FORM 51-102F1
MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE THREE MONTHS ENDED DECEMBER 31, 2019 AND 2018

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MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS FOR THE THREE MONTHS ENDED DECEMBER 31, 2019 AND 2018

*This management's discussion and analysis ("**MD&A**") of ESSA Pharma Inc. (the "**Company**" or "**ESSA**") for the three months ended December 31, 2019 and 2018 is dated as of February X, 2020.*

*This MD&A has been prepared with reference to National Instrument 51-102 - Continuous Disclosure Obligations of the Canadian Securities Administrators. This MD&A should be read in conjunction with the unaudited condensed consolidated interim financial statements for the three months ended December 31, 2019 and 2018 and the audited consolidated financial statements for the years ended September 30, 2019, 2018 and 2017, and the related notes thereto. The condensed consolidated interim financial statements are prepared in accordance with International Financial Reporting Standards ("**IFRS**"). Financial information presented in this MD&A is presented in United States dollars ("**USD**" or "**$**" or "**US$**"), unless otherwise indicated. Canadian dollars are presented as "C$" or "CAD", where indicated.*

This MD&A contains certain "forward-looking statements" and certain "forward-looking information" as defined under the United States Private Securities Litigation Reform Act and applicable Canadian securities laws. Please refer to the discussion of forward-looking statements set out under the heading "Cautionary Note Regarding Forward-Looking Statements" below. As a result of many factors, the Company's actual results may differ materially from those anticipated in these forward-looking statements.

*The Company's common shares traded on the TSX Venture Exchange ("**TSX-V**") under the symbol "EPI" and the Nasdaq Capital Market ("**Nasdaq**") under the symbol "EPIX".*

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This MD&A contains forward-looking statements or forward-looking information within the meaning of the United States Private Securities Litigation Reform Act and applicable Canadian securities laws. All statements in this MD&A, other than statements of historical facts, are forward-looking statements. These statements appear in a number of different places in this MD&A and can be identified by words such as "anticipates", "estimates", "projects", "expects", "intends", "believes", "plans", "will", "could", "may", "hopes" or their negatives or other comparable words. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance or achievements to be materially different from any future results, performance or achievements that may be expressed or implied by such forward-looking statements. Examples of such forward looking statements include, but are not limited to statements related to:

- the Company's ability to obtain funding for operations, including research funding, and the timing of potential sources of such funding;
- the initiation, timing, cost, location, progress and success of, strategy and plans with respect to, ESSA's research and development programs (including research programs and related milestones with regards to next-generation drug candidates and compounds), preclinical studies and clinical trials;
- the therapeutic benefits, properties, effectiveness, pharmacokinetic profile and safety of the Company's product candidate and potential future product candidates, including the expected benefits, properties, effectiveness, pharmacokinetic profile and safety of the Company's next-generation Aniten compounds;
- the Company's ability to advance its product candidate and potential future product candidates through, and successfully complete, clinical trials;
- the Company's ability to achieve profitability;
- the grant ("**CPRIT Grant**") under the Cancer and Prevention Research Institute of Texas ("**CPRIT**") and payments thereunder, including residual obligations;
- the Company's use of proceeds from funding and financings;
- the Realm Acquisition and the Company's ability to effectively liquidate Realm (as such terms are defined herein) and assume the related obligations;
- the use of proceeds from the August 2019 Financing (as defined herein);
- the Company's ability to recruit sufficient numbers of patients for future clinical trials, and the benefits expected therefrom;
- the Company's ability to establish and maintain relationships with collaborators with acceptable development, regulatory and commercialization expertise and the benefits to be derived from such collaborative efforts;

- the implementation of the Company's business model and strategic plans, including strategic plans with respect to patent applications and strategic collaborations partnerships;
- the Company's ability to identify, develop and commercialize product candidates;
- the Company's commercialization, marketing and manufacturing capabilities and strategy;
- the Company's ability to protect its intellectual property and operate its business without infringing upon the intellectual property rights of others;
- the Company's expectations regarding federal, state, provincial and foreign regulatory requirements, including the Company's plans with respect to anticipated regulatory filings;
- whether the Company will receive, and the timing and costs of obtaining, regulatory approvals in the United States, Canada and other jurisdictions;
- the accuracy of the Company's estimates of the size and characteristics of the markets that may be addressed by the Company's product candidate and potential future product candidates;
- the rate and degree of market acceptance and clinical utility of the Company's potential future product candidates, if any;
- the timing of, and the Company's ability and the Company's collaborators' ability, if any, to obtain and maintain regulatory approvals for the Company's product candidate and potential future product candidates;
- the Company's expectations regarding market risk, including interest rate changes and foreign currency fluctuations;
- the Company's ability to engage and retain the employees required to grow its business;
- the compensation that is expected to be paid to the Company's employees;
- the Company's future financial performance and projected expenditures;
- developments relating to the Company's competitors and its industry, including the success of competing therapies that are or may become available; and
- estimates of the Company's financial condition, expenses, future revenue, capital requirements, its needs for additional financing and potential sources of capital and funding.

Such statements reflect the Company's current views with respect to future events, are subject to risks and uncertainties and are necessarily based upon a number of estimates and assumptions that are inherently subject to significant medical, scientific, business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company's actual results, performance or achievements to be materially different from any future results, performance, or achievements that may be expressed or implied by such forward-looking statements, including those described under "Risk Factors". In making the forward looking statements included in this MD&A, the Company has made various material assumptions, including but not limited to:

- its ability to identify a product candidate or product candidates;
- the availability of financing on reasonable terms;
- its ability to repay debt;
- its ability to obtain regulatory and other approvals to commence a clinical trial involving future product candidates;
- its ability to obtain positive results from its research and development activities, including clinical trials;
- its ability to obtain required regulatory approvals;
- its ability to protect patents and proprietary rights;
- its ability to successfully out-license or sell future products, if any, and in-license and develop new products;
- favourable general business and economic conditions;
- its ability to attract and retain skilled staff;
- market competition; and
- the products and technology offered by the Company's competitors.

In evaluating forward-looking statements, current and prospective shareholders should specifically consider various factors, including the risks outlined under the heading "*Risk Factors*" in the Company's Annual Report on Form 20-F for the fiscal year ended September 30, 2019. Some of these risks and assumptions include, among others:

- risks related to the Company's ability to identify a product candidate through preclinical studies and obtain regulatory approval of an IND application to commence a clinical trial;

- risks related to the Company's future success being dependent primarily on identification through preclinical studies, regulatory approval, and commercialization of a single product candidate;
- risks related to the Company's ability to continue to license its product candidates or technology from third parties;
- uncertainty related to the Company's ability to obtain required regulatory approvals for ESSA's proposed products;
- risks related to the Company's ability to successfully identify and develop product candidates in a timely manner;
- risks related to clinical drug development;
- risks related to the Company's ability to conduct a clinical trial or submit a future NDA/NDS or IND/CTA (as such terms are defined herein);
- risks related to the Company's ability to successfully commercialize future product candidates;
- the possibility that the Company's product candidate and potential future product candidates may have undesirable side effects;
- risks related to the Company's ability to enroll subjects in future clinical trials;
- risks that the FDA (as defined herein) may not accept data from trials conducted in such locations outside the United States;
- risks related to the Company's ongoing obligations and continued regulatory review;
- risks related to potential administrative or judicial sanctions;
- the risk of increased costs associated with prolonged, delayed or terminated clinical trials;
- the risk that third parties may not carry out their contractual duties;
- risks related to the possibility that the Company's relationships with clinical research organizations (as defined herein) and academic institutions may terminate;
- risks related to the Company's lack of experience manufacturing product candidates on a large clinical or commercial scale and its lack of manufacturing facility;
- risks related to the Company's failure to obtain regulatory approval in international jurisdictions;
- risks related to recently enacted and future legislation in the United States that may increase the difficulty and cost for the Company to obtain marketing approval of, and commercialize, its product candidate and potential future products and affect the prices the Company may obtain;
- risks related to new legislation, new regulatory requirements, and the continuing efforts of governmental and third party payors to contain or reduce the costs of healthcare;
- uncertainty as to the Company's ability to raise additional funding;
- risks related to the Company's ability to raise additional capital on favorable terms;
- risks related to the Realm Acquisition, the liquidation of Realm, and the assumption of related obligations;
- risks that the Company may default on the residual obligations of the agreement providing for the CPRIT Grant, which may result in the Company not receiving the remaining CPRIT Grant funds and/or having to reimburse all of the CPRIT Grant, if such default is not waived by CPRIT;
- risks related to the Company's incurrence of significant losses in every quarter since its inception and the Company's anticipation that it will continue to incur significant losses in the future;
- risks related to the Company's limited operating history;
- risks related to the Company's reliance on proprietary technology;
- risks related to the Company's ability to protect its intellectual property rights throughout the world;
- risks related to claims by third parties asserting that the Company, or its employees or consultants have misappropriated their intellectual property, or claiming ownership of what the Company regards as its intellectual property;
- risks related to the Company's ability to comply with governmental patent agency requirements in order to maintain patent protection;
- risks related to computer system failures or security breaches;
- risks related to business disruptions that could seriously harm the Company's future revenues and financial condition and increase ESSA's costs and expenses;
- risks related to the Company's dependence on the use of information technologies;
- risks related to the Company's ability to attract and maintain highly-qualified personnel;
- third-party coverage and reimbursement and health care cost containment initiatives and treatment guidelines may constrain the Company's future revenues;

- risks related to potential conflicts of interest between the Company and its directors and officers;
- risks related to competition from other biotechnology and pharmaceutical companies;
- risks related to movements in foreign currency exchange rates;
- risks related to the Company's ability to convince public payors and hospitals to include ESSA's product candidate and potential future products on their approved formulary lists;
- risks related to the Company's ability to establish an effective sales force and marketing infrastructure, or enter into acceptable third-party sales and marketing or licensing arrangements;
- risks related to the Company's ability to manage growth;
- risks related to the Company's ability to achieve or maintain expected levels of market acceptance for its products;
- risks related to the Company's ability to realize benefits from acquired businesses or products or form strategic alliances in the future;
- risks related to collaborations with third parties;
- risks that employees may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements, which could cause significant liability for ESSA and harm its reputation;
- risks related to product liability lawsuits;
- risks related to compulsory licensing and/or generic competition;
- risks related to the increased costs and effort as a result of ESSA being a public company;
- risks inherent in foreign operations;
- laws and regulations governing international operations may preclude the Company from developing, manufacturing and selling certain product candidates outside of the United States and Canada and require ESSA to develop and implement costly compliance programs;
- risks related to laws that govern fraud and abuse and patients' rights;
- risks related to the Company's ability to comply with environmental, health and safety laws and regulations;
- risks related to the different disclosure obligations for a U.S. domestic reporting company and a foreign private issuer such as ESSA;
- risks relating to the Company's ability to maintain its status as a foreign private issuer in the future;
- risks related to the Company being a "passive foreign investment company;"
- risks related to the Company's status as an emerging growth company;
- risks related to United States investors' ability to effect service of process or enforcement of actions against the Company;
- risks related to the Company's ability to maintain compliance with Nasdaq listing requirements;
- risks related to market price and trading volume volatility;
- risks related to the Company's dividend policy;
- risks associated with future sales of the Company's securities;
- risks related to the Company's ability to implement and maintain effective internal controls;
- risks related to the Company's ability to maintain an active trading market for its common shares;
- risks related to share price volatility associated with the Company's thinly traded common shares; and
- risks related to analyst coverage.

If one or more of these risks or uncertainties or a risk that is not currently known to the Company, materialize, or if its underlying assumptions prove to be incorrect, actual results may vary significantly from those expressed or implied by forward-looking statements. The forward-looking statements represent the Company's views as of the date of this document. While the Company may elect to update these forward-looking statements in the future, the Company has no current intention to do so except as to the extent required by applicable securities law. Investors are cautioned that forward-looking statements are not guarantees of future performance and are inherently uncertain. Accordingly, investors are cautioned not to put undue reliance on forward-looking statements. The Company advises you that these cautionary remarks expressly qualify in their entirely all forward-looking statements attributable to the Company or persons acting on its behalf.

OVERVIEW OF THE COMPANY

ESSA is a pharmaceutical company currently in preclinical stage, focused on developing novel and proprietary therapies for the treatment of prostate cancer in patients whose disease is progressing despite treatment with current standard of care therapies, including second-generation anti-androgen drugs such as abiraterone, enzalutamide, apalutamide, and darolutamide. The Company believes its preclinical series of compounds can significantly expand the interval of time in which patients suffering from castration-resistant prostate cancer ("**CRPC**") can benefit from anti-hormone-based therapies. Specifically, the compounds act by disrupting the androgen receptor ("**AR**") signaling pathway, the primary pathway that drives prostate cancer growth, by preventing AR activation through selective binding to the N-terminal domain ("**NTD**") of the AR. In this respect, ESSA's compounds differ from classical non-steroid anti-androgens, which interfere either with androgen synthesis, or with the binding of androgens to the ligand-binding domain ("**LBD**"), located at the opposite end of the receptor from the NTD (i.e. "lutamides") or to androgen synthesis (i.e. abiraterone). A functional NTD is essential for activation of the AR; blocking the NTD inhibits AR-driven transcription and therefore androgen-driven biology. We believe that the transcription inhibition mechanism of ESSA's preclinical series of compounds is unique, and has the advantage of bypassing identified mechanisms of resistance to the anti-androgens currently used in the treatment of CRPC. The Company has been granted by the United States Adopted Names ("**USAN**") Council a unique USAN stem "-aniten" to recognize this new mechanistic class. The Company refers to this series of proprietary compounds, currently in development, as the "**Aniten**" series. In preclinical studies, blocking the NTD has demonstrated the capability to prevent AR-driven gene expression. A recently completed Phase I clinical trial of ESSA's first-generation agent EPI-506 (as defined herein) demonstrated prostate-specific antigen ("**PSA**") declines, a sign of inhibition of AR-driven biology, at higher dose levels administered to patients with metastatic CRPC ("**mCRPC**") refractory to current standard of care therapies.

According to the American Cancer Society, in the United States, prostate cancer is the second most frequently diagnosed cancer among men, behind skin cancer. Approximately one-third of all prostate cancer patients who have been treated for local disease will subsequently have rising serum levels of PSA, which is an indication of recurrent or advanced disease. Patients with advanced disease often undergo androgen ablation therapy using analogues of luteinizing hormone releasing hormone or surgical castration; this approach is termed "androgen deprivation therapy", or "ADT". Most advanced prostate cancer patients initially respond to androgen ablation therapy; however, many experience a recurrence in tumor growth despite the reduction of testosterone to castrate levels, and at that point are considered to have CRPC. Following diagnosis of CRPC, patients have been generally treated with anti-androgens that block the binding of androgens (darolutamide, enzalutamide, apalutamide or bicalutamide) to the AR, or inhibit synthesis of androgens (abiraterone). More recently, significant improvements in progression-free survival have been achieved by utilizing this latest generation of anti-androgens in combination with ADT in newly diagnosed metastatic prostate cancer.

The growth of prostate tumors is mediated by an activated AR. Generally, there are three means of activating the AR. First, androgens such as dihydrotestosterone can activate AR by binding to its LBD. Second, CRPC can be driven by constitutively-active variants of AR ("**vAR**") that lack an LBD and do not require androgen for activation. The third mechanism involves certain signaling pathways that activate AR independent of androgen activity. Generally, current drugs for the treatment of prostate cancer work by focusing on the first mechanism in combination with either (i) interfering with the production of androgen, or (ii) preventing androgen from binding to the LBD. However, over time, these approaches eventually fail, due to mechanisms of resistance which all involve the LBD, whether at the DNA (AR amplification or LBD mutations) or RNA level (emergence of AR splice variants).

Through their potential to directly and selectively block all known means of activating the AR, the Company believes the Aniten series of compounds hold the potential to be effective in cases where current therapies have failed. Both preclinical and clinical studies support this belief. In preclinical studies, the Aniten series of compounds has been shown to shrink prostate cancer xenografts, including tumors both sensitive and resistant to the second-generation anti-androgens such as enzalutamide. Recent studies have also suggested the potential for combinations of ESSA's Aniten compounds with anti-androgens to potentially inhibit AR-driven biology more completely in unique and complementary mechanisms by affecting opposite ends of the AR receptor.

The Phase I clinical trial of first-generation ralaniten acetate ("**EPI-506**"), has indicated the safety and tolerability for this mechanism of transcription inhibition of AR-driven biology as patients tolerated doses of the drug at overall exposures consistent with those associated with efficacy in animal models. Possible proof of concept was shown with short duration PSA declines of up to 37% being observed in some patients whose disease was highly refractory to second-generation anti-androgens treatment. However, unlike in animals, this first-generation drug was significantly metabolized in humans, leading to a very short half-life of circulating drug and suboptimal drug exposures. Consequently, very high doses were required to achieve modest drug exposures, with the relatively short half-life limiting the therapeutic level exposure of the drug within a 24-hour period. This limitation, together with unfavorable pharmaceutical properties, led to the Company's decision to discontinue EPI-506 development in favor of focusing on the development of the next generation of Anitens. The Company is now focused on developing this next generation of anitens, including more potent drugs with potentially increased resistance to metabolism as well as advanced pharmaceutical properties, including expected advancements in manufacturability, stability and likelihood of successful commercial formulation.

The NTD of the AR is flexible with a high degree of intrinsic disorder making it difficult for use in crystal structure-based drug design. The Company is not currently aware of any success by other drug development companies in finding drugs that bind specifically to this drug target. The nature of the highly specific binding of the Aniten compounds to the NTD, and the biological consequences of that binding, have been defined in recent scientific studies. The selectivity of the binding, based on *in vivo* imaging as well as *in vitro* studies, is consistent with the clean toxicological profile observed with the first-generation EPI-506 and the subsequent safety profile in the Phase 1 trial.

The incidence of both metastatic and non-metastatic CRPC continues to rise, and using a dynamic progression model, Scher et al[†] have projected a 2020 incidence of 546,955 and prevalence of 3,072,480. The Company expects that the Aniten series of compounds could be effective for many of those patients. In its early clinical development, the Company intends to initially focus on patients who have failed second-generation anti-androgen therapies (i.e. abiraterone and/or lutamides) for the following reasons:

- CRPC treatment remains a prostate cancer market segment with an apparent and significant unmet therapeutic need and is therefore a potentially large market;
- the Company believes that the unique mechanism of action of its Aniten compounds is well suited to treat those patients who have failed AR LBD focused therapies, and whose biological characterization reveals that their tumors are still largely driven by AR biology; and
- the Company expects that the large number of patients with an apparent unmet therapeutic need in this area will facilitate timely enrollment in its clinical trials.

Furthermore, ESSA believes that a successful Phase I clinical trial will facilitate the early study of the combination of ESSA's Aniten compound with second-generation anti-androgens. The Company and its collaborators have developed preclinical in vitro and in vivo evidence supporting the combination of NTD inhibitors together with the LBD inhibiting anti-androgens. The application of two independent, complementary mechanisms of AR transcription inhibition may result in greater suppression of androgen activity and the delay or prevention of drug resistance. Recent progress in the clinical treatment of prostate cancer has resulted from the earlier utilization of anti-androgens in combination with classic androgen deprivation therapy ("ADT"), consistent with the premise that more effective androgen suppression yields clinical benefit. The introduction of NTD inhibitors would have the potential of further improving androgen suppression and delaying the emergence of resistance.

The Company is party to a license agreement with the British Columbia Cancer Agency ("**BCCA**") and the University of British Columbia ("**UBC**") dated December 22, 2010, as amended (the "**License Agreement**"), which provides the Company with exclusive world-wide rights to the issued patents and patent applications related to the EPI-002 compound.

The Company believes that it has developed a strong and defensive intellectual property position for multiple EPI and Aniten structural classes, with 16 pending and maintained patent families different structural motifs/analogues.

[†] Scher HI, Solo K, Valant J, Todd MB, Mehra M (2015) Prevalence of Prostate Cancer Clinical States and Mortality in the United States: Estimates Using a Dynamic Progression Model. PLoS ONE 10(10): e0139440. doi:10.1371/journal.pone.0139440

Patent applications are pending in the United States and in contracting states to the Patent Cooperation Treaty for the Aniten next-generation NTD inhibitors, with expiry between 2036-2040.

Completed Phase I Clinical Study of EPI-506

The Company conducted an initial proof-of-concept Phase I clinical study utilizing the first-generation Aniten compound, EPI-506. The objective of the EPI-506 Phase I clinical trial was to explore the safety, tolerability, maximum tolerated dose and pharmacokinetics of EPI-506, in addition to anti-tumor activity in asymptomatic or minimally symptomatic patients with mCRPC who were no longer responding to either abiraterone or enzalutamide treatments, or both. Efficacy endpoints, such as PSA reduction, and other disease progression criteria were evaluated. Details relating to the design of the Phase I/II clinical trial of EPI-506 are available on the U.S. National Institutes of Health clinical trials website (see https://clinicaltrials.gov).

The Investigational New Drug ("**IND**") application to the U.S. Food and Drug Administration ("**FDA**") for EPI-506, to begin a Phase I clinical trial, was accepted in September 2015, with the first clinical patient enrolled in November 2015. The Company's Canadian Clinical Trial Application ("**CTA**") submission to Health Canada was subsequently also accepted. Based on allometric scaling, an initial dose level of EPI-506 of 80 mg was determined. However, following the enrollment of the initial cohorts, it became apparent that EPI-506 exposure was much lower in humans than projected. EPI-506 dosing was escalated aggressively to allow patients in the clinical study greater exposure to the drug. The highest dose patients ultimately received was 3600 mg of EPI-506, administered in a single dose or split into two doses daily. The initial data from the Phase I clinical trial was presented at the European Society of Medical Oncology meeting in September 2017.

Conducted at five sites in the United States and Canada, the open-label, single-arm, dose-escalation study evaluated the safety, pharmacokinetics, maximum-tolerated dose and anti-tumor activity of EPI-506 in men with end-stage mCRPC who had progressed after prior enzalutamide and/or abiraterone treatment and who may have received one prior line of chemotherapy. Twenty-eight patients were available for analysis, with each patient having received four or more prior therapies for prostate cancer at the time of study entry. Patients self-administered oral doses of EPI-506 ranging from 80 mg to 3600 mg, with a mean drug exposure of 85 days (range of eight to 535 days). Four patients underwent prolonged treatment (with a median of 318 days; and a range of 219 to 535 days at data cut-off), following intra-patient dose escalation. PSA declines, an indication of efficacy, ranging from 4% to 37% were observed in five patients, which occurred predominantly in the higher dose cohorts (≥1280 mg.

EPI-506 was generally well-tolerated with a favorable safety profile having been demonstrated across all doses up to 2400 mg. At a dose of 3600 mg, gastrointestinal adverse events (nausea, vomiting and abdominal pain) were observed in two patients: one patient in the once-daily ("**QD**") dosing cohort and one patient in the 1800 mg twice-daily dosing cohort, leading to study discontinuation and a dose-limiting toxicity ("**DLT**") due to more than 25% of doses being missed in the 28-day safety reporting period. A separate patient in the 3600 mg QD cohort experienced a transient Grade 3 increase in liver enzymes (AST/ALT), which also constituted a DLT, and enrollment was consequently concluded in this cohort.

Although the safety profile and possible signs of anti-tumor activity at higher-dose levels support the concept that inhibiting the AR-NTD may provide a clinical benefit to mCRPC patients, the pharmacokinetic and metabolic studies revealed that the challenges encountered in achieving exposures similar to those associated with anti-tumor activity in the animal models were due to the greatly increased metabolism of EPI-506 in patients as compared to rodents. In light of these discoveries, ESSA concluded that prioritizing the development of one of its Aniten next-generation NTD inhibitors that, in the Company's discovery program, had demonstrated greater potency, reduced metabolism and other enhanced pharmaceutical properties offered a more compelling regulatory and commercial pathway forward. As a result, the Company announced on September 11, 2017 its decision to discontinue the further clinical development of EPI-506 and to implement a corporate restructuring plan to focus research and development resources on its next-generation Anitens targeting the AR-NTD. The restructuring included a decrease in headcount and a reduction of operational expenditures related to the clinical program.

ESSA's next-generation Aniten compounds represent multiple chemical scaffold changes to the first-generation drugs and appear to retain NTD inhibition of the AR. However, they have demonstrated an ability to advance upon a number of attributes of the first-generation compound, EPI-506. In *in vitro* assays measuring inhibition of AR transcriptional activity, these drugs demonstrate greater than 20 times higher potency than EPI-506 or its active metabolite, EPI-002. In addition, the compounds demonstrated resistance to metabolism in preclinical studies, suggesting likely longer half-lives in humans. Lastly, the compounds demonstrated significantly superior pharmaceutical properties relative to EPI-506. They represent potential advancements in ease and cost of large-scale manufacture, drug product stability, and suitability for commercialization globally. From this series of next-generation compounds, EPI-7386 was selected as the IND candidate and preparations for IND filing are currently underway.

Strategy

The Company's initial therapeutic goal is to develop a safe and effective therapy for prostate cancer patients whose tumors have progressed on current anti-androgen therapy. However, the action of the NTD-inhibiting Aniten compounds suggests that there may ultimately be additional therapeutic advantage to combining these agents with anti-androgens at an earlier stage of treatment. Therefore, while the first priority is to characterize and enter into Phase I development of an optional NTD inhibitor, in parallel the Company is also conducting preclinical studies of combination therapy with academic and industry collaborators as well as exploring other potential applications for AR-NTD inhibitors, including breast cancer.

Identifying and characterizing an Aniten compound to take into clinical trials

The purpose of the next-generation program has been to identify drug candidates with increased potency, reduced metabolic susceptibility and superior pharmaceutical properties compared to ESSA's first-generation compounds. Structure-activity relation studies conducted on the chemical scaffold of ESSA's first-generation compounds have resulted in the generation of a new series of compounds that have demonstrated higher potency and predicted longer half-lives. Multiple changes in the chemical scaffold have also been incorporated with the goal of improving ADME and pharmaceutical properties of the chemical class.

In preclinical models of AR inhibition, several candidate molecules met these goals, and on March 26, 2019, the Company announced the nomination of EPI-7386 as its lead clinical candidate for the treatment of mCRPC through inhibition of the NTD of the androgen receptor. In preclinical studies, EPI-7386 has displayed activity *in vitro* in numerous prostate cancer models including models where second-generation anti-androgens are inactive and compared to ESSA's first-generation compound, EPI-506, EPI-7386 is significantly more potent, metabolically stable and more effective in preclinical studies. In addition, EPI-7386 has demonstrated a favorable tolerability profile in all animal studies of the compound conducted to date.

On October 28, 2019 at the 2019 AACR-NCI-EORTC International Conference on Molecular Targets and Cancer Therapeutics, an oral poster presentation titled "Treatment of castrated resistant prostate cancer, with EPI-7386, a second generation N-terminal domain androgen receptor inhibitor ", presented a deeper preclinical characterization of EPI-7386. The poster showed that pre-clinical studies demonstrate that EPI-7386 (i) displays similar *in vitro* IC50 potency compared to the lutamide class of antiandrogens in an *in vitro* androgen receptor (AR) inhibition assay; (ii) shows *in vitro* activity in several enzalutamide-resistant prostate cancer cell models; (iii) exhibits a favorable metabolic profile across three preclinical animal species (which suggests that EPI-7386 will have high exposure and a long half-life in humans) (iv) provides similar antitumor activity to enzalutamide in the enzalutamide-sensitive LNCaP prostate cancer xenograft model, and (v) provides superior antitumor activity to enzalutamide, as a single agent or in combination with enzalutamide, in the enzalutamide emerging-resistant VCaP prostate cancer xenograft model, specifically showing AR inhibition with both an N-terminal domain inhibitor (EPI-7386) and a ligand binding domain inhibitor (enzalutamide), induces deeper and more consistent anti-tumor responses in the enzalutamide emerging-resistant VCaP xenograft model; (vi) antitumor activity in enzalutamide-resistant prostate cancer xenograft models, 22Rv1 and LNCaP95, with no antitumor activity, as expected, in a non-functional androgen receptor PC-3 prostate cancer xenograft model; (vii) wide therapeutic index as demonstrated by a broad dose response in the VCaP model; (viii) high plasma exposures in animal studies using a new suspension formulation.

IND-enabling studies are currently underway, and ESSA expects to file an IND in the first calendar quarter of 2020.

Advancing a product candidate through clinical development and regulatory approval in CRPC patients

Following IND approval of a development candidate, the Company intends to conduct a Phase I clinical trial to determine the safety, tolerability, maximum tolerated dose, pharmacokinetics and potential therapeutic benefits of the drug in mCRPC patients. Depending on the number of cohorts enrolled, the Phase I clinical trial is expected to take nine to twelve months. At this time, it is expected that the design of the Phase I clinical trial will be the standard three patients per dose cohort. All patients will be characterized biologically for underlying tumor genomic characteristics, for evidence of AR pathway activation and for dose-related pharmacological and pharmacodynamic effects. Once the Phase I clinical trial is complete, the Company plans to review the data, including the safety, tolerability, evidence of efficacy and pharmacological and biomarker data. This information will inform the final size, design, timing and clinical as well as biological characteristics of the patients to be entered into a potential Phase II clinical trial.

Developing a product candidate as an essential component of a new standard of care for the treatment of pre-CRPC and expanding usage earlier in the disease stage

An activated AR is required for the growth and survival of most prostate cancer, and NTD inhibition of AR-directed biology occurs both in full length AR, vARs and in the setting of the multiple resistance mechanisms affecting the anti-androgens which work through the opposite end of the AR. The Company, therefore, believes that the AR-NTD is an ideal target for next-generation anti-androgen hormone therapy. If ESSA's product candidate is successful in treating CRPC patients, it is reasonable to expect that such clinical candidate may be effective in treating earlier stage patients. Therefore, the Company may conduct additional clinical studies potentially, leading to the approval of a clinical candidate for use in prostate cancer patients at an earlier disease stage likely in combination with second-generation anti-androgens. The Company is currently generating *in vitro* and *in vivo* data in collaboration with academic and industry investigators in this regard. Preliminary data indicates that there may be potential benefits to combining an NTD inhibitor, such as an Aniten compound, with an anti-androgen that works through inhibition of the LBD of the AR. Other emerging potential clinical applications for NTD inhibitors are in combination with other agents, such as poly ADP ribose polymerase inhibitors, as well as in the subset of metastatic breast cancer patients whose tumors have been demonstrated to have activation of the AR pathway.

Evaluating strategic collaborations to maximize value

The Company currently retains all commercial rights for its EPI and Aniten series drug portfolio. The Company continues to evaluate potential collaborations that could enhance the value of its prostate cancer program and allow it to leverage the expertise of such strategic collaborators.

CORPORATE UPDATE AND OVERALL PERFORMANCE

ESSA is a preclinical stage company and does not currently generate revenue. During the three months ended December 31, 2019, the Company recorded a comprehensive loss of $4,622,211 (2018 - $2,710,767). As of December 31, 2019, the Company had cash resources of $45,934,420 (September 30, 2019 - $53,322,723) and working capital of $45,527,165 (September 30, 2019 - $48,724,264).

This corporate update highlights significant events and transactions for the three months ended December 31, 2019 and for the subsequent period to the date of this MD&A.

Corporate and Finance Highlights

SVB Term Loan Repayment

On October 17, 2019, the Company repaid, early and at its option, its capital term loan under which the Company had received total net proceeds of $7,779,063 from Silicon Valley Bank in the year ended September 30, 2017 (the "**SVB Term Loan**"). The Company repaid the balance of principal of $2,953,968 and remaining finance costs of $698,503.

Stock Option Grants

The Company granted 1,441,530 stock options to directors, officers, employees and consultants at an exercise price of $3.23 for a period of 10 years. Additionally, the board of directors approved an amended stock option and amended restricted share unit plan to provide for a maximum of 6,251,469 common shares. The Company granted 2,551,470 stock options under the amended stock option plan to certain employees at a weighted average price of $3.23 for a period of 10 years. Options granted under the amended stock option plan may not be exercised by the optionees until the amended plan is approved by the shareholders and regulators.

On October 17, 2019, the Company amended 42,000 stock options held by a former director such that they were immediately vested, and the expiry date was extended for a period of one year from date of resignation.

On October 30, 2019, the Company granted 225,000 stock options to non-executive members of the board of directors at an exercise price of $4.67 for a period of 10 years. Options granted under the amended stock option plan may not be exercised by the optionees until the amended plan is approved by the shareholders and regulators. The Company anticipates obtaining shareholder approval for the granted options at the Company's annual general meeting being held on February 27, 2020.

Changes to the Company's Board of Directors

On October 17, 2019, Dr. Ari Brettman, nominee of Clarus Lifesciences III, L.P., was appointed to the board of directors.

Research and Development Milestones

Progress in the selection of a product candidate and filing an IND

During the period from the fourth calendar quarter of 2017 to the first calendar quarter of 2020, the Company has conducted and will continue to conduct preclinical studies on the next-generation Aniten compounds. During such period, there are two key research and development milestones that the Company aims to achieve:

- First milestone: the selection of a most promising candidate from the Aniten compounds, which will need to meet specific criteria, for the Company to take into the clinical trial stage. The Company announced the selection of EPI-7386 as its IND candidate in March 2019.
- Second milestone: the filing and approval with respect to the selected candidate of an IND with the FDA. IND-enabling studies on EPI-7386 are currently underway and the Company expects to file an IND in the first calendar quarter of 2020.

DISCUSSION OF OPERATIONS

Preclinical Studies

The Company is focused on the advancement of EPI-7386, a next-generation Aniten NTD inhibitor.

This next-generation compound was discovered through significant chemical structure-based activity efforts. In an *in vitro* AR-based gene transcription assay, EPI-7386 exhibited greater than 20 times higher potency than EPI-002. The ability of EPI-7386 to reduce tumor growth was confirmed in a human prostate cancer xenograft model. In this preclinical study, the next-generation compound reduced tumor growth compared to the control using low daily doses of the drug. This next-generation compound also inhibited *in vitro* cellular proliferation of an enzalutamide-resistant cell line.

In addition to higher potency, EPI-7386 and other next-generation compounds are designed to reduce the metabolism of these agents following oral dosing compared to EPI-002. Excessive metabolism of a drug candidate may reduce the effective exposure levels of a drug and necessitate frequent and excessive dose administration. Specific modifications in the chemical structure were made in an attempt to block the known sites of metabolism of EPI-002. A series of *in vitro* studies examining drug metabolism were conducted with EPI-7386 and other next-generation compounds. Results indicated that several of these compounds, including EPI-7386, may be metabolized more slowly

than EPI-002 in humans. The Company has conducted animal pharmacokinetic studies which verify the initial *in vitro* metabolism results and predict a drug half-life in patients over 24 hours.

Importantly, the next-generation compounds exhibiting less *in vitro* metabolism were tested against off-target screening. Significant off-target binding of drug candidates could lead to unanticipated toxicity. Broad characterization of EPI-7386 and other Anitens has demonstrated minimal non-specific binding properties in this off-target screening, indicating a favorable selectivity profile for further development. Following the preclinical characterization of the most promising of these next-generation compounds, the Company selected EPI-7386 as its IND candidate and IND-preparation toxicology studies are being conducted.

Future Clinical Development Program

Phase I/II Clinical Trial Design for treating CRPC patients

The Company has selected EPI-7386 as its IND candidate and IND-preparatory studies are underway. If the Company successfully attains approval of any IND or CTA, the Company will conduct a Phase I clinical trial to determine the safety, tolerability, maximum tolerated dose, pharmacokinetics, and efficacy of the compound in CRPC patients. In a Phase I study, it is expected the clinical trial will evaluate the safety, tolerability, pharmacokinetics, and maximum-tolerated dose of the compound, in multiple-dose escalations. Learnings from the Phase I clinical trial of EPI-506 will be incorporated into the design and conduct of the Phase I and future trials. The Company plans to include, for example, extensive biological characterization of the patients entered into the trial. If the Phase I portion of the clinical trial is successful, the Phase II portion (dose expansion) of the clinical trial will evaluate activity in a target group of biologically-characterized mCRPC patients and it is the Company's intent to conduct early studies of EPI-7386 in combination with anti-androgens.

Early Conduct of a Combination Phase I/II Clinical Trial

Given the evolution of prostate cancer therapeutics towards combination therapy strategies, the biological rationale for combining NTD and LBD inhibitors, and compelling early *in vitro* and preclinical animal model results, the Company may perform combination studies of the next-generation Aniten compound with current generation anti-androgens.

Phase III Clinical Trial

In order to ultimately obtain full regulatory approval, the Company expects that at least one Phase III clinical trial will be required, most likely in patients similar to the population of mCRPC patients who will have been enrolled in the planned Phase I/II clinical trial. However, the results of the Phase I/II clinical trial may also suggest modification of the initial patient population based on anti-tumor response and biomarker assessment. In a Phase III clinical trial, the key end-point is expected to be progression-free survival or overall survival relative to patients receiving the standard-of-care. It is expected that such a Phase III clinical trial would be conducted at numerous sites around the world.

SELECTED QUARTERLY FINANCIAL INFORMATION

The following table summarizes selected unaudited consolidated financial data for each of the last eight quarters, prepared in accordance with IFRS. The Company has not earned any revenues or declared dividends as of December 31, 2019.

	For the Quarters Ended			
	December 31, 2019	**September 30, 2019**	**June 30, 2019**	**March 31, 2019**
Total assets	$ 47,364,474	$ 54,773,824	$ 7,072,204	$ 9,612,421
Long-term liabilities	105,789	18,179	1,413,047	2,215,701
Research and development expense	2,587,148	2,004,750	1,951,084	1,454,077
General and administration	2,143,740	1,251,000	1,213,166	1,762,212

	December 31, 2019	September 30, 2019	June 30, 2019	March 31, 2019
Comprehensive loss	$ (4,622,211)	$ (999,527)	$ (3,301,784)	$ (3,429,787)
Loss per share – basic and diluted	(0.22)	(0.07)	(0.52)	(0.54)

	For the Quarters Ended			
	December 31, 2018	**September 30, 2018**	**June 30, 2018**	**March 31, 2018**
Total assets	$ 13,214,847	$ 16,017,074	$ 18,512,377	$ 22,334,083
Long-term liabilities	2,824,827	3,520,664	4,134,529	4,797,841
Research and development expense	1,286,323	926,839	987,792	1,989,107
General and administration	1,247,108	1,211,159	1,579,420	2,179,717
Comprehensive loss	$ (2,710,767)	$ (2,276,430)	$ (2,880,113)	$ (4,382,956)
Loss per share – basic and diluted	(0.43)	(0.39)	(0.50)	(0.83)

The Company's quarterly results have varied and may, in the future, vary depending on numerous factors, including the rate of expenditure relative to financial capacity and operational plans, fluctuations in the Company's derivative liabilities, and whether the Company has granted any stock options. Certain of these factors may not be predictable to the Company. Fluctuations on derivative liabilities are discussed below under the subheading "*Derivative liabilities*" section below. The granting of stock options results in share-based payment charges, reflecting the vesting of such stock options.

In the quarter ended September 30, 2019, the Company completed the Realm Acquisition, acquiring net assets of $20,247,296, incurring professional fees of $1,925,145 and recognizing a gain on acquisition of $2,332,954. In addition, on August 27, 2019, the Company also closed a public offering of equity securities of the Company in Canada and a concurrent private placement of equity securities in the United States (the "**August 2019 Financing**"). The Company issued a total of 6,080,596 common shares in the capital of the Company and 11,919,404 pre-funded common share purchase warrants of the Company in lieu of common share sof the Company at a price of $2.00 per security for aggregate gross proceeds of $36,000,000, resulting in an increase in assets.

In the quarter ended September 30, 2018, the Company recorded the partial receipts of the third tranche of the CPRIT Grant of $229,201, which was recognized as recoveries of R&D expenditures. The CPRIT Grant is detailed in the accompanying condensed consolidated interim financial statements and risks relating to the CPRIT Grant, including risk that the Company may default on the residual obligations of the agreement providing for the CPRIT Grant, are described under the heading "*Risk Factors*" in the Company's Annual Report on Form 20-F for the fiscal year ended September 30, 2019, which is available on SEDAR at www.sedar.com and on the SEC's Electronic Data Gathering and Retrieval System, or "**EDGAR**" website at www.sec.gov.

In the quarter ended March 31, 2018, the Company completed the January 2018 Financing for gross proceeds of approximately $26,040,000, resulting in an increase in assets.

Three months ended December 31, 2019 and 2018

The Company incurred a comprehensive loss of $4,622,211 for the three months ended December 31, 2019 compared to a comprehensive loss of $2,710,767 for the three months ended December 31, 2018. Significant differences between the periods include R&D expenditures of $2,587,148 (2018 - $1,286,323), financing costs of $215,501 (2018 - $177,434), general and administrative expenses of $2,143,740 (2018 - $1,247,108), interest income of $100,965 (2018 - $nil) and a loss in derivative liability of $60,997 (2018 - $12,550 gain). Other significant changes in comprehensive loss are as follows:

Research and Development

- The overall R&D expense for the three months ended December 31, 2019 was $2,587,148 compared to $1,286,323 for the three months ended December 31, 2018. R&D expense in 2019 was incurred primarily in increased preclinical work on the Company's clinical candidate EPI-7386 which was selected in March 2019. In the three months ended December 31, 2018, the Company was continuing its research and development of its next-generation Aniten compounds in order to make a candidate selection.

- Clinical costs of $101,143 in 2019 (2018 - $nil) relate to clinical consulting work in preparation for the expected IND filing and Phase I clinical trial of EPI-7386.

- Consulting fees were $73,596 for the three months ended December 31, 2019 compared to $74,331 for the three months ended December 31, 2018 and include amounts paid to the former Chief Scientific Officer and former Chief Technical Officer for monthly consulting fees and bonuses pursuant to their respective consulting agreements (see "*Related Party Transactions*" below) and some additional external support in the current period.

- Legal patents and license fees have decreased to $237,700 for the three months ended December 31, 2019 compared to $273,536 for the three months ended December 31, 2018. In the prior period, the Company submitted a number of patent applications on its next-generation compounds for which the Company owns the rights. The Company has adopted a tiered patent strategy to protect its intellectual property as the pharmaceutical industry places significant importance on patents for the protection of new technologies, products and processes. The Company anticipates that there will be ongoing investment into patent applications. The costs in the current period reflect that ongoing investment.

- Preclinical costs of $773,171 (2018 - $657,861) and manufacturing and chemistry costs of $847,190 (2018 - $1,312) for the three months ended December 31, 2019 were incurred in the development of the Company's next-generation Aniten compounds, including cGMP manufacturing of EPI-7386. Preclinical costs in 2018 were primarily incurred internally and under the collaborative research agreements with the BCCA and UBC – see the discussion of research grants and administration costs below.

- Salaries and benefits have increased to $345,198 (2018 - $178,403) for the three months ended December 31, 2019 as a result of increased preclinical and clinical staff involved in the development of the Company's next-generation Aniten compounds, including the appointment of the Company's Chief Medical Officer in July 2019.

R&D expenses include the following major expenses for the three months ended December 31, 2019 and 2018:

For the three months ended December 31	**2019**	**2018**
Clinical	$ 101,143	$ -
Consulting	73,596	74,331
Legal patents and license fees	237,700	273,536
Manufacturing and chemistry	847,190	1,312
Other	41,262	6,240
Preclinical	773,171	657,861
Salaries and benefits	345,198	178,403
Share-based payments (Note 12*)	152,406	90,052
Travel	15,482	4,588
Total	$ 2,587,148	$ 1,286,323

* See the Notes set out in the accompanying condensed consolidated interim financial statements for the three months ended December 31, 2019 and 2018.

Share-based payments of $152,406 (2018 - $90,052) for the three months ended December 31, 2019 relate to the value assigned to stock options granted to key management and consultants of the Company conducting research and development activities. The expense is recognized in relation to the grant and vesting of these equity instruments as measured by the Black-Scholes pricing model.

General and administrative

General and administration expenses for the three months ended December 31, 2019 increased to $2,143,740 from $1,247,108 in the comparative period in 2018. Significant components of such expenses in the current period included:

- Director fees of $92,500 (2018 - $63,000) were incurred in relation to various meetings held by the board of directors and various committees during the period. On July 31, 2019, in connection with the Realm Acquisition, the Company appointed three additional members to the board of directors.

- Investor relations expense of $57,739 (2018 - $41,287) was incurred in relation to investor relations consultants, shareholder communications and news releases.

- Professional fees for legal and accounting services of $195,118 (2018 - $249,473) were incurred in conjunction with the corporate activities in the current period.

- Rent expense of $15,644 (2018 - $42,915) has decreased relative to the previous period as a consequence of adopting IFRS 16. Rent expense previously incurred on the South San Francisco office is now classified as a lease payment.

- Salaries and benefits expense is comparable at $376,363 (2018 - $371,309) and includes corporate staffing such as the Chief Executive Officer, Chief Financial Officer, and Chief Operating Officer, as disclosed under the heading "Related Party Transactions", and additional general administrative support staff.

- Insurance expense of $133,595 (2018 - $114,278) relates to insurance coverage for directors and officers of the Company as a reporting issuer and publicly listed company in the United States, as well as general liability insurance.

General and administrative expenses include the following major expenses for the three and three months ended December 31, 2019 and 2018:

For the three months ended December 31	**2019**	**2018**
Amortization	$ 32,155	$ 4,574
Consulting and subcontractor fees	32,805	26,165
Director fees	92,500	63,000
Insurance	133,595	114,278
Investor relations	57,739	41,287
Office, IT and communications	50,232	14,526
Professional fees	195,118	249,473
Regulatory fees and transfer agent	10,320	16,995
Rent	15,644	42,915
Salaries and benefits	376,363	371,309
Share-based payments (Note 12*)	1,101,215	246,165
Travel and entertainment	46,054	56,421
Total	$ 2,143,740	$ 1,247,108

* See the Notes set out in the accompanying condensed consolidated interim financial statements for the three months ended December 31, 2019 and 2018.

Share-based payments expense of $1,101,215 (2018 - $246,165) for the three months ended December 31, 2019 relates to the value assigned to stock options granted to key management and consultants of the Company. The expense is recognized in relation to the grant and vest of these equity instruments as measured by the Black-Scholes pricing model.

Derivative liabilities

The Company has certain warrants treated as derivatives for financial reporting purposes. Consequently, the Company's financial results are impacted by fluctuations in the market price of the Company's common stock. These warrants, as well as some broker warrants, are measured at fair value, with changes recognized in the statement of loss and comprehensive loss at each reporting date. During the three months ended December 31, 2019, the Company recorded the resulting change in fair value, largely resulting from the increase in stock price during the period, of $60,997 (2018 – gain of $12,550) in the statement of loss and comprehensive loss.

Derivative warrant liabilities are discussed under the heading "*Critical Accounting Estimates*" and Note 10 of the accompanying condensed consolidated interim financial statements for the three months ended December 31, 2019, and 2018.

USE OF PROCEEDS

The Company did not complete any financings during the three months ended December 31, 2019.

During the year ended September 30, 2019, the Company received total net proceeds of $36,000,000 pursuant to the August 2019 Financing. The Company issued a total of 6,080,596 common shares and 11,919,404 pre-funded warrants in lieu of common shares of the Company at a price of $2.00 per security. Each pre-funded warrant entitles the holder thereof to acquire one common share at a nominal exercise price for a period of five years.

During the year ended September 30, 2018, the Company received total net proceeds of $23,654,101 from an equity financing of 4,321,000 common shares and 2,189,000 pre-funded warrants at a price of $4.00 each, for total gross proceeds $26,040,000 (the "**January 2018 Financing**").

The following table sets out a comparison of how the Company intended to use the proceeds from the above financings, based on its disclosure, against how the Company actually used the proceeds following the respective closing dates, an explanation of the variances and the impact of the variance on the ability of the Company to achieve its business objectives and milestones.

Intended Use of Proceeds	**Actual Use of Proceeds**
Preclinical development of next-generation Aniten compounds	The proceeds under the January 2018 Financing were intended for use toward the advancement of the preclinical and clinical development of the Company's next-generation Aniten compounds. Additionally, the funds were intended for use for the interest and principal payments on the Company's SVB Term Loan and general corporate purposes. Having selected EPI-7386 in March 2019, the August 2019 Financing will be used primarily to complete the Phase 1 dose-escalation and extension studies, Phase 1 combination studies with recent anti-androgens and preparatory work on Phase II studies. In addition, the Company plans to conduct preclinical studies with EPI-7386 in additional prostate and breast cancer models as well as to continue the preclinical development of additional Aniten molecules. According to current plans, the net proceeds combined with the company's current cash reserves are expected to provide sufficient cash resources through 2022. During the three months ended December 31, 2019, the Company incurred $2,434,742 in cash R&D costs in relation to the preclinical costs of the Aniten next generation compound. An additional $1,010,370 has been incurred for cash general and administrative costs in support of the Company's research and development activities. The Company also completed $3,199,799 and $32,235 in principal and

Intended Use of Proceeds	Actual Use of Proceeds
	interest payments, respectively, as well as the final payment of $688,000 on the SVB Term Loan, which is now fully repaid. During the year ended September 30, 2019, the Company incurred $6,391,448 in cash R&D costs in relation to the preclinical costs of the Aniten next generation compound. An additional $4,613,268 has been incurred for cash general and administrative costs in support of the Company's research and development activities. The Company also completed $2,808,823 and $401,929 in principal and interest payments, respectively, on the SVB Term Loan, pursuant to which the Company initially drew down $8,000,000. During the year ended September 30, 2018, the Company incurred $4,873,335 in cash R&D costs, net of recoveries, in relation to the preclinical costs of the Aniten next generation compound, as well as close-out costs related to the termination of the EPI-506 Phase I/II clinical trial program. An additional $5,928,671 has been incurred for cash general and administrative costs in support of the Company's research and development activities. The Company also completed $1,991,378 and $563,298 in principal and interest payments, respectively, on the SVB Term Loan. As at December 31, 2019, the Company has not yet fully expended the funds raised in its August 2019 Financing towards the preclinical development of its next-generation Aniten compounds.

LIQUIDITY AND CAPITAL RESOURCES

As at December 31, 2019, the Company has working capital of $45,527,165 (September 30, 2019 - $48,724,264). Operational activities during the three months ended December 31, 2019 were financed mainly by proceeds from the August 2019 Financing. At December 31, 2019, the Company had available cash reserves of $45,934,420 (September 30, 2019 - $53,322,723) and accounts receivable of $350,097 (September 30, 2019 - $360,800) related primarily to the final CPRIT Grant payment and GST input tax credits, to settle current liabilities of $1,229,162 (September 30, 2019 - $5,274,744). The Company believes that it has sufficient capital to satisfy its obligations as they become due and execute its planned expenditures through the fiscal 2022 year, provided there are no significant changes in capital structure and debt obligations.

Cash used in operating activities for the three months ended December 31, 2019 was $3,360,612 (2018 - $1,850,703). Working capital items used cash of $6,041 (2018 – provided $318,129).

Cash used in financing activities for the three months ended December 31, 2019 was $4,036,178 (2018 – $802,688), including $314,603 in share issuance costs, and $3,199,799 (2018 - $683,203) and $720,235 (2018 - $119,485) in principal and interest paid in relation to the SVB Term Loan. The Company received $227,864 (2018 - $nil) with respect to broker warrants exercised and issued subsequent to December 31, 2019. The Company made lease payments of $29,405 (2018 - $nil) which had been classified as rent expense prior to the adoption of IFRS 16 (See "*Changes in or Adoption of Accounting Policies*").

The Company does not currently generate revenue. Future cash requirements may vary materially from those expected due to a number of factors, including the costs associated with preclinical and clinical activities as well as possible unanticipated costs resulting from strategic opportunities that may arise in the future. As a result, it will be necessary for the Company to raise additional funds in the future. These funds may come from sources such as entering into strategic collaboration arrangements, the issuance of shares from treasury, or alternative sources of financing; however, there can be no assurance that the Company will successfully raise the funds necessary to continue the preclinical development of its next-generation Anitens targeting the AR-NTD and for its other operational activities (see "*Risk Factors*").

CONTRACTUAL OBLIGATIONS

As of December 31, 2019, and in the normal course of business, the Company has the following obligations to make future payments, representing contracts and other commitments that are known and committed.

Contractual obligations	2020	2021	2022	2023	2024	After 5 years
Minimum annual royalty per License Agreement (CAD)[1]	C$ 85,000	C$ 85,000	C$ 85,000	C$ 85,000	C$ 85,000	C$ 595,000
Total (in CAD)	C$ 85,000	C$ 85,000	C$ 85,000	C$ 85,000	C$ 85,000	C$ 595,000
Total (in USD) [2]	$ 64,445	$ 64,445	$ 64,445	$ 64,445	$ 64,445	$ 458,115
Lease on U.S. office spaces (USD)	$ 89,979	$ 60,574	$ -	$ -	$ -	$ -
Total (USD)	$ 155,424	$ 126,019	$ 65,445	$ 65,445	$ 65,445	$ 458,115

Notes:

(1) ESSA has the worldwide, exclusive right to develop products based on "Licensed IP", as defined in, and pursuant to, the License Agreement. A copy of the License Agreement is available as Exhibit 4.2 to Amendment No. 1 to the Company's Form 20-F registration statement filed on June 11, 2015 (File No. 001-37410) on EDGAR at www.sec.gov. Pursuant to the License Agreement, the Company was required to pay a minimum annual royalty of C$85,000 for the 2017 calendar year and for each year thereafter. Additional milestone payments of C$50,000 and C$900,000, which have been excluded from the above table, would be due upon the enrolment of the first patient in Phase II and Phase III respectively, for any products developed based on Licensed IP.

(2) Converted based on the indicative exchange rate of the Bank of Canada of C$1.00 = $0.7699 as at December 31, 2019.

OFF-BALANCE SHEET ARRANGEMENTS & PROPOSED TRANSACTIONS

The Company has no material off-balance sheet arrangements that have, or are reasonably likely to have, a current or future material effect on its results of operations, financial condition, revenues or expenses, liquidity, capital expenditures or capital resources.

The Company has no material proposed business acquisitions or dispositions that have, or are reasonably likely to have, a current or future material effect on its results of operations, financial condition, revenues or expenses, liquidity, capital expenditures or capital resources.

RELATED PARTY TRANSACTIONS

Compensation accrued and paid to key management personnel for the three months ended December 31, 2019 and 2018 was as follows:

Name and Relationship	Nature of compensation	2019	2018
Richard Glickman, Director and Chairman of the Board	Director fees[1]	$ 16,500	$ 16,500
Gary Sollis, Director	Director fees[1]	12,500	12,750
Franklin Berger, Director	Director fees[1]	13,500	12,750
Scott Requadt, Director	Director fees[1]	11,750	11,750
Otello Stampacchia, Director	Director fees[1][3]	1,458	9,250
Alex Martin, Director	Director fees[1]	8,750	-
Marella Thorell, Director	Director fees[1]	8,750	-
Sanford Zweifach, Director	Director fees[1] [2]	12,000	-
Dr. Ari Brettman, Director	Director fees[1]	7,294	-
Dr. Marianne Sadar, former Director and Chief Scientific Officer	Consulting fees and bonus[4]	-	34,626
Dr. Raymond Andersen, former Director and Chief Technical Officer	Consulting fees and bonus[5]	-	34,626
Dr. David R. Parkinson, Chief Executive Officer	Salary and bonus[6]	118,586	112,940
David Wood, Chief Financial Officer	Salary and bonus[7]	61,594	58,718
Peter Virsik, Executive Vice-President and Chief Operating Officer	Salary and bonus[8]	100,095	93,987
Dr. Alessandra Cesano, Chief Medical Officer	Salary and bonus[9]	100,000	-
Directors and officers	Share-based payments [10]	1,032,732	286,806
Total compensation		$ 1,505,509	$ 684,703

Notes:

(1) The Company compensated, until October 2019, its independent directors as follows: annual retainer of $25,000; an additional annual retainer of $25,000 for the Chairman of the Board; an additional annual retainer of $10,000 for committee chairs; $1,500 per board meeting attended in person; and $1,000 for all other board and subcommittee meetings. In October 2019, the board of directors adopted a revised compensation plan as follows: an annual retainer of $35,000 for each non-executive director; an additional annual retainer of $25,000 for the Chairman of the Board; an annual retainer for the audit committee chair of $15,000 ($7,000 for each member of the audit committee); an annual retainer for the compensation committee chair of $12,000 ($6,000 for each member of the compensation committee); an annual retainer for the corporate governance and nomination committee chair of $8,000 ($4,000 for each member of the corporate governance and nomination committee).

(2) Amounts are paid to Pelican Consulting Group, Inc. which is a company controlled by Sanford Zweifach.

(3) Amounts are payable to Omega Fund Management LLC, a company in which Dr. Stampacchia is the Managing Director. Dr. Stampacchia resigned from the board of directors on October 17, 2019.

(4) Under a consulting agreement, effective February 1, 2018, Dr. Sadar will receive an annual consulting fee of C$180,000 (C$15,000 monthly) for the first and second year of the term and an annual consulting fee of C$120,000 (C$10,000 monthly) for the third and fourth year of the term. Dr. Sadar is also eligible for a bonus of up to 25% of the annual consulting fee upon accomplishment of certain objectives as agreed upon by all parties. Dr. Sadar did not stand for re-election to the board of directors of the Company at the annual general meeting held on June 26, 2019.

(5) Under a consulting agreement, effective February 1, 2018, Dr. Andersen will receive an annual consulting fee of C$180,000 (C$15,000 monthly) for the first and second year of the term and an annual consulting fee of C$120,000 (C$10,000 monthly) for the third and fourth year of the term. Dr. Andersen is also eligible for a bonus of up to 25% of the annual consulting fee upon accomplishment of certain objectives as agreed upon by all parties. Dr. Andersen resigned from the board of directors of the Company on July 31, 2019 upon the closing of the Realm Acquisition.

(6) Dr. David R. Parkinson receives a base salary of $474,346 per annum, increased from $451,758 effective January 1, 2019, and a performance-based bonus per annum of up to 50% of his base salary.
(7) David Wood receives a base salary of $246,376 per annum, increased from $236,900 effective January 1, 2019, and a performance-based bonus per annum of up to 40% of his base salary.
(8) Peter Virsik receives a base salary of $400,387 per annum, increased from $375,950 effective January 1, 2019, and a performance-based bonus per annum of up to 40% of his base salary.
(9) Dr. Alessandra Cesano receives a base salary of $400,000 per annum, and a performance-based bonus per annum of up to 40% of her base salary. Dr. Cesano was appointed as the CMO of the Company effective July 1, 2019.
(10) Share-based payments to related parties represents the fair value of options granted and vested in the period to key management personnel.

Key management personnel include: Dr. David R. Parkinson, Chief Executive Officer ("**CEO**"); David Wood, Chief Financial Officer ("**CFO**"); Peter Virsik, Executive Vice-President and Chief Operating Officer ("**COO**"); Dr. Alessandra Cesano, CMO (appointed July 1, 2019), Dr. Marianne Sadar, Director (who did not stand for re-election on June 26, 2019); Dr. Raymond Andersen, Director (who resigned upon the closing of the Realm Acquisition effective July 31, 2019); Richard Glickman, Director and Chairman of the Board; Gary Sollis, Director; Franklin Berger, Director; Scott Requadt, Director, Dr. Otello Stampacchia, Director (appointed October 18, 2018 and resigned October 17, 2019), Alex Martin, Director (appointed upon the closing of the Realm Acquisition effective July 31, 2019); Marella Thorell, Director (appointed upon the closing of the Realm Acquisition effective July 31, 2019); Sanford Zweifach, Director (appointed upon the closing of the Realm Acquisition effective July 31, 2019); and Dr. Ari Brettman, Director (appointed October 17, 2019).

During the three months ended December 31, 2019, the Company granted 3,330,000 (2018 – 12,000) options to key management personnel. The vesting of these options and options granted to key management personnel in prior periods were recorded as share-based payments expense in the statement of loss and comprehensive loss at a value of $1,032,732 (2018 - $286,806).

Included in accounts payable and accrued liabilities as at December 31, 2019 is $85,600 (September 30, 2019 - $108,331) due to Alex Martin, Marella Thorell, Richard Glickman, Gary Sollis, Franklin Berger, Scott Requadt, Clarus Ventures, LLC, and Pelican Consulting Group, Inc. with respect to key management personnel compensation and expense reimbursements. Amounts due to related parties are non-interest bearing, with no fixed terms of repayment.

Dr. Parkinson, CEO, is entitled to a payment of one year of base salary upon termination without cause. This amount increases to 18 months if the termination without cause occurs after a change of control event or within 60 days prior to a change of control event where such event was under consideration at the time of termination. Mr. Wood, CFO, Mr. Virsik, COO, and Dr. Cesano, CMO, are entitled to a payment of one year of base salary upon termination without cause. This amount increases to 18 months of salary if termination without cause occurs within 18 months after a change of control event. Stock options held by the CEO, CFO, COO, and CMO vest immediately upon a change of control.

CHANGES IN OR ADOPTION OF ACCOUNTING POLICIES

The accounting policies adopted in the preparation of the condensed consolidated interim financial statements for the three months ended December 31, 2019 and 2018 are consistent with those policies detailed in Notes 2 and 3 of the Company's annual consolidated financial statements for the years ended September 30, 2019, 2018 and 2017, except for the following:

IFRS 16 Leases

The Company adopted IFRS 16 - *Leases* ("IFRS 16") on October 1, 2019. The objective of the new standard is to eliminate the classification of leases as either operating or financing leases for a lessee and report all leases on the statement of financial position. The only exemption to this will be for leases that are one year or less in duration or for leases of assets with low values. Under IFRS 16 a lessee is required to recognize a right-of-use asset, representing its right to use the underlying asset, and a lease liability, representing its obligations to make lease payments. IFRS 16 also changes the nature of expenses relating to leases, as lease expenses previously recognized for operating leases are replaced with depreciation expense on capitalized right-of-use assets and finance or interest expense for the corresponding lease liabilities associated with the capitalized right-of-use leased assets.

The Company adopted IFRS 16 using the modified retrospective approach and did not restate comparative amounts for the year prior to first adoption. For all leases, the lease liability was measured at October 1, 2019 as the present value of any future minimum lease payments discounted using the appropriate incremental borrowing rate. The associated right of use assets was measured at the amount equal to the lease liability on October 1, 2019.

The following leases accounting policies have been applied as of October 1, 2019 on adoption of IFRS 16:

At inception of a contract, we assess whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. We assess whether the contract involves the use of an identified asset, whether we have the right to obtain substantially all of the economic benefits from use of the asset during the term of the arrangement and if we have the right to direct the use of the asset.

As a lessee, we recognize a right-of-use asset, and a lease liability at the commencement date of a lease. The right-of-use asset is initially measured at cost, which is comprised of the initial amount of the lease liability adjusted for any payments made at or before the commencement date, plus any decommissioning and restoration costs, less any lease incentives received.

The right-of-use asset is subsequently depreciated from the commencement date to the earlier of the end of the lease term, or the end of the useful life of the asset. In addition, the right-of-use asset may be reduced due to impairment losses, if any, and adjusted for certain measurements of the lease liability.

A lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted by the interest rate implicit in the lease, or if that rate cannot be readily determined, the incremental borrowing rate. Lease payments included in the measurement of the lease liability are comprised of:

- fixed payments, including in-substance fixed payments, less any lease incentives receivable;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable under a residual value guarantee;
- exercise prices of purchase options if we are reasonably certain to exercise that option; and
- payments of penalties for terminating the lease, if the lease term reflects the lessee exercising an option to terminate the lease.

The lease liability is measured at amortized cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, or if there is a change in our estimate or assessment of the expected amount payable under a residual value guarantee, purchase, extension or termination option. Variable lease payments not included in the initial measurement of the lease liability are charged directly to profit.

As part of the initial application of IFRS 16, we have elected not to recognize right-of-use assets and lease liabilities for short-term leases that have a lease term of 12 months or less and leases of low-value assets. The lease payments associated with these leases are charged directly to profit on a straight-line basis over the lease term.

Impact of transition to IFRS 16:

Effective October 1, 2019, the Company adopted IFRS 16 using the modified retrospective approach and accordingly the information presented for 2019 has not been restated. The cumulative effect of initial application is recognized in deficit at October 1, 2019. Comparative amounts for 2019 remains as previously reported under IAS 17 and related interpretations.

On initial application, the Company has elected to record right-of-use assets based on the corresponding lease liabilities. Lease liabilities have been measured by discounting future lease payments at the incremental borrowing rate at October 1, 2019. The incremental borrowing rate applied was 12% per annum and represents the Company's best estimate of the rate of interest that it would expect to pay to borrow, on a collateralized basis, over a similar term, an amount equal to the lease payments in the current economic environment.

As of the initial date of application of IFRS 16, the Company has an office lease. The remaining non-cancelable period of the lease was18 months. The application of IFRS 16 to leases, previously classified as operating leases under IAS 17, resulted in the recognition of right-of-use assets of $165,486 and lease liabilities with no net impact on deficit.

CRITICAL ACCOUNTING ESTIMATES

The Company makes estimates and assumptions about the future that affect the reported amounts of assets and liabilities. Estimates and judgments are continually evaluated based on historical experience and other factors, including expectations of future events, that are believed to be reasonable under the circumstances. In the future, actual experience may differ from these estimates and assumptions.

The effect of a change in an accounting estimate is recognized prospectively by including it in comprehensive income in the period of the change, if the change affects that period only, or in the period of the change and future periods, if the change affects both. Significant assumptions about the future and other sources of estimation uncertainty that management has made at the statement of financial position date, that could result in a material adjustment to the carrying amounts of assets and liabilities, in the event that actual results differ from assumptions that have been made, relate to the following key estimates:

Intangible assets – impairment

The application of the Company's accounting policy for intangible assets expenditures requires judgment in determining whether it is likely that future economic benefits will flow to the Company, which may be based on assumptions about future events or circumstances. Estimates and assumptions may change if new information becomes available. If, after expenditures are capitalized, information becomes available suggesting that the recovery of expenditures is unlikely, the amount capitalized is written off in profit or loss in the period the new information becomes available.

Intangible assets – useful lives

Following initial recognition, the Company carries the value of intangible assets at cost less accumulated amortization and any accumulated impairment losses. Amortization is recorded on a straight-line basis based upon management's estimate of the useful life and residual value. The estimates are reviewed at least annually and are updated if expectations change as a result of technical obsolescence or legal and other limits to use. A change in the useful life or residual value will impact the reported carrying value of the intangible assets resulting in a change in related amortization expense.

Product development and relocation grant

Pursuant to the terms of the Company's CPRIT Grant, the Company has met certain terms and conditions to qualify for the grant funding. The Company has therefore taken into income a portion of the grant that represents expenses the Company has incurred to date under the grant parameters. The expenses are subject to assessment by CPRIT for compliance with the grant regulations which may result in certain expenses being denied.

Income tax

The determination of income tax is inherently complex and requires making certain estimates and assumptions about future events. Changes in facts and circumstances as a result of income tax audits, reassessments, changes to corporate structure and associated domiciling, jurisprudence and any new legislation may result in an increase or decrease the provision for income taxes. The value of deferred tax assets is evaluated based on the probability of realization; the Company has assessed that it is improbable that such assets will be realized and has accordingly not recognized a value for deferred taxes.

Functional Currency

The functional currency of the Company and its subsidiaries is the currency of their respective primary economic environment, and the Company reconsiders the functional currency if there is a change in events and conditions, which determined the primary economic environment. The functional currencies of the Company's entities have been judged as detailed in Note 2 of the accompanying consolidated financial statements.

Acquisition of Realm

On July 31, 2019, the Company completed the acquisition (the "**Realm** Acquisition") of Realm Therapeutics plc ("**Realm**") pursuant to a scheme of arrangement under Part 26 of the U.K. Companies Act 2006 ("**Scheme**") as sanctioned by the High Court of Justice in England and Wales, on July 29, 2019. Under the terms of the Realm Acquisition, ESSA acquired all of the issued and outstanding shares of Realm, and Realm shareholders received a total of 6,718,150 common shares of the Company ("**New ESSA Shares**") at a ratio of 0.5763 New ESSA Share per each one share of Realm (or 1.4409 New ESSA Shares for every one Realm ADS (as defined in the Scheme), representing 25 Realm shares), based on a 60-day volume-weighted average price of $3.19 per share of ESSA on May 14, 2019.

The acquisition of Realm required management to make a judgment as to whether Realm constituted a business combination or an asset acquisition under the definitions of IFRS 3 *Business Combinations*. The assessment required management to assess the inputs, processes and ability of Realm to produce outputs at the time of acquisition. Pursuant to the assessment, Realm was considered an asset acquisition (Note 4 of the accompanying consolidated financial statements).

Share-based payments and compensation

The Company has applied estimates with respect to the valuation of shares issued for non-cash consideration. Shares are valued at the fair value of the equity instruments granted at the date the Company receives the goods or services.

The Company has applied estimates with respect to the valuation of pre-funded warrants issued for cash. Pre-funded warrants are valued at an amount equal to the cash proceeds received.

The Company measures the cost of equity-settled transactions with employees by reference to the fair value of the equity instruments at the date at which they are granted. Estimating fair value for share-based payment transactions requires determining the most appropriate valuation model, which is dependent on the terms and conditions of the grant. This estimate also requires determining the most appropriate inputs to the valuation model including the fair value of the underlying common shares, the expected life of the share option, volatility and dividend yield and making assumptions about these inputs. The Company makes reference to prices quoted on the TSX-V, as applicable, and Nasdaq. The assumptions and models used for estimating fair value for share-based payment transactions are discussed in Note 12 of the accompanying consolidated financial statements. Share-based payments are recorded under R&D and G&A expenditures.

Derivative financial instruments

Certain warrants are treated as derivative financial liabilities. The estimated fair value, based on the Black-Scholes model, is adjusted on a quarterly basis with gains or losses recognized in the statement of net loss and comprehensive loss. The Black-Scholes model is based on significant assumptions such as volatility, dividend yield, expected term

and liquidity discounts as detailed in Note 10 of the accompanying financial statements. See discussion under the heading "*Selected Quarterly Financial Information - Derivative liabilities*."

FINANCIAL INSTRUMENTS AND RISKS

The Company's financial instruments consist of cash, receivables, accounts payable and accrued liabilities, long-term debt and derivative liabilities. The fair value of cash, receivables and accounts payable and accrued liabilities approximates their carrying values due to their short term to maturity. The derivative liabilities are measured using level 3 inputs. During the three months ended December 31, 2019, the Company recognized a loss on derivative liability of $60,997 (2018 – gain of $12,550) through profit or loss.

Fair value estimates of financial instruments are made at a specific point in time, based on relevant information about financial markets and specific financial instruments. As these estimates are subjective in nature, involving uncertainties and matters of judgement, they cannot be determined with precision. Changes in assumptions can significantly affect estimated fair values.

Financial risk factors

The Company's risk exposures and the impact on the Company's financial instruments are summarized below:

Credit risk

Financial instruments that potentially subject the Company to a significant concentration of credit risk consist primarily of cash and receivables. The Company's receivables is materially the balance remaining on the CPRIT Grant. The Company limits its exposure to credit loss by placing its cash with major financial institutions. Amounts due from government agencies are considered to have minimal credit risk.

Liquidity risk

The Company's approach to managing liquidity risk is to ensure that it will have sufficient liquidity to meet liabilities when due. As at December 31, 2019, the Company had a working capital of $45,527,165. Debt and equity financings are dependent on market conditions and may not be available on favorable terms.

Market risk

Market risk is the risk of loss that may arise from changes in market factors such as interest rates, and foreign exchange rates.

(a) Interest rate risk

As at December 31, 2019, the Company has cash balances which are interest-bearing. Interest income is not significant to the Company's projected operational budget and related interest rate fluctuations are not significant to the Company's risk assessment.

(b) Foreign currency risk

The Company's foreign currency risk exposure relates to net monetary assets denominated in Canadian dollars. The Company maintains its cash in US dollars and converts on an as needed basis to discharge Canadian denominated expenditures. A 10% change in the foreign exchange rate between the Canadian and U.S. dollar would result in a fluctuation of $35,360 in the net loss realized for the period. The Company does not currently engage in hedging activities.

(c) Price risk

The Company is exposed to price risk with respect to equity prices. The Company closely monitors individual equity movements and the stock market to determine the appropriate course of action to be taken by the Company.

ADDITIONAL INFORMATION

Additional information regarding the Company can be found on SEDAR at www.sedar.com, the website of the SEC at www.sec.gov and the Company's website at www.essapharma.com. The Company's Annual Report on Form 20-F for the fiscal year ended September 30, 2019 also provides additional information on the Company, and can be accessed through SEDAR at www.sedar.com or the website of the SEC at www.sec.gov.

OUTSTANDING SHARE CAPITAL

The following table sets out the equity instruments of the Company outstanding as of the date of this MD&A:

Equity instruments:	
Common shares	20,824,339
Stock options	5,311,500
Warrants	12,331,127

RISK FACTORS

Prior to making an investment decision investors should consider the investment, operational and intellectual property risks set out in the Company's Annual Report on Form 20-F for the fiscal year ended September 30, 2019, which is posted on SEDAR at www.sedar.com and on EDGAR at www.sec.gov, which are in addition to the usual risks associated with an investment in a business at an early stage of development. The directors of the Company consider the risks set out in the aforementioned Annual Report on Form 20-F to be the most significant to potential investors in the Company, but are not all of the risks associated with an investment in securities of the Company.

If any of these risks materialize into actual events or circumstances or other possible additional risks and uncertainties of which the directors of the Company are currently unaware, or which they consider not to be material in relation to the Company's business, actually occur, the Company's assets, liabilities, financial condition, results of operations (including future results of operations), business and business prospects, are likely to be materially and adversely affected. In such circumstances, the price of the Company's securities could decline and investors may lose all or part of their investment. The Company's actual results could differ materially from those anticipated in the forward-looking statements as a result of a number of factors, including the risks described above. See "*Cautionary Note Regarding Forward-Looking Statements.*"

DISCLOSURE CONTROLS AND PROCEDURES AND INTERNAL CONTROLS OVER FINANCIAL REPORTING

Disclosure Controls and Procedures

The Company has established disclosure controls and procedures to ensure that information disclosed in this MD&A and the related consolidated financial statements was properly recorded, processed, summarized and reported to the Company's board of directors and Audit Committee. The Company's certifying officers conducted or caused to be conducted under their supervision an evaluation of the disclosure controls and procedures as required under Canadian securities laws, as at December 31, 2019. Based on the evaluation, the Company's certifying officers concluded that the disclosure controls and procedures were effective to provide a reasonable level of assurance that information required to be disclosed by the Company in its annual filings, interim filings, and other reports that it files or submits under Canadian securities legislation is recorded, processed, summarized and reported within the time period specified and that such information is accumulated and communicated to the Company's management, including the certifying officers, as appropriate to allow for timely decisions regarding required disclosure.

It should be noted that while the Company's certifying officers believe that the Company's disclosure controls and procedures provide a reasonable level of assurance and that they are effective, they do not expect that the disclosure controls and procedures will prevent all errors and fraud. A control system, no matter how well conceived or operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

Internal Control over Financial Reporting ("ICFR")

The Company's certifying officers acknowledge that they are responsible for designing internal controls over financial reporting, or causing them to be designed under their supervision in order to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. As at December 31, 2019, the Company's certifying officers conducted or caused to be conducted under their supervision an evaluation of the design and operating effectiveness of the Company's internal control over financial reporting, as required under Canadian securities laws. Based on such evaluation, the Company's certifying officers concluded that the Company's internal control over financial reporting was effective.

The Company ceased to be a venture issuer, as defined by National Instrument 51-102 – Continuous Disclosure Obligations on July 9, 2015 as a result of completing its listing on the Nasdaq. The Company's Audit Committee (the "**Audit Committee**") is comprised of Franklin Berger (chair), Gary Sollis, and Sanford Zweifach, all of whom are "financially literate" as defined in NI 52-110 – Audit Committees ("**NI 52-110**") and the rules of Nasdaq. Each member of the Audit Committee is considered independent pursuant to NI 52-110, Rule 10A-3 under the United States Securities and Exchange Act of 1934, as amended, and the rules of Nasdaq. The Company's board of directors has determined that Mr. Berger is an "audit committee financial expert" as defined in Item 16A of Form 20-F.

Management has adopted the internal control framework of the Committee of Sponsoring Organizations of the Treadway Commission *Internal Control – Integrated Framework* (2013).

The Company did not have any significant changes to its ICFR systems in the period from October 1, 2019 to December 31, 2019 that materially affected, or are reasonably likely to materially affect the Company's ICFR.

Limitations of Controls and Procedures

The Company's management, including the CEO and CFO, believe that any disclosure controls and procedures or internal controls over financial reporting, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, they cannot provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been prevented or detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by unauthorized override of the control. The design of any systems of controls is also 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. Accordingly, because of the inherent limitations in a cost effective control system, misstatements due to error or fraud may occur and not be detected.