our product candidates in additional clinical trials, and to demonstrate their safety to the satisfaction of appropriate regulatory agencies, as a condition to receipt of any regulatory approvals. In clinical trials to date, transient hypertension believed to be associated with CA4P and OXi4503 has been effectively managed through pre-treatment with anti-hypertensive medication. We cannot assure you, however, that we will be able to make the necessary demonstrations of safety to allow us to receive regulatory approval for our product candidates in any indication.

We only have a limited number of employees to manage and operate our business.

As of December 31, 2019, we had thirteen full-time employees. We rely on consultants and professionals to augment our staffing needs. Our limited financial resources require us to manage and operate our business in a highly efficient manner. We cannot assure you that we will be able to retain adequate staffing levels to run our operations and/or to accomplish all of the objectives that we otherwise would seek to accomplish.

We have a history of losses, and we anticipate that we will continue to incur losses in the future; our auditors have included in their audit report an explanatory paragraph as to substantial doubt as to our ability to continue as a going concern.

We have experienced net losses every year since our inception and, as of December 31, 2019, had an accumulated deficit of approximately $12.1 million. We have opined and our auditors have included in their audit report a “going concern” explanatory paragraph as to substantial doubt as to our ability to continue as a going concern that assumes the realization of our assets and the satisfaction of our liabilities and commitments in the normal course of business. We anticipate continuing to incur substantial additional losses over at least the next several years due to, among other factors, our clinical trials and development activities with respect to our drug candidates, technologies, and anticipated research and development activities and the general and administrative expense associated with those activities. We have not yet commercialized any product candidates. Our ability to attain profitability will depend upon our ability to develop and commercialize products that are effective and commercially viable, to obtain regulatory approval for the manufacture and sale of our products and to license or otherwise market our products successfully. We may never achieve profitability.

We depend on our executive officers and principal consultants and the loss of their services could materially harm our business.

We believe that our success depends, and will likely continue to depend, upon our ability to retain the services of our current executive officers, particularly our Chief Executive Officer, Chief Technology Officer and Chief Financial Officer, our principal consultants and others. Our executive officers have been working at 50-60% salaries since early April 2019 (and prior to the reverse merger since October 2017), which increases the risk that we may not be able to retain their services. The loss of the services of any of these individuals could have a material adverse effect on our business. In addition to these key service providers, we have established relationships with universities, hospitals and research institutions, which have historically provided, and continue to provide, us with access to research laboratories, clinical trials, facilities and patients. Additionally, we believe that we may, at any time and from time to time, materially depend on the services of consultants and other unaffiliated third parties. We cannot assure you that consultants and other unaffiliated third parties will provide the level of service to us that we require in order to achieve our business objectives.

Our industry is highly competitive, and our product candidates may become obsolete.

We are engaged in a rapidly evolving field. Competition from other pharmaceutical companies, biotechnology companies and research and academic institutions is intense and likely to increase. Many of those companies and institutions have substantially greater financial, technical and human resources than we do. Many of those companies and institutions also have substantially greater experience in developing products, conducting clinical trials, obtaining regulatory approval and in manufacturing and marketing pharmaceutical products. Our competitors may succeed in obtaining regulatory approval for their products more rapidly than we do. Competitors have developed or are in the process of developing technologies that are, or in the future may be, the basis for competitive products. Some of these competitive products may have an entirely different approach or means of accomplishing the desired therapeutic effect than products being developed by us. Our competitors may succeed in developing products that are more effective and/or cost competitive than those we are developing, or that would render our product candidates less competitive or even obsolete. In addition, one or more of our competitors may achieve product commercialization or patent protection earlier than we do, which could materially adversely affect us.

We depend extensively on the patents and proprietary technology we license from others, and we must maintain these licenses in order to preserve our business.

We have licensed in rights to CA4P, OXi4503 and other programs from third parties. If our license agreements terminate or expire, we may lose the licensed rights to our product candidates, including CA4P and OXi4503, and we may not be able to continue to develop them or, if they are approved, we may not be able to market or commercialize them.

We depend on license agreements with third-parties for certain intellectual property rights relating to our product candidates, including patent rights. Currently, we have licensed in certain patent rights from Arizona State University, or ASU, and the Bristol-Myers Squibb Company for CA4P and OXi4503 and from Baylor University for other programs. In general, our license agreements require us to make payments and satisfy performance obligations in order to keep these agreements in effect and retain our rights under them. These payment obligations can include upfront fees, maintenance fees, milestones, royalties, patent prosecution expense, and other fees. These performance obligations typically include diligence obligations. If we fail to pay, be diligent or otherwise perform as required under our license agreements, we could lose the rights under the patents and other intellectual property rights covered by the agreements. While we are not currently aware of any dispute with any licensors under our material agreements with them, if disputes arise under any of our in-licenses, including our in-licenses from ASU, the Bristol-Myers Squibb Company and Baylor University, we could lose our rights under these agreements. Any such dispute may not be resolvable on favorable terms, or at all. Whether or not any disputes of this kind are favorably resolved, our management's time and attention and our other resources could be consumed by the need to attend to and seek to resolve these disputes and our business could be harmed by the emergence of such a dispute.

If we lose our rights under these agreements, we may not be able to conduct any further activities with the product candidate or program that the license covered. If this were to happen, we might not be able to develop our product candidates further, or following regulatory approval, if any, we might be prohibited from marketing or commercializing them. In particular, patents previously licensed to us, such as the patents we previously licensed from Angiogene, might after termination be used to stop us from conducting activities in the patents' respective fields.

We depend on patents and proprietary technology in the course of our business, and we must protect those assets in order to preserve our business.

Although we expect to seek patent protection for any compounds we discover and/or for any specific use we discover for new or previously known compounds, any or all of them may not be subject to effective patent protection. Further, the development of regimens for the administration of pharmaceuticals, which generally involve specifications for the frequency, timing and amount of dosages, has been, and we believe, may continue to be, important to our effort, although those processes, as such, may not be patentable. In addition, the issued patents may be declared invalid or our competitors may find ways to avoid the claims in the patents. Further, our lack of access to adequate capital may cause us to curtail payment of fees necessary to maintain patents that we otherwise would seek to maintain, and we may make incorrect decisions regarding which patents to keep and which to abandon.

Our success will depend, in part, on our ability to obtain and maintain patents, protect our trade secrets and operate without infringing on the proprietary rights of others. We are the exclusive licensee, sole assignee or co-assignee on a number of granted United States patents, pending United States patent applications, and granted patents and/or pending applications in several other major markets, including the European Union, Canada and Japan. The patent position of pharmaceutical and biotechnology firms like us is generally highly uncertain and involves complex legal and factual questions, resulting in both an apparent inconsistency regarding the breadth of claims allowed in United States patents and general uncertainty as to their legal interpretation and enforceability. Accordingly, patent applications assigned or exclusively licensed to us may not result in patents being issued, any issued patents assigned or exclusively licensed to us may not provide us with competitive protection or may be challenged by others, and the current or future granted patents of others may have an adverse effect on our ability to do business and achieve profitability. Moreover, because some of the basic research relating to one or more of our patent applications and/or patents were performed at various universities and/or funded by grants, one or more of these universities, employees of such universities and/or grantors could assert that they have certain rights in such research and any resulting products. Further, others may independently develop similar products, may duplicate our products, or may design around our patent rights. In addition, as a result of the assertion of rights by a third-party or otherwise, we may be required to obtain licenses to patents or other proprietary rights of others in or outside of the United States. Any licenses required under any such patents or proprietary rights may not be made available on terms acceptable to us, if at all. If we do not obtain such licenses, we could encounter delays in product market introductions while our attempts to design around such patents or could find that the development, manufacture or sale of products requiring such licenses is foreclosed. In addition, we could incur substantial costs in defending ourselves in suits brought against us or in connection with patents to which we hold licenses or in bringing suit to protect our own patents against infringement.

We require employees and the institutions that perform our preclinical and clinical trials to enter into confidentiality agreements with us. Those agreements provide that all confidential information developed or made known to a party to any such agreement during the course of the relationship with us be kept confidential and not be disclosed to third-parties, except in specific circumstances. Any such agreement may not provide meaningful protection for our trade secrets or other confidential information in the event of unauthorized use or disclosure of such information.

The use of our products may result in product liability exposure, and it is uncertain whether our insurance coverage will be sufficient to cover all claims.

The use of our product candidates in clinical trials may expose us to liability claims in the event such product candidates cause death, injury or disease, or result in adverse effects. We may be exposed to liability claims even if our product did not cause death, injury or diseases, but is merely presumed or alleged to have caused any of these. If our product candidates are ever commercially approved, the commercial use of these products may also expose us to similar liability claims. Any of these claims could be made by health care institutions, contract laboratories, patients or others using such products. Although we have obtained liability insurance coverage for our ongoing clinical trials, this coverage may not be in amounts sufficient to protect us from any product liability claims or product recalls which could have a material adverse effect on our financial condition and prospects. Further, adverse product and similar liability claims could negatively impact our ability to obtain or maintain regulatory approvals for our technology and product candidates under development.

If clinical trials or regulatory approval processes for our product candidates are prolonged, delayed or suspended, we may be unable to out-license or commercialize our product candidates on a timely basis, which would require us to incur additional costs and delay or prevent our receipt of any proceeds from potential license agreements or product sales.

We cannot predict whether we will encounter problems with any of our completed, ongoing or planned clinical trials that will cause us or any regulatory authority to delay or suspend those clinical trials or delay or invalidate the analysis of data derived from them. A number of events, including any of the following, could delay the completion of our other ongoing and planned clinical trials and negatively impact our ability to obtain regulatory approval for, and to market and sell, a particular product candidate:

- conditions imposed on us by the FDA, EMA or another foreign regulatory authority regarding the scope or design of our clinical trials;

- delays in obtaining, or our inability to obtain, required approvals from institutional review boards or other reviewing entities at clinical sites selected for participation in our clinical trials;
- insufficient supply of our product candidates or other materials necessary to conduct and complete our clinical trials;
- slow enrollment and retention rate of subjects in clinical trials;
- any compliance audits and pre-approval inspections by the FDA, EMA or other regulatory authorities;
- negative or inconclusive results from clinical trials, or results that are inconsistent with earlier results;
- serious and unexpected drug-related side effects; and
- failure of our third-party contractors to comply with regulatory requirements or otherwise meet their contractual obligations to us.

Commercialization or licensure of our product candidates may be delayed or prevented by the imposition of additional conditions on our clinical trials by the FDA, EMA or another foreign regulatory authority or the requirement of additional supportive clinical trials by the FDA, EMA or another foreign regulatory authority. In addition, clinical trials require sufficient patient enrollment, which is a function of many factors, including the size of the patient population, the nature of the trial protocol, the proximity of patients to clinical sites, the availability of effective treatments for the relevant disease, the conduct of other clinical trials that compete for the same patients as our clinical trials, and the eligibility criteria for our clinical trials. Our failure to enroll patients in our clinical trials could delay the completion of the clinical trial beyond our expectations, or it could prevent us from being able to complete the clinical trial. In addition, the FDA and EMA could require us to conduct clinical trials with a larger number of subjects than we have projected for any of our product candidates. We may not be able to enroll a sufficient number of patients in a timely or cost-effective manner. Furthermore, enrolled patients may drop out of our clinical trials, which could impair the validity or statistical significance of the clinical trials.

We do not know whether our clinical trials will begin as planned, will need to be restructured, or will be completed on schedule, if at all. Delays in our clinical trials will result in increased development costs for our product candidates, and our financial resources may be insufficient to fund any incremental costs. In addition, if our clinical trials are delayed, our competitors may be able to bring products to market before we do and the commercial viability of our product candidates could be limited.

We have been granted orphan drug status for certain of our product candidates and may seek orphan drug status for additional indications for those product candidates or for additional product candidates. We may be unsuccessful in maintaining orphan drug exclusivity for our product candidates and may be unsuccessful in our efforts to seek orphan drug status and orphan drug exclusivity.

Regulatory authorities in some jurisdictions, including the United States and the European Union, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan Drug Act, the FDA may designate a product as an orphan drug if it is a drug intended to treat a rare disease or condition, which is generally defined as a disease with a patient population of fewer than 200,000 individuals in the United States. Our lead product candidate, OXi4503, has been awarded orphan drug status by the FDA and the European Commission for the treatment of acute myelogenous leukemia. Our other product candidate, CA4P, has been awarded orphan drug status by the FDA for the treatment of anaplastic, medullary, Stage IV papillary and Stage IV follicular thyroid cancers, ovarian cancer, neuroendocrine tumors and glioma. CA4P has also been awarded orphan drug status by the European Commission in the European Union for the treatment of anaplastic thyroid cancer, ovarian cancer and neuroendocrine tumors.

Generally, if a product with an orphan drug designation subsequently receives the first marketing approval for the indication for which it has such designation, the product is entitled to a period of marketing exclusivity, which precludes the EMA or the FDA from approving another marketing application for the same drug for the same indication during the period of exclusivity. The applicable period is seven years in the United States and ten years in the European Union. The European exclusivity period can be reduced to six years if a drug no longer meets the criteria for orphan drug designation or if the drug is sufficiently profitable so that market exclusivity is no longer justified. Orphan drug exclusivity may be lost if the FDA or the EMA determines that the request for designation was materially defective, if the manufacturer is unable to assure sufficient quantity of the drug to meet the needs of patients with the rare disease or condition.

Even if we obtain orphan drug exclusivity for a product candidate or additional product candidates, that exclusivity may not effectively protect the product candidate from competition because different drugs can be approved for the same condition. Even after an orphan drug is approved, the FDA can subsequently approve a different drug for the same condition if the FDA concludes that the later drug is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care.

Our product candidates will remain subject to ongoing regulatory review even if they receive marketing approval, and if we fail to comply with continuing regulations, we could lose these approvals and the sale of any approved commercial products could be suspended.

Even if we receive regulatory approval to market a particular product candidate, the manufacturing, labeling, packaging, adverse event reporting, storage, advertising, promotion, and record keeping related to the product will remain subject to extensive regulatory requirements. If we fail to comply with the regulatory requirements of the FDA, EMA and other applicable domestic and foreign regulatory authorities or previously unknown problems with any approved product, manufacturer, or manufacturing process are discovered, we could be subject to administrative or judicially imposed sanctions, including:

- restrictions on the products, manufacturers, or manufacturing processes;
- warning letters;
- civil or criminal penalties;
- fines;
- injunctions;
- product seizures or detentions;
- pressure to initiate voluntary product recalls;
- suspension or withdrawal of regulatory approvals; and
- refusal to approve pending applications for marketing approval of new products or supplements to approved applications.

If physicians and patients do not accept our future products or if the market for indications for which any product candidate is approved is smaller than expected, we may be unable to generate significant revenue, if any.

Even if any of our product candidates obtain regulatory approval, they may not gain market acceptance among physicians, patients, and third-party payers. Physicians may decide not to prescribe our drugs for a variety of reasons including:

- timing of market introduction of competitive products;
- demonstration of clinical safety and efficacy compared to other products;
- cost-effectiveness;
- limited or no coverage by third-party payers;
- convenience and ease of administration;
- prevalence and severity of adverse side effects;
- restrictions in the label of the drug;

- other potential advantages of alternative treatment methods; and
- ineffective marketing and distribution support of our products.

If any of our product candidates is approved, but fails to achieve market acceptance, we may not be able to generate significant revenue and our business would suffer.

The uncertainty associated with pharmaceutical reimbursement and related matters may adversely affect our business.

Market acceptance and sales of any one or more of our product candidates that we develop will depend on reimbursement policies and may be affected by future healthcare reform measures in the United States and in foreign jurisdictions. Government authorities and third-party payers, such as private health insurers and health maintenance organizations, decide which drugs they will cover and establish payment levels. We cannot be certain that reimbursement will be available for any product candidates that we develop. Also, we cannot be certain that reimbursement policies will not reduce the demand for, or the price paid for, our products. If reimbursement is not available or is available on a limited basis, we may not be able to successfully commercialize any product candidates that we develop.

In the United States, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, also called the Medicare Modernization Act, or MMA, changed the way Medicare covers and pays for pharmaceutical products. The legislation established Medicare Part D, which expanded Medicare coverage for outpatient prescription drug purchases by the elderly but provided authority for limiting the number of drugs that will be covered in any therapeutic class. The MMA also introduced a new reimbursement methodology based on average sales prices for physician-administered drugs.

The United States and several foreign jurisdictions are considering, or have already enacted, a number of legislative and regulatory proposals to change the healthcare system in ways that could affect our ability to sell our products profitably. Among policy makers and payers in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access to healthcare. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives. We expect to experience pricing pressures in connection with the sale of any products that we develop due to the trend toward managed healthcare, the increasing influence of health maintenance organizations and additional legislative proposals.

In March 2010, the Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, or collectively, ACA, became law in the U.S. The goal of ACA is to reduce the cost of health care and substantially change the way health care is financed by both government and private insurers. While we cannot predict what impact on federal reimbursement policies this legislation will have in general or on our business specifically, the ACA may result in downward pressure on pharmaceutical reimbursement, which could negatively affect market acceptance of, and the price we may charge for, any products we develop that receive regulatory approval.

More recently, the current U.S. presidential administration has made statements suggesting plans to seek repeal of all or portions of the ACA. There is uncertainty regarding the impact that the President’s administration may have on matters currently governed by the ACA, if any, and any regulatory or legislative changes will likely take time to unfold. These changes could have an impact on coverage and reimbursement for healthcare items and services covered by plans that were authorized by the ACA. However, we cannot predict the ultimate content, timing or effect of any healthcare reform legislation or the impact of potential legislation on us. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our products.

Unfavorable global epidemic or pandemic conditions could adversely affect our business, financial condition or results of operations.

Our operations and the financial results of our operations could be adversely affected by general conditions in the global economy and in the global financial markets. Global financial concerns have caused, and may continue to cause, extreme volatility and disruptions in the capital and credit markets. A severe or prolonged economic downturn could result in a variety of risks to our business, including our ability to raise additional capital when needed on acceptable terms, if at all. We cannot currently anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our business.

Our business may suffer from the severity or longevity of the COVID-19 Global Outbreak.

The COVID-19 is currently impacting countries, communities, supply chains and markets, as well as the global financial markets. To date, COVID-19 has not had a material impact on the Company, other than as set forth above. However, the Company cannot predict whether COVID-19 will have a material impact on our financial condition and results of operations due to understaffing, disruptions in government spending, among other factors. In addition, at this time we cannot predict the impact of COVID-19 on our ability to obtain financing necessary for the Company to fund its working capital requirements. In most respects, it is too early in the COVID-19 pandemic to be able to quantify or qualify the longer-term ramifications on our business, our customers and/or our potential investors.

Our business and operations could suffer in the event of system failures.

Despite the implementation of security measures, our internal computer systems and those of our third-party CROs and other contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. Furthermore, we have little or no control over the security measures and computer systems of our third-party CROs and other contractors and consultants. While we have not experienced any material system failure, accident, or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our programs. For example, the loss of clinical trial data for our product candidates could result in delays in our marketing approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach results in a loss of or damage to our data or applications or other data or applications relating to our technology or product candidates, or inappropriate disclosure of confidential or proprietary information, we could incur liabilities and the further development of our product candidates could be delayed.

Our employees, principal investigators, CROs and consultants may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements and insider trading.

We are exposed to the risk that our employees, principal investigators, CROs and consultants may engage in fraudulent conduct or other illegal activity. Misconduct by these parties could include intentional, reckless and/or negligent conduct or disclosure of unauthorized activities to us that violate the regulations of the FDA and other regulatory authorities, including those laws requiring the reporting of true, complete and accurate information to such authorities; healthcare fraud and abuse laws and regulations in the United States and abroad; or laws that require the reporting of financial information or data accurately. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. Activities subject to these laws also involve the improper use of information obtained in the course of clinical trials or creating fraudulent data in our preclinical studies or clinical trials, which could result in regulatory sanctions and cause serious harm to our reputation.

We have a code of conduct applicable to all of our employees, but it is not always possible to identify and deter misconduct by employees and other third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. Additionally, we are subject to the risk that a person could allege such fraud or other misconduct, even if none occurred. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of civil, criminal and administrative penalties, damages, monetary fines, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

We, or the third parties upon whom we depend, may be adversely affected by earthquakes or other natural disasters and our business continuity and disaster recovery plans may not adequately protect us from a serious disaster.

Earthquakes or other natural disasters could severely disrupt our operations and have a material adverse effect on our business, results of operations, financial condition and prospects. If a natural disaster, power outage or other event occurred that prevented us from using all or a significant portion of our headquarters, that damaged critical infrastructure, such as the manufacturing facilities of our third-party contract manufacturers, or that otherwise disrupted operations, it may be difficult or, in certain cases, impossible for us to continue our business for a substantial period of time. The disaster recovery and business continuity plans we have in place may prove inadequate in the event of a serious disaster or similar event. We may incur substantial expenses as a result of the limited nature of our disaster recovery and business continuity plans, which could have a material adverse effect on our business.

The price of our common stock is volatile, and is likely to continue to fluctuate due to reasons beyond our control; a limited public trading market may cause volatility in the price of our common stock.

The market price of our common stock has been, and likely will continue to be, highly volatile. Factors, including our financial results or our competitors' financial results, clinical trial and research development announcements and government regulatory action affecting our potential products in both the United States and foreign countries, have had, and may continue to have, a significant effect on our results of operations and on the market price of our common stock. We cannot assure you that an investment in our common stock will not fluctuate significantly. One or more of these factors could significantly harm our business and cause a decline in the price of our common stock in the public market. Substantially all of the shares of our common stock issuable upon exercise of outstanding options and warrants have been registered or are likely to be registered for resale or are available for sale pursuant to Rule 144 under the Securities Act, and may be sold from time to time. As of December 31, 2018, we had approximately 25,994,000 shares of common stock underlying currently outstanding warrants and options. Sales of any of these shares on the market, as well as future sales of our common stock by existing stockholders, or the perception that sales may occur at any time, could adversely affect the market price of our common stock.

Our common stock is currently quoted on the OTCQB Market. The quotation of our common stock on the OTCQB Market does not assure that a meaningful, consistent and liquid trading market currently exists, and in recent years such market has experienced extreme price and volume fluctuations that have particularly affected the market prices of many smaller companies like us. Our common stock is subject to this volatility. Sales of substantial amounts of common stock, or the perception that such sales might occur, could adversely affect prevailing market prices of our common stock and our stock price may decline substantially in a short time and our stockholders could suffer losses or be unable to liquidate their holdings.

Our common stock is currently subject to the "Penny Stock" Rules of the SEC and the trading market in our securities is limited, which makes transactions in our stock cumbersome and may reduce the value of an investment in our stock.

As of December 31, 2019, we had net tangible assets of less than $0.6 million and our common stock had a market price per share of less than $5.00. As a result, transactions in our common stock are subject to the SEC's "penny stock" rules. The designation of our common stock as a "penny stock" likely limits the liquidity of our common stock. Prices for penny stocks are often not available to buyers and sellers and the market may be very limited. Penny stocks are among the riskiest equity investments. Broker-dealers who sell penny stocks must provide purchasers of these stocks with a standardized risk-disclosure document prepared by the SEC. The document provides information about penny stocks and the nature and level of risks involved in investing in the penny stock market. A broker must also provide purchasers with bid and offer quotations and information regarding broker and salesperson compensation and make a written determination that the penny stock is a suitable investment for the purchaser and obtain the purchaser's written agreement to the purchase. Many brokers choose not to participate in penny stock transactions. Because of the penny stock rules, there may be less trading activity in penny stocks. Because shares of our common stock are currently subject to these penny stock rules, your ability to trade or dispose of shares of our common stock may be adversely affected.

We may not be able to achieve secondary trading of our stock in certain states because our common stock is no longer nationally traded, which could subject our stockholders to significant restrictions and costs.

Our common stock is not currently eligible for trading on the Nasdaq Capital Market or on a national securities exchange. Therefore, our common stock is subject to the securities laws of the various states and jurisdictions of the United States in addition to federal securities law. While we may register our common stock or qualify for exemptions for our common stock in one of more states, if we fail to do so the investors in those states where we have not taken such steps may not be allowed to purchase our stock or those who presently hold our stock may not be able to resell their shares without substantial effort and expense. These restrictions and potential costs could be significant burdens on our stockholders.

If we fail to maintain an effective system of internal controls over financial reporting, we may not be able to accurately report our financial results. As a result, current and potential stockholders could lose confidence in our financial reporting, which could harm our business and the trading price of our stock.

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports. If we cannot maintain effective controls and reliable financial reports, our business and operating results could be harmed. For example, our small size and limited staffing levels do not allow for segregation of duties that exist at larger companies. We have conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2019 based on the criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 Framework). Based on that evaluation, our management concluded that our internal control over financial reporting were not effective as of December 31, 2019. We continue to work on remedying our weaknesses and maintaining effective internal controls over financial reporting; however, there can be no assurance that a material weakness will not occur in the future. Any failure to implement and maintain controls over our financial reporting or difficulties encountered in the implementation of improvements in our controls, could cause us to fail to meet our reporting obligations. Any failure to maintain our internal controls over financial reporting or to address identified weaknesses in the future, if they were to occur, could also cause investors to lose confidence in our reported financial information, which could have a negative impact on the trading price of our stock.

Issuance of additional equity securities may adversely affect the market price of our common stock.

We are currently authorized to issue up to 150,000,000 shares of our common stock. As of December 31, 2019, we had 84,069,967 shares of common stock issued and outstanding, including 1,019,303 shares of common stock to be issued. As of December 31, 2019, we also had approximately 19,516,000 warrants outstanding, 6,415,000 options outstanding.

To the extent that additional shares of common stock are issued or options and warrants are exercised, holders of our common stock will experience dilution. In addition, in the event of any future issuances of equity securities or securities convertible into or exchangeable for common stock, holders of our common stock may experience dilution.

We are currently authorized to issue up to 15,000,000 shares of preferred stock. As of December 31, 2019, we had 278,188 shares of preferred stock outstanding. Our Board of Directors is authorized to issue preferred stock without any action on the part of our stockholders. Our Board of Directors also has the power, without stockholder approval, to set the terms of any such preferred stock that may be issued, including voting rights, conversion rights, dividend rights, preferences over our common stock with respect to dividends or if we liquidate, dissolve or wind up our business and other terms. If we issue preferred stock in the future that has preference over our common stock with respect to the payment of dividends or upon our liquidation, dissolution or winding up, or if we issue preferred stock with voting rights that dilute the voting power of our common stock, the market price of our common stock could decrease. Any provision permitting the conversion of any such preferred stock into our common stock could result in significant dilution to the holders of our common stock.

We also consider from time to time various strategic alternatives that could involve issuances of additional common or preferred stock, including but not limited to acquisitions and business combinations.

We have no plans to pay dividends on our common stock, and you may not receive funds without selling your common stock.

We have not declared or paid any cash dividends on our common stock, nor do we expect to pay any cash dividends on our common stock for the foreseeable future. We currently intend to retain any future earnings, if any, to finance our operations and growth and, potentially, for future stock repurchases and, therefore, we have no plans to pay cash dividends on our common stock. Any future determination to pay cash dividends on our common stock will be at the discretion of our Board of Directors and will be dependent on our earnings, financial condition, operating results, capital requirements, any contractual restrictions, and other factors that our board of directors deems relevant.

Accordingly, you may have to sell some or all of your common stock in order to generate cash from your investment in the Company. You may not receive a gain on your investment when you sell our common stock and may lose the entire amount of your investment.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our office is located in Agoura Hills, California, where we lease about 2,000 square feet of general office space. The lease for this office is on a month-to-month basis. We believe that other suitable office space would be available if we move to a different location upon the expiration of our current lease.

ITEM 3. LEGAL PROCEEDINGS

From time to time, we may become involved in legal proceedings arising in the ordinary course of our business. Historically, the outcome of all such legal proceedings has not, in the aggregate, had a material adverse effect on our business, financial condition, results of operations or liquidity. Other than as set forth below, there are no additional pending or threatened legal proceedings at this time.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

The Company's common stock trades on the OTCQB market, operated by OTC Markets, under the symbol "MATN".

Holders

As of May 8, 2020, there were approximately 62 stockholders of record of the 87,012,809 outstanding shares of the Company's common stock.

Dividends

The Company has not declared or paid any cash dividends on its common stock since its inception in 1988 and does not intend to pay cash dividends in the foreseeable future. The Company presently intends to retain future earnings, if any, to finance the growth and development of its business.

Securities Authorized for Issuance Under Equity Compensation Plans

Information relating to compensation plans under which our equity securities are authorized for issuance is presented in Part III, Item 12 of this Annual Report on Form 10-K.

Unregistered Sales of Securities

None.

ITEM 6. SELECTED FINANCIAL DATA

Not applicable.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Note Regarding Forward-Looking Statements

This Annual Report on Form 10-K (the "Annual Report" or "Report") includes a number of forward-looking statements that reflect management's current views with respect to future events and financial performance. Forward-looking statements are projections in respect of future events or our future financial performance. In some cases, you can identify forward-looking statements by terminology such as "may," "should," "expects," "plans," "anticipates," "believes," "estimates," "predicts," "potential" or "continue" or the negative of these terms or other comparable terminology. Those statements include statements regarding the intent, belief or current expectations of us and members of our management team, as well as the assumptions on which such statements are based.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, or performance. These statements are only predictions and involve known and unknown risks, uncertainties and other factors. Some of these risks are included in the section entitled "Risk Factors" set forth in this Annual Report and in other reports that we file with the SEC. The occurrence of any of these risks, or others of which we are currently unaware, may cause our company's actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. These risks include, by way of example and without limitation:

- our ability to successfully commercialize our products and services on a large enough scale to generate profitable operations;
- our ability to maintain and develop relationships with customers and suppliers;
- our ability to successfully integrate acquired businesses or new products, or to realize anticipated synergies in connection with acquisitions of businesses or products;
- expectations concerning our ability to raise additional funding and to continue as a going concern;
- our ability to successfully implement our business plan;
- our ability to avoid, or to adequately address any intellectual property claims brought by third parties; and
- the anticipated impact of any changes in industry regulation.

Readers are urged to carefully review and consider the various disclosures made by us in this report and in our other reports filed with the SEC, including our Form 8-K/A filed with the SEC on July 8, 2019, which includes the audited financial statements for our subsidiary, Oncotelic, as of and for the years ended December 31, 2018 and 2017. We undertake no obligation to update or revise forward-looking statements to reflect changed assumptions, the occurrence of unanticipated events or changes in the future operating results over time except as required by law. We believe that our assumptions are based upon reasonable data derived from and known about our business and operations. No assurances are made that actual results of operations or the results of our future activities will not differ materially from our assumptions.

Corporate History

Mateon Therapeutics, Inc. (f/k/a OXiGENE, Inc.), was formed in the State of New York in 1988, was reincorporated in the State of Delaware in 1992 and changed its name to Mateon Therapeutics, Inc. in 2016. The Company conducts business activities through both the Company and its wholly-owned subsidiary Oncotelic. The Company is currently evaluating the further development of its product candidates OXi4503 as a treatment for acute myeloid leukemia and myelodysplastic syndromes and CA4P in combination with a checkpoint inhibitor for the treatment of advanced metastatic melanoma.

On April 17, 2019, the Company entered into a merger agreement with Oncotelic a clinical-stage biopharmaceutical company focused on the treatment of cancer using TGF-b RNA), and Oncotelic Acquisition Corporation (the “Merger Sub”, a newly formed wholly-owned subsidiary of the Company). The Company and Oncotelic entered into the merger agreement in order to create a publicly-traded company with a pipeline of immunotherapies that target several cancer markets which currently lack adequate treatment options.

On April 22, 2019, following the satisfaction of closing conditions contained in the merger agreement, the Merger Sub was merged with and into Oncotelic, with Oncotelic surviving the merger as a wholly-owned subsidiary of the Company (the “Merger”). In connection with the Merger, the Company issued approximately 41,000,033 million shares of common stock and 193,713 shares of newly designated Series A Convertible Preferred Stock, par value $0.01 per share (the “Series A Preferred”) to the former stockholders of Oncotelic in exchange for all of the previously outstanding shares of Oncotelic common stock.

Each share of Series A Preferred is convertible into 1,000 shares of common stock and is eligible to vote on stockholder matters on an as-converted basis. The Series A Preferred is convertible on a (i) optional conversion by the holder at any time or (ii) mandatory conversion upon the availability of a sufficient number of authorized shares of common stock. As a result of the Merger, the former Oncotelic security holders immediately before the Merger owned approximately 85% of the issued and outstanding common stock, including shares of common stock that are issuable upon conversion of the Series A Preferred, and the stockholders of the Company immediately before the merger owned the remaining 15% immediately following the Merger.

Holders of the Company's common stock at the close of business on the date prior to the effectiveness of the Merger were issued a Contingent Value Right ("CVR"), which provides them with the right to receive 75% of the net proceeds received from the full or partial sale, license, transfer or other disposition of the intellectual property rights and related assets of the Company's product candidates OXi4503 and CA4P, in their current form and for their currently contemplated uses, that occurs under a definitive agreement executed prior to the fourth anniversary of the merger (after the initial $500,000 of such net proceeds, which will be retained by the Company). The Company's stock transfer agent acts as the rights agent for the CVR holders. The CVRs are not transferrable, do not entitle their holders to any equity interest in the Company and do not have any voting or dividend rights.

Board and Management Changes

In accordance with the terms of the merger agreement, Dr. Vuong Trieu, Ph.D., Oncotelic's Chairman and Chief Executive Officer, was appointed to the Company's Board of Directors and was appointed as Chief Executive Officer of the Company and Chairman of the Board of Directors. The Company's previous Chief Executive Officer, Dr. William D. Schwieterman, resigned from his position as Chief Executive Officer, although he remained a member of the Company's Board of Directors until January 15, 2020. Also, in accordance with the terms of the merger agreement, all of the other previous directors of the Company resigned effective with the closing of the Merger.

Effective June 30, 2019, Matthew Loar resigned from his position as Chief Financial Officer ("CFO") of the Company. The Company retained Amit Shah as his successor. Mr. Shah commenced his position as CFO of the Company effective July 1, 2019, initially as a consultant CFO and effective August 1, 2019 as an executive employee.

Company Overview

We are a clinical stage biopharmaceutical company developing drugs for the treatment of cancer. Our goal is to advance our drug candidates into late stage pivotal clinical trials and either sell marketing rights to a larger pharmaceutical company or seek FDA approval ourselves.

Oncotelic's lead product candidate, OT-101, is being developed as a broad-spectrum anti-cancer drug that can also be used in combination with other standard cancer therapies to establish an effective multi-modality treatment strategy for difficult-to-treat cancers. Together, we plan to initiate phase 3 clinical trials for OT-101 in both high-grade glioma and pancreatic cancer. During phase 2 clinical trials in pancreatic cancer, melanoma, and colorectal cancers (Study P001) and in high-grade gliomas (Study G004), meaningful clinical benefits were observed and OT-101 exhibited a favorable safety profile. These clinical benefits included long-term survival and meaningful tumor reduction. Both partial and complete responses have been observed in the G004 Phase 2 clinical trial of OT-101 as a single agent in patients with aggressive brain tumors.

Oncotelic's self-immunization protocol (SIP™) is based on novel and proprietary sequential treatment of cancers with OT-101 (an antisense against TGF-ß2) and chemotherapies. This sequential treatment strategy is aimed at achieving effective self-immunization against a patients' own cancer, resulting in robust therapeutic immune response and consequently better control of the cancer and improved survival. Prolonged states of being cancer-free have been observed in some patients with the most aggressive forms of cancer, raising a renewed hope for a potential cure. The use of OT-101 lifts the suppression of the patient's immune cells around the cancer tissue, providing the foundation for an effective initial priming, which is critical for a successful immune response. The subsequent chemotherapy results in the release of neoantigens that result in a robust boost of the immune response. We believe that a rational combination of the Oncotelic SIP™ platform with immune-modulatory drugs like interleukin 2 (IL-2) and/or immune checkpoint inhibitors has the potential to help achieve sustained and robust immune responses in patients with the most difficult-to-treat forms of cancer.

Oncotelic is also working on developing OT-101 as a possible drug candidate that can be deployed in various epidemic and pandemic diseases, such as Severe Acute Respiratory Syndrome ("SARS") and specifically for the current COVID-19.

The Company also completed a merger with PointR in November of 2019. PointR develops and deploys high performance cluster computers and AI technologies as a supercomputing grid that can be layered in and interconnected to create an all-point mesh to harvest operational data within manufacturing plant, hospitals, clinics, phase I units. These grids provide real-time, localized decision-making harvesting complex data from structured and unstructured sources. The deployment of this supercomputing grid enables data capture and insight extraction in real time in blocks which are chained into blockchain ledger records serving as immutable transactions for stakeholders such as regulatory agencies, caretakers, insurers, payers, and manufacturers. The PointR grid can integrate and fuse data from any type of sensors or collection devices. For example, the Vision platform is a network of activity detection cameras functionalized with AI algorithms to monitor, evaluate, and archive real time visual data as a series of metadata entries in a Blockchain ledger.

In the pharmaceutical industry PointR's AI combined with Blockchain will be used in the entire life cycle of a drug: discovery, clinical trials and manufacturing. Leveraging its deep partnership with IBM, the PointR team will combine its own AI Vision technology with industry standard Blockchain to transform drug manufacturing and real-world evidence monitoring for clinical trials. The combined system has the potential to automatically record individual key steps in cGMP manufacturing operations including the flow of people, raw materials and operations in trusted perpetual blockchain ledgers that are indisputable. This has the potential to create much more efficient GMP manufacturing operations while simultaneously improving reliability and data security.

For the past year we have been operating under significant capital constraints, which has curtailed our ability to achieve meaningful progress in either of the Company's two clinical programs – one of which is developing OXi4503 as a treatment for acute myeloid leukemia and myelodysplastic syndromes and the other of which is developing CA4P in combination with a checkpoint inhibitor for the treatment of advanced metastatic melanoma. We believe that the merger of Oncotelic and the Company creates a combined company that has potential to generate shareholder value through a promising pipeline of next generation immunotherapies targeting several significant cancer markets where there is a lack of therapeutic options and lack of an effective immunotherapy protocol.

Bridge Financing

On April 23, 2019, the Company completed the initial tranche of financing pursuant to the Bridge Financing. In connection with the Bridge Financing, the Company issued a $200,000 principal amount Convertible Debenture to Peak One, a $200,000 principal amount Convertible Debenture to TFK and an aggregate $200,000 principal amount Convertible Debenture to the Bridge Investors. Each of the Convertible Debentures were issued at a 10% original issue discount for gross proceeds of $540,000. The Debentures will mature on the third anniversary of their issuance and may be redeemed by the Company prior to maturity, subject to the prepayment penalties.

On June 12, 2019, the Company closed the second tranche of financing with Peak One, issuing an additional $200,000 face amount Convertible Debenture for gross proceeds of $179,000 after original issue discount. Concurrent with the issuance of the second tranche, the Company entered into the Amendment to increase the total borrowing amount under the Securities Purchase Agreement with Peak One to up to $600,000, adding the ability to borrow up to an additional $200,000 in a third tranche through the issuance of an additional Convertible Debenture.

On August 6, 2019, pursuant to the Bridge SPA, the Company entered into a second Convertible Note with the Bridge Investor. This second note has a principal balance of $200,000, an OID of $20,000 and debt issuance costs of $5,000, resulting in net proceeds of $175,000, with a maturity date of August 6, 2022.

During the three months ended December 31, 2019, the Peak One Tranche #2 note and the notes issued to our CEO and the bridge investors reached the 180 days. As such, Peak One, the CEO and the bridge investor had the ability to convert that debt into equity at the variable conversion price of 65% % of the Company's lowest traded price after the first 180 days or at the lower of the Fixed Price or 55% of the Company's traded stock price under certain circumstances. This gave rise to a derivative feature within the debt instrument. The Company evaluated the impact of the derivative and recorded a derivative liability of $541,000. This also required the company to fully amortize the beneficial conversion feature of $563,000, record a debt discount of $169,000 and a change in fair value of $192,000 to appropriately record the transactions.

For additional information concerning the merger with Oncotelic, the CVRs, the management change and the bridge financings, see our Current Reports on Form 8-K filed with the SEC on April 18 and April 25, 2019 as well as Note 7 of the Consolidated Notes to Financial Statements attached to this Annual Report on Form 10K

Note Purchase Agreement with PointR Data, Inc.

On July 22, 2019, the Company entered into a Note Purchase Agreement with PointR Data, Inc. Pursuant to the Note Purchase Agreement, the Company issued a Convertible Promissory Note to PointR Data, Inc. in the principal amount of $200,000. The Convertible Promissory Note bore interest at a rate of 8% per annum. Interest payments were due monthly on the 15th day of each calendar month (or the next business day thereafter), and were payable, at the option of the holder, either in cash or in shares of the Company's common stock, valued at the closing price of the common stock on the principal market on which the common stock is either traded or quoted at such time. The Convertible Promissory Note was due and payable on demand by the holder (a) at any time after January 1, 2020 or (b) upon the occurrence of an Event of Default (as defined in the Convertible Note and the Note Purchase Agreement). All amounts outstanding under the Convertible Promissory Note were converted into the Company's securities issued at the price per share paid by investors in the Qualified Financing.

Merger Agreement with PointR Data, Inc.

On August 17, 2019, the Company entered into an Agreement and Plan of Merger (the "PointR Merger Agreement") with PointR Data, Inc., a Delaware corporation ("PointR"), a privately-held, developer of high-performance cluster computer and AI applications. The PointR Merger Agreement provided, that subject to the satisfaction of certain conditions, PointR would be merged with and into a newly formed subsidiary of the Company (the "PointR Merger"), with PointR surviving the Merger as a wholly-owned subsidiary of the Company.

At the effective time of the PointR Merger, holders of PointR common stock prior to the PointR Merger were entitled to receive an aggregate of $15,000,000 payable in shares of the Company's common stock, calculated at a price of $0.18 per share. The Merger Agreement also provides for two additional tranches of merger consideration based on PointR's achievement of a development milestone and a revenue milestone. The development milestone is triggered on the completion of an AI tool or platform that will analyze data and can be used to identify patients that will benefit from a particular targeted drug. The revenue milestone is triggered on securing a licensing contract from a third-party customer that will generate a minimum of $100 million in license fees over the life-time of the contract, of which at least $10 million shall have been received. Each additional tranche of merger consideration is for an aggregate value of $7,500,000 and payable in additional shares the Company's common stock, based on the market price at the time of payment, subject to a minimum value of $0.18 per share. The Merger is intended to qualify as a tax-free reorganization for U.S. federal income tax purposes.

On November 1, 2019, the Company entered into Amendment No. 1 to Agreement and Plan of Merger (the "Amendment") with PointR. The Amendment revised the terms of the PointR Merger Agreement to provide that holders of PointR common stock will receive shares of the Company's Series A Preferred in lieu of the Company's common stock in connection with the Merger. The Amendment also revised the milestones for the earn-out payment under the Merger Agreement. The development milestone is triggered on either (a) the completion of an AI tool or platform that will analyze data and can be used to identify patients that will benefit from a particular targeted drug, or (b) the execution of a statement of work with a third party customer to provide use of an AI platform which is designed to create efficiencies in the pharmaceutical manufacturing process and the Company provides follow on work for a period of 30 to 60 additional days. The revenue milestone is triggered on (a) securing a licensing contract from a third party customer that will generate a minimum of $100 million in license fees over the life-time of the contract, of which at least $10 million shall have been received, (b) any joint venture partially owned by the Company or PointR which uses the AI platform for strategic purposes, closes a liquidity event (including any initial public offering, reverse merger with a publicly traded company or acquisition), or (c) the AI platform materially facilitates the discovery of a drug that receives FDA marketing approval. Each additional tranche of merger consideration is for an aggregate value of $7,500,000 and payable in additional shares of the Company's common stock, based on the market price at the time of payment, subject to a minimum value of $0.18 per share.

On November 4, 2019, in accordance with the terms of the PointR Merger Agreement the Company completed the PointR Merger. On the effectiveness of the PointR Merger, the shares of PointR common stock outstanding immediately prior to the Merger and $200,000 Convertible Promissory Note, with accrued interest thereon was converted solely into the right to receive 84,475 shares of the Company's Series A Preferred. Immediately following the closing of the Merger, the former PointR security holders own approximately 23.29% of the Company's issued and outstanding common stock (including any shares of common stock issuable upon conversion of the Series A Preferred), and the Company's stockholders prior to the Merger own approximately 76.71% of the Company's issued and outstanding common stock (including any shares of common stock issuable upon conversion of the Series A Preferred).

The PointR Merger is intended to create a publicly traded AI driven immuno-oncology company with a robust pipeline of first in class TGF-β immunotherapies for late stage cancers such as gliomas, pancreatic cancer and melanoma.

Fall 2019 Debt Financing

On December 11, 2019, the Company closed its Fall 2019 Debt Financing raising an additional $500,000 for gross proceeds of $1.0 million. The transactions complete the previously announced offering, under which the Company entered into a Note Purchase Agreement (the "Note Purchase Agreement") with certain accredited investors for the sale of convertible promissory notes (the "Notes"). The Company completed the initial closing under the Note Purchase Agreement on November 23, 2019, issuing a $250,000 principal amount Note to each of Dr. Trieu, the Company's Chief Executive Officer, and Stephen Boesch, in exchange for gross proceeds of $500,000. In connection with the second and final closing the Company issued Notes to additional investors including $250,000 to Dr. Sanjay Jha, the former CEO of Motorola and COO/President of Qualcomm. The Company also offset certain payables due to Dr. Trieu, Chulho Park, the Company's Chief Technology Officer, and Amit Shah, the Company's Chief Financial Officer and converted that into the debt under the Fall 2019 Debt Financing. $35,000 due to Dr. Trieu, $27,000 due to Mr. Park and $20,000 due to Mr. Shah was converted into debt. The Company also issued notes of $168,000 to two affiliated accredited investors.

All the Notes provide for interest at the rate of 5% per annum, and are unsecured. All amounts outstanding under the Notes becomes due and payable upon the approval of the holders of a majority of the principal amount of outstanding Notes (the "Majority Holders") on or after (a) November 23, 2020 or (b) the occurrence of an event of default (either, the "Maturity Date"). The Company may prepay the Notes at any time. Events of default under the Notes include failure to make payments under the Notes within thirty (30) days of the date due, failure to observe of the Note Purchase Agreement or Notes which is not cured within thirty (30) days of notice of the breach, bankruptcy, or a change in control of the Company (as defined in the Note Purchase Agreement).

The Majority Holders have the right, at any time not more than five (5) days following the Maturity Date, to elect to convert all, and not less than all, of the outstanding accrued and unpaid interest and principal on the Notes. The Notes may be converted, at the election of the Majority Holders, either (a) into shares of the Company's common stock at a conversion price of $0.18 per share, or (b) into shares of EdgePoint's, the Company's to be newly formed subsidiary for AI/Blockchain in pharmaceutical manufacturing, common stock at a conversion price of $5.00 (based on a $5 million pre-money valuation) of EdgePoint and 1 million shares outstanding.

The issuance of the Fall 2019 notes resulted in a discount from the beneficial conversion feature totaling $222,222 related to the conversion feature. Total amortization of the discount totaled $22,222 for the year ended December 31, 2019. Total unamortized discount on this note was $200,000 as of December 31, 2019.

Research Service Agreement between Golden Mountain Partners LLC (GMP) and Mateon Therapeutics Inc./Oncotelic Inc. ("Mateon Entities").

When COVID-19 emerged in China, the Company and GMP contemplated a collaboration to develop drug candidates for COVID-19. Oncotelic and GMP entered into a research and services agreement (the "Agreement") on February 3, 2020 memorializing their collaborative efforts to develop and test COVID-19 antisense therapeutics. On March 18, 2020, the Company reported the anti-viral activity of OT-101 – its lead drug candidate currently in phase 3 testing in pancreatic cancer and glioblastoma. In an in vitro antiviral testing performed by an independent laboratory, OT-101 has an 50% effective concentration (EC50) of 7.6 µg/mL and is not toxic at the highest dose of 1000 µg/mL giving a safety index (SI) value of >130, which is considered highly active. On March 23, 2020, the Company, Oncotelic and GMP entered into a supplement to the Agreement (the "Supplement") to confirm the inclusion of OT-101 within the scope of the Agreement, pending positive confirmatory testing against COVID-19. In consideration for the financial support provided by GMP for the research, pursuant to the terms of the Agreement (as amended by the Supplement) GMP is entitled to obtain certain exclusive rights to the use of the Product in the COVID Field on a global basis, and an economic interest in the use of the Product in the COVID Field including 50/50 profit sharing. As described in the Supplement, the Mateon Entities intend to license or assign intellectual property rights, including the 2020 Patent Application and any other intellectual property rights owned or controlled by the Mateon Entities relating to the Product, OXi4503 and CA4P, to a joint venture company to be established jointly between Oncotelic and GMP (or its designee), as well as providing management services and other expertise to the joint venture company; GMP intends that it (or its designee, as the case may be) shall provide funding to the joint venture company to support its development and commercial activities in the joint venture company's territories; in each case, on terms to be agreed by the parties; and GMP shall be entitled to use its governmental relations and local expertise in Greater China to assist with coordinating the research, dGondenevelopment and commercialization of (i) the Products in the COVID Field, (ii) the Products in the OT101 Oncology Field, (iii) OXi4503; and (iv) CA4P, in each case in Greater China. The joint venture company is intended to be owned 50% by Oncotelic and 50% by GMP (or its designee), and its principal activities shall be to research, develop, bring to market and commercialize: (i) the Products in the COVID Field on a global basis, (ii) the Products in the OT101 Oncology Field in the Licensed Territory, (iii) OXi4503 in the Licensed Territory; and (iv) CA4P in the Licensed Territory. Upon completion of due diligence by one another and subject to GMP's satisfactory due diligence review, the parties intend to enter into written definitive agreements for the Joint Venture Transaction within the Exclusivity Period of 90 days. On April 6, 2020, the Company announced that it had delivered the requisite testing results to GMP confirming the applicability and potential use of OT-101 for the treatment of COVID-19. OT-101 exhibited potent activity against both COVID-19 and SARS with a robust safety index of >500. Also, the Company has submitted a Pre-Investigational New Drug application package to the Food and Drug Administration. GMP paid the Company fees of $1.2 million for the services rendered under the agreement and supplemental agreements as well as reimbursed the Company for actual costs incurred of $0.1 million.

Critical Accounting Policies and Significant Judgments and Estimates

The preparation of financial statements in accordance with U.S. generally accepted accounting principles requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported revenues and expense during the reporting periods. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances at the time we make such estimates. Actual results and outcomes may differ materially from our estimates, judgments and assumptions. We periodically review our estimates in light of changes in circumstances, facts and experience. The effects of material revisions in estimates are reflected in the financial statements prospectively from the date of the change in estimate. Our significant accounting policies are more fully described in Note 2 to our financial statements included elsewhere in this Annual Report.

We define our critical accounting policies as those accounting principles that require us to make subjective estimates and judgments about matters that are uncertain and are likely to have a material impact on our financial condition and results of operations, as well as the specific manner in which we apply those principles. We believe the critical accounting policies used in the preparation of our financial statements that require significant estimates and judgments are the following:

Investment in Equity-based Securities

Prior to the Merger, Oncotelic received Series E Preferred Shares of Adhera Therapeutics, Inc. (“Adhera”) in consideration for the issuance of Oncotelic’s common stock under various Securities Purchase Agreements (See Notes 7). The Company records its investments in equity securities initially at cost in accordance with Accounting Standards Codification (“ASC”) 321, Investments –Equity Securities (“ASC 321”). The Company subsequently marks the investments to market at each reporting period and, in accordance with ASU 2016-01, Financial Instruments – (Overall), records the unrealized gains or losses in the Statement of Operations. There were no unrealized gains or losses on investments in equity securities for the year ended December 31, 2019. There were no unrealized gains or losses on investments in equity securities for the year ended December 31, 2018. The Company identified certain disclosures by Adhera indicating their financial condition and that they may file for bankruptcy. As such the Company wrote off the long-term investment.

Impairment of Long-Lived Assets

The Company reviews long-lived assets, including definite-lived intangible assets, for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Recoverability of these assets is determined by comparing the forecasted undiscounted net cash flows of the operation to which the assets relate to the carrying amount. If the operation is determined to be unable to recover the carrying amount of its assets, then these assets are written down first, followed by other long-lived assets of the operation to fair value. Fair value is determined based on discounted cash flows or appraised values, depending on the nature of the assets. For the year ended December 31, 2019 and 2018, there were no impairment losses recognized for long-lived assets.

Intangible Assets

The Company records its intangible assets at cost in accordance with ASC 350, Intangibles – Goodwill and Other. The Company reviews the intangible assets for impairment on an annual basis or if events or changes in circumstances indicate it is more likely than not that they are impaired. These events could include a significant change in the business climate, legal factors, a decline in operating performance, competition, sale or disposition of a significant portion of the business, or other factors.

Goodwill

Goodwill represents the excess of the purchase price of acquired business over the estimated fair value of the identifiable net assets acquired. Goodwill is not amortized but is tested for impairment at least once annually, at the reporting unit level or more frequently if events or changes in circumstances indicate that the asset might be impaired. The goodwill impairment test is applied by performing a qualitative assessment before calculating the fair value of the reporting unit. If, on the basis of qualitative factors, it is considered not more likely than not that the fair value of the reporting unit is less than the carrying amount, further testing of goodwill for impairment would not be required. Otherwise, goodwill impairment is tested using a two-step approach.

The first step involves comparing the fair value of the reporting unit to its carrying amount. If the fair value of the reporting unit is determined to be greater than its carrying amount, there is no impairment. If the reporting unit's carrying amount is determined to be greater than the fair value, the second step must be completed to measure the amount of impairment, if any. The second step involves calculating the implied fair value of goodwill by deducting the fair value of all tangible and intangible assets, excluding goodwill, of the reporting unit from the fair value of the reporting unit as determined in step one. The implied fair value of the goodwill in this step is compared to the carrying value of goodwill. If the implied fair value of the goodwill is less than the carrying value of the goodwill, an impairment loss equivalent to the difference is recorded.

Convertible Instruments

The Company evaluates and accounts for conversion options embedded in its convertible instruments in accordance with ASC 815 "Derivatives and Hedging".

ASC 815 generally provides three criteria that, if met, require companies to bifurcate conversion options from their host instruments and account for them as free standing derivative financial instruments. These three criteria include circumstances in which (a) the economic characteristics and risks of the embedded derivative instrument are not clearly and closely related to the economic characteristics and risks of the host contract, (b) the hybrid instrument that embodies both the embedded derivative instrument and the host contract is not re-measured at fair value under otherwise applicable generally accepted accounting principles with changes in fair value reported in earnings as they occur, and (c) a separate instrument with the same terms as the embedded derivative instrument would be considered a derivative instrument. Professional standards also provide an exception to this rule when the host instrument is deemed to be conventional as defined under professional standards.

The Company accounts for convertible instruments (when it has determined that the embedded conversion options should not be bifurcated from their host instruments) in accordance with ASC 470-20 "Debt – Debt with Conversion and Other Options." Accordingly, the Company records, when necessary, discounts to convertible notes for the intrinsic value of conversion options embedded in debt instruments based upon the differences between the fair value of the underlying common stock at the commitment date of the note transaction and the effective conversion price embedded in the note. Original issue discounts under these arrangements are amortized over the term of the related debt to their earliest date of redemption. The Company also records when necessary deemed dividends for the intrinsic value of conversion options embedded in preferred shares based upon the differences between the fair value of the underlying common stock at the commitment date of the note transaction and the effective conversion price embedded in the note.

ASC 815-40 “Derivatives and Hedging – Contracts in Entity’s Own Equity” provides that, among other things, generally, if an event is not within the entity’s control could or require net cash settlement, then the contract shall be classified as an asset or a liability.

Derivative Financial Instruments Indexed to the Company’s Common Stock

We have generally issued derivative financial instruments, such as warrants, in connection with our equity offerings. We evaluate the terms of these derivative financial instruments in order to determine their accounting treatment in our financial statements. Key considerations include whether the financial instruments are freestanding and whether they contain conditional obligations. If the warrants are freestanding, do not contain conditional obligations and meet other classification criteria, we account for the warrants as an equity instrument. However, if the warrants contain conditional obligations, then we account for the warrants as a liability until the conditional obligations are met or are no longer relevant. Because no established market prices exist for the warrants that we issue in connection with our equity offerings, we must estimate the fair value of the warrants, which is as inherently subjective as it is for stock options, and for similar reasons as noted in the stock-based compensation section above. For financial instruments which are accounted for as a liability, we report any changes in their estimated fair values as gains or losses in our Consolidated Statement of Income.

Research and Development Expense

Research and development expense consists of costs we incur for the development of our investigational drugs and, to a lesser extent, for preclinical research activities. Research and development costs are expensed as incurred. Research and development expense includes clinical trial costs, salaries and benefits of employees, including associated stock-based compensation, payments to clinical investigators, drug manufacturing costs, laboratory supplies and facility costs. Clinical trial costs are a significant component of our research and development expense, and these can be difficult to accurately estimate. Included in clinical trial costs are fees paid to other entities that conduct certain research and development activities on our behalf, such as clinical research organizations, or CROs. We estimate clinical trial expense based on the services performed pursuant to contracts with research institutions such as CROs and the actual clinical investigators. These estimates are based on actual time and expenses incurred by the CRO and the clinical investigators. Also included in clinical trial expense are costs based on the level of patient enrollment into the clinical trial and the actual services performed under the related clinical trial agreement. Changes in clinical trial assumptions, such as the length of time estimated to enroll all patients, rate of screening failures, patient drop-out rates, number and nature of adverse event reports and the total number of patients enrolled can impact the average and expected cost per patient and the overall cost of the clinical trial. Based on patient enrollment reports and services provided, we may periodically adjust estimates for the clinical trial costs. If we do not identify costs that we have begun to incur or if we underestimate or overestimate the level of services performed, the length of time for these services or the costs of these services, our actual expenses could differ from our estimates.

Share-Based Compensation

We record the estimated fair value of all share-based payments issued to employees and other service providers. Our share-based payments consist primarily of stock options. The valuation of stock options is an inherently subjective process, since market values are not available for any stock options in our equity securities. Market values are also not available on long-term, non-transferable stock options in other equity securities. With no market values on options to trade in our common stock and no comparable market values on any long-term non-transferable stock options, the process of valuing our stock options is even more uncertain and subjective. Accordingly, we use a Black-Scholes option pricing model to derive an estimated fair value of the stock options which we issue. The Black-Scholes option pricing model requires certain input assumptions, including the expected term of the options and the expected volatility of our common stock. Changes in these assumptions could have a material impact on the estimated fair value that we record for share-based payments that we issue. We determine the term of the options based on the simplified method, which averages the vesting period and the contractual life of the stock option. We determine the expected volatility based on the historical volatility of our common stock over a period commensurate with the option’s expected term. The Black-Scholes option pricing model also requires assumptions for risk-free interest rates and the expected dividend yield of our common stock, but we feel that these values are more objective and note that changes in these values do not have a significant impact on the estimated value of the options when compared to the volatility and term assumptions.

We are also required to estimate the level of award forfeitures expected to occur and record compensation expense only for those awards that are ultimately expected to vest. Accordingly, we perform a historical analysis of option awards that are forfeited prior to vesting, and record total stock option expense that reflects this estimated forfeiture rate.

Results of Operations

The Merger with Oncotelic was treated as a "reverse merger" for accounting purposes. In accordance with the reporting requirements and commencing with the Quarterly Report ending June 30, 2019, the Company has been reporting historical financial data of Oncotelic for all periods prior to the date of the merger, and for the combined company for all periods after the date of the merger. Accordingly, the following management discussion and analysis should be read together with the audited financial statements and notes for Oncotelic included in our Current Report on Form 8K/A filed with the SEC on July 8, 2019. The financial statements for the Company included in this Annual Report on Form 10-K for periods prior to the Merger are not the same as those reported Company's prior filings with the SEC which were derived the operations of the Company only. The results of operations for the Company were replaced by those of Oncotelic for the year ended December 31, 2018 and through the date of the merger. After the merger, the results of Mateon were combined with those of Oncotelic till December 31, 2019. In addition, the results of operations for PointR were included from the time of that acquisition. As such, the results of operations for 2019 and 2018 are not comparable.

Years Ended December 31, 2019 and 2018

A comparison of the Company's operating results for the year ended December 31, 2019 and 2018, respectively, is as follows.

	2019	2018	Variance
Operating expense:			
Research and development	$ 1,372,151	$ 649,755	$ 722,396
General and administrative	2,938,726	62,983	2,875,743
Total operating expense	4,310,877	712,738	3,598,139
Loss from operations	(4,310,877)	(712,738)	(3,598,139)
Long term investment written off	1,769,300	-	1,769,300
Change in the value of derivatives on debt	191,643	-	191,643
Interest expense, net	(749,479)	-	(749,479)
Net loss	$ (6,638,013)	$ (712,738)	$ (5,925,275)

Research and Development Expense

Research and development ("R&D") expense increased by approximately $0.7 million for the year ended December 31, 2019 compared to the same period in 2018. Of this amount, approximately $0.5 million was the result of the inclusion of the Company's R&D operations and approximately $0.3 million was the result of an increase in Oncotelic's R&D operations. The Company's R&D activities of $0.3 million was primarily due to personnel costs. The financial information presented does not include any R&D activity for the Company for the period ended December 31, 2018 and as such the results for the Company are not directly comparative from period to period.

The increase of approximately $0.3 million in Oncotelic's R&D activities is primarily due to higher personnel costs paid to a related party to conduct the R&D activities with the lead product candidate OT-101.

As a result of the Merger with Oncotelic, we expect to increase research and development activities, including the initiation of new clinical trials for both oncology indications as well as COVID-19, and therefore believe that research and development expense will increase in the future, subject to our continuing ability to secure sufficient funding to continue planned operations.

General and Administrative Expense

General and administrative ("G&A") expense increased by approximately $2.9 million for the year ended December 31, 2019 compared to the same period of 2018, primarily due to an increase of approximately $1.4 million in G&A expense for Oncotelic's operations and the addition of approximately $1.5 million related to the Company's G&A operations as a result of the mergers of Oncotelic and PointR and fund raising efforts. In the year ended December 31, 2018, G&A expense of $0.5 million was reversed upon acquisition of certain intangible assets. No similar reduction was recorded in the same period of 2019.

The increase of approximately $1.4 million in Oncotelic's G&A activities is primarily due to higher legal and professional costs of approximately $0.7 million primarily in connection with the acquisition of Oncotelic and fund raising efforts, stock based compensation of $0.3 million related to the year ended December 31, 2019, and $0.5 million reversed upon acquisition of certain intangible assets during the year ended December 31, 2018. The approximately $1.5 million in the Company's G&A activities was primarily due to approximately $0.7 million of higher personnel costs and approximately $0.6 million for legal and professional services associated with the merger of PointR and fund-raising efforts and $0.1 million for stock cost recorded due to inducement shares issued to Peak One and TFK.

As a result of the Merger with Oncotelic, we expect to increase G&A activities, in connection with fund raising activities as well as other G&A initiatives, and therefore believe that G&A expense will increase in the future, subject to our continuing ability to secure sufficient funding to continue planned operations.

Write off of Long-Term Investment

We recorded a loss of $1.8 million in value of our long-term investment in Adhera Therapeutics, Inc. ("Adhera") during the year ended December 31, 2019. Based on a recent filing by Adhera, in which Adhera described their current financial condition as well as the fact that they have ceased all operations and are also considering possible bankruptcy options, we recorded a loss in value of the long term investment in Adhera as it seems severely impaired and therefore, determined to write off the entire investment. No similar charge was recorded in 2018.

Change in value of derivatives

During the three months ended December 31, 2019, we recorded a change in value of derivatives of $0.2 million on the Peak One Tranche #2 note and the notes issued to our CEO and the bridge investors. Such notes reached the 180 days, and as such Peak One, the CEO and the bridge investor had the ability to convert that debt into equity at the variable conversion price of 65% % of the Company's lowest traded price after the first 180 days or at the lower of the Fixed Price or 55% of the Company's traded stock price under certain circumstances. This gave rise to a derivative feature within the debt instrument which resulted in the recording of a derivative liability and change in value of the derivative.

Interest Expense

We recorded interest expense of $0.8 million in connection with debt raised from convertible notes during the year ended December 31, 2019. No similar expense was recorded in 2018.

Net Loss

We recorded a net loss of approximately $6.6 million for the year ended December 31, 2019, compared to a net loss of approximately $0.7 million for the year ended December 31, 2018. The increased loss of approximately $5.9 million for year ended, 2019 as compared to the same period of 2018 was due to the increase in research and development and G&A expense as explained above, the write off of the value of the long-term investment and interest cost, the recording of the change in value of the derivative and interest expense.

The financial information presented above does not include any expenses for the Company's or PointR's operations for the year ended December 31, 2018 and through the dates of the respective mergers.

Liquidity, Financial Condition and Capital Resources ($s in '000's)

	December 31, 2019	*December 31, 2018*
Cash	$ 82	$ 2
Working capital	(6,510)	(281)
Stockholders' Equity	16,902	2,465

The Company has experienced net losses every year since inception and as of December 31, 2019 had an accumulated deficit of approximately $12.1 million. As of December 31, 2019, the Company had approximately $82,000 in cash and current liabilities of approximately $6.8 million, of which approximately $1.3 million are net assumed liabilities of the Company as part of the Oncotelic reverse merger and $2.6 million is contingent liability to issue common shares of the Company to PointR shareholders upon achievement of certain milestones. The Company does not expect to generate any meaningful revenue from product sales in the near future, and expects to incur significant additional operating losses over the next several years, primarily as a result of the Company's plans to continue clinical trials for its investigational drugs. The Company's limited capital resources, history of recurring losses and uncertainties as to whether the Company's operations will become profitable raise substantial doubt about its ability to continue as a going concern. The financial statements contained in this report do not include any adjustments related to the recoverability of assets or classifications of liabilities that might be necessary should the Company be unable to continue as a going concern.

The principal source of the Company's working capital deficit to date has been the issuance of convertible notes, a majority of which has been provided by officers and certain insiders. The Company will need to raise additional capital in order to fund its operations and continue development of product candidates. The Company is evaluating the options to further the development of Oncotelic's lead product candidate, OT-101 in addition to evaluating the development pathway of its product candidates; OXi4503 and/or CA4P. Since April 2019, the Company has raised $1.9 million, net of cash discounts of $0.1 million, through the sale of convertible debentures and notes payable.

Following, the drawdown of the second tranche from the Bridge Investor, up to $400,000 in face value of Convertible Debentures remains available under the Securities Purchase Agreements.

The Company anticipates raising substantial additional capital through the sale of equity securities and/or debt, but no other financing arrangements are in place at this time.

If the Company is unable to access additional funds when needed, it may not be able to continue the development of these investigational drugs and the Company could be required to delay, scale back or eliminate some or all of its development programs and operations. Any additional equity financing, if available, would be dilutive to the current stockholders and may not be available on favorable terms. Additional debt financing, if available, may involve restrictive covenants and could also be dilutive. The Company's ability to access capital is not assured and, if access is not achieved on a timely basis, would materially harm the Company's financial condition, the value of its common stock and its business prospects.

Cash Flows ($s in '000s)

	Year ended December 31,	
	2019	**2018**
Net cash used in operating activities	$ (2,281)	$ (241)
Net cash provided by investing activities	189	-
Net cash provided by financing activities	2,171	240
Increase (decrease) in cash	$ 79	$ (1)

Operating Activities

Net cash used in operating activities was approximately $2.3 million for the year ended December 31, 2019. This was due to the net loss of approximately $6.6 million and a change in the fair value of derivative recorded on the conversion of debt to an equity based instrument of $0.2 million, which was partially offset by non-cash charges of approximately $1.3 million, non-cash issuance of shares in lieu of services of approximately $0.4 million, non-cash charge of $1.8 million for the write off of the long-term investments and changes in operating assets and liabilities of approximately $1.1 million.

Net cash used in operating activities was approximately $0.2 million for the year ended December 31, 2018, due to the net loss of approximately $0.7 million and changes in operating assets and liabilities of approximately $0.1 million and by non-cash charges of approximately $0.9 million, partially offset by a non-cash write off of related party payable of $0.5 million.

Investing Activities

For the year ended December 31, 2019, net cash provided by investing activities, which was approximately $0.2 million and which was attributable to the cash received in the mergers. No similar cash was recorded during the same period of 2018.

Financing Activities

For the year ended December 31, 2019, net cash provided by financing activities was approximately $2.2 million, consisting of approximately $0.9 million from the issuance of the Convertible Debentures in connection with the Bridge Financing, $0.2 million from the issuance of the Convertible Debentures to PointR, $1.0 million from the issuance of notes payable during the fall of 2019 and approximately $0.1 million from the sale of common stock.

For the year ended December 31, 2018, net cash provided by financing activities was $240,000 from the sale of Oncotelic common stock.

Off-Balance Sheet Arrangements

We have no off-balance sheet arrangements.

Effects of Inflation

We do not believe that inflation has had a material impact on our business, revenues or operating results during the periods presented.

Contractual Obligations

Our current drug development programs are based on a series of compounds called combretastatins, which we have exclusively licensed from Arizona State University, or ASU. If our current drug candidates are approved, we will be required to pay low to mid-single-digit royalties on future net sales of products associated with the ASU patent rights until these patent rights expire.

We also have an exclusive license from Bristol-Myers Squibb, or BMS, for certain patent rights to particular combretastatins, including CA4P. If CA4P is approved, we will be required to pay low-single-digit royalties on future net sales of products associated with the BMS patent rights until these patent rights expire.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our cash is maintained in U.S. dollar accounts. We have adopted a policy for the cash that we hold, and also for any cash equivalents and investments that we may hold, the primary objective of which is to preserve principal, while also maintaining liquidity to meet our operating needs and maximize yields to the extent possible. Although our investments can be subject to credit risk, we follow procedures to limit the amount of credit exposure in any single issue, issuer or type of investment. Our investments are also subject to interest rate risk and would be likely to decrease in value if market interest rates increase. However, due to the generally conservative nature of our investments and relatively short duration, we believe that interest rate risk is mitigated.

Although we may from time to time manufacture drugs and conduct preclinical or clinical trials outside of the United States, we believe our exposure to foreign currency risk to be immaterial.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

See Item 15 for a list of our Financial Statements and Schedules and any supplementary financial information filed as part of this Annual Report.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosures. In designing disclosure controls and procedures, our management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible disclosure controls and procedures. The design of any disclosure controls and procedures also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Any controls and procedures, no matter how well designed and operated, can provide only reasonable, not absolute, assurance of achieving the desired control objectives.

As required by Rule 13a-15(b) under the Securities Exchange Act of 1934, as amended (the "Exchange Act") our Chief Executive Officer ("CEO") and our Chief Financial Officer ("CFO") conducted an evaluation as of the end of the period covered by this Annual Report on Form 10-K, of the effectiveness of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act. Based on that evaluation, our CEO and our CFO each concluded that our disclosure controls and procedures are not effective to provide reasonable assurance that information required to be disclosed in the reports that we file or submit under the Exchange Act, (i) is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and (ii) is accumulated and communicated to our management, including our CEO and our CFO, as appropriate to allow timely decisions regarding required disclosure.

Material Weaknesses in Internal Control over Financial Reporting

Management conducted an assessment of the effectiveness of our internal control over financial reporting as of December 31, 2019 based on the framework established in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, management has determined that the Registrant's internal control over financial reporting as of December 31, 2019 was not effective as a result of certain material weaknesses.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis.

The ineffectiveness of our internal control over financial reporting was due to the following material weaknesses which are observed in many small companies with a small number of accounting and financial reporting staff:

- Lack of formal policies and procedures;

- Lack of a functioning audit committee and independent directors on the Company's board of directors to oversee financial reporting responsibilities;
- Inadequate or lack of segregation of duties
- Lack of dedicated resources and experienced personnel to design and implement internal control procedures to support financial reporting objectives;
- Lack of qualified accounting personnel to prepare and report financial information in accordance with GAAP; and
- Lack of risk assessment procedures on internal controls to detect financial reporting risks on a timely manner.

Management's Plan to Remediate the Material Weaknesses

Management has been implementing and continues to implement measures designed to ensure that control deficiencies contributing to the material weakness are remediated, such that these controls are designed, implemented, and operating effectively. The remediation actions planned include:

- Continue to search for, evaluate and recruit qualified independent outside directors;
- Once independent directors are on Board, to set up a formal Audit Committee (and other Committees) of the Board
- Hire qualified accounting personnel to prepare and report financial information in accordance with GAAP;
- Identify gaps in our skills base and the expertise of our staff required to meet the financial reporting requirements of a public company; and
- Continue to develop policies and procedures on internal control over financial reporting and monitor the effectiveness of operations on existing controls and procedures.

Changes in Internal Control over Financial Reporting

During the year ended December 31, 2019, we continued to execute upon our planned remediation actions which are all intended to strengthen our overall control environment. In June 2019, the Company entered into a consulting agreement with Mr. Amit Shah to serve as a consulting Chief Financial Officer to the Company. On August 23, 2019, the Company entered into an employment agreement with Mr. Amit Shah, effective August 1, 2019, to serve as the Company's Chief Financial Officer. For the fiscal year ended December 31, 2019, and as a result of the Merger with our wholly-owned subsidiary Oncotelic we have consolidated all accounting functions to the Company headquarters and all record keeping has been migrated into the same accounting software.

We are committed to maintaining a strong internal control environment and believe that these remediation efforts will represent significant improvements in our control environment. Our management will continue to monitor and evaluate the relevance of our risk-based approach and the effectiveness of our internal controls and procedures over financial reporting on an ongoing basis and is committed to taking further action and implementing additional enhancements or improvements, as necessary and as funds allow.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The following table sets forth certain information about our current directors and executive officers followed by individual biographies of the directors and executive officers of the Company, including their business experience and other relevant information.

Name	Age	Position
Vuong Trieu, Ph. D.	55	Chairman of the Board and Chief Executive Officer
Amit Shah	53	Chief Financial Officer
Chulho Park, Ph.D.	53	Chief Technology Officer
Seymore Fein	71	Chief Medical Officer
David Diamond	70	Director
Steven W. King	55	Director
Anthony E. Maida III	67	Director

Vuong Trieu, Ph.D. is the founder and Chair of the Board of Directors of Oncotelic and now serves as the Company's Chief Executive Officer, having served in such capacity since 2014. Dr. Trieu has been involved in drug discovery, development, and commercialization for over 25 years, including his contributions as co-inventor of Abraxane®. He has served as Chairman of the Board and Chief Executive Officer of Oncotelic since its formation in 2015. He previously served as Executive Chairman and Interim CEO of Marina Biotech, Inc. from 2016 to 2018. Marina Biotech was a developer of tkRNA for the treatment of FAP/CRC (Familial adenomatous polyposis/ Colorectal Cancer). Prior to that, he also served as President and CEO of IgDraSol, Inc.— a developer of a 2nd generation Abraxane—beginning in 2012 until its acquisition by Sorrento Therapeutics, Inc. in 2013. He served as Chief Scientific Officer for Sorrento Therapeutics, Inc. and a member of that company's board of directors from 2013 until 2014. Previously, Dr. Trieu was Senior Director of Pharmacology/Biology at Abraxis Bioscience/Celgene, where he led the preclinical, clinical and PK/biomarker development of Abraxane, and was the co-inventor of the intellectual property covering Abraxane. Earlier in his career, Dr. Trieu held positions at Genetic Therapy/Sandoz (leading the adenoviral gene therapy program against atherosclerosis), Applied Molecular Evolution (AME)/Lily (leading the expression, purification, and preclinical testing of mAb therapeutics) and Parker Hughes Institute (Director of Cardiovascular Biology program that evaluated a series of small molecules and biologics against preclinical models of atherosclerosis, dyslipidemia, stroke, ALS, and restenosis). Dr. Trieu holds a PhD in Microbiology, BS in Microbiology and Botany. He is a member of ENDO, ASCO, AACR, and many other professional organizations. Dr. Trieu is published widely in oncology, cardiovascular, and drug development.

Dr. Trieu has over 100 patent applications and 39 issued U.S. patents.

The Board believes that Dr. Trieu's extensive experience as an executive at various biotechnology and biopharmaceutical companies as well as his service on private and public company boards qualifies him to serve on the Board.

Amit Shah was appointed as our Chief Financial Officer effective in July 2019. Mr. Shah has served as a senior financial officer for a number of life science companies, including Chief Financial Officer at Marina Biotech, Inc., a publicly traded biotechnology company from 2017 to 2018; Vice President of Finance & Accounting Insightra Medical Inc. from 2014 to 2015, Acting Chief Financial Officer of Insightra Medical Inc. in 2015; VP Finance and Acting Chief Financial Officer at IgDraSol Inc. in 2013; Corporate Controller & Director of Finance at ISTA Pharmaceuticals from 2010 to 2012; Corporate Controller at Spectrum Pharmaceuticals from 2007 to 2010: and as Controller / Senior Manager Internal Audits at Caraco Pharmaceuticals Laboratories from 2000 to 2007. In addition to his work with life sciences companies, Mr. Shah served as the Chief Financial Officer at Eagle Business Performance Services, a management consulting and business advisory firm from end of 2018 through March 2019 and as a consultant and ultimately Senior Director of Finance – ERP, at Young's Market Company from 2015 to 2017. Mr. Shah received a Bachelor's of Commerce degree from the University of Mumbai, and is an Associate Chartered Accountant from The Institute of Chartered Accountants of India. Mr. Shah is also an inactive CPA from Colorado, USA.

Chulho Park, Ph.D. has served as the Chief Technology Officer of Oncotelic since its formation in 2015. Prior to that was the Chief Executive Officer and Founder of MabPrex from 2010 to 2018, where he led the pharmaceutical development of therapeutic antibodies as well as small molecule drugs. Dr. Park served as President of Pharmaceutical Development at IgDraSol, Inc. from January 2013 through its sale to Sorrento Therapeutics, Inc. in September 2013. Dr. Park led the CMC development at IgDraSol bringing manufacturing of the drug product to FDA's manufacturing standard. Previously, Dr. Park has held several senior management positions with Eli Lilly & Company, Applied Molecular Evolution, and aTyr Pharma Inc.

Seymore Fein, M.D. has served as the Company's Chief Medical Officer since January 6, 2020. Dr. Fein founded and has been the managing partner of a clinical and regulatory consulting organization, - CNF Pharma, LLC (May 11, 2015 – Present).. He is also Chief Medical Officer of Ventria Bioscience, Inc. (May 11, 2015 – Present). He has worked closely with the Division of Gastroenterology and Inborn Errors Products at the FDA and has participated in the development of and FDA approval of numerous drug products in many therapeutic areas Dr. Fein's professional activities have been focused on drug development research for over 35 years wherein he has been extensively involved in the successful development of numerous drugs, biologics and medical devices over this time leading to FDA approvals for over 20 drugs (NDAs, sNDAs, BLAs) and devices (PMAs). Dr. Fein began his career at Hoffmann-La Roche Ltd., where he served as a senior research physician and was responsible for a clinical development program that led to U.S. Food and Drug Administration (FDA) approval of recombinant interferon-alpha for cancer treatment. Dr. Fein was also the medical director of Bayer Healthcare Pharmaceuticals from, where he was responsible for therapeutic areas including gastroenterology, oncology, and cardiology. He later served as medical director for Rorer Group (now part of Sanofi) and Ohmeda (now part of Baxter) from. Dr. Fein has successfully overseen entrepreneurial drug development leading to the FDA approval of two orphan drug products in the field of gastroenterology. He received his B.A. degree from the University of Pennsylvania and his M.D. degree with honors from New York Medical College. He completed a three-year residency in internal medicine at Dartmouth and a three-year fellowship in medical oncology and hematology at Harvard Medical School, where he served as an instructor of medicine during his final fellowship year. Dr. Fein is board-certified in both oncology and internal medicine.

David Diamond was appointed to the Board on January 22, 2020. Mr. Diamond currently provides strategic guidance and operational oversight to CEOs and boards of directors in the Life Sciences industry. Mr. Diamond has significant experience assisting management teams and boards of directors with capital financing and strategic business planning nationally and internationally and has built strong relationships with prominent investment bankers. He currently serves as the National Life Sciences and Technology Practice Lead at Mayer Hoffman McCann P.C., a national CPA firm since 2015 and has over 30 years of experience in both public accounting and industry. Mr. Diamond previously served as a Board member for Kreston International ($2 billion CPA network), a member of the board of San Diego Venture Group and was a Founding Member of UCSD Connect. He is a Certified Director in Corporate Governance from UCLA Anderson Graduate School of Management and an active CPA, licensed in the United States, Israel and South Africa.

The Board believes that Mr. Diamond's extensive experience as a strategic guide and oversight to CEOs and Boards of companies in the life sciences space, combined with his other qualities qualifies him to serve on the Board.

Anthony E. Maida III, Ph.D., M.A., M.B.A. was appointed to the Board on May 11, 2020. Dr. Maida has been involved in the clinical development of immunotherapy for over 27 years in various executive management positions. Since June 2010, Dr. Maida has served as Senior Vice President, Clinical Research for Northwest Biotherapeutics, Inc., a cancer vaccine company focused on therapy for patients with glioblastoma multiforme and prostate cancer. From June 2009 through June 2010, Dr. Maida served as Vice President of Clinical Research and General Manager, Oncology, Worldwide for PharmaNet, Inc., a clinical research organization. From 1997 through 2010, Dr. Maida served as Chairman, Founder and Director of BioConsul Drug Development Corporation and Principal of Anthony Maida Consulting International, advising pharmaceutical and investment firms, in the clinical development of therapeutic products and product/company acquisitions. From 1992 to September of 1999, Dr. Maida was President and Chief Executive Officer of Jenner Biotherapies, Inc., an immunotherapy company. Dr. Maida is currently a member of the board of directors and audit chair of Spectrum Pharmaceuticals, Inc. and Vitality Biopharma, Inc. (OTCQB: VBIO) and was formerly a member of the board of directors and audit chair of OncoSec Medical Inc. (OTCQB: ONCS). Dr. Maida holds a B.A. in Biology and History, an M.B.A., an M.A. in Toxicology and a Ph.D. in Immunology. He is a member of the American Society of Clinical Oncology, the American Association for Cancer Research, the Society of Neuro-Oncology, the International Society for Biological Therapy of Cancer and the American Chemical Society.

The Board believes that Dr. Maida is qualified to serve on the Board due to his extensive experience as an executive at various biotechnology and biopharmaceutical companies as well as his service on private and public company boards.

Steven W. King was appointed to the Board on May 11, 2020. He previously served as the CEO of Peregrine Pharmaceuticals, Inc. and its wholly-owned biomanufacturing subsidiary Avid Bioservices, Inc., during which time the company advanced its lead compound through Phase 3 development, while growing revenues to over $55 million. Prior to joining Peregrine, Mr. King was employed at Vascular Targeting Technologies, Inc., which was acquired by Peregrine in 1997. Mr. King served in a variety of executive roles at Peregrine, including Director of Research and Development from 1997 to 2000; Vice President Technology and Product Development from 2000 to 2002; Chief Operating Officer from 2002 to 2003; and Chief Executive Officer from 2003 to 2017. Mr. King served on the board of directors of Peregrine from 2003 until 2017. Mr. King previously worked at the University of Texas Southwestern Medical Center and is co-inventor on over 40 U.S. and foreign patents and patent applications in the vascular targeting agent field. Mr. King received his Bachelor's and Master's degrees from Texas Tech University in Cell and Molecular Biology.

The Board believes Mr. King is qualified to serve as a director because of his extensive scientific understanding of technologies in development and expertise in developing and manufacturing biologics, combined with the perspective and experience he brings from having previously served on the boards of public companies.

Our Board currently has three standing committees which consist of the Audit Committee, the Compensation Committee and the Nominating and Corporate Governance Committee (collectively, the "Committees"), each of which has the composition and responsibilities described below. Members will serve on these committees until their resignation or as otherwise determined by our Board. Due to the resignations of several directors of the Board in 2019 and in connection with the Merger, the full Board acted on behalf of the Committees until the appropriate director candidates were selected and appointed by the Board. With the appointment of both Dr. Maida and Mr. King effective May 11, 2020, the Committees have been reconstituted effective that same date.

Audit Committee

As of May 11, 2020, the members of the Audit Committee consist of Mr. Diamond who serves as Committee Chair and Dr. Maida. The Board has determined that Mr. Diamond is an "audit committee financial expert," as the SEC has defined that term in Item 407 of Regulation S-K.

Our Audit Committee has the authority to retain and terminate the services of our independent registered public accounting firm, reviews our annual financial statements, considers matters relating to accounting policy and internal controls, and reviews the scope of our annual audits.

The Board has adopted a charter for the Audit Committee, which is reviewed and reassessed annually by the Audit Committee. A copy of the Audit Committee's written charter is publicly available on our website at www.mateon.com. All of the members of our Audit Committee are qualified as independent under the definition as established in the OTC Market Rules and all members are financially literate.

Compensation Committee

As of May 11, 2020, the members of the Compensation Committee consist of Dr. Maida who serves as Committee Chair and Mr. King.

The Compensation Committee's responsibilities include making recommendations to the Board regarding the compensation philosophy and compensation guidelines for our executives, the role and performance of our executive officers, and appropriate compensation levels for our Chief Executive Officer (or "CEO"), which are determined without the CEO present, and other executives based on a comparative review of compensation practices of similarly situated businesses. The Compensation Committee also makes recommendations to the Board regarding the design and implementation of our compensation plans and the establishment of criteria and the approval of performance results relative to our incentive plans. Our Compensation Committee also administers our 2005 Stock Plan, our 2015 Equity Incentive Plan and our 2017 Equity Incentive Plan. Each member of the Compensation Committee qualifies as independent under the definition promulgated by The NASDAQ Stock Market and qualifies as a "Non-Employee Director" within the meaning of Rule 16b-3 under the Exchange Act.

The Compensation Committee reviews and assesses the three main components of each named executive officer's compensation: base salary, incentive compensation, and equity compensation. Adjustments to base salary are generally only made when there has been a change in the scope of the responsibilities of the named executive officer or when, based on a review of the base salary component of executive officers in companies of a similar size and stage of development, the Compensation Committee members believe that an adjustment is warranted in order to remain competitive. The executive management of the Company determines and agrees with the Compensation Committee on its corporate goals and objectives for the ensuing year. At the end of each year, the attainment of each objective is assessed and incentive awards may be made to each executive based on his or her contribution to achieving the objectives. Awards are made based on either provision of an executive's employment agreement, or an assessment of each executive's equity compensation position relative to the Company's other executives.

The Compensation Committee also typically reviews our director compensation on at least an annual basis. The Compensation Committee has the authority to directly retain the services of independent consultants and other experts to assist in fulfilling its responsibilities. Currently there are no independent compensation consultants retained by the Company.

Nominating and Governance Committee

As of May 11, 2020, the members of the Compensation Committee consist of Mr. King who serves as Committee Chair and Dr. Maida.

The Nominating and Governance Committee's responsibilities include making recommendations to the full Board as to the size and composition of the Board and making recommendations as to particular nominees to the Board. All members of the Nominating and Governance Committee qualify as independent under the definition promulgated by The NASDAQ Stock Market.

Board Attendance at Board of Directors, Committee and Stockholder Meetings

Our Board met five times and acted by unanimous written consent three times during the fiscal year ended December 31, 2019. As previously mentioned, our committees did not meet during 2019, instead the full Board met and acted on their behalf during the fiscal year ended December 31, 2019. Each of our directors serving during fiscal 2019 attended at least 75% of the meetings of the Board and the committees of the Board upon which such director served that were held during the term of his service.

Although we do not have a formal policy regarding attendance by members of the Board at our annual meeting of stockholders, directors are encouraged to attend.

Board Leadership Structure

Our Board has the discretion to determine whether to separate or combine the roles of Chair of the Board and Chief Executive Officer. Dr. Trieu has served in both roles since his appointment to the Board after the reverse merger with Oncotelic and our Board continues to believe that his combined role is most advantageous to the Company and its stockholders. Dr. Trieu possesses in-depth knowledge of the issues, opportunities and risks facing us, our business and our industry and is best positioned to fulfill the Board Chair's responsibility to develop meeting agendas that focus the Board's time and attention on critical matters and to facilitate constructive dialogue among Board members on strategic issues.

In addition to Dr. Trieu's leadership, the Board maintains effective independent oversight through a number of governance practices, including, open and direct communication with management, input on meeting agendas, and regular executive sessions.

Risk Oversight

Our Board oversees a company-wide approach to risk management, determines the appropriate risk level for us generally, and assesses the specific risks faced by us to reviews the steps taken by management to mitigate those risks. Although our Board has ultimate oversight responsibility for the risk management process, its committees oversee risk in certain specified areas.

Specifically, our Compensation Committee is responsible for overseeing the management of risks relating to our executive compensation plans and arrangements, and the incentives created by the compensation awards it administers and our Audit Committee oversees management of enterprise risks and financial risks, as well as potential conflicts of interests. The Board will be responsible for overseeing the management of risks associated with the independence of our Board.

Compensation Committee Interlocks and Insider Participation

Prior to the merger of the Company with Oncotelic, none of the members of our Compensation Committee had been employed by us in the last completed fiscal year. In addition, none of our executive officers, except Dr. Trieu, served as a member of the Board or Compensation Committee, or other committee serving an equivalent function, of any entity that has an executive officer who serves on our Board or Compensation Committee during 2019. After the merger of the Company with Oncotelic, our Chief Executive Officer, Dr. Trieu is a control person of Autotelic, Inc.

Also, Mr. Steven King, is the CEO of Edgepoint Inc., an AI company that is a subsidiary of the Company. Dr. Maida is currently consulting with the Company in regards to its planned trials for COVID-19.

Corporate Code of Ethics

We have adopted a Corporate Code of Conduct and Ethics (the "Code of Conduct") that applies to all of our employees, including our CEO and CFO. The text of the Code of Conduct has been filed as an exhibit to our Annual Report on Form 10-K for the year ended December 31, 2014, and is posted on our website at www.mateon.com. Disclosure regarding any amendments to, or waivers from provisions of the code of conduct and ethics that apply to our directors and principal executive and financial officers will be included in a Current Report on Form 8-K within four business days following the date of the amendment or waiver.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires our directors, executive officers and persons who own more than 10% of our common stock to file with the SEC and us initial reports of beneficial ownership and reports of changes in beneficial ownership of our common stock and other equity securities. For these purposes, the term "other equity securities" would include options granted under the Company's 2005 Stock Plan (the "2005 Stock Plan"), the Company's 2015 Equity Incentive Plan (the "2015 Plan") and the Company's 2017 Equity Incentive Plan (the "2017 Plan"). To our knowledge, based solely on a review of the forms and written representations received by us from our Section 16 reporting persons, during the fiscal year ended December 31, 2019, all Section 16(a) filing requirements applicable to the reporting persons were properly and timely satisfied.

ITEM 11. EXECUTIVE COMPENSATION

Summary Compensation Table

The following table provides information regarding the compensation paid during the years ended December 31, 2019 and 2018 to our principal executive officer, principal financial officer and certain of our other executive officers, who are collectively referred to as "named executive officers" elsewhere in this Annual Report.

Name and Principal Position	Year	Salary	Bonus	Awards[1]	Compensation	Total
William D. Schwieterman, M.D.	2019	$ 74,204	$ —	$ —	$ 410,000(2)	$ 484,204
Former President and Chief Executive Officer	2018	$ 205,000	$ —	$ 155,875	$ 103,217(2)	$ 464,092
Matthew M. Loar	2019	87,735	—	—	325,000	279,406
Former Chief Financial Officer	2018	162,500	—	116,906	—	279,406
Vuong Trieu, Ph. D.						
President and Chief Executive Officer	2019	114,691	—	92,782	—	206,473
Fatih Uckun, Ph. D. M.D.						
Former Chief Medical Officer (4/23/2019)	2019	135,362	—	82,474	—	217,838
Chulho Park, Ph. D.						
Chief Technology Officer	2019	89,437	—	72,164	—	161,601
Amit Shah						
Chief Financial Officer	2019	35,102		126,454(3)	31,400(3)	192,866

(1) The fair values for all stock awards in this table represent the estimated award value at the time of grant using a Black-Scholes option pricing model with the following weighted-average assumptions for the years 2019 and 2018:

Weighted-Average Assumptions	2019	2018
Risk-free interest rate	1.7%	2.8%
Expected life (years)	6.0	5.2
Expected volatility	103.7%	88%
Dividend yield	0.0%	0.0%

The values of stock option grants shown in the table represent the full estimated Black-Scholes option value at the grant date, pursuant to compensation disclosure rules of the SEC. The Black-Scholes valuation for the options and stock awards for Messrs. Trieu, Uckun, Park and Shah are estimated assuming that the options would have been granted on the date of the employment agreements with each of the Officers. Such options and stock awards have not yet been granted to Messrs. Trieu, Park or Shah as of the date of this filing, and neither were they granted to Dr. Uckun. However, the stock option grants in the table vest over one to six years, and the values shown do not take into account subsequent increases or decreases in actual value to the recipient. See the Narrative Disclosure below for information regarding the number of shares granted to each of the named executive officers. See Note 6 to our Financial Statements included in our Annual Report on Form 10-K for the year ended December 31, 2019 for additional information regarding the assumptions used to determine the fair value of each of the option awards in this table. See also our discussion of stock-based compensation under “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Significant Judgments and Estimates” in our Annual Report on Form 10-K for the year ended December 31, 2019.

(2) Represents the amount payable to Dr. Schwieterman and Mr. Loar based on their individual separation and release agreements described below.

(3) Represents fees paid and payable to Mr. Shah, in cash and stock-based compensation, from June 23, 2019 to July 31, 2019 when Mr. Shah performed services as the Chief Financial Officer of Oncotelic and then the Company in a consulting capacity. Mr. Shah was formally appointed as an employee and appointed as in-house CFO effective August 2, 2019.

Narrative Disclosure to Summary Compensation Table

Dr. William D. Schwieterman. On May 15, 2015, we entered into an employment agreement with Dr. Schwieterman for his service as President and Chief Executive Officer, which was subsequently amended on July 31, 2015. Pursuant to the terms of this agreement, Dr. Schwieterman was entitled to receive an annual base salary of $410,000. In addition, he was eligible for an annual bonus of up to fifty percent of his then-current annual base salary, based on the Board’s assessment of his performance and the Company’s performance. Dr. Schwieterman’s employment agreement also provided for the Company to pay the costs of furnished housing in San Francisco, California and the cost of one economy class roundtrip airplane ticket between San Francisco, California and Mobile, Alabama per month.

On October 2, 2017, the Company and Dr. Schwieterman agreed to a 50% reduction in his base annual salary, to $205,000, with reinstatement to previous levels contingent on the Company raising additional funding of at least $4 million or the execution of a licensing or collaboration agreement with certain conditions. Dr. Schwieterman continued to receive the reduced salary until the Merger. For calendar years 2019 and 2018, the Board determined that Dr. Schwieterman would not receive an annual bonus due to the financial condition of the Company.

On January 12, 2017, the Company granted Dr. Schwieterman options to purchase 550,000 shares of our common stock with an exercise price of $0.375 per share, which vest over a four-year period. On June 20, 2018, the Company granted Dr. Schwieterman options to purchase 1,000,000 shares of our common stock with an exercise price of $0.22 per share, which vest in monthly installments over a one-year period. The one-year vesting period for the option granted in 2018 was chosen to partially compensate Dr. Schwieterman for the below-market salary that has been effective since October 2, 2017.

On April 17, 2019, Dr. Schwieterman and the Company entered into a Separation and Release Agreement (the "Schwieterman Agreement"), providing, among other things, that Dr. Schwieterman will receive, in lieu of any other severance payments otherwise due and payable to Dr. Schwieterman, which currently aggregate $410,000 upon a change in control of the Company, (i) a payment of $205,000 in cash, upon the closing of a financing in which at least $10 million in gross proceeds is received by the Company subsequent to the closing of the Merger, and (ii) an additional payment of $205,000 in cash, upon the closing of a financing in which at least an additional $10 million in gross proceeds is received by the Company.

Matthew M. Loar. On July 20, 2015, we entered into an employment agreement (the "Loar Agreement") with Mr. Loar for his service as our Chief Financial Officer. Pursuant to the terms of the Loar Agreement, Mr. Loar was entitled to receive an annual base salary of $325,000. In addition, he was eligible for an annual bonus of up to thirty-five percent of his then-current annual base salary, based on the Board's assessment of his performance and the Company's performance.

On October 2, 2017, the Company and Mr. Loar agreed to a 50% reduction in his base annual salary, to $162,500, with reinstatement to previous levels contingent on the Company raising additional funding of at least $4 million or the execution of a licensing or collaboration agreement with certain conditions. For calendar years 2019 and 2018, the Board determined that Mr. Loar would not receive an annual bonus due to the financial condition of the Company.

On January 12, 2017, the Company granted Mr. Loar options to purchase 350,000 shares of our common stock with an exercise price of $0.375 per share, which vested over a four-year period. On June 20, 2018, the Company granted Mr. Loar options to purchase 750,000 shares of our common stock with an exercise price of $0.22 per share, which vested in monthly installments over a one-year period. The one-year vesting period for the option granted in 2018 was chosen to partially compensate Mr. Loar for the below-market salary that had been effective.

On July 1, 2019, Mr. Loar and the Company entered into a Separation and Release Agreement (the "Loar Separation Agreement"), providing, among other things, that Mr. Loar will receive, in lieu of any other severance payments, a payment of $16,250 for each $1 million in gross proceeds received by the Company in future financings up to a maximum of $325,000. In addition, the Company agreed to extend the term and exercise period of all outstanding vested options held by Mr. Loar for a period of 24 months from the date of the Loar Separation Agreement.

Vuong Trieu, Ph. D., Fatih Uckun, Ph. D. M.D., Chulho Park, Ph. D and Amit Shah

Commencing April 23, 2019, Drs. Trieu, Uckun and Park were appointed as Executive Officers and commenced earning compensation based on the table below. Subsequently, on August 23, 2019, the Company entered into Employment Agreements and incentive compensation arrangements with each of its executive officers. The Employment Agreements provide for annual base salaries for each year of the term, subject to review and adjustment by the Board or the Compensation Committee from time to time. Each Employment Agreement provides that the executive shall be eligible for an annual discretionary cash bonus expressed as a percentage the executive's base salary, subject to their achievement of performance targets and goals established by the Board or the Compensation Committee. Each of the executive officers entered into the Company's standard form of indemnification agreement.

The initial base salaries and discretionary cash bonus amounts have been set for the executives as follows:

Executive	Title	Initial Base Salary	Discretionary Bonus (% of Base)
Vuong Trieu	Chief Executive Officer	$ 450,000	50%
Fatih Uckun	Former Chief Medical Officer	$ 400,000	40%
Chulho Park	Chief Technology Officer	$ 350,000	40%
Amit Shah	Chief Financial Officer	$ 320,000	40%

Each of the Employment Agreements provides that the executive will receive only a portion of the base salary until the completion of a "Financing Event", which is: (a) the closing of an equity or debt financing with gross proceeds equal to or greater than $4,000,000; (b) the execution of a licensing or collaboration agreement with an up-front payment equal to or greater than $4,000,000; or (c) any combination of (a) and (b) whereby the gross proceeds are equal to or greater than $4,000,000. Messrs. Trieu, Uckun and Park will be paid 50% of their base salary, and Mr. Shah shall receive 60% of his base salary until the completion of a Financing Event. Under the Employment Agreements, the base salary for each executive increases to 100% effective on the closing of the Financing Event and going forward thereafter.

Dr. Uckun resigned from the position of Chief Medical Officer effective January 6, 2020. Dr. Seymour Fein joined the Company as Chief Medical Officer effective January 6, 2020. Dr. Fein provides his services to the Company as an independent contractor.

The Employment Agreements provide for equity awards to each executive under the terms of the 2017 Plan. Each Employment Agreement provides that the executive will receive a restricted stock grant of the Company's common stock, par value $0.01 per share. The Company will compensate Messrs. Trieu, Uckun, Park and Shah for the taxes actually incurred on grant of the restricted shares. The restricted stock will vest fully on the one-year anniversary of employment. The Employment Agreements also provide for grants of incentive stock options to purchase shares of the Company's common stock under the Stock Plan. Such options were granted at an exercise price of $0.21 equal to the Fair Market Value (as defined in the Stock Plan) on the date of grant, and shall vest and become exercisable after one year of employment. Thereafter, each Employment Agreement contemplates that the executive will be eligible to receive a comparable annual grant of restricted shares or stock options as approved by the Board or Compensation Committee and which shall contain the customary terms and provisions of such grants generally to key executives under the Stock Plan.

The initial restricted stock grants and stock option grants have been set for the executives as follows:

Executive	Title	Restricted Stock (Shares)	Stock Options (Shares)
Vuong Trieu	Chief Executive Officer	209,302	313,953
Fatih Uckun	Former Chief Medical Officer	186,047	279,070
Chulho Park	Chief Technology Officer	162,791	244,186
Amit Shah	Chief Financial Officer	148,837	223,256

In addition, Mr. Shah earned 100,000 shares of restricted stock grants and 275,000 incentive stock options for his services as a consultant CFO from July to August 2019.

The Employment Agreements each have a term that continues until terminated by the Company or the executive. In the event that the Company terminates an executive for "Cause", or an executive voluntarily resigns his employment, on termination the executive will be entitled to receive all accrued and unpaid base salary, any accrued and unused paid time off, and reimbursement of outstanding business expenses. If the Employment Agreements are terminated by the Company without "Cause" or the executive resigns for "Good Reason" (each as defined in the Employment Agreement) then the executive will be entitled to additional severance benefits including: (a) a lump sum payment equal to 12 months' of the executive's then current base salary (18 months in the case of Dr. Trieu); (b) accelerated vesting of all outstanding stock options and incentive compensation awards, and (c) insurance benefits or COBRA coverage for 12 months (18 months in the case of Dr. Trieu) in addition to payment of accrued and unpaid.

Outstanding Equity Awards at Fiscal Year-End

The following table shows all outstanding grants of stock options as of December 31, 2018 to each of the executive officers named in the Summary Compensation Table. There were no grants of unvested stock awards outstanding as of December 31, 2019. Exercise prices shown are rounded to the nearest whole cent. No options or restricted shares were granted during the year ended December 31, 2019 even though the Board had approved such grants to Messrs. Trieu, Uckun, Park and Shah. The table below reflects the options and restricted shares that are issuable to Messrs. Trieu, Park and Shah.

		Option Awards			
Name	Type	**Number of Securities Underlying Unexercised Options/RSUs Exercisable**	**Number of Securities Underlying Unexercised Options/RSUs Unexercisable**	**Option Exercise Price**	**Option Expiration Date**
William D. Schwieterman, M.D.		5,280	—	2.60	7/02/2020
Former President and Chief Executive Officer	ISO	300,000	—	1.43	5/28/2025
	ISO	75,000	—	1.43	5/28/2025
	ISO	500,000	—	0.73	3/21/2026
	ISO	550,000	—	0.38	1/12/2027
	ISO	1,000,000	—	0.22	6/20/2028
Matthew M. Loar	ISO	150,000	—	$ 1.37	7/20/2025
Former Chief Financial Officer	ISO	262,500	—	0.73	3/21/2026
	ISO	350,000	—	0.38	1/12/2027
	ISO	750,000	—	0.22	6/20/2028
Vuong Trieu, Ph. D. (1)	RSU	104,651	104,651	$ 0.22	8/13/2029
Chief Executive Officer & President	ISO	156,977	156,976	0.22	8/13/2029
Chulho Park, Ph.D.(1)	RSU	81,396	81,395	$ 0.22	8/13/2029
Chief Technology Officer	ISO	122,093	122,093	0.22	8/13/2029
Amit Shah (1) (2)	RSU	174,419	74,418	$ 0.22	8/13/2029
Chief Financial Officer	ISO	386,628	111,628	0.22	8/13/2029

(1) The RSUs and ISOs have been approved by the board but not yet granted. The stock compensation thereon will be calculated and expensed when granted.

(2) Includes 100,000 shares of restricted stock grants and 275,000 incentive stock options for his services as a consultant CFO from July to August 2019 and which are fully earned as of the date of this document.

Dr. Uckun resigned from the position of Chief Medical Officer effective January 6, 2020 and as such his information has not been compiled for this table.

Pension Benefits

We do not have any qualified or non-qualified defined benefit plans.

Nonqualified Deferred Compensation

We do not have any non-qualified defined contribution plans or other deferred compensation plans.

Potential Payments Upon Termination or Change-In-Control

We have entered into certain agreements and maintain certain plans that may require us to make certain payments and/or provide certain benefits to Dr. Trieu, Dr. Park and Mr. Shah in the event of a termination of their employment or a change of control of the Company. The following table summarizes the potential payments to Drs. Trieu and Park; and Mr. Shah assuming that one of the described termination events occurs. The table assumes that the event occurred on December 31, 2019, the last day of our fiscal year and that each of the named officers were eligible to earn the full initial base compensation. On the final trading day of our fiscal year the closing price of our common stock on OTCQB Market was $0.17 per share.

The Employment Agreements each have a term that continues until terminated by the Company or the executive. In the event that the Company terminates an executive for "Cause", or an executive voluntarily resigns his employment, on termination the executive will be entitled to receive all accrued and unpaid base salary, any accrued and unused paid time off, and reimbursement of outstanding business expenses. If the Employment Agreements are terminated by the Company without "Cause" or the executive resigns for "Good Reason" (each as defined in the Employment Agreement) then the executive will be entitled to additional severance benefits including: (a) a lump sum payment equal to 12 months' of the executive's then current base salary (18 months in the case of Dr. Trieu); (b) accelerated vesting of all outstanding stock options and incentive compensation awards, and (c) insurance benefits or COBRA coverage for 12 months (18 months in the case of Dr. Trieu) in addition to payment of accrued and unpaid.

Vuong N. Trieu, Ph. D.

Executive Benefits and Payments Upon Termination	Termination within 12 months Following Change in Control	Voluntary Termination by Executive or Death	Involuntary Not for Cause Termination or Termination by Executive with Good Reason	For Cause Termination	Disability
Base Salary	$ 450,000	$ —	$ 450,000	$ —	$ —
Annual Bonus (50% of Base Salary)	Executive entitled to Annual Bonus related to most recently completed calendar year if earned and not already paid	Executive entitled to Annual Bonus related to most recently completed calendar year if earned and not already paid	Executive entitled to Annual Bonus related to most recently completed calendar year if earned and not already paid	N/A	Executive entitled to Annual Bonus related to most recently completed calendar year if earned and not already paid
Acceleration of Vesting of Equity Stock Options & RSUs:	100%	0%	100%	0%	0%
Number of Stock Options & RSUs	523,255	—	523,255	—	—
Value upon Termination	$ —	$ —	$ —	$ —	$ —
Vested Stock Received:					
Number of Shares	261,628	—	261,628	—	—
Value upon Termination	$ —	$ —	$ —	$ —	$ —
Relocation Reimbursement	N/A	N/A	N/A	N/A	N/A
Deferred Compensation Payout	N/A	N/A	N/A	N/A	N/A
Post-Term Health Care	Up to 18 months	N/A	Up to 18 months	N/A	N/A
	$ 50,490	$ —	$ 50,490	$ —	$ —
Excise Tax Gross Up	N/A	N/A	N/A	N/A	N/A

Chulho Park, Ph. D.

Executive Benefits and Payments Upon Termination	Termination within 12 months Following Change in Control	Voluntary Termination by Executive or Death	Involuntary Not for Cause Termination or Termination by Executive with Good Reason	For Cause Termination	Disability
Base Salary	$ 350,000	$ —	$ 350,000	$ —	$ —
Annual Bonus (50% of Base Salary)	Executive entitled to Annual Bonus related to most recently completed calendar year if earned and not already paid	Executive entitled to Annual Bonus related to most recently completed calendar year if earned and not already paid	Executive entitled to Annual Bonus related to most recently completed calendar year if earned and not already paid	N/A	Executive entitled to Annual Bonus related to most recently completed calendar year if earned and not already paid
Acceleration of Vesting of Equity	100%	0%	100%	0%	0%
Stock Options & RSUs:					
Number of Stock Options & RSUs	406,977	—	406,977	—	—
Value upon Termination	$ —	$ —	$ —	$ —	$ —
Vested Stock Received:					
Number of Shares	203,488	—	203,488	—	—
Value upon Termination	$ —	$ —	$ —	$ —	$ —
Relocation Reimbursement	N/A	N/A	N/A	N/A	N/A
Deferred Compensation Payout	N/A	N/A	N/A	N/A	N/A
Post-Term Health Care	Up to 12 months	N/A	Up to 12 months	N/A	N/A
	$ 27,540	$ —	$ 27,540	$ —	$ —
Excise Tax Gross Up	N/A	N/A	N/A	N/A	N/A

Amit Shah

Executive Benefits and Payments Upon Termination	Termination within 12 months Following Change in Control	Voluntary Termination by Executive or Death	Involuntary Not for Cause Termination or Termination by Executive with Good Reason	For Cause Termination	Disability
Base Salary	$ 320,000	$ —	$ 320,000	$ —	$ —
Annual Bonus (50% of Base Salary)	Executive entitled to Annual Bonus related to most recently completed calendar year if earned and not already paid	Executive entitled to Annual Bonus related to most recently completed calendar year if earned and not already paid	Executive entitled to Annual Bonus related to most recently completed calendar year if earned and not already paid	N/A	Executive entitled to Annual Bonus related to most recently completed calendar year if earned and not already paid
Acceleration of Vesting of Equity	100%	0%	100%	0%	0%
Stock Options & RSUs:					
Number of Stock Options & RSUs (1)	747,093	—	747,093	—	—
Value upon Termination	$ —	$ —	$ —	$ —	$ —
Vested Stock Received:					
Number of Shares (1)	561,047	—	561,047	—	—
Value upon Termination	$ —	$ —	$ —	$ —	$ —
Relocation Reimbursement	N/A	N/A	N/A	N/A	N/A
Deferred Compensation Payout	N/A	N/A	N/A	N/A	N/A
Post-Term Health Care	Up to 12 months	N/A	Up to 12 months	N/A	N/A
	$ 25,884	$ —	$ 25,884	$ —	$ —
Excise Tax Gross Up	N/A	N/A	N/A	N/A	N/A

(1) Includes 100,000 shares of restricted stock grants and 275,000 incentive stock options for his services as a consultant CFO from July to August 2019 and which are fully earned as of the date of this document.

Dr. Uckun resigned from the position of Chief Medical Officer effective January 6, 2020 and as such his information has not been compiled for this table.

The information set forth above is described in more detail in the Narrative Disclosure to the Summary Compensation Table.

As defined in the employment agreements, a "Change in Control" means the following during the employment term:

(1) any "Person" (as such term is used in Sections 13(d) and 14(d) of the Exchange Act) becomes the "Beneficial Owner" (as defined in Rule 13d-3 under said Act), directly or indirectly, of securities of the Company representing more than fifty percent of the total voting power represented by the Company's then outstanding voting securities (excluding for this purpose any such voting securities held by the Company or its affiliates or by any employee benefit plan of the Company) pursuant to a transaction or a series of related transactions which the Board of Directors does not approve; or

(2) a merger or consolidation of the Company whether or not approved by the Board of Directors, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or the parent of such corporation) at least fifty percent of the total voting power represented by the voting securities of the Company or such surviving entity or parent of such corporation, as the case may be, outstanding immediately after such merger or consolidation; or

(3) the stockholders of the Company approve an agreement for the sale or disposition by the Company of all or substantially all of its assets; or

(4) a change in the composition of the Board of Directors, as a result of which fewer than a majority of the directors are Incumbent Directors, and provided in each such case the Change in Control also meets the requirements of a "Change in Control Event" within the meaning of Section 409A(a)(2)(A)(v) of the Code and Treasury Regulation Section 1.409A-3(i)(5). "Incumbent Directors" mean the directors who either (A) are directors of the Company as of the date of this Agreement, or (B) are elected, or nominated for election, to the Board of Directors with the affirmative votes of at least a majority of the Incumbent Directors at the time of such election or nomination (but shall not include an individual whose election or nomination is in connection with an actual or threatened proxy contest relating to the election of directors to the Company).

In each such case the Change of Control must also meet the requirements of a "Change of Control Event" within the meaning of Section 409(a)(2)(A)(v) of the Code.

Each of Drs. Trieu and Park, and Mr. Shah will be entitled to certain benefits as described in the table above if his employment is terminated by the Company for reasons other than cause or by him with good reason. "Cause," as defined in the employment agreements, means:

(1) Substantial failure to perform any of his duties or to follow reasonable, lawful directions of the Board or any officer to whom the party reports;

(2) willful misconduct or willful malfeasance in connection with his employment;

(3) commission of, conviction of, or plea of nolo contendere to, any crime constituting a felony under the laws of the United States or any state thereof, or any other crime involving moral turpitude;

(4) material breach of any provision of the employment agreement, the By-laws or any other written agreement with the Company;

(5) engaging in misconduct that causes significant injury to the Company, financial or otherwise, or to its reputation; or

(6) any act, omission or circumstance constituting cause under the law governing the employment agreement.

"Good Reason," as defined in the employment agreements, means the Company:

(1) materially reduces the officer's title or responsibilities;

(2) relocates its headquarters more than sixty (60) miles from their current location (unless the relocation results in the headquarters being closer to the officer's residence);

(3) materially reduces the officer's base salary; or

(4) breaches a material term of the officer's employment agreement.

Good Reason must also meet the requirements for a good reason termination in accordance with Code Section 409A, and any successor statute, regulation and guidance thereto.

Director Compensation

For the year ended December 31, 2019, none of the non-employee directors were paid any cash compensation or received any stock-based compensation

	Fees Earned or Paid in		
	Cash[1]	Option Awards[2]	Total
David J. Chaplin, Ph.D.	$ —	$ —	$ —
Simon C. Pedder, Ph.D.	$ —	$ —	$ —
Donald R. Reynolds	$ —	$ —	$ —
Bobby W. Sandage, Jr., Ph.D.	$ —	$ —	$ —
William D. Schwieterman, M.D.	$ —	$ —	$ —

Effective with quarterly board fees for the fourth quarter of 2017, the Board has suspended all cash payments for Board service until the Company's financial position improved sufficiently to warrant reinstatement of these fees.

For the year ended December 31, 2019, we did not grant any stock options or shares to any of the non-employee directors. Although the initial terms of the options, when granted, provide that they vest one year subsequent to grant, pursuant to rules of the SEC the fair market value for the options granted represents the full value at the grant date only and the values do not take into account subsequent increases or decreases in actual value to the recipient. See Note 6 to our Financial Statements included in our Annual Report on Form 10-K for the year ended December 31, 2018, for additional information regarding the assumptions used to determine the fair value of each of the option awards in this table. See also our discussion of stock-based compensation under "Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Significant Judgments and Estimates" in the Form 10-K.

The following is a description of the standard compensation arrangements under which our non-employee directors have been compensated for their service as directors, including as members of the various Committees of our Board.

Fees. In October 2016, the Board amended and restated its director compensation policy (as amended and restated, the "2016 Director Compensation Policy"). In accordance with the 2016 Director Compensation Policy, the following cash fees are payable to non-employee directors quarterly in arrears at the end of each quarter:

Board or Committee of Board	Annual Cash Retainer Amount
Member of the Board	$ 40,000
Chairperson of the Board (in addition to compensation as a Member of the Board)	$ 20,000
Chairperson of Audit, Compensation and Nominating and Governance Committee (in addition to compensation as a Member of the Board and as a member of the respective committee)	$ 3,000
Audit Committee Member (in addition to compensation as a Member of the Board)	$ 5,000
Compensation and Nominating and Governance Committee Member (in addition to compensation as a Member of the Board).	$ 3,000

A new non-employee director joining the Board during the course of the year on a date other than the first day of the fiscal quarter would receive his or her cash compensation for that quarter pro-rated. In October 2017, the Board suspended all cash payments for Board service until the Company's financial position improved sufficiently to warrant reinstatement of cash fees. Such payments have been reinstated commencing January 1, 2020.

The Board intends to re-evaluate compensation, including non-employee director compensation, following the reconstitution of its Compensation Committee.

Equity Grants.

In accordance with the 2016 Director Compensation Policy, on the date of each annual meeting, each non-employee director was granted a non-qualified stock option to purchase shares of our common stock valued at $40,000 on the date of grant, which will vest in full one year from the grant date, subject to the applicable director's continued service on the Board as of the vesting date. Since none of the non-employee directors were not directors at the annual meeting in 2019, none of the non-employee directors were eligible for any option grants for the year ended December 31, 2019.

A new non-employee director joining the Board was granted an option to purchase shares of our common stock valued at $50,000 on or shortly after the first date of his or her service, which will vest over a three-year period subject to the director's continued service on the Board as of each vesting date.

Each option granted under the 2016 Director Compensation Policy had an exercise price equal to the closing price of our common stock on the applicable trading market on the date of grant, or if the date of grant is not a trading day, the closing price on the next trading day following the date of grant, and each option will have a term of six years. The number of options to be received under the 2016 Director Compensation Policy will be calculated using the Black-Scholes valuation method.

Options granted pursuant to the 2016 Director Compensation Policy are subject to the terms and conditions of the applicable stock plan. Under the terms of the 2015 Incentive Plan and the 2017 Incentive Plan, directors may be granted shares of common stock, stock-based awards, and/or stock options to purchase shares of common stock.

The Board intends to re-evaluate compensation, including non-employee director compensation, following the reconstitution of its Compensation Committee.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Security Ownership of Certain Beneficial Owners and Management

The following table sets forth information, as of the May 8, 2020, regarding the beneficial ownership of our common stock by:

- each of our directors and our director nominees;
- each of our executive officers;
- our directors and executive officers as a group; and
- each person known to us to beneficially own more than 5% of our common stock.

The address for each beneficial owner listed is c/o Mateon Therapeutics, Inc. 29397 Agoura Road, Suite 107, Agoura Hills, California, 91301. Each of the stockholders listed has sole voting and investment power with respect to the shares beneficially owned by the stockholder, subject to community property laws where applicable.

In accordance with applicable SEC rules, the number of shares reflected as beneficially owned by each entity, person, director or executive officer is determined in accordance with the rules of the SEC. Under those rules, beneficial ownership includes any shares over which the individual has sole or shared voting power or investment power as well as any shares that the individual has the right to acquire within 60 days after the Record Date through the exercise of any stock option, warrants or other rights. As detailed in the footnotes to the table, we have included the shares issuable upon conversion of Series A Preferred.

We have computed the percentage of shares beneficially owned on the basis of 366,219,939 shares of our Common Stock outstanding as of May 6, 2020, which reflects the assumed conversion of all of our outstanding shares of Preferred Stock into an aggregate of 278,187,827 shares of Common Stock. Shares of our Common Stock that a person has the right to acquire within 60 days after the Record Date through other means, such as a stock option or warrant, are deemed outstanding for purposes of computing the percentage ownership of the person holding such rights, but are not deemed outstanding for purposes of computing the percentage ownership of any other person (other than the percentage ownership of all directors and executive officers as a group).

Name of Beneficial Owner	Common Stock Beneficially Owned	Percentage of Common Stock
Directors and Officers:		
Vuong Trieu	113,867,439(1)	31.1%
Steven W. King	3,988,423(3)	1.1%
Anthony E. Maida III	1,137,314(4)	*%
Amit Shah	-(5)	-%
Fatih Uckun	8,545,504(6)	2.33%
Chulho Park	16,096,832(7)	4.4%
All officers and directors as a group (8 persons)	149,397,780(8)	39.22%
Beneficial owners of more than 5%		
Vuong Trieu	113,867,439(1)	31.1%
Balaji Bhakta	41,630,811(10)	11.4%
Larn Hwang	23,445,992(9)	6.4%

* < 1%

(1) Includes: (a) 90,514,526 shares owned directly by the reporting person, including 74,455,718 shares which are issuable upon conversion of Preferred Stock; (b) 16,780,384 shares registered in the name of Autotelic, Inc., including 13,849,161 shares issuable upon conversion of Preferred Stock, and (c) 6,872,529 shares registered in the name of Dr. Trieu's spouse, including 5,672,025 shares issuable upon conversion of Preferred Stock but does not include the restricted stock grants and incentive stock options granted but not yet issued and shown above under "*Narrative Disclosure to Summary Compensation Table – under Vuong Trieu, Ph. D., Fatih Uckun, Ph. D. M.D., Chulho Park, Ph. D and Amit Shah"*. Dr. Trieu is the Chief Executive Officer of Autotelic, Inc. and in that capacity has the sole authority to control the voting and the disposition of Common Stock and Preferred Stock owned by Autotelic, Inc. Dr. Trieu disclaims beneficial ownership of the shares held by Autotelic, Inc., except to the extent of his pecuniary interest therein.

(2) Consists of (i) 625,747 shares of Common Stock, (ii) 625,000 shares of Common Stock issuable upon exercise of outstanding warrants, and (iii) 2,449,021 shares issuable upon exercise of outstanding stock options.

(3) Shares held in the name of Artius Bioconsulting, LLC, consists of (i) 696,704 shares of Common Stock and (ii) 3,291,720 shares of Common Stock underlying 3,291.720 shares of Preferred Stock.

(4) Consists of (i) 198,668 shares of Common Stock and (ii) 938,646 shares of Common Stock underlying 938.646 shares of Preferred Stock.

(5) Consists of (i) 0 shares of Common Stock, and (ii) 0 shares issuable upon exercise of outstanding stock options but does not include the restricted stock grants and incentive stock options granted but not yet issued and shown above under "*Narrative Disclosure to Summary Compensation Table – under Vuong Trieu, Ph. D., Fatih Uckun, Ph. D. M.D., Chulho Park, Ph. D and Amit Shah"*

(6) Consists of (i) 1,492,742 shares of Common Stock and (ii) 7,052,762 shares of Common Stock underlying 7,052.762 shares of Preferred Stock but does not include the restricted stock grants and incentive stock options granted but not yet issued and shown above under "*Narrative Disclosure to Summary Compensation Table – under Vuong Trieu, Ph. D., Fatih Uckun, Ph. D. M.D., Chulho Park, Ph. D and Amit Shah"*

(7) Consists of (i) 2,811,819 shares of Common Stock and (ii) 13,285,013 shares of Common Stock underlying 13,285.013 shares of Preferred Stock but does not include the restricted stock grants and incentive stock options granted but not yet issued and shown above under "*Narrative Disclosure to Summary Compensation Table – under Vuong Trieu, Ph. D., Fatih Uckun, Ph. D. M.D., Chulho Park, Ph. D and Amit Shah"*

(8) Consists of (i) 26,016,216 shares of Common Stock, (ii) 118,545,043 shares of Common Stock underlying 118,545.043 shares of Preferred Stock, 875,000 shares of Common Stock issuable upon exercise of outstanding warrants, and (iii) 3,961,521 shares issuable upon exercise of outstanding stock options, but does not include the restricted stock grants and incentive stock options granted but not yet issued and shown above under "*Narrative Disclosure to Summary Compensation Table – under Vuong Trieu, Ph. D., Fatih Uckun, Ph. D. M.D., Chulho Park, Ph. D and Amit Shah"*

(9) Consists of (i) 4,095,581 shares of Common Stock and (ii) 19,350,411 shares of Common Stock underlying 19,350.411 shares of Preferred Stock.

(10) Consists of 41,630,811 shares of Common Stock underlying 41,630.81 shares of Preferred Stock.

Equity Compensation Plan Information

The following table provides certain aggregate information with respect to all of the Company's equity compensation plans in effect as of December 31, 2019.

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	Weighted-Average Exercise Price of Outstanding Options	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
Equity compensation plans approved by security holders	4,872,000	$ 0.92	2,378,000
Equity compensation plans not approved by security holders	1,913,000	0.31	87,000
Total	6,875,000	$ 0.75	2,465,000

Brief Description of equity compensation plan not approved by security holders

On January 12, 2017, the Board of Directors adopted and approved the 2017 Plan. The 2017 Plan allows the Company, under the direction of the Compensation Committee, to make grants of stock options, restricted and unrestricted stock awards, and other stock-based awards to employees, consultants and directors. The purpose of these awards is to attract and retain key individuals, further align employee and stockholder interests, and provide additional incentive for them to promote our success. The 2017 Plan provides for the issuance of up to 2,000,000 shares of the Company's common stock. Any stock options granted under the 2017 Plan must be non-qualified stock options, which are not intended to meet the requirements of Section 422 of the Internal Revenue code. Options generally vest over a period of time, may not be exercised unless they are vested, and no option may be exercised after the end of the term set forth in the award agreement.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

Our Audit Committee reviews and approves in advance all related person transactions.

Our Board of Directors has reviewed the materiality of any relationship that each of our directors has with the Company, either directly or indirectly. Based upon this review, our Board has determined that each of the directors, except for Dr. Trieu and Mr. King, qualify as "independent directors" as defined under the rules of The Nasdaq Stock Market and OTC Market Rules for U.S. Companies.

In April 2018, we closed a private placement transaction in which we received net proceeds of approximately $2.4 million. The private placement transaction consisted of the sale of 59.5 units at a purchase price of $50,000 per unit, and each unit contained 250,000 shares of our common stock and warrants to purchase up to 250,000 shares of our common stock. The purchase price of the common stock was $0.20 per share and warrants are exercisable at $0.40 per share. Dr. Schwieterman purchased 2.5 units and Mr. Loar and Mr. Reynolds each purchased one unit in the private placement transaction. The purchases of Dr. Schwieterman, Mr. Loar and Mr. Reynolds were reviewed in advance by disinterested directors on the Audit Committee.

Master Service Agreement with Autotelic Inc.

In October 2015, Oncotelic entered into a Master Service Agreement (the "MSA") with Autotelic Inc., a related party that is partly-owned by the Company's CEO Vuong Trieu, Ph.D. Dr. Trieu, a related party, is a control person in Autotelic Inc. Autotelic Inc. currently owns less than 10% of the Company. The MSA stated that Autotelic Inc. will provide business functions and services to the Company and allowed Autotelic Inc. to charge the Company for these expenses paid on its behalf. The MSA includes personnel costs allocated based on amount of time incurred and other services such as consultant fees, clinical studies, conferences and other operating expenses incurred on behalf of the Company. The MSA requires a 90-day written termination notice in the event either party requires to terminate such services.

Expenses related to the MSA were $1,280,737 for the year ended December 31, 2019 as compared to $1,029,439 for the year ended December 31, 2018. In addition, Autotelic Inc. invoiced the Company $48,485 for expenses for the year ended December 31, 2019. No similar expense was incurred in 2018.

In January 2019, Oncotelic issued a total of $80,772 shares of common stock with a fair value of $4.00 per share to Autotelic, Inc. in lieu of cash for the settlement of outstanding accounts payable.

Stock Purchase Agreements

In December 2018, Oncotelic entered into a Stock Purchase Agreement with the Company's CEO, Vuong Trieu, Ph.D. (the "Vuong SPA"). In connection with the Vuong SPA Oncotelic issued 189,238 shares of common shares at $4.00 per share. As consideration for the shares Oncotelic received 151.39 Preferred Series E shares of Adhera Therapeutics, Inc. with a value of $756,950.

In December 2018, Oncotelic entered into a Stock Purchase Agreement with Autotelic Inc. (the "Autotelic SPA"). In connection with the Autotelic SPA Oncotelic issued 226,988 shares of common shares at $4.00 per share. As consideration for the shares Oncotelic received 181.59 Preferred Series E shares of Adhera Therapeutics, Inc. with a value of $907,950.

License Fee with Autotelic

In December 2015, Oncotelic paid Autotelic Inc. $395,150 for the right to license the use of Trabedersen (OT-101) for 5 years. On April 13, 2018, Oncotelic purchased the license for OT-101 from Autotelic Inc. for $819,191, which was recorded as an intangible asset. In addition, Oncotelic recorded a charge of approximately $69,000 and $28,000 for the years ended December 31, 2019 and 2018, respectively, as amortization of the intangibles acquired. As such, Oncotelic had approximately $722,000 and $791,000 of unamortized intangibles as of December 31, 2019 and December 31, 2018, respectively. On December 31, 2018, Oncotelic issued Autotelic Inc. 204,798 shares of the Company's common stock as consideration for the license.

Note Payable – Related Party

On April 23, 2019, the Company issued a convertible note to our Chief Executive Officer totaling $164,444, including OID of $16,444, receiving net proceeds of $148,000, which will be used by the Company for working capital and general corporate purposes.

On November 23, the Company issued a convertible note to our Chief Executive Officer totaling $250,000, which would be used by the Company for working capital and general corporate purposes. Of the $250,000, the Company received $120,000 during the year ended December 31, 2019 and the balance $130,000 during the first quarter of the year 2020.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The following table presents fees for professional audit services rendered by our independent public accounting firm, Squar Milner LLP and OUM & Co., LLP, for the audit of the Company's annual financial statements for the years ended December 31, 2019 and December 31, 2018, and fees billed for other services rendered during those periods.

	2019	2018
Audit fees (1)	$ 90,000	$ 181,744
Audit-related fees	—	—
Tax fees	—	—
All other fees	—	—
	$ 90,000	**$ 181,744**

(1) Audit fees consisted of audit work performed on the audit of the annual financial statements, review of quarterly financial statements, as well as work that generally only the independent registered public accounting firm can reasonably be expected to provide, such as the provision of consents and comfort letters in connection with the filing of registration statements and statutory audits. We had engaged OUM & Co., LLP as our independent public accounting firm on December 9, 2016.

We engaged Squar Milner LLP as our independent public accounting firm on July 29, 2019. In connection with the appointment of Squar Milner LLP, the Company ended its appointment of OUM & Co., LLP effective July 29, 2019.The change in accounting firm was predicated on the change in control of the Company following its merger with Oncotelic, and not as a result of any disagreement with OUM.

For 2019, we paid Squar Milner $20,000 in connection with the reviews for the six months ended June 30, 2019 and nine months ended September 30, 2019. In addition, we paid Squar Milner $50,000 for the audit for Mateon for 2019 and $20,000 related to consents.

Policy on Audit Committee Pre-Approval of Audit and Permissible

Non-audit Services of Independent Registered Public Accounting Firm

Consistent with SEC policies regarding auditor independence, the Audit Committee has responsibility for appointing, setting compensation, and overseeing the work of the independent registered public accounting firm. In recognition of this responsibility, the Audit Committee has established a policy to pre-approve all audit and permissible non-audit services provided by the independent registered public accounting firm.

Prior to engagement of the independent registered public accounting firm for the next year's audit, management will submit an aggregate of services expected to be rendered during that year for each of four categories of services to the Audit Committee for approval.

1. **Audit** services include audit work performed in the preparation and audit of the annual financial statements, review of quarterly financial statements, as well as work that generally only the independent auditor can reasonably be expected to provide, such as the provision of consents and comfort letters in connection with the filing of registration statements.

2. **Audit-related** services are for assurance and related services that are traditionally performed by the independent auditor, including due diligence related to mergers and acquisitions, employee benefit plan audits, and special procedures required to meet certain regulatory requirements.

3. **Tax** services consist principally of assistance with tax compliance and reporting, as well as certain tax planning consultations.

4. **Other Fees** are those associated with services not captured in the other categories. The Company generally does not request such services from the independent auditor.

Prior to engagement, the Audit Committee pre-approves these services by category of service. The fees are budgeted, and the Audit Committee requires the independent registered public accounting firm and management to report actual fees versus the budget periodically throughout the year by category of service. During the year, circumstances may arise when it may become necessary to engage the independent registered public accounting firm for additional services not contemplated in the original pre-approval. In those instances, the Audit Committee requires specific pre-approval before engaging the independent registered public accounting firm.

The Audit Committee may delegate pre-approval authority to one or more of its members. The member to whom such authority is delegated must report, for informational purposes only, any pre-approval decisions to the Audit Committee at its next scheduled meeting.

In the absence of an Audit Committee, the responsibilities of the Audit Committee are fulfilled by the Board of Directors of the Company. As such, for the year ended December 31, 2019 the Board of Directors approved the appointment and services of Squar Milner LLP.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) The following documents are filed as part of this Annual Report on Form 10-K.

(1) *Financial Statements*

See financial statements listed in the accompanying "Index to Financial Statements" covered by the Report of Independent Registered Public Accounting Firm.

(2) *Financial Statement Schedule*

No schedules are submitted because they are not applicable, not required or because the information is included in the Financial Statements as Notes to Financial Statements.

(3) *Exhibits*

The following is a list of exhibits filed as part of this Annual Report on Form 10-K.

		Incorporated by Reference			
Exhibit Number	**Description**	**Form**	**Filing Date**	**Exhibit Number**	**Filed Herewith**
2.1	Agreement and Plan of Merger, dated as of April 17, 2019, by and among the Company, Oncotelic and Oncotelic Acquisition Corporation.	8-K	4/18/2019	2.1	
2.2	Agreement and Plan of Merger, dated as of April 17, 2019, by and among the Company, Oncotelic and Oncotelic Acquisition Corporation.	8-K	4/25/2019	2.1	
2.3	Agreement and Plan of Merger, dated as of August 17, 2019, by and among the Company, PointR and Paris Acquisition Corporation.	8-K	8/21/2019	2.1	
2.4	Agreement and Plan of Merger, dated as of August 17, 2019, by and among the Company, PointR Data, Inc. and Paris Acquisition Corp.	8-K	11/12/2019	2.1	
2.5	Amendment No. 1 to Agreement and Plan of Merger, dated as of November 1, 2019, by and among the Company, PointR Data, Inc. and Paris Acquisition Corp.	8-K	11/12/2019	2.2	
3.1	Amended and Restated By-Laws of the Registrant.	8-K	6/17/2016	3.2	
3.2	Restated Certificate of Incorporation of the Registrant, as amended by Certificates of Amendment dated June 22, 1995, November 15, 1996, July 14, 2005, June 2, 2009, February 8, 2010, August 5, 2010, February 22, 2011, May 29, 2012, December 27, 2012, July 17, 2013, June 16, 2016 and June 20, 2018.	10-Q	8/14/2018	3.1	
3.3	Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock of the Company.	8-K	4/25/2019	3.1	
3.4	Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock of the Company.	8-K	11/12/2019	3.1	
4.1	Form of Series A/B Common Stock Purchase Warrant.	8-K	4/11/2013	4.1	
4.2	Form of Common Stock Purchase Warrant.	8-K	9/20/2013	4.1	
4.3	Form of Common Stock Purchase Warrant.	S-1/A	1/31/2014	4.9	
4.4	Form of Placement Agent Purchase Warrant.	S-1/A	1/31/2014	4.8	
4.5	Form of Common Stock Purchase Warrant.	8-K	2/14/2014	4.1	
4.6	Form of Placement Agent Purchase Warrant.	8-K	2/14/2014	4.2	

4.7	Form of Common Stock Purchase Warrant.	8-K	5/23/2014	4.1
4.8	Form of Common Stock Purchase Warrant.	8-K	3/20/2015	4.1
4.9	Specimen Common Stock Certificate. *	10-Q	8/2/2016	4.1
4.10	Form of Series A Warrant to purchase common stock.	8-K	4/16/2018	4.1
4.11	Form of Series B Warrant to purchase common stock.	8-K	4/16/2018	4.2
4.12	Form of Placement Agent Purchase Warrant.	S-1	6/13/2018	4.12
4.13	Form of Debenture, issued by the Company to PeakOne.	8-K	4/18/2019	4.1
4.14	Form of Debenture, issued by the Company to the Bridge Investors.	8-K	4/18/2019	4.2
4.15	Form of Debenture, issued by the Company to Peak One Opportunity Fund, L.P. and TFK Investments, LLC Ex. 4.1 Form of Debenture, issued by the Company to the Bridge Investors.	8-K	4/25/2019	4.2
4.16	Form of Debenture, issued by the Company to Peak One Opportunity Fund, L.P. and TFK Investments, LLC.	8-K	6/20/2019	4.1
4.17	Convertible Promissory Note between Mateon Therapeutics, Inc. and PointR Data Inc. dated July 22, 2019.	8-K	7/24/2019	4.1
4.18	Form of Note Purchase Agreement, dated as of November 23, 2019, by and among the Company and the investors identified therein.	8-K	11/25/2019	4.1
10.1	Technology Development Agreement, dated as of May 27, 1997, between the Registrant and the Arizona Board of Regents, acting for and on behalf of Arizona State University.	10-K	4/15/1998	10.9
10.2	Research Collaboration and License Agreement, dated as of December 15, 1999, between OXiGENE Europe AB and Bristol-Myers Squibb Company. *	8-K	12/28/1999	99.1
10.3	Amendment and Confirmation of License Agreement No. 206-01.LIC, dated as of June 10, 2002, between the Registrant and the Arizona Board of Regents, acting for and on behalf of Arizona State University.	10-Q	8/14/2002	10.29
10.4	Termination Agreement by and between OXiGENE Europe AB and Bristol-Myers Squibb Company dated as of February 15, 2002.	10-Q	8/14/2002	10.14
10.5	License Agreement No. 206-01.LIC by and between the Arizona Board of Regents, acting on behalf of and for Arizona State University, and OXiGENE Europe AB, dated August 2, 1999.	10-K/A	8/12/2003	10.27
10.6	Research and License Agreement between the Registrant and Baylor University, dated June 1, 1999.	10-K/A	8/12/2003	10.28
10.7	Agreement to Amend Research and License Agreement between the Registrant and Baylor University, dated April 23, 2002.	10-K/A	8/12/2003	10.29

10.8	Addendum to Research and License Agreement between the Registrant and Baylor University, dated April 14, 2003.	10-K/A	8/12/2003	10.30
10.9	Form of Incentive Stock Option Agreement under Mateon's 2005 Stock Plan. +	10-K	3/14/2006	10.29
10.10	Form of Non-Qualified Stock Option Agreement under Mateon's 2005 Stock Plan. +	10-K	3/14/2006	10.30
10.11	Form of Restricted Stock Agreement under Mateon's 2005 Stock Plan. +	10-K	3/14/2006	10.31
10.12	Lease between Broadway 701 Gateway Fee LLC, a Delaware Limited Liability Company, as Landlord, and the Registrant, as Tenant, dated October 10, 2008.	10-K	3/30/2009	10.59
10.13	Form of Indemnification Agreement. +	10-Q	8/13/2012	10.2
10.14	Third Amendment to Lease, dated as of April 1, 2013, by and between the Registrant and DWF III Gateway, LLC, a Delaware limited liability company.	10-Q	5/9/2013	10.1
10.15	Fourth Amendment to Lease, dated April 28, 2014, by and between the Registrant and DWF III Gateway, LLC.	10-Q	5/8/2014	10.1
10.16	Employment Agreement by and between the Registrant and William D. Schwieterman, dated as of May 12, 2015. +	10-Q	8/6/2015	10.1
10.17	Employment Agreement by and between the Registrant and Matthew M. Loar, dated as of July 20, 2015. +	10-Q	8/6/2015	10.2
10.18	Form of Option Agreement under Mateon's 2015 Equity Incentive Plan. +	10-Q	8/6/2015	10.6
10.19	Amendment No. 1 to Employment Agreement by and between William D. Schwieterman, dated as of July 31, 2015. +	10-Q	8/6/2015	10.7
10.20	Second Amended and Restated Employment Agreement by and between the Registrant and David J. Chaplin, effective as of January 1, 2017. +	8-K	10/28/2016	10.1
10.21	Mateon Therapeutics, Inc. Amended and Restated Non-Employee Director Compensation Policy, effective October 25, 2016. +	8-K	10/28/2016	10.2
10.22	Mateon Therapeutics, Inc. 2017 Equity Incentive Plan. +	8-K	1/13/2017	10.1
10.23	Form of Option Agreement under Mateon's 2017 Equity Incentive Plan. +	8-K	1/13/2017	10.2
10.24	Mateon Therapeutics, Inc. 2005 Stock Plan (as amended and restated on January 12, 2017). +	8-K	1/13/2017	10.3
10.25	Amendment No. 2 to Employment Agreement by and between the Registrant and William D. Schwieterman, dated as of October 2, 2017. +	10-Q	11/14/2017	10.1
10.26	Amendment No. 1 to Employment Agreement by and between the Registrant and Matthew M. Loar, dated as of October 2, 2017. +	10-Q	11/14/2017	10.2
10.27	Amendment No. 1 to Second Amended and Restated Employment Agreement by and between the Registrant and David J. Chaplin, dated as of October 2, 2017. +	10-Q	11/14/2017	10.3

10.28	Mateon Therapeutics, Inc. 2015 Equity Incentive Plan (as amended and restated on May 7, 2018). +	Definitive Proxy Statement on Schedule 14A	05/07/2018	Appendix A
10.29	Form of Subscription Agreement for private placement transaction entered into on April 12, 2018.	8-K	4/16/2018	10.1
10.30	Form of Registration Rights Agreement for private placement transaction entered into on April 12, 2018.	8-K	4/16/2018	10.2
10.31	Engagement Letter, dated February 7, 2018, by and between the Registrant and Divine Capital Markets LLC.	8-K	4/16/2018	10.3
10.32	Separation and Release Agreement, dated April 17, 2019 by and between the Company and William D. Schwieterman, M.D.	8-K	4/18/2019	10.1
10.33	Form of Securities Purchase Agreement, dated as of April 17, 2019, by and among the Company and Peak One	8-K	4/18/2019	10.2
10.34	Form of Securities Purchase Agreement, dated as of April 17, 2019, by and among the Company and the Bridge Investors.	8-K	4/18/2019	10.3
10.35	Contingent Value Rights Agreement, dated April 17, 2019, by and among the Company, Oncotelic and American Stock Transfer and Trust Company LLC	8-K	4/25/2019	10.1
10.36	Form of Securities Purchase Agreement, dated as of April 17, 2019, by and among the Company and Peak One Opportunity Fund, L.P. and TFK Investments, LLC.	8-K	4/25/2019	10.2
10.37	Form of Securities Purchase Agreement, dated as of April 17, 2019, by and among the Company and the Bridge Investors	8-K	4/25/2019	10.3
10.38	Form of Securities Purchase Agreement, dated as of April 17, 2019, by and among the Company and Peak One Opportunity Fund, L.P. and TFK Investments, LLC.	8-K	6/20/2019	10.1
10.39	Amendment to Securities Purchase Agreement dated as of June 12, 2019 by and between the Company and Peak One Opportunity Fund, L.P.	8-K	6/20/2019	10.2
10.40	Separation Agreement dated as of July 1, 2019 by and between the Company and Matthew M. Loar Ex.	8-K	7/5/2019	10.1
10.41	Note Purchase Agreement between Mateon Therapeutics, Inc. and PointR Data Inc. dated July 22, 2019.	8-K	7/24/2019	10.1
10.42	Employment Agreement dated August 23, 2019 between the Company and Dr. Vuong Trieu.	8-K	8/29/2019	10.1

10.43	Employment Agreement dated August 23, 2019 between the Company and Dr. Fatih Uckun.	8-K/A	11/25/2019	10.2	
10.44	Employment Agreement dated August 23, 2019 between the Company and Dr. Chulho Park.	8-K	8/29/2019	10.3	
10.45	Employment Agreement dated August 23, 2019 between the Company and Mr. Amit Shah.	8-K	8/29/2019	10.4	
10.46	Investigational Product Supply and Use Authorization Agreement for OT-101 U.S. Expanded Access (IPSUA) dated September 5, 2019, between WideTrial and Oncotelic.	8-K	9/10/2019	10.1	
10.47	Agreement for Delivery and Licensed Use of Data Generated from OT-101 U.S. Expanded Access (Data License 1) dated September 5, 2019 between WideTrial and Oncotelic.	8-K	9/10/2019	10.2	
10.48	Agreement for Delivery and Licensed Use of WideTrial Bonus Dataset (Data License 2 Agreement) dated September 5, 2019 between WideTrial and Oncotelic.	8-K	9/10/2019	10.3	
10.49	Form of Convertible Promissory Note, issued by the Company under the Note Purchase Agreement dated as of November 23, 2019.	8-K	11/25/2019	10.1	
10.50	Research and Services Agreement.	8-K	3/23/2020	10.1	
10.51	Supplement Research and Services Agreement.	8-K	3/23/2020	10.2	
10.52	Paycheck Protection Program Promissory Note dated April 21, 2020 between Mateon Therapeutics, Inc. and Silicon Valley Bank.	8-K	4/27/2020	10.1	
14.1	Corporate Code of Conduct and Ethics.	10-K	3/30/2015	14.1	
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) and 15d-14(a).				x
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) and 15d-14(a).				x
32.1	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				x
101.1	Interactive Data Files for the fiscal years ended December 31, 2018 and December 31, 2017				x
101.INS	XBRL Instance Document				x
101.SCH	XBRL Taxonomy Extension Schema				x
101.CAL	XBRL Taxonomy Extension Calculation Linkbase				x
101.DEF	XBRL Taxonomy Extension Definition Linkbase				x
101.LAB	XBRL Taxonomy Extension Label Linkbase				x
101.PRE	XBRL Taxonomy Extension Presentation Linkbase				x

* Confidential treatment has been granted for portions of this Exhibit. Redacted portions filed separately with the Securities and Exchange Commission.

+ Management contract or compensatory plan or arrangement.

ITEM 16. 10-K SUMMARY

None.

SIGNATURES

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

Mateon Therapeutics, Inc.

/S/ VUONG TRIEU

By: VUONG TRIEU, PH. D.
Chief Executive Officer

Date: May 14, 2020

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

Signature	Title	Date
/s/ VUONG TRIEU Vuong Trieu, Ph. D.	President, Chief Executive Officer and Chairman of the Board and Director (Principal executive officer)	May 14, 2020
/s/ AMIT SHAH Amit Shah	Chief Financial Officer (Principal financial and accounting officer)	May 14, 2020
/s/ DAVID DIAMOND David Diamond	Director	May 14, 2020
/s/ STEVEN KING Steven King	Director	May 14, 2020
/s/ ANTHONY MAIDA Anthony Maida, M.D., Ph. D.	Director	May 14, 2020

Mateon Therapeutics, Inc.

Index to Financial Statements

The following financial statements of Mateon Therapeutics, Inc.:

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Stockholders and Board of Directors
Mateon Therapeutics, Inc.
Agoura Hills, California

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Mateon Therapeutics, Inc. (the "Company") as of December 31, 2019 and 2018, the related consolidated statements of operations, stockholders' (deficit) equity and cash flows for the years then ended, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2019 and 2018, and the results of its operations and its cash flows for years then ended**,** in conformity with accounting principles generally accepted in the United States of America.

Going Concern Uncertainty

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the consolidated financial statements, the Company has suffered recurring losses from operations and has an accumulated deficit and a working capital deficiency that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 2. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

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

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

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

/s/ SQUAR MILNER LLP

We have served as the company's auditor since 2019.

Los Angeles, California
May 14, 2020

MATEON THERAPEUTICS, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS

	December 31, 2019	December 31, 2018
ASSETS		
Current assets:		
Cash	$ 81,964	$ 2,498
Accounts receivable	149,748	-
Prepaid & other current assets	41,288	-
Total current assets	273,000	2,498
Development equipment, net of depreciation of $64,404	47,554	-
Long-term investment	-	1,769,300
Intangibles, net of accumulated amortization of $85,608 and $34,189	924,572	975,991
In process R&D	1,377,200	-
Goodwill	21,062,455	-
Total assets	$ 23,684,781	$ 2,747,789
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued liabilities	$ 2,054,983	$ -
Accounts payable to related party	601,682	283,030
Contingent consideration	2,625,000	-
Derivative liability on Notes	540,517	-
Convertible debt, related party, net of costs	16,474	-
Convertible debt, net of costs of	944,450	-
Total current liabilities	6,783,106	283,030
Commitments and contingencies (Note 11)		
Stockholders' equity:		
Convertible preferred stock, $0.01 par value, 15,000,000 shares authorized; 278,188 and 0 shares issued and outstanding	2,782	-
Common stock, $.01 par value; 150,000,000 shares authorized; 84,069,967 and 6,843,802 issued and outstanding, respectively	840,700	68,438
Additional paid-in capital	28,185,599	7,886,598
Accumulated deficit	(12,127,406)	(5,490,277)
Total stockholders' equity	16,901,675	2,464,759
Total liabilities and stockholders' equity	$ 23,684,781	$ 2,747,789

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

MATEON THERAPEUTICS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS

	For the Year Ended December 31, 2019	2018
Operating expenses:		
Research and development	$ 1,372,151	$ 649,755
General and administrative	2,938,726	62,983
Total operating expenses	4,310,877	712,738
Loss from operations	(4,310,877)	(712,738)
Other expense:		
Interest income	123	-
Interest expense	(749,602)	-
Change in fair value of derivative on debt	191,643	-
Long term investment written off	(1,769,300)	-
Total other expense	(2,327,136)	-
Net Loss	$ (6,638,013)	$ (712,738)
Basic and diluted net loss per share attributable to common stock	$ (0.11)	$ (0.12)
Basic and diluted weighted average common stock outstanding	59,958,406	6,136,312

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

MATEON THERAPEUTICS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY FOR THE YEAR ENDED DECEMBER 31, 2019

	Convertible Preferred Stock		Common Stock		Additional Paid-in	Accumulated	Stockholders'
	Shares	Amount	Shares	Amount	Capital	Deficit	Equity
Balance at January 1, 2019	**-**	**$ -**	**6,843,802**	**$ 68,438**	**$ 7,886,598**	**$ (5,490,277)**	**$ 2,464,759**
Common shares issued for cash	-	-	20,750	208	82,792	-	83,000
Common shares issued for services	-	-	91,844	918	417,218	-	418,136
Stock-based compensation	-	-	-	-	340,674	-	340,674
Common shares issued for settlement of accounts payable to related party	-	-	80,772	808	237,282	-	238,090
Recapitalization under reverse merger	193,713	1,937	75,232,799	752,328	2,972,606	884	3,727,755
Beneficial conversion feature on convertible debt and restricted common shares	-	-	1,050,000	10,500	895,862	-	906,362
Common shares issued in conversion of warrants	-	-	150,000	1,500	(1,380)	-	120
Acquisition of PointR	84,475	845	-	-	15,239,947		15,240,792
Derivative on debt						-	
Common shares issued to investors			600,000	6,000	114,000		120,000
Net loss	-	-	-	-	-	(6,638,013)	(6,638,013)
Balance as of December 31, 2019	**278,188**	**$ 2,782**	**84,069,967**	**$840,700**	**$28,185,599**	**$ (12,127,406)**	**$ 16,901,675**

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

MATEON THERAPEUTICS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF STOCKHOLDERS' (DEFICIT) EQUITY FOR THE YEAR ENDED DECEMBER 31, 2018

	Convertible Preferred Stock		Common Stock		Additional Paid-in	Accumulated	Stockholders' (Deficit)
	Shares	Amount	Shares	Amount	Capital	Deficit	Equity
Balance at January 1, 2018	**-**	**$ -**	**5,948,710**	**$ 58,764**	**$ 4,235,180**	**$ (4,777,539)**	**$ (483,595)**
Common shares issued for cash	-	-	60,000	600	239,400	-	240,000
Common shares issued in lieu of cash for services	-	-	187,970	1,880	749,999	-	751,878
Common shares issued for product acquisition	-	-	204,796	2,048	817,143	-	819,191
Common shares issued in lieu of investments	-	-	442,326	4,423	1,764,877	-	1,769,300
Stock-based compensation	-	-	-	723	80,000	-	80,723
Net loss	-	-	-	-	-	(712,738)	(712,738)
Balance as of December 31, 2018	**-**	**$ -**	**6,843,802**	**$ 68,438**	**$ 7,886,598**	**$ (5,490,277)**	**$ 2,464,759**

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

MATEON THERAPEUTICS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

	For the Years Ended December 31,	
	2019	**2018**
Cash flows from operating activities:		
Net loss	$ (6,638,013)	$ (712,738)
Adjustments to reconcile net loss to net cash used in operating activities:		
Amortization of debt discount and deferred finance costs	745,973	-
Amortization of intangible assets	51,419	34,189
Stock-based compensation	340,674	80,000
Depreciation on development equipment	9,238	-
Common shares issued to investors	120,000	
Issuance of common stock in lieu of cash for services	418,136	751,878
Change in fair value of derivative	(191,643)	-
Write off of long term investment	1,769,300	-
Write off of related party accounts payable	-	(458,221)
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	(78,559)	26,147
Accounts payable and accrued expenses	616,043	37,765
Accounts payable to related party	556,742	-
Net cash used in operating activities	(2,280,690)	(240,980)
Cash flows from investing activities:		
Cash acquired in mergers	189,286	-
Net cash provided by investing activities	189,286	-
Cash flows from financing activities:		
Proceeds from sales of common stock	83,000	240,000
Net proceeds from convertible notes payable, related party	203,870	-
Net proceeds from convertible notes payable	1,884,000	-
Net cash provided by financing activities	2,170,870	240,000
Net increase (decrease) in cash	79,466	(980)
Cash - beginning of period	2,498	3,478
Cash - end of period	$ 81,964	$ 2,498
Supplemental cash flow information:		
Cash paid for:		
Interest paid	$ -	$ -
Income taxes paid	$ -	$ -
Non cash investing and financing activities:		
Recapitalization under reverse merger	$ 3,727,752	$ -
Acquisition of PointR	$ 15,240,792	$ -
Issuance of common stock for settlement of accounts payable to related party	$ 238,090	$ 751,878
Beneficial conversion feature on convertible debt and restricted common shares	$ 684,140	$ -
Capitalization of prepaid expenses related to product acquisition	$ -	$ 819,191
Issuance of preferred stock for settlement of debt	$ 204,603	$ -
Non cash investment	$ -	$ 1,769,300

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

NOTE 1 – DESCRIPTION OF BUSINESS AND BASIS OF PRESENTATION

Description of Business

Mateon Therapeutics, Inc. (f/k/a OXiGENE, Inc.) (the "Parent", "Mateon"), was formed in the State of New York in 1988, was reincorporated in the State of Delaware in 1992 and changed its name to Mateon Therapeutics, Inc. in 2016. Mateon conducts business activities through both the Parent and its wholly-owned subsidiary Oncotelic, Inc. ("Oncotelic"), a Delaware corporation (collectively, the "Company"). Mateon is evaluating the further development of its product candidates OXi4503 as a treatment for acute myeloid leukemia and myelodysplastic syndromes and CA4P in combination with a checkpoint inhibitor for the treatment of advanced metastatic melanoma.

On April 17, 2019, Mateon entered into an Agreement and Plan of Merger (the "Merger Agreement") with Oncotelic, a clinical-stage biopharmaceutical company developing investigational drugs for the treatment of orphan oncology indications and the Company's wholly-owned subsidiary Oncotelic Acquisition Corporation (the "Merger Sub"). Upon the terms of and subject to the satisfaction of the conditions described in the Merger Agreement, the Merger Sub was merged with and into Oncotelic (the "Merger"), with Oncotelic surviving the Merger as a wholly-owned subsidiary of the Company.

On April 22, 2019, Mateon completed the Merger and Oncotelic became a wholly-owned subsidiary of Mateon. Upon the completion of the Merger each share of Oncotelic common stock outstanding immediately prior to the Merger (excluding any shares of Oncotelic held by stockholders exercising dissenters' appraisal rights) was converted pursuant to the Merger Agreement using the following ratios of (i) 3.97335267 shares of Mateon common stock, par value $0.01 per share (the "Common Stock"), and (ii) 0.01877292 shares of the Company's newly designated Series A Convertible Preferred Stock (the "Series A Preferred"). Following the closing of the Merger, the former Oncotelic security holders own approximately 85% of the Company's issued and outstanding Common Stock (including any shares of Common Stock issuable upon conversion of the Series A Preferred), and the Company's stockholders prior to the Merger own approximately 15% of the Company's issued and outstanding Common Stock (including any shares of Common Stock Issuable upon conversion of the Series A Preferred).

The Merger was treated as a recapitalization and reverse acquisition for financial accounting purposes. Oncotelic is considered the acquirer for accounting purposes, and the registrant's historical financial statements before the Merger have been replaced with the historical financial statements of Oncotelic prior to the Merger in the financial statements and filings with the Securities and Exchange Commission.

The Company is a cancer immunotherapy company dedicated to the development of first in class self-immunization protocol (SIP™) candidates for difficult to treat cancers. The Company's proprietary SIP™ candidates offer advantages over other immunotherapies because they do not require extraction of the tumor or isolation of the antigens, and they have the potential for broad-spectrum applicability for multiple cancer types. The Company's proprietary product candidates have shown promising clinical activity in phase 2 trials for the treatment of gliomas and pancreatic cancers. The Company aims to translate its unique insights, which span more than three decades of original work using RNA therapeutics, into the deployment of antisense as a RNA therapeutic for diseases which are caused by TGF-beta overexpression, starting with cancer and expanding to Duchenne Muscular Dystrophy (DMD) and others. Oncotelic's lead product candidate, OT-101, is being developed as a broad-spectrum anti-cancer drug that can also be used in combination with other standard cancer therapies to establish an effective multi-modality treatment strategy for difficult-to-treat cancers. Together, the Company plans to initiate phase 3 clinical trials for OT-101 in both high-grade glioma and pancreatic cancer; and any other indications that may evolve.

The Company is also planning to develop OT-101 for the various epidemics and pandemics, similar to the current corona virus (COVID-19) pandemic. Please see Note 12 – Subsequent Events *Covid-19 Efforts* for more information.

On August 17, 2019, the Company entered into an Agreement and Plan of Merger (the "PointR Merger Agreement") with PointR. Upon the terms of, and subject to the satisfaction of the conditions described in the PointR Merger Agreement, PointR would be merged with and into a newly formed subsidiary of the Company (the "PointR Merger Sub"), with PointR surviving the merger as a wholly-owned subsidiary of the Company. The merger is intended to create a publicly-traded artificial intelligence ("AI") driven immuno-oncology company with a robust pipeline of first in class TGF-β immunotherapies for late stage cancers such as gliomas, pancreatic cancer and melanoma.

On November 1, 2019, the Company entered into Amendment No. 1 (the "Amendment") to the PointR Merger Agreement with PointR. The Amendment revised certain terms of the PointR Merger Agreement to provide that holders of PointR common stock would receive shares of the Company's Series A Preferred in lieu of the Company's Common Stock in connection with the merger. The Amendment revised the terms of the milestones for earn-out payment as well.

On November 4, 2019, pursuant to the terms of the PointR Merger Agreement the Company completed the merger with PointR. On the effectiveness of the merger, the outstanding common stock of PointR immediately prior to the merger, including the conversion of a $200,000 note with accrued interest, excluding any shares of PointR held by stockholders exercising dissenters' appraisal rights, was converted solely into the right to receive approximately 84,475 shares of the Company's Series A Preferred.

Immediately following the closing of the Merger, the former PointR security holders own approximately 23.29% of the Company's issued and outstanding Common Stock (including any shares of Common Stock issuable upon the conversion of the Company's Series A Preferred), and the Company's stockholders prior to the Merger own approximately 76.71% of the Company's issued and outstanding Common Stock (including any shares of Common Stock issuable upon conversion of the Company's Series A Preferred).

Please review Note 12 – Subsequent events for more information on updates since December 31, 2019.

Principles of Consolidation

The consolidated financial statements include the accounts of Mateon and its wholly-owned subsidiaries, Oncotelic and PointR. Intercompany accounts and transactions have been eliminated in consolidation.

Basis of Presentation

The accompanying consolidated financial statements have been prepared by the Company pursuant to the rules and regulations of the Securities and Exchange Commission including Form 10-K and Regulation S-X. The information furnished herein reflects all adjustments (consisting of normal recurring accruals and adjustments) which are, in the opinion of management, necessary to fairly state the operating results for the respective periods. Certain information and footnote disclosures normally present in annual financial statements prepared in accordance with accounting principles generally accepted in the United States of America ("US GAAP") have been omitted pursuant to such rules and regulations.

Liquidity and Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. The Company has incurred net losses of approximately $12.1 million since inception, had negative working capital of $6.5 million at December 31, 2019, of which approximately $1.1 million is attributable to assumed working capital of Mateon and $2.6 million contingent liability of issuance of common shares of Mateon to PointR shareholders upon achievement of certain milestones in accordance with the merger agreement with PointR, and has negative cash flows from operations during the year ended December 31, 2019. These conditions raise substantial doubt about the Company's ability to continue as a going concern for a period of one year from the date of this filing. Management expects to incur additional losses in the foreseeable future and recognizes the need to raise capital to remain viable. The accompanying consolidated financial statements do not include any adjustments that might be necessary should the Company be unable to continue as a going concern.

The Company's long-term plans include continued development of its current pipeline of products to generate sufficient revenues, through either technology transfer or product sales, to cover its anticipated expenses. Until the Company is able to generate sufficient revenues from its current pipeline, the Company plans on funding its operations through the sale of equity and/or the issuance of debt, combined with or without warrants or other equity instruments.

On April 17, 2019, the Company entered into a Securities Purchase Agreement with two institutional investors for a commitment to purchase convertible debentures in the aggregate principal amount of up to $400,000.

Further, on April 17, 2019, the Company entered into a Securities Purchase Agreement with our CEO and an investor (the "Bridge Investor") for a commitment to purchase convertible debentures in the aggregate amount of up to $400,000.

On April 23, 2019, the Company issued two convertible notes in the principal amount of $200,000 each, both including an original issue discount ("OID") of $20,000 and deferred financing costs of $5,000 each, receiving net proceeds of $350,000, which were used by the Company for working capital and general corporate purposes. (Note 6).

On April 23, 2019, the Company issued a convertible debenture totaling $35,556 to the Bridge Investor, including OID of $3,556, receiving net proceeds of $32,000, which were used by the Company for working capital and general corporate purposes. (Note 6)

Also on April 23, 2019, the Company issued a convertible note totaling $164,444, including OID of $16,444, to our Chief Executive Officer, receiving net proceeds of $148,000, which were used by the Company for working capital and general corporate purposes. (Note 6)

On June 12, 2019, the Company received the second tranche under the first Securities Purchase Agreement above. The second tranche totaled $200,000, including $20,000 OID and $1,000 of deferred financing costs, receiving net proceeds of $179,000, which is planned to be used by the Company for working capital and general corporate purposes. (Note 6)

On July 22, 2019, the Company entered into a convertible note purchase agreement with PointR Data, Inc., a privately held, developer of high performance cluster computer and AI applications ("PointR") for $200,000. The convertible note bears an interest rate of 8% per annum due on 15th of each month and is payable, at the option of the holder, either in cash or in shares of the Company's Common Stock. The convertible note had a maturity date of January 1, 2020.

On August 6, 2019, the Company closed the second tranche of financing with our Bridge Investor, issuing an additional $200,000 face amount convertible debenture, including OID of $20,000 and $5,000 deferred financing costs, receiving net proceeds of $175,000. Following the drawdown of the second tranche from the Bridge Investor, up to $400,000 in face value of Debentures remains available under the Securities Purchase Agreement.

On December 11, 2019, the Company closed its Fall 2019 Debt Financing raising an additional $500,000 for gross proceeds of $1.0 million. The transactions complete the previously announced offering, under which the Company entered into a Note Purchase Agreement (the "Note Purchase Agreement") with certain accredited investors for the sale of convertible promissory notes (the "Notes"). The Company completed the initial closing under the Note Purchase Agreement on November 23, 2019, issuing a $250,000 principal amount Note to each of Dr. Vuong Trieu, the Company's Chief Executive Officer, and Stephen Boesch, in exchange for gross proceeds of $500,000. In connection with the second and final closing the Company issued Notes to additional investors including $250,000 to Dr. Sanjay Jha, the former CEO of Motorola and COO/President of Qualcomm. The Company also offset certain payables due to Dr. Vuong Trieu, the Company's Chief Executive Officer, Chulho Park, the Company's Chief Technology Officer, and Amit Shah, the Company's Chief Financial Officer and converted that into the debt under the Fall 2019 Debt Financing. $35,000 due to Dr. Vuong Trieu, $27,000 due to Chulho Park and $20,000 due to Amit Shahwas converted into debt. The Company also issued notes of $168,000 to two unaffiliated accredited investors.

Although no assurances can be given as to the Company's ability to deliver on its revenue plans, or that unforeseen expenses may arise, management believes that the potential equity and debt financing or other potential financing will provide the necessary funding for the Company to continue as a going concern. Also, management cannot guarantee any potential debt or equity financing will be available on favorable terms or at all. As such, management does not believe they have sufficient cash for 12 months from the date of this report. If adequate funds are not available on acceptable terms, or at all, the Company will need to curtail operations, or cease operations completely.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Use of Estimates

The preparation of financial statements in conformity with US GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, equity-based transactions and disclosure of contingent liabilities at the date of the financial statements and revenues and expense during the reporting period. Actual results could materially differ from those estimates.

The Company believes the following critical accounting policies affect its more significant judgments and estimates used in the preparation of the financial statements. Significant estimates include the valuation of goodwill and intangible assets for impairment, deferred tax asset and valuation allowance, and fair value of financial instruments.

Cash

As of December 31, 2019, and December 31, 2018, the Company held all its cash in banks. The Company considers investments in highly liquid instruments with a maturity of three months or less to be cash equivalents. The Company did not have any cash equivalents as of December 31, 2019 and December 31, 2018.

Investment in Equity Securities

Prior to the Merger, Oncotelic received Series E Preferred Shares of Adhera Therapeutics, Inc. (“Adhera”) in consideration for the issuance of Oncotelic’s common stock under various Securities Purchase Agreements (See Notes 7). The Company records its investments in equity securities initially at cost in accordance with Accounting Standards Codification (“ASC”) 321, Investments –Equity Securities (“ASC 321”). The Company subsequently marks the investments to market at each reporting period and, in accordance with ASU 2016-01, Financial Instruments – (Overall), records the unrealized gains or losses in the Statement of Operations. There were no unrealized gains or losses on investments in equity securities for the years ended December 30, 2019 or 2018. During the fourth quarter of the year ended December 31, 2019, the Company evaluated the fair value of the investment based on a recent filing by Adhera, in which Adhera describes their current financial condition including the potential to file for bankruptcy, the Company believes that the long term investment in Adhera is impaired and therefore, determined to write off the entire investment.

Fair Value of Financial Instruments

The carrying value of cash, accounts payable and accrued expense approximate their fair values based on the short-term maturity of these instruments. As defined in ASC 820, “Fair Value Measurements and Disclosures,” fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (exit price). The Company utilizes market data or assumptions that market participants would use in pricing the asset or liability, including assumptions about risk and the risks inherent in the inputs to the valuation technique. These inputs can be readily observable, market corroborated, or generally unobservable. ASC 820 establishes a fair value hierarchy that prioritizes the inputs used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurement) and the lowest priority to unobservable inputs (level 3 measurement). This fair value measurement framework applies at both initial and subsequent measurement.

The three levels of the fair value hierarchy defined by ASC 820 are as follows:

- Level 1 – Quoted prices are available in active markets for identical assets or liabilities as of the reporting date. Active markets are those in which transactions for the asset or liability occur in sufficient frequency and volume to provide pricing information on an ongoing basis. Level 1 primarily consists of financial instruments such as exchange-traded derivatives, marketable securities and listed equities.

- Level 2 – Pricing inputs are other than quoted prices in active markets included in Level 1, which are either directly or indirectly observable as of the reported date. Level 2 includes those financial instruments that are valued using models or other valuation methodologies. These models are primarily industry-standard models that consider various assumptions, including quoted forward prices for commodities, time value, volatility factors and current market and contractual prices for the underlying instruments, as well as other relevant economic measures. Substantially all of these assumptions are observable in the marketplace throughout the full term of the instrument, can be derived from observable data or are supported by observable levels at which transactions are executed in the marketplace. Instruments in this category generally include non-exchange-traded derivatives such as commodity swaps, interest rate swaps, options and collars.

- Level 3 – Pricing inputs include significant inputs that are generally less observable from objective sources. These inputs may be used with internally developed methodologies that result in management's best estimate of fair value.

As of December 31, 2018	Carrying Value	Fair Value Measurement Using			
		Level 1	Level 2	Level 3	Total
Investments in Equity Securities					
Adhera Therapeutics – Convertible Series E Preferred Shares	$ -	$ -	$ -	$ 1,769,300	$ 1,769,300
	$ -	$ -	$ -	$ 1,769,300	$ 1,769,300

Through September 30, 2019, the Company had opined that since the Adhera Convertible Series E Preferred shares contained "full-ratchet" anti-dilution provisions, if Adhera were to issue any new common shares or derivative securities convertible into shares of common stock at a price that is lower than the conversion price for the Convertible Series E Preferred Stock (other than certain limited exempt issuances) then the conversion price for the Convertible Series E Preferred Stock would have automatically adjusted to the lower conversion price, as defined in the agreement with Adhera. The Adhera Convertible Series E Preferred shares are not publicly traded and there are no freely observable inputs from objective sources.

During the fourth quarter of the year ended December 31, 2019, the Company evaluated the fair value of the investment based on a recent filing by Adhera, in which Adhera describes their current financial condition including the potential to file for bankruptcy, the Company believes that the long term investment in Adhera is impaired and therefore, determined to write off the entire investment.

The change in the value of the investment, under level 3 of the Fair Value Measurement, is shown as under:

	Year ended	
	December 31, 2019	December 31, 2018
Opening Balance	$ 1,769,300	$ -
Value introduced	-	1,769,300
Write off value of investment	(1,769,300)	-
Closing balance	$ -	$ 1,769,000

Net Loss Per Share

Basic net loss per common share is computed by dividing the net loss by the weighted-average number of common shares outstanding during the period. Diluted net loss per share includes the effect of common stock equivalents (notes convertible into common stock, stock options and warrants) when, under either the treasury or if-converted method, such inclusion in the computation would be dilutive. The following number of shares have been excluded from diluted loss since such inclusion would be anti-dilutive:

	Year ended	
	December 31, 2019	**December 31, 2018**
Convertible notes	10,000,000	-
Stock options	6,145,044	6,785,617
Warrants	19,515,787	24,380,893
Potentially dilutive securities	35,660,831	31,166,510

Stock-Based Compensation

The Company applies the provisions of ASC 718, Compensation—Stock Compensation ("ASC 718"), which requires the measurement and recognition of compensation expense for all stock-based awards made to employees, including employee stock options, in the statements of operations.

For stock options issued to employees and members of the board of directors for their services, the Company estimates the grant date fair value of each option using the Black-Scholes option pricing model. The use of the Black-Scholes option pricing model requires management to make assumptions with respect to the expected term of the option, the expected volatility of the common stock consistent with the expected life of the option, risk-free interest rates and expected dividend yields of the common stock. For awards subject to service-based vesting conditions, including those with a graded vesting schedule, the Company recognizes stock-based compensation expense equal to the grant date fair value of stock options on a straight-line basis over the requisite service period, which is generally the vesting term. Forfeitures are recorded as they are incurred as opposed to being estimated at the time of grant and revised.

Pursuant to ASU 2018-07 Compensation – Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting, the Company accounts for stock options issued to non-employees for their services in accordance with ASC 718. The Company uses valuation methods and assumptions to value the stock options that are in line with the process for valuing employee stock options noted above.

Impairment of Long-Lived Assets

The Company reviews long-lived assets, including definite-lived intangible assets, for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Recoverability of these assets is determined by comparing the forecasted undiscounted net cash flows of the operation to which the assets relate to the carrying amount. If the operation is determined to be unable to recover the carrying amount of its assets, then these assets are written down first, followed by other long-lived assets of the operation to fair value. Fair value is determined based on discounted cash flows or appraised values, depending on the nature of the assets. For the years ended December 31, 2019 and 2018, there were no impairment losses recognized for long-lived assets.

Intangible Assets

The Company records its intangible assets at cost in accordance with ASC 350, Intangibles – Goodwill and Other. The Company reviews the intangible assets for impairment on an annual basis or if events or changes in circumstances indicate it is more likely than not that they are impaired. These events could include a significant change in the business climate, legal factors, a decline in operating performance, competition, sale or disposition of a significant portion of the business, or other factors. If the review indicates the impairment, an impairment loss would be recorded for the difference of the value recorded and the new value. For the years ended December 31, 2019 and 2018, there were no impairment losses recognized for intangible assets.

Goodwill

Goodwill represents the excess of the purchase price of acquired business over the estimated fair value of the identifiable net assets acquired. Goodwill is not amortized but is tested for impairment at least once annually, at the reporting unit level or more frequently if events or changes in circumstances indicate that the asset might be impaired. The goodwill impairment test is applied by performing a qualitative assessment before calculating the fair value of the reporting unit. If, on the basis of qualitative factors, it is considered not more likely than not that the fair value of the reporting unit is less than the carrying amount, further testing of goodwill for impairment would not be required. Otherwise, goodwill impairment is tested using a two-step approach.

The first step involves comparing the fair value of the reporting unit to its carrying amount. If the fair value of the reporting unit is determined to be greater than its carrying amount, there is no impairment. If the reporting unit's carrying amount is determined to be greater than the fair value, the second step must be completed to measure the amount of impairment, if any. The second step involves calculating the implied fair value of goodwill by deducting the fair value of all tangible and intangible assets, excluding goodwill, of the reporting unit from the fair value of the reporting unit as determined in step one. The implied fair value of the goodwill in this step is compared to the carrying value of goodwill. If the implied fair value of the goodwill is less than the carrying value of the goodwill, an impairment loss equivalent to the difference is recorded. For the years ended December 31, 2019 and 2018, there were no impairment losses recognized for Goodwill.

Convertible Instruments

The Company evaluates and accounts for conversion options embedded in its convertible instruments in accordance with ASC 815 "Derivatives and Hedging".

ASC 815 generally provides three criteria that, if met, require companies to bifurcate conversion options from their host instruments and account for them as free standing derivative financial instruments. These three criteria include circumstances in which (a) the economic characteristics and risks of the embedded derivative instrument are not clearly and closely related to the economic characteristics and risks of the host contract, (b) the hybrid instrument that embodies both the embedded derivative instrument and the host contract is not re-measured at fair value under otherwise applicable generally accepted accounting principles with changes in fair value reported in earnings as they occur, and (c) a separate instrument with the same terms as the embedded derivative instrument would be considered a derivative instrument. Professional standards also provide an exception to this rule when the host instrument is deemed to be conventional as defined under professional standards as "The Meaning of Conventional Convertible Debt Instrument."

The Company accounts for convertible instruments (when it has determined that the embedded conversion options should not be bifurcated from their host instruments) in accordance with ASC 470-20 "Debt – Debt with Conversion and Other Options." Accordingly, the Company records, when necessary, discounts to convertible notes for the intrinsic value of conversion options embedded in debt instruments based upon the differences between the fair value of the underlying common stock at the commitment date of the note transaction and the effective conversion price embedded in the note. Original issue discounts under these arrangements are amortized over the term of the related debt to their earliest date of redemption. The Company also records when necessary deemed dividends for the intrinsic value of conversion options embedded in preferred shares based upon the differences between the fair value of the underlying common stock at the commitment date of the note transaction and the effective conversion price embedded in the note.

ASC 815-40 “Derivatives and Hedging – Contracts in Entity’s Own Equity” provides that, among other things, generally, if an event is not within the entity’s control could or require net cash settlement, then the contract shall be classified as an asset or a liability.

Research & Development Costs

In accordance with ASC 730-10-25 “Research and Development”, research and development costs are charged to expense as and when incurred.

Prior Period Reclassifications

Certain amounts in prior periods may have been reclassified to conform with current period presentation.

Recent Accounting Pronouncements

In January 2017, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2017-04, Intangibles – Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment. The new guidance requires only a one-step quantitative impairment test, whereby a goodwill impairment loss will be measured as the excess of a reporting period unit’s carrying amount over its fair value (not to exceed the total goodwill allocated to that reporting unit). It eliminates Step 2 of the current two-step goodwill impairment test, under which a goodwill impairment loss is measured by comparing the implied fair value of a reporting unit’s goodwill with the carrying amount of that goodwill. ASU 2017-04 is effective for annual periods beginning after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The adoption of ASU 2017-04 is not expected to have a material impact on the Company’s financial statements and related disclosures.

In August 2016, the FASB issued ASU 2016-15, “Statement of Cash Flows (Topic 230) Classification of Certain Cash Receipts and Cash Payments”. The new guidance is intended to reduce diversity in practice in how certain transactions are classified in the statement of cash flows. ASU 2016-15 is effective for annual periods beginning after December 15, 2018. Early adoption is permitted, provided that all of the amendments are adopted in the same period. The guidance requires application using a retrospective transition method. The adoption of ASU 2016-15 did not have a material impact on the Company’s financial statements and related disclosures.

In August 2015, the FASB issued ASU 2015-14, Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date, which defers the effective date of ASU 2014-09 for all entities by one year. ASU 2014-09 became effective for the Company on January 1, 2018. The ASU also requires expanded disclosures relating to the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. Additionally, qualitative and quantitative disclosures are required about customer contracts, significant judgments and changes in judgments, and assets recognized from the costs to obtain or fulfill a contract. The Company did not have any revenues for the years ended December 31, 2019 and 2018 respectively, and may not have revenues in the near future. The adoption of ASC 606 is not likely to have any impact on the Company’s financial statements and related disclosures.

On February 25, 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842). The new guidance establishes the principles to report transparent and economically neutral information about the assets and liabilities that arise from leases. The new guidance is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. The adoption of ASU 2016-02 did not have a material impact on the Company’s financial statements and related disclosures as the Company does not have any leases.

All other newly issued but not yet effective accounting pronouncements have been deemed to be not applicable or immaterial to the Company.

NOTE 3 - ACQUISITIONS

Merger Agreement with Oncotelic, Inc.

Effective April 22, 2019, the Company completed the Merger pursuant to the Merger Agreement. Pursuant to the terms of the Merger Agreement, Oncotelic, Inc. merged with and into Merger Sub. Oncotelic, Inc. was the surviving corporation and, as a result of the Merger, became a wholly owned subsidiary of Mateon.

On the effectiveness of the Merger it is reflected that:

- for all bookkeeping and accounting purposes, the closing of the Merger (the "Closing") was to be deemed to have occurred at 10:00 am local time on April 22, 2019;
- for the purposes of calculating the number of shares of the Company's Common Stock, $0.01 par value per share, to be issued in exchange for common equity units of Oncotelic, Inc. in connection with the Merger, the conversion ratio was to be 3.97335267 for Common Stock and 0.01877292 of newly designated Series A Preferred;
- 41,419,934 shares of Mateon Common Stock were issued and outstanding as of the date of the Merger;
- Oncotelic's outstanding 10,318,746 shares of Common Stock, consisting of 7,866,335 outstanding shares of Common Stock, 3,102,411 converted options and 150,000 converted warrants, that were exchanged for an aggregate of (a) 41,000,033 shares of the Company's Common Stock and (b) 193,713 shares of the Company's newly designated Series A Preferred, par value $0.01 per share each of which are initially convertible into 1,000 shares of Common Stock upon (i) optional conversion by the holder at any time, or (ii) mandatory conversion upon the availability of a sufficient number of authorized but unissued Common Stock. Included in the shares issued to the former stockholders of Oncotelic are approximately 2.1 million shares of Common Stock and approximately 10,000 shares of the Series A Preferred which are to be issued subject to the holders' waiver of dissenter's rights.
- Holders of the Company's Common Stock at the close of business on the date prior to the effectiveness of the Merger were issued a Contingent Value Right ("CVR").

Each CVR provides its holder the right to receive 75% of the net proceeds received from the full or partial sale, license, transfer or other disposition of the intellectual property rights and related assets of the Company's product candidates OXi4503 and CA4P, in their form and for their contemplated uses at the time of Closing, that occurs under a definitive agreement executed prior to the fourth anniversary of the Merger (after the initial $500,000 of such net proceeds, which will be retained by the Company). The CVRs are not transferable, do not entitle the holder to any equity interest in the Company and do not have any voting or dividend rights.

Immediately following the Merger, Mateon had 82,419,967 shares of Common Stock issued and outstanding and 193,713 shares of Series A Preferred which when converted at a 1:1,000 ratio will result in an additional 193,712,995 shares of Common Stock. The pre-Merger stockholders of Mateon retained an aggregate of 41,419,934 shares of Common Stock of Mateon, representing approximately 15% ownership of the post-Merger company. Therefore, upon consummation of the Merger, there was a change in control of Mateon, with the former owners of Oncotelic effectively acquiring control of Mateon. The Merger has been treated as a recapitalization and reverse acquisition for financial accounting purposes. As such, Oncotelic is considered the acquirer for financial accounting purposes, and the registrant's historical financial statements of the Company before the Merger has been replaced with the historical financial statements of Oncotelic before the Merger in the financial statements and filings with the Securities and Exchange Commission.

The Company obtained a 3rd party valuation on the fair value of the assets acquired and liabilities assumed for use in the purchase price allocation, as well as the value the consideration exchanged in the Merger. It was determined that the market price of the Company's Common Stock was a readily determinable measurement for calculating the fair value of the consideration and the Merger date stock price of $.09 was used to value the equity interest exchanged.

The following table summarizes the allocation of the purchase price to the fair values of the assets acquired and liabilities assumed as of the transaction date:

Cash	$	182,883
Prepaid expense		56,175
Accounts payable and other current liabilities assumed		(1,391,302)
Net liability acquired		(1,152,244)
Goodwill (a.)		4,879,999
Total purchase price (b.)	$	3,727,755

a. The primary items that generate goodwill include the value of the synergies between the acquired company and Oncotelic, Inc. and the acquired assembled workforce, neither of which qualifies for recognition as an intangible asset.

Goodwill is the excess of the purchase price over the fair value of the underlying net tangible and identifiable intangible assets. In accordance with applicable accounting standards, goodwill is not amortized but instead is tested for impairment at least annually or more frequently if certain indicators are present. Goodwill and intangibles is not deductible for tax purposes. The Company has considered the valuation as a preliminary allocation of assets and liabilities and may adjust such estimates in the future, if deemed material.

b. The total purchase price of $3,727,755 represents the consideration transferred from Mateon in the Merger and was calculated based on the number of shares of Common Stock outstanding at the date of the Merger.

Merger with PointR

On August 17, 2019, the Company entered into an Agreement and Plan of Merger (the “PointR Merger Agreement”) with PointR. Upon the terms of, and subject to the satisfaction of the conditions described in, the PointR Merger Agreement, PointR would be merged with and into a newly formed subsidiary of the Company (the “PointR Merger Sub”), with PointR surviving the merger as a wholly-owned subsidiary of the Company. The merger is intended to create a publicly-traded AI driven immuno-oncology company with a robust pipeline of first in class TGF-β immunotherapies for late stage cancers such as gliomas, pancreatic cancer and melanoma.

On November 1, 2019, the Company entered into Amendment No. 1 (the “Amendment”) to the PointR Merger Agreement with PointR. The Amendment revised certain terms of the PointR Merger Agreement to provide that holders of PointR common stock would receive shares of the Company’s Series A Preferred in lieu of the Company’s Common Stock in connection with the merger. The Amendment revised the terms of the milestones for earn-out payment as well.

On November 4, 2019, pursuant to the terms of the PointR Merger Agreement the Company completed the merger with PointR. On the effectiveness of the merger, the outstanding common stock of PointR immediately prior to the merger, including the conversion of a $200,000 note with accrued interest, excluding any shares of PointR held by stockholders exercising dissenters’ appraisal rights, was converted solely into the right to receive approximately 84,475 shares of the Company’s Series A Preferred.

Immediately following the closing of the Merger, the former PointR security holders own approximately 23.29% of the Company’s issued and outstanding Common Stock (including any shares of Common Stock issuable upon the conversion of the Company’s Series A Preferred), and the Company’s stockholders prior to the Merger own approximately 76.71% of the Company’s issued and outstanding Common Stock (including any shares of Common Stock issuable upon conversion of the Company’s Series A Preferred).

The Company obtained a preliminary 3rd party valuation on the fair value of the assets acquired and liabilities assumed for use in the purchase price allocation, as well as the value the consideration exchanged in the Merger. It was determined that the market price of the Company's Common Stock was a readily determinable measurement for calculating the fair value of the consideration and the Merger date stock price of $.18 was used to value the equity interest exchanged.

The purchase price of approximately $17.8 million, includes $15.2 million represents the consideration transferred from Mateon at the time of the merger transaction and $2.6 million of contingent consideration issuable upon PointR achieving certain milestones. Mateon issued 84,475 shares of preferred stock of the Company, related to the $15 million of consideration and including $0.2 million of short term debt repaid by Mateon inclusive of accrued interest thereon, and convertible at a rate of 1,000 shares of common stock per preferred stock, and was calculated based on the purchase prices divided by the price of the common stock of Mateon and does not include the $2.6 million of contingent consideration.

The number of shares of common stock equivalents Mateon issued to PointR stockholders, for purposes of this Annual Report on Form 10-K, is calculated pursuant to the terms of the Merger Agreement based on Mateon common stock outstanding as of November 4, 2019, as follows:

$15,205,473 divided by $0.18 = 84,474,854 shares of common stock
84,474,854 shares of common stock divided by 1000 = 84,475 shares of preferred stock
Combined ownership of common stock equivalents = 360,638,491 shares
PointR's ownership of combined common stock equivalents = 23.29%

The application of the acquisition method of accounting is dependent upon certain valuations and other studies, which was completed in February 2020. The purchase price allocation was adopted and the final amounts allocated to assets acquired and liabilities assumed.

The following table summarizes the allocation of the purchase price to the fair values of the assets acquired and liabilities assumed as of the transaction date:

Assets and Liabilities Acquired:		
Cash	$	6,403
Fixed Assets		56,792
Other assets assumed (excluding cash and fixed assets)		260,905
In-process research and development		1,377,200
Liabilities assumed		(17,964)
Net assets acquired		1,683,336
Goodwill		16,182,456
Purchase price	$	17,865,792

a. The primary items that generate goodwill include the value of the synergies between the acquired company and PointR and the acquired assembled workforce, neither of which qualifies for recognition as an intangible asset.

Goodwill is the excess of the purchase price over the fair value of the underlying net tangible and identifiable intangible assets. In accordance with applicable accounting standards, goodwill is not amortized but instead is tested for impairment at least annually or more frequently if certain indicators are present. Goodwill and intangibles is not deductible for tax purposes. The Company has considered the valuation as a preliminary allocation of assets and liabilities and may adjust such estimates in the future, if deemed material.

b. The total purchase price of $17,831,427 represents the consideration transferred from Mateon in the Merger and was calculated based on the number of shares of Common Stock plus the preferred shares outstanding but convertible into Common Stock outstanding at the date of the Merger and includes $2,625,000 of contingent consideration of shares issuable to PointR shareholders upon achievement of certain milestones.

NOTE 4 - INTANGIBLE ASSETS AND GOODWILL

Mateon completed a Merger with Oncotelic (Note 3), which gave rise to Goodwill of $4,751,055. Further, we added goodwill of $16,311,400 upon the completion of the Merger with PointR (Note 3). In general, the goodwill is tested on an annual impairment date chosen of December 31. However, since both mergers were completed in 2019 and both assets are currently being developed for various cancer and COVID-19 therapies, we do not believe the goodwill of the companies acquired has been impaired.

Assignment and Assumption Agreement with Autotelic, Inc.

In April 2018, Oncotelic entered into an Assignment and Assumption Agreement (the "Assignment Agreement") with Autotelic Inc., an affiliate company, and Autotelic LLC, an affiliate company, pursuant to which Oncotelic acquired the rights to all intellectual property ("IP") related to a patented product. As consideration for the Assignment Agreement, Oncotelic issued 204,798 shares of its Common Stock for a value of $819,191. The Assignment Agreement also provides that Oncotelic shall be responsible for all costs related to the IP, including development and maintenance, going forward. All previous pass through charges related to this asset from Autotelic Inc. to Autotelic, LLC and then to Oncotelic will be null and void. As a result, Oncotelic wrote-off approximately $458,000 in previously billed charges related to the Oncotelic IP for the year ended December 31, 2018 which was recorded in general and administrative expense. Dr. Trieu, a related party, is a control person in Autotelic LLC and Autotelic Inc.

Intangible Asset Summary

The following table summarizes the balances as of December 31, 2019 and December 31, 2018, of the intangible assets acquired, their useful life, and annual amortization:

	December 31, 2019	Remaining Estimated Useful Life (Years)
Intangible asset – Intellectual Property	$ 819,191	18.68
Intangible asset – Capitalization of license cost	190,989	18.68
	1,010,180	
Less Accumulated Amortization	(85,608)	
Total	$ 924,572	

	December 31, 2018	Remaining Estimated Useful Life (Years)
Intangible asset – Intellectual Property	$ 819,191	19.27
Intangible asset – Capitalization of license cost	190,989	19.27
	1,010,180	
Less Accumulated Amortization	(34,189)	
Total	$ 975,991	

Amortization of identifiable intangible assets for the years ended December 31, 2019 and 2018 was $51,365 and $34,189, respectively.

The future yearly amortization expense over the next five years and thereafter are as follows:

For the year ended December 31,	
2020	$ 51,365
2021	51,365
2022	51,365
2023	51,365
2024	51,365
Thereafter	667,747
	$ 924,572

In-Process Research & Development (IPR&D) Summary

The following table summarizes the balances as of December 31, 2019 of the IPR&D assets acquired. The Company will evaluate, on an annual basis, for any impairment and record an impairment if identified. No similar balances were present in 2018:

	December 31, 2019
Intangible asset – In-process research & development	$ 1,377,200
Total	$ 1,377,200

NOTE 5 – ACCOUNTS PAYABLE AND ACCRUED EXPENSES

Accounts payable and accrued expense consists of the following amounts:

	December 31, 2019	December 31, 2018
Accounts payable	$ 1,793,033	$ -
Accrued expense	261,950	-
	$ 2,054,983	$ -

	December 31, 2019	December 31, 2018
Accounts payable – related party	$ 601,682	$ 283,030

NOTE 6 – CONVERTIBLE DEBENTURES AND NOTES

As of December 31, 2019, convertible debentures and notes, net of debt discount, consist of the following amounts:

	December 31, 2019
10% Convertible note payable, due April 23, 2022 – Peak One	115,623
10% Convertible note payable, due June 12, 2022 – Peak One	(81,735)
10% Convertible note payable, due April 23, 2022 - TFK	115,623
10% Convertible note payable, due April 23, 2022 – Related Party	(12,663)
10% Convertible note payable, due April 23, 2022 – Bridge Investor	(2,748)
10% Convertible note payable, due August 6, 2022 – Bridge Investor	26,824
	$ 160,924

The gross principal balances on the convertible debentures listed above totaled $1,000,000 and included an initial debt discount totaling $800,140. Total amortization expense related to these debt discounts was $155,644 for the year ended December 31, 2019. No similar expense was recorded in the same period of 2018. The total unamortized debt discount at December 31, 2019, was $1,039,076 after recording the transactions for the derivative feature on the debt that converted to variable instruments.

The Peak One Tranche #2 note and the notes issued to our CEO and the bridge investors reached the 180 days During the 3 months ended December 31, 2019. As such, Peak One, the CEO and the bridge investor had the ability to convert that debt into equity at the variable conversion price of 65% % of the Company's lowest traded price after the first 180 days or at the lower of the Fixed Price or 55% of the Company's traded stock price under certain circumstances. This gave rise to a derivative feature within the debt instrument. The Company evaluated the impact of the derivative and recorded a derivative liability of $541,000. This also required the company to fully amortize the beneficial conversion feature of $563,000, record a debt discount of $169,000 and a change in fair value of $192,000 to appropriately record the transactions.

Bridge Financing

Peak One Financing

On April 17, 2019, the Company entered into a Securities Purchase Agreement (the "Purchase Agreement") with Peak One Opportunity Fund, L.P. (the "Buyer", "Peak One"), for a commitment to purchase convertible notes in the aggregate amount of $400,000, pursuant to which, for an aggregate purchase price of $400,000, the Buyer purchased (a) Tranche #1 in the form of a Convertible Promissory Note in the principal amount of $200,000 (the "Convertible Note") and (b) 350,000 restricted shares of the Company's Common Stock (the "Shares") (the "Purchase and Sale Transaction"). The Company used the net proceeds from the Purchase and Sale Transaction for working capital and general corporate purposes.

The Convertible Note has a principal balance of $200,000, including a 10%$ OID of $20,000 and $5,000 in debt issuance costs, receiving net proceeds of $175,000, with a maturity date of April 23, 2022. Upon the occurrence of certain events of default, the Buyer, amongst other remedies, has the right to charge a penalty in a range of 18% to 40% dependent on the specific default event. Amounts due under the Convertible Note may also be converted into shares (the "Tranche #1 Conversion Shares") of the Company's Common Stock at any time, at the option of the holder, at (i) a conversion price, during the first 180 days, of $0.10 per share (the "Fixed Price"), and then (2) at the lower of the Fixed Price or 65% of the Company's lowest traded price after the first 180 days or at the lower of the Fixed Price or 55% of the Company's traded stock price under certain circumstances. The Company has agreed to at all times, reserve and keep available out of its authorized Common Stock a number of shares equal to at least two times the full number of the Tranche #1 Conversion Shares. The Company may redeem the Convertible Note at rates of 110% to 140% over the principal balance dependent on certain events and redeem the value with accrued interest thereon, if any.

The issuance of the Convertible Note resulted in a discount from the beneficial conversion feature totaling $84,570, including $52,285 related to the beneficial conversion feature and a discount from the issuance of restricted stock of 350,000 shares for $32,285. Total amortization of these OID and debt issuance cost discounts totaled $25,193 for the year ended December 31, 2019. Total unamortized discount on this note was $84,377 as of December 31, 2019.

On June 12, 2019, the Company entered into an amendment of the Purchase Agreement ("Amendment #1") in connection with the draw-down of the second tranche, and to provide for additional borrowing capacity under that agreement. Amendment #1 increased the borrowing amount up to $600,000, adding the ability to borrow an additional $200,000 in a third tranche.

On June 12, 2019, the Buyer purchased Convertible Note Tranche #2 (“Tranche #2”) totaling $200,000, including a 10% OID of $20,000 and a $1,000 debt issuance cost, receiving net proceeds of $179,000 against the April 17, 2019, Purchase Agreement with Peak One, with a maturity date of June 12, 2022. Amounts due under Tranche #2 are convertible at the same terms as Tranche #1 above.

The issuance of Tranche #2 resulted in a discount from the beneficial conversion feature totaling $180,000, including $132,091 related to the conversion feature and a discount from the issuance of restricted stock of 350,000 shares for $47,909. Total amortization of these OID and debt issuance cost discounts totaled $37,046 for the year ended December 31, 2019. Total unamortized discount on this note was $163,954 as of December 31, 2019.

On November 5, 2019, the Company and Peak One amended the Convertible Note under Tranche #1 to extend the date of conversion of the Convertible Note into Common Stock of the Company at 65% of the traded price of the Company’s Common Stock until January 8, 2020. This amendment put a temporary hold on Peak One to convert the debt under Tranche 1. This restriction did not apply if Peak One opted to convert the Convertible Note at $0.10. The Company compensated Peak One 300,000 shares of the Company’s Common Stock for delaying the conversion until January 18, 2020. Such shares were issued to Peak One on November 14, 2019. Non-cash compensation expense of $60,000 was recorded for such issuance.

Subsequent to December 31, 2019, Peak One converted approximately $150,000 of their total debt into 2,012,145 shares of Mateon.

TFK Financing

On April 23, 2019, the Company, entered into a Convertible Note (the “TFK Note”) with TFK Investments, LLC (“TFK”). The TFK Note has a principal balance of $200,000, including a 10% OID of $20,000 and $5,000 in debt issuance costs, receiving net proceeds of $175,000, with a maturity date of April 23, 2022. Upon the occurrence of certain events of default, the Buyer, amongst other remedies, has the right to charge a penalty in a range of 18% to 40% dependent on the specific default event. Amounts due under the Convertible Note may also be converted into shares (the “TFK Conversion Shares”) of the Company’s Common Stock at any time, at (i) a conversion price, during the first 180 days, of $0.10 per share (the “Fixed Price”), and then (2) at the lower of the Fixed Price or 65% of the Company’s lowest traded price after the first 180 days or at the lower of the Fixed Price or 55% of the Company’s traded stock price under certain circumstances. The Company has agreed to at all times reserve and keep available out of its authorized Common Stock a number of shares equal to at least two times the full number of the TFK Conversion Shares. The Company may redeem the Convertible Note at rates of 110% to 140% rates over the principal balance dependent on certain events and redeem the value with accrued interest thereon, if any.

The issuance of the TFK Note resulted in a discount from the beneficial conversion feature totaling $84,570, including $52,285 related to the beneficial conversion feature and a discount from the issuance of restricted stock of 350,000 shares for $32,285. Total amortization of these OID and debt issuance cost discounts totaled $25,193 for the year ended December 31, 2019. Total unamortized discount on this note was $84,377 as of December 31, 2019.

On November 5, 2019, the Company and TFK amended the TFK Convertible Note to extend the date of conversion of the Convertible Note into Common Stock of the Company at 65% of the traded price of the Company’s Common Stock until January 8, 2020. This restriction did not apply if TFK wished to convert the Convertible Note at $0.10 per share. The Company compensated TFK 300,000 shares of the Company’s Common Stock for delaying the conversion until January 8, 2020. Such shares were issued to TFK on November 14, 2019. Non-cash compensation expense of $60,000 was recorded for such issuance.

Subsequent to December 31, 2019, TFK converted $133,430 of their total debt into 1,950,000 shares of Mateon.

Notes with Officer and Bridge Investor

On April 17, 2019, the Company entered into a Securities Purchase Agreement (the "Bridge SPA") with our CEO and the Bridge Investor with a commitment to purchase convertible notes in the aggregate of $400,000.

On April 23, 2019, the Company entered into a convertible note with our Chief Executive Officer, Vuong Trieu, Ph. D. (the "Trieu Note"). The Trieu Note has a principal balance of $164,444, including a 10% OID of $16,444, resulting in net proceeds of $148,000, with a maturity date of April 23, 2022. Upon the occurrence of certain events of default, the Buyer, amongst other remedies, has the right to charge a penalty in a range of 18% to 40% dependent on the specific default event. Amounts due under the Convertible Note may also be converted into shares (the"Trieu Conversion Shares") of the Company's Common Stock at any time, at the option of the holder, at a conversion price of $0.10 per share (the "Fixed Price"), at the lower of the Fixed Price or 65% of the Company's lowest traded price after the 180th day or at the lower of the Fixed Price or 55% of the Company's traded stock price under certain circumstances. The Company has agreed to at all times reserve and keep available out of its authorized Common Stock a number of shares equal to at least two times the full number of Conversion Shares. The Company may redeem the Convertible Note at rates of 110% to 140% rates over the principal balance dependent on certain events and redeem the value with accrued interest thereon, if any.

The issuance of the Trieu Note resulted in a discount from the beneficial conversion feature totaling $131,555 related to the conversion feature. Total amortization of the 10% OID discount totaled $34,029 for the year ended December 31, 2019. Total unamortized discount on this note was $113,970 as of December 31, 2019.

On April 23, 2019, pursuant to the Bridge SPA the Company entered into Convertible Note Tranche #1 ("Tranche #1") with the Bridge Investor. Tranche #1 has a principal balance of $35,556, an OID of $3,556, resulting in net proceeds of $32,000, with a maturity date of April 23, 2022. Upon the occurrence of certain events of default, the Buyer, amongst other remedies, has the right to charge a penalty in a range of 18% to 40% dependent on the specific default event. Amounts due under Tranche #1 may also be converted into shares (the "Bridge SPA Conversion Shares") of the Company's Common Stock at any time, at (i) a conversion price, during the first 180 days, of $0.10 per share (the "Fixed Price"), and then (2) at the lower of the Fixed Price or 65% of the Company's lowest traded price after the first 180 days or at the lower of the Fixed Price or 55% of the Company's traded stock price under certain circumstances. The Company may redeem the Convertible Note at rates of 110% to 140% rates over the principal balance dependent on certain events and redeem the value with accrued interest thereon, if any.

The issuance of the note resulted in a discount from the beneficial conversion feature totaling $28,445. Total amortization of the OID and discount totaled $7,358 for the year ended December 31, 2019. Total unamortized discount on this note was $24,643 as of December 31, 2019.

On August 6, 2019, pursuant to the Bridge SPA the Company entered into Convertible Note Tranche #2 ("Tranche #2") with the Bridge Investor. Tranche #2 has a principal balance of $200,000, an OID of $20,000 and debt issuance costs of $5,000, resulting in net proceeds of $175,000, with a maturity date of August 6, 2022. Upon the occurrence of certain events of default, the Buyer, amongst other remedies, has the right to charge a penalty in a range of 18% to 40% dependent on the specific default event. Amounts due under Tranche #1 may also be converted into shares (the "Bridge SPA Conversion Shares") of the Company's Common Stock at any time, at the option of the holder, at a conversion price of $0.10 per share (the "Fixed Price"), at the lower of the Fixed Price or 65% of the Company's lowest traded price after the 180th day or at the lower of the Fixed Price or 55% of the Company's traded stock price under certain circumstances. The Company may redeem the Convertible Note at rates of 110% to 140% rates over the principal balance dependent on certain events and redeem the value with accrued interest thereon, if any.

The issuance of the note resulted in a discount from the beneficial conversion feature totaling $175,000. Total amortization of the OID and discount totaled $26,825 for the year ended December 31, 2019. Total unamortized discount on this note was $173,175 as of December 31, 2019.

The Peak One Tranche #2 note and the notes issued to our CEO and the bridge investors reached the 180 days During the 3 months ended December 31, 2019. As as such, Peak One, the CEO and the bridge investor had the ability to convert that debt into equity at the variable conversion price of 65% % of the Company's lowest traded price after the first 180 days or at the lower of the Fixed Price or 55% of the Company's traded stock price under certain circumstances. This gave rise to a derivative feature within the debt instrument. The Company evaluated the impact of the derivative and recorded a derivative liability of approximately $541,000. This also required the company to fully amortize the beneficial conversion feature of approximately $563,000, record a debt discount of approximately $169,000 and a change in fair value of approximately $192,000 to appropriately record the transactions.

Convertible Note with PointR Data, Inc.

On July 22, 2019, the Company entered into a Note Purchase Agreement with PointR. Pursuant to the Note Purchase Agreement, the Company issued a Convertible Promissory Note to PointR. in the principal amount of $200,000. The Convertible Promissory Note bore interest at a rate of 8% per annum. Interest payments were due monthly on the 15th day of each calendar month (or the next business day thereafter), and were payable, at the option of the holder, either in cash or in shares of the Company's Common Stock, valued at the closing price of the Common Stock on the principal market on which the Common Stock is either traded or quoted at such time. The Convertible Promissory Note was due and payable on demand by the holder (a) at any time after January 1, 2020 or (b) upon the occurrence of an Event of Default (as defined in the Convertible Note and the Note Purchase Agreement). All amounts outstanding under the Convertible Promissory Note would be automatically be converted into the Company's securities issued in next equity financing raising gross proceeds of $10 million or more (a "Qualified Financing") at the price per share paid by investors in the Qualified Financing. As the conversion feature is contingent upon a future event, the conversion feature will be evaluated under ASC 470-20 and ASC 815 when and if the Qualified Financing occurred.

On November 4, 2019, the Convertible Note, with accrued interest of $4,603 thereon, was converted into Company's Series A Preferred and is a part of the total consideration of 84,475 Series A Preferred issued to the PointR shareholders. Since the conversion occurred prior to the Qualified Financing, the Company did not have to evaluate the conversion feature under ASC 470-20 and ASC 815.

Fall 2019 Debt Financing

As of December 31, 2019, the amounts outstanding, inclusive of accrued interest thereon, on the Fall 2019 Debt Financing consisted of:

	December 31, 2019
5% Convertible note payable – Stephen Boesch	187,785
5% Convertible note payable – Vuong Trieu*	187,785
5% Convertible note payable – Sanjay Jha (Through his family trust)	187,785
5% Convertible note payable – CEO, CTO & CFO	77,620
5% Convertible note payable – Bridge Investors	159,025
	$ 800,000

*There was an amount of $130,000 due for the Note from Dr. Trieu as of December 31, 2019. Such amount was received by the Company during the three months ended March 31, 2020.

On December 11, 2019, the Company closed its Fall 2019 Debt Financing raising an additional $500,000 for gross proceeds of $1.0 million. The Company entered into Note Purchase Agreements (the "Note Purchase Agreements") with certain accredited investors for the sale of convertible promissory notes (the "Fall 2019 Notes"). The Company completed the initial closing under the Note Purchase Agreements on November 23, 2019, issuing a $250,000 principal amount Fall 2019 Note to each of Dr. Vuong Trieu, the Company's Chief Executive Officer, and Stephen Boesch, in exchange for gross proceeds of $500,000. In connection with the second and final closing the Company issued the Fall 2019 Notes to additional investors including $250,000 to Dr. Sanjay Jha, through his family trust, the former CEO of Motorola and COO/President of Qualcomm. The Company also offset certain amounts due to Dr. Vuong Trieu, the Company's Chief Executive Officer, Chulho Park, the Company's Chief Technology Officer, and Amit Shah, the Company's Chief Financial Officer and converted such amounts due into the Fall 2019 Notes. $35,000 due to Dr. Vuong Trieu, $27,000 due to Chulho Park and $20,000 due to Amit Shah was converted into debt. The Company also issued the Fall 2019 Notes of $168,000 to two unaffiliated accredited investors.

All the Fall 2019 Notes provide for interest at the rate of 5% per annum, and are unsecured. All amounts outstanding under the Fall 2019 Notes become due and payable upon the approval of the holders of a majority of the principal amount of outstanding Fall 2019 Notes (the "Majority Holders") on or after (a) November 23, 2020 or (b) the occurrence of an event of default (either, the "Maturity Date"). The Company may prepay the Fall 2019 Notes at any time. Events of default under the Fall 2019 Notes include failure to make payments under the Fall 2019 Notes within thirty (30) days of the date due, failure to observe of the Note Purchase Agreement or Fall 2019 Notes which is not cured within thirty (30) days of notice of the breach, bankruptcy, or a change in control of the Company (as defined in the Note Purchase Agreement).

The Majority Holders have the right, at any time not more than five (5) days following the Maturity Date, to elect to convert all, and not less than all, of the outstanding accrued and unpaid interest and principal on the Fall 2019 Notes. The Fall 2019 Notes may be converted, at the election of the Majority Holders, either (a) into shares of the Company's Common Stock at a conversion price of $0.18 per share, or (b) into shares of EdgePoint's, the Company's to be newly formed subsidiary for AI/Blockchain in pharmaceutical manufacturing, common stock at a conversion price of $5.00 (based on a $5 million pre-money valuation) of EdgePoint and 1 million shares outstanding.

The issuance of the Fall 2019 notes resulted in a discount from the beneficial conversion feature totaling $222,222 related to the conversion feature. Total amortization of the discount totaled $22,222 for the year ended December 31, 2019. Total unamortized discount on this note was $200,000 as of December 31, 2019.

Further, the Company recorded interest expense of $3,869 on these Fall 2019 Notes for the year ended December 31, 2019. The total amount outstanding under the Fall 2019 Notes, including accrued interest thereon, as of December 31, 2019 was $1,003,869.

NOTE 7 - RELATED PARTY TRANSACTIONS

Master Service Agreement with Autotelic Inc.

In October 2015, Oncotelic entered into a Master Service Agreement (the "MSA") with Autotelic Inc., a related party that is partly-owned by the Company's CEO Vuong Trieu, Ph.D. Dr. Trieu, a related party, is a control person in Autotelic Inc. Autotelic Inc. currently owns less than 10% of the Company. The MSA stated that Autotelic Inc. will provide business functions and services to the Company and allowed Autotelic Inc. to charge the Company for these expenses paid on its behalf. The MSA includes personnel costs allocated based on amount of time incurred and other services such as consultant fees, clinical studies, conferences and other operating expenses incurred on behalf of the Company. The MSA requires a 90-day written termination notice in the event either party requires to terminate such services.

Expenses related to the MSA were $1,280,737 for the year ended December 31, 2019 as compared to $1,029,439 for year ended December 31, 2018.

In January 2019, Oncotelic issued a total of 80,772 shares of common stock with a fair value of $4.00 per share to Autotelic, Inc. in lieu of cash for the settlement of outstanding accounts payable.

In addition, Autotelic Inc. billed the Company $48,485 for the year ended December 31, 2019 related to charges incurred on behalf of the Company. No similar charges were incurred in the same period of 2018.

Stock Purchase Agreements

In December 2018, Oncotelic entered into a Stock Purchase Agreement with the Company's CEO, Vuong Trieu, Ph.D. (the "Vuong SPA"). In connection with the Vuong SPA Oncotelic issued 189,238 shares of common shares at $4.00 per share. As consideration for the shares Oncotelic received 151.39 Preferred Series E shares of Adhera Therapeutics, Inc. with a value of $756,950.

In December 2018, Oncotelic entered into a Stock Purchase Agreement with Autotelic Inc. (the "Autotelic SPA"). In connection with the Autotelic SPA Oncotelic issued 226,988 shares of common shares at $4.00 per share. As consideration for the shares Oncotelic received 181.59 Preferred Series E shares of Adhera Therapeutics, Inc. with a value of $907,950.

License Fee with Autotelic

In December 2015, Oncotelic paid Autotelic Inc. $395,150 for the right to license the use of Trabedersen (OT-101) for 5 years. On April 13, 2018, Oncotelic purchased the license for OT-101 from Autotelic Inc. for $819,191, which was recorded as an intangible asset. In addition, the remaining prepaid expense of $191,191 was converted into an intangible to be amortized at the same rate as the license. As such, Oncotelic recorded a charge of $51,365 and $34,243 for the years ended December 31, 2019 and 2018, respectively, as amortization of the intangibles acquired. Oncotelic had approximately $924,572 and $975,991 of unamortized intangibles as of December 31, 2019 and 2018, respectively. On December 31, 2018, Oncotelic issued Autotelic Inc. 204,798 shares of the Company's common stock as consideration for the license.

Note Payable – Related Party

On April 23, 2019, the Company issued a convertible note to our Chief Executive Officer totaling $164,444, including OID of $16,444, receiving net proceeds of $148,000, which was used by the Company for working capital and general corporate purposes (Note 6). In addition, the Company issued a $250,000 principal amount Fall 2019 Note to the Chief Executive Officer also offset certain amounts due to the Company's Chief Executive Officer in the amount of $35,000 due to and was converted into debt.

NOTE 8 - STOCKHOLDERS' EQUITY

The following transactions affected the Company's Stockholders' Equity:

Equity Transactions During the Period Prior to the Merger

Issuance of Common Stock

On December 26, 2018, Oncotelic issued 26,100 shares of common stock to a third-party investor in connection with a Share Purchase Agreement for 20.88 shares of Preferred Series E Stock of Adhera Therapeutics, Inc. with a value of $104,400.

On December 26, 2018, Oncotelic entered into a Stock Purchase Agreement with the Company's CEO, Vuong Trieu, Ph.D. (the "Vuong SPA"). In connection with the Vuong SPA, Oncotelic issued 189,238 shares of common shares at $4.00 per share. As consideration for the shares Oncotelic received 151.39 Preferred Series E shares of Adhera Therapeutics, Inc. with a value of $756,950.

On December 26, 2018, Oncotelic entered into a Stock Purchase Agreement with Autotelic Inc. (the "Autotelic SPA"). In connection with the Autotelic SPA Oncotelic issued 226,988 shares of common shares at $4.00 per share. As consideration for the shares Oncotelic received 181.59 Preferred Series E shares of Adhera Therapeutics, Inc. with a value of $907,950.

On January 11, 2019, Oncotelic issued 11,250 shares of common stock with a fair value of $4.00 per share to an employee in lieu of cash for compensation.

In January 2019, Oncotelic issued a total of 80,772 shares of common stock with a fair value of $4.00 per share to Autotelic, Inc. in lieu of cash for the settlement of outstanding accounts payable and services received during the three months ended March 31, 2019.

In January 2019, Oncotelic issued a total of 20,750 shares of common stock with a fair value of $4.00 per share to two separates investors for $83,000 in cash.

In March 2019, Oncotelic issued 80,594 shares of common stock with a fair value of $4.00 per share to various employees in lieu of cash for accrued compensation.

In April 2019, the Company issued a total of 150,000 shares of Common Stock to two investors as a result of the conversion of warrants for $120 in cash.

Equity Transactions During the Period Since the Merger

Issuance of Preferred Stock

On April 22, 2019, pursuant to the Merger the Company issued 193,713 shares of Series A Preferred in exchange for 77,154 shares of Oncotelic common stock. Further, the Company issued 84,475 shares of Series A Convertible Preferred Stock to PointR in exchange of 11,135,935 shares of PointR common stock upon the consummation of the PointR merger (Note 3)

Issuance of Common Stock

On April 22, 2019, pursuant to the Merger the Company issued 41,000,033 shares of Common Stock in exchange for 10,318,746 shares of Oncotelic common stock. (Note 3)

On April 23, 2019, the Company issued 700,000 restricted shares of its Common Stock with a fair value of $0.11 per share to two noteholders in connection with convertible notes payable. (Note 6)

On June 12, 2019, the Company issued 350,000 restricted shares of its Common Stock with a fair value of $0.18 per share in connection with a convertible note payable. (Note 6)

On November 18, 2019, the Company issued 300,000 restricted shares of its Common Stock to Peak One with a fair value of $0.20 to extend the date of conversion of the Convertible Note into Common Stock of the Company at 65% of the traded price of the Company's Common Stock until January 18, 2020. This restriction did not apply if Peak One wished to convert the Convertible Note at $0.10. The Company recorded a cost of $60,000 in lieu of such issuance.

On November 18, 2019, the Company issued 300,000 restricted shares of its Common Stock to TFK with a fair value of $0.20 to extend the date of conversion of the Convertible Note into Common Stock of the Company at 65% of the traded price of the Company's Common Stock until January 8, 2020. This restriction did not apply if TFK wished to convert the Convertible Note at $0.10 per share. The Company recorded a cost of $60,000 in lieu of such issuance.

NOTE 9 – STOCK-BASED COMPENSATION

Options

Pursuant to the Merger, the Company's Common Stock and corresponding outstanding options survived. The below information details the Company's associated option activity pre and post merger.

As of December 31, 2019, options to purchase Common Stock were outstanding under three stock option plans – the 2017 Equity Incentive Plan (the "2017 Plan"), the 2015 Equity Incentive Plan (the "2015 Plan") and the 2005 Stock Plan (the "2005 Plan"). Under the 2017 Plan, up to 2,000,000 shares of the Company's Common Stock may be issued pursuant to awards granted in the form of nonqualified stock options, restricted and unrestricted stock awards, and other stock-based awards. Under the 2015 and 2005 Plans, taken together, up to 7,250,000 shares of the Company's Common Stock may be issued pursuant to awards granted in the form of incentive stock options, nonqualified stock options, restricted and unrestricted stock awards, and other stock-based awards. Employees, consultants, and directors are eligible for awards granted under the 2017 and 2015 Plans. Since the adoption of the 2015 Plan, no further awards may be granted under the 2005 Plan, although options previously granted remain outstanding in accordance with their terms.

Compensation based stock option activity for qualified and unqualified stock options are summarized as follows:

	Shares	Weighted Average Exercise Price
Outstanding at December 31, 2018	6,785,617	$ 0.75
Granted/Additions	-	-
Exercised	-	-
Expired or canceled	(640,573)	0.62
Outstanding at December 31, 2019	6,145,044	$ 0.75

The following table summarizes information about options to purchase shares of the Company's Common Stock outstanding and exercisable at December 31, 2019:

Exercise prices	Outstanding Options	Weighted-Average Remaining Life In Years	Weighted-Average Exercise Price	Number Exercisable
$ 0.22	2,524,513	8.48	$ 0.22	2,524,513
0.38	1,162,500	7.04	0.375	1,162,500
0.51	242,966	7.45	0.51	242,966
0.58	271,224	6.82	0.58	271,224
0.73	1,025,000	6.23	0.73	1,025,000
1.37	150,000	5.56	1.37	150,000
1.43	525,000	5.41	1.43	525,000
2.60	5,280	4.51	2.60	5,280
2.79	9,760	4.01	2.79	9,760
2.95	150,000	4.38	2.95	150,000
11.88	2,359	2.01	11.88	2,359
15.00	75,000	5.41	15.00	75,000
19.80	1,442	1.84	19.80	1,442
	6,145,044	7.12	$ 0.75	6,145,044

The compensation expense attributed to the issuance of the options is recognized as they are vested.

The employee stock option plan stock options are exercisable for ten years from the grant date and vest over various terms from the grant date to three years.

The aggregate intrinsic value totaled $0 and was based on the Company's closing stock price of $0.19 as of December 31, 2019, which would have been received by the option holders had all option holders exercised their options as of that date.

All the compensation expense was recorded prior to the close of the Merger, as the vesting of all the options was accelerated due to the effective change in control of the Company, and as such no compensation expense related to the above options was recorded during the year ended December 31, 2019 and 2018, respectively. As of December 31, 2019, there was no future compensation cost as all stock options are vested at December 31, 2019.

On April 22, 2019 and in conjunction with the close of the Merger, the Company recorded approximately $341,000 in compensation cost as a result of the acceleration of the vesting schedule of approximately 328,000 Oncotelic options. Pursuant to the Merger these options were converted into Common and Series A Preferred Shares in the Company.

On August 23, 2019, the Company entered into Employment Agreements and incentive compensation arrangements with each of its executive officers, including Dr. Vuong Trieu, the Chief Executive Officer; Dr. Fatih Uckun, the Chief Medical Officer; Dr. Chulho Park, its Chief Technology Officer; and Mr. Amit Shah, the Chief Financial Officer. Details of the agreements and the incentive compensation is described in detail in Note 11 – Commitments & Contingencies under "Employment Agreements". The incentive stock options or the restricted stock awards granted to the Company's executive officers have not been granted as of the date of this filing.

Warrants

Pursuant to the Merger, the Company's Common Stock and corresponding outstanding warrants survived. The below information details represents the Company's associated warrant activity pre-merger and post-merger.

The issuance of warrants to purchase shares of the Company's Common Stock including those attributed to debt issuances are summarized as follows:

	Shares	Weighted-Average Exercise Price
Outstanding at December 31, 2018	24,380,893	$ 1.05
Expired or cancelled	(4,865,106)	2.82
Outstanding at December 31, 2019	19,515,787	$ 0.60

	Shares	Weighted-Average Exercise Price
Outstanding at December 31, 2017	9,625,393	$ 2.55
Granted	16,362,500	0.38
Expired or cancelled	(1,607,000)	3.35
Outstanding at December 31, 2018	24,380,893	$ 1.05

The following table summarizes information about warrants outstanding and exercisable at December 31, 2019:

	Outstanding and exercisable			
Exercise Price	Number Outstanding	Weighted-Average Remaining Life in Years	Weighted-Average Exercise Price	Number Exercisable
$ 0.20	1,487,500	3.33	$ 0.20	1,487,500
0.40	14,875,000	0.38	0.40	14,875,000
1.71	2,919,710	0.23	1.71	2,919,710
2.13	233,577	0.22	2.13	233,577
	19,515,787	0.58	$ 0.60	19,515,787

The expense attributed to the issuances of the warrants was recognized as they vested/earned. These warrants are exercisable for three to five years from the grant date. All are currently exercisable. There were no warrants issued during the year ended December 31, 2019. 16,362,500 warrants were issued during the year ended December 31, 2018.

NOTE 10 – INCOME TAXES

The Company had net deferred tax assets of approximately $65 million and $1.0 million as of December 31, 2019 and 2018, respectively, which primarily relate to net operating loss carryforwards. The increase in 2019 related to the two mergers.

We record a valuation allowance in the full amount of our net deferred tax assets since realization of such tax benefits has been determined by our management to be less likely than not.

We have identified our federal and California state tax returns as “major” tax jurisdictions. The periods our income tax returns are subject to examination for these jurisdictions are 2015 through 2018. We believe our income 8 tax filing positions and deductions will be sustained on audit, and we do not anticipate any adjustments that would result in a material change to our financial position. Therefore, no liabilities for uncertain income tax positions have been recorded.

At December 31, 2019, we had available net operating loss carry-forwards for federal income tax reporting purposes of approximately $248 million which are available to offset future taxable income. Portions of these carry-forwards will expire through 2038 if not otherwise utilized. We have not performed a formal analysis, but we believe our ability to use such net operating losses and tax credit carry-forwards is subject to annual limitations due to change of control provisions under Sections 382 and 383 of the Internal Revenue Code, which significantly impacts our ability to realize these deferred tax assets.

As of the date of this filing, the Company has not filed its 2019 federal and state corporate income tax returns. The Company expects to file these documents as soon as practicable.

NOTE 11 – COMMITMENTS AND CONTINGENCIES

Leases

The Company had a lease for its corporate headquarters, which expired in June 2019. The lease was for a total of 5,275 square feet of office space located in South San Francisco, California. Rental expense related to that corporate headquarters was $35,772 and $35,772 for the year ended December 31, 2019 and 2018, respectively. Currently, the Company is leasing the office located at 29397 Agoura Road, Suite 107, Agoura Hills, CA 91301 on a month-to-month basis until such time a new office is identified.

Legal Claims

From time to time, the Company may become involved in legal proceedings arising in the ordinary course of business. The Company is not presently a party to any legal proceedings that it currently believes, if determined adversely to the Company, would individually or taken together have a material adverse effect on the Company's business, operating results, financial condition or cash flows.

Employment Agreements

On August 23, 2019, the Company entered into Employment Agreements and incentive compensation arrangements with each of its executive officers, including Dr. Vuong Trieu, the Chief Executive Officer; Dr. Fatih Uckun, the Chief Medical Officer; Dr. Chulho Park, the Chief Technology Officer; and Mr. Amit Shah, the Chief Financial Officer. On November 18, 2019, upon review of said employment agreement with Dr. Uckun, it was observed that the agreement submitted for Dr. Uckun was the incorrect document.

The Employment Agreements provide for annual base salaries for each year of the term, subject to review and adjustment by the Company's Board of Directors (the "Board") or the Compensation Committee of the Board ("Compensation Committee") from time to time. Each Employment Agreement provides that the executive shall be eligible for an annual discretionary cash bonus expressed as a percentage the executive's base salary, subject to their achievement of performance targets and goals established by the Board or the Compensation Committee.

The Employment Agreements provide for equity awards to each executive under the terms of the Company's stock option plans. Each Employment Agreement provides that the executive will receive a restricted stock grant of the Company's Common Stock, par value $0.01 per share. The Company will compensate Messrs. Trieu, Uckun, Park and Shah for the taxes actually incurred on grant of the restricted shares. The restricted stock will vest fully on the one-year anniversary of employment. As of December 31, 2019, the restricted shares have yet to be issued. The Employment Agreements also provide for grants of incentive stock options to purchase shares of the Company's Common Stock under the Stock Plan. Such options shall vest and become exercisable after one year of employment. As of December 31, 2019, the Company these options have yet to be granted. Thereafter, each Employment Agreement contemplates that the executive will be eligible to receive a comparable annual grant of restricted shares or stock options as approved by the Board or Compensation Committee and which shall contain the customary terms and provisions of such grants generally to key executives under the Stock Plan.

The initial restricted stock grants and stock option grants have been set for the executives as follows:

Executive	Title	Restricted Stock (Shares)	Stock Options (Shares)
Vuong Trieu	Chief Executive Officer	209,302	313,953
Fatih Uckun	Chief Medical Officer	186,047	279,070
Chulho Park	Chief Technology Officer	162,791	244,186
Amit Shah	Chief Financial Officer	148,837	223,256

The incentive stock options or the restricted stock awards granted to the Company's executive officers have not been issued as of the date of this filing.

PointR Merger Consideration

The total purchase price of $17,831,427 represented the consideration transferred from Mateon in the Merger and was calculated based on the number of shares of Common Stock plus the preferred shares outstanding but convertible into Common Stock outstanding at the date of the Merger and includes $2,625,000 of contingent consideration of shares issuable to PointR shareholders upon achievement of certain milestones.

NOTE 12 – SUBSEQUENT EVENTS

COVID-19 efforts

Research Service Agreement between Golden Mountain Partners LLC (GMP) and Mateon Therapeutics Inc./Oncotelic Inc. ("Mateon Entities").

When COVID-19 emerged in China, Mateon and GMP contemplated a collaboration to develop drug candidates for COVID-19. Oncotelic and GMP entered into a research and services agreement (the "Agreement") on February 3, 2020 memorializing their collaborative efforts to develop and test COVID-19 antisense therapeutics. On March 18, 2020, Mateon reported the anti-viral activity of OT-101 – its lead drug candidate currently in phase 3 testing in pancreatic cancer and glioblastoma. In an in vitro antiviral testing performed by an independent laboratory, OT-101 showed that it was highly active against COVID-19. On March 23, 2020, Mateon, Oncotelic, Inc., and GMP entered into a supplement to the Agreement (the "Supplement") to confirm the inclusion of OT-101 within the scope of the Agreement, pending positive confirmatory testing against COVID-19. In consideration for the financial support provided by GMP for the research, pursuant to the terms of the Agreement (as amended by the Supplement) GMP is entitled to obtain certain exclusive rights to the use of the Product in the COVID Field on a global basis, and an economic interest in the use of the Product in the COVID Field including 50/50 profit sharing. As described in the Supplement, the Mateon Entities intend to license or assign intellectual property rights, including the 2020 Patent Application and any other intellectual property rights owned or controlled by the Mateon Entities relating to the Product, OXi4503 and CA4P, to a joint venture company to be established jointly between Oncotelic and GMP (or its designee), as well as providing management services and other expertise to the joint venture company; GMP intends that it (or its designee, as the case may be) shall provide funding to the joint venture company to support its development and commercial activities in the joint venture company's territories; in each case, on terms to be agreed by the parties; and GMP shall be entitled to use its governmental relations and local expertise in Greater China to assist with coordinating the research, development and commercialization of (i) the Products in the COVID Field, (ii) the Products in the OT101 Oncology Field, (iii) OXi4503; and (iv) CA4P, in each case in Greater China. The joint venture company is intended to be owned 50% by Oncotelic and 50% by GMP (or its designee), and its principal activities shall be to research, develop, bring to market and commercialize: (i) the Products in the COVID Field on a global basis, (ii) the Products in the OT101 Oncology Field in the Licensed Territory, (iii) OXi4503 in the Licensed Territory; and (iv) CA4P in the Licensed Territory. Upon completion of due diligence by one another and subject to GMP's satisfactory due diligence review, the parties intend to enter into written definitive agreements for the Joint Venture Transaction within the Exclusivity Period of 90 days. On April 6, 2020, the Company delivered the requisite testing results to GMP confirming the applicability and potential use of OT-101 for the treatment of COVID-19. OT-101 exhibited potent activity against both COVID-19 and SARS with a robust safety index of >500. Also, The Company has submitted a Pre-Investigational New Drug (Pre-IND) application package to the Food and Drug Administration. GMP paid the Company fees of $1.2 million for the services rendered under the agreement and supplemental agreements as well as reimbursed the Company for actual costs incurred of $0.1 million.

In April 2020, Mateon also filed the IND with the FDA to permit Mateon to commence clinical trials to evaluate if OT-101 is effective to treat COVID-19. The proposed randomized, double-blind, placebo-controlled Phase 2 study is intended to evaluate the safety and efficacy of OT-101 in adult patients hospitalized with positive SARS-CoV-2 and pneumonia in the US.

Provisional Patent Filing

On March 18, 2020 and March 20, 2020, Oncotelic, Inc. ("Oncotelic"), a wholly-owned subsidiary of Mateon Therapeutics, Inc. ("Mateon" or the "Company"), filed three provisional patent applications on the method of use and composition of matter for the treatment of COVID-19. The filings represent the culmination of internal research programs, including efforts with our external partner, and position our antisense platforms for further development for the treatment of epidemics and pandemics.

Payment Protection Program

On April 21, 2020, the Company, entered into a Paycheck Protection Program Promissory Note (the "PPP Note") with respect to a loan in the amount of $250,000 (the "PPP Loan") from Silicon Valley Bank (the "Lender"). The PPP Loan was obtained pursuant to the Paycheck Protection Program (the "PPP") of the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") administered by the U.S. Small Business Administration ("SBA"). The PPP Loan matures on April 21, 2022 and bears interest at a rate of 1.00% per annum. The PPP Loan is payable in 17 equal monthly payments commencing November 21, 2020. The PPP Loan may be prepaid at any time prior to maturity with no prepayment penalties.

All or a portion of the PPP Loan may be forgiven by the SBA and the Lender upon application by the Company within 60 days but not later than 120 days after loan approval and upon documentation of expenditures in accordance with the SBA requirements.

Conversion of shares by Peak One and TFK

In February and March of 2020, Peak One and TFK converted $150,000 of their debt of $400,000 under the Peak One Notes for 2,012,145 shares of Mateon. As such, the balance remaining unpaid as of the date of this report is $250,000. Similarly, TFK converted $133,430 of their debt of $200,000 for 1,950,000 shares of Mateon. As such, the balance remaining unpaid is $66,570 as of the date of this report.

Cancellation of 2018 warrants and issue of new warrants

During the quarter ended March 31, 2020, the Company offered to cancel 14,875,000 warrants issued to certain investors, at a price of $0.40, issued in connection with the 2018 private placement in exchange for new warrants at a price of $0.20. Of the 14,875,000 warrants outstanding, 13,750,000 were exchange for new warrants.

Exhibit 31.1

MATEON THERAPEUTICS, INC.

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

I, Vuong Trieu, Ph.D., certify that:

1. I have reviewed this Annual Report on Form 10-K of Mateon Therapeutics, Inc.;

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

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

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

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

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

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

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

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

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

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

By: */s/ Vuong Trieu*
Vuong Trieu, Ph.D.
Chief Executive Officer (Principal Executive Officer)
Date: May 14, 2020

Exhibit 31.2

MATEON THERAPEUTICS, INC.

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

I, Amit Shah, certify that:

1. I have reviewed this Annual Report on Form 10-K of Mateon Therapeutics, Inc.;

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

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

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

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

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

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

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

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

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

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

By: */s/ Amit Shah*
Amit Shah
Chief Financial Officer (Principal Financial and Accounting Officer)
Date: May 14, 2020

Exhibit 32.1

MATEON THERAPEUTICS, INC.

CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with this Annual Report on Form 10-K for the year ended December 31, 2019 of Mateon Therapeutics, Inc. (the "Company") as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, in the capacity and on the date indicated below, hereby certifies pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to his knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

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

By: */s/ Vuong Trieu*
Vuong Trieu, Ph.D.
Chief Executive Officer (Principal Executive Officer)
Date: May 14, 2020

Exhibit 32.2

MATEON THERAPEUTICS, INC.

CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with this Annual Report on Form 10-K for the year ended December 31, 2019 of Mateon Therapeutics, Inc. (the "Company") as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, in the capacity and on the date indicated below, hereby certifies pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to his knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

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

By: */s/ Amit Shah*
Amit Shah
Chief Financial Officer (Principal Financial and Accounting Officer)
Date: May 14, 2020