

Management's Discussion and Analysis of Financial Condition and Operations

The following Management's Discussion and Analysis ("MD&A"), of Theralase® Technologies Inc. ("Theralase®" or the "Company") should be read in conjunction with the audited consolidated financial statements for the year ended December 31, 2021.

This MD&A has been filed in accordance with the provisions of National Instrument 51-102 (*Continuous Disclosure Obligations*). Additional information relating to the Company can be found on Sedar at www.sedar.com. This MD&A is prepared as of April 28, 2022.

The Company's common shares are listed for trading on the TSX Venture Exchange (**Symbol: TLT**) and trade on the OTCQB marketplace (**Symbol: TLTF**).

Forward Looking Statements

The information provided herein is intended to provide a general outline of the operations of the Company. This document contains certain forward-looking statements and information (collectively, "Forward-Looking Statements" or "FLS") within the meaning of applicable securities laws. FLS are statements and information that are not historical facts, but instead include financial projections and estimates; statements regarding plans, goals, objectives, intentions and expectations with respect to Theralase®'s future business, operations, research and development; including: anticipated timelines for the commencement or completion of certain activities, enrolment of patients in clinical studies or other information in future periods. FLS, which may be identified by words including, without limitation, "believe", "anticipate", "should", "could", "would", "estimate", "expect", "plan", "will", "intend", "may", "pending", "objective", "exploring", "potential", "project", "possible" and other similar expressions, and the negative of such expressions, are intended to provide information about management's current plans and expectations regarding future operations.

FLS in this MD&A include, but are not limited to, statements with respect to: future revenue projections, business initiatives and their timing; competitive environment; business strategic objectives; research, development and/or commercialization plans, acquisition and disposition of assets; preclinical and/or clinical studies: status, timing and/or strategies; supply and demand of products or services; ability to meet current and future financial obligations; ability to execute on business and/or growth strategies; management's assessment of business strategies and/or operations; the intention and/or ability to pay dividends on the common shares of the Company.

Readers are cautioned not to place undue reliance on FLS since there can be no assurance that the plans, intentions or expectations, upon which they are based will occur. By their nature, FLS involve numerous assumptions, known and unknown, risks and uncertainties, both general and specific, that contribute to the possibility that the predictions, forecasts, projections and other things contemplated by the FLS will not occur. Such FLS or information are based on a number of assumptions, which may prove to be incorrect, including those assumptions listed below and those discussed elsewhere in this MD&A. Some of the assumptions made by Theralase®, upon which such FLS are based, include; but are not limited to, assumptions about: the ability to continue as a going concern, the business operations continuing on a basis consistent with prior years; the ability to access financing from time to time on favourable terms, or at all; the continuation of executive management, operating management, key personnel or key consultants or the non-disruptive replacement of them on reasonable terms; the ability of Theralase® to maintain reasonably stable operating and general administrative expenses; current and future success of research, development, and/or commercialization initiatives; the ability to achieve development and/or commercialization milestones; market competition; the ability to secure all required regulatory, government and/or certification approvals; geographic protection over the intellectual property in the markets in which Theralase® does business; market acceptance and/or revenue generation of products under development; the stability of current economic and business conditions, the strength of the economy in Canada, the United States and elsewhere; currency, exchange and/or interest rates and commodity prices being reasonably stable at current rates.

FLS reflect current expectations of management regarding future events and operating performance as of the date of this MD&A. Such information: involves significant risks and uncertainties; should not be read as guarantees of future performance and/or results; and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors could cause actual results to differ materially from the results discussed in the FLS; including, but not limited to, the risks related to: limited operating history; working capital and capital resources; ability to retain key personnel; protection of intellectual property; competition; implementation delays; strategic alliances; trade secret protection; product deficiencies; dependence on third party suppliers; volatility of share price; regulatory risks; early stage of product development; reliance on third parties; clinical study risk; clinical study timing delays; patient enrolment; failure to achieve milestones; currency risk; material weakness in internal controls over financial reporting; credit risk; product liability, clinical study liability and patent-related rights of the United States government in Photo Dynamic Therapy ("PDT") technology. See "Risk and Uncertainties".

ALTHOUGH THE FLS CONTAINED IN THIS MD&A ARE BASED UPON WHAT THERALASE®'S MANAGEMENT BELIEVES TO BE REASONABLE ASSUMPTIONS, THERALASE® CANNOT ASSURE READERS THAT ACTUAL RESULTS WILL BE CONSISTENT WITH SUCH INFORMATION. FLS REFLECT MANAGEMENT'S CURRENT BELIEFS AND ARE BASED ON INFORMATION CURRENTLY AVAILABLE TO THERALASE®. READERS OF THIS MD&A ARE CAUTIONED NOT TO PLACE UNDUE RELIANCE ON THERALASE®'S FLS BECAUSE A NUMBER OF FACTORS, SUCH AS THOSE REFERRED TO IN THE PARAGRAPHS ABOVE, COULD CAUSE ACTUAL FUTURE RESULTS, CONDITIONS, ACTIONS OR EVENTS TO DIFFER MATERIALLY FROM THE TARGETS, EXPECTATIONS, ESTIMATES AND/OR INTENTIONS EXPRESSED IN THE FLS CONTAINED IN THIS MD&A. THE FLS ARE MADE AS OF THE DATE OF THIS MD&A AND THERALASE® ASSUMES NO OBLIGATION TO UPDATE OR REVISE SUCH INFORMATION TO REFLECT NEW EVENTS OR CIRCUMSTANCES, EXCEPT AS MAY BE REQUIRED BY APPLICABLE LAW.

Company Profile

Theralase® is a clinical stage pharmaceutical company dedicated to the research and development of light activated Photo Dynamic Compounds ("PDCs") and their associated drug formulations with a primary objective of efficacy and a secondary objective of safety in the destruction of various cancers, bacteria and viruses. The Company in its Anti-Cancer Therapy ("ACT") division conducts preclinical research and clinical development of the PDCs, primarily in the treatment of cancer, with assistance from its Cool Laser Therapy ("CLT") division to develop medical lasers to activate them. The Company in its CLT division designs, develops, manufactures and markets proprietary super-pulsed CLT technology indicated and cleared by Health Canada and the Food and Drug Administration ("FDA") for the treatment of chronic knee pain and when used off-label for treating numerous nerve, muscle and joint conditions.

Leadership Transition

Effective August 20, 2021, Shawn Shirazi, Chief Executive Officer (“CEO”), left the employ of the Company.

Effective August 23, 2021, John Trikola joined the Company in the capacity of Chief Operating Officer (“COO”) and interim CEO.

Effective October 25, 2021, Dr. Vera Madzarevic, Ph.D. assumed the role of Director of Clinical Development and Quality Assurance. Dr. Madzarevic holds a Ph.D. in both clinical pharmacology and biochemistry and brings over 25 years of global experience in clinical research and quality assurance in the biopharmaceutical and medical device industry to Theralase®.

Effective, November 15, 2021, Mr. Trikola agreed to resign from his positions as the COO and interim CEO of the Company, as a result of certain facts that came to the Company’s attention concerning Mr. Trikola’s background, that the Company’s vetting process failed to detect. The Company has taken steps to improve its vetting process for incoming officers and directors.

Effective November 15, 2021, Dr. Arkady Mandel, M.D., Ph.D., D.Sc., who is currently the Chief Scientific Officer (“CSO”) of the Company, assumed the role of interim CEO, replacing Mr. Trikola.

COVID-19 Pandemic

On March 11, 2020, the World Health Organization (“WHO”) declared the outbreak of a novel coronavirus (“COVID-19”) as a global pandemic, which continues to spread throughout Canada and around the world, through various waves and variants. As of the date of this MD&A, the Company is aware of significant changes in its business as a result of COVID-19, notably: the reduction and inability to retain personnel, personnel working remotely or virtually, significant delays in clinical research studies and significant delays / cancellations in customer purchasing decisions. Management is uncertain of the full extent of these impacts on its financial statements and believes that the business disruption caused by COVID-19 could be transient; however, there is uncertainty around its expected duration; hence, the potential impact on the business cannot be fully estimated as of the date of this MD&A.

Theralase® continues to experience variations in sales and the timing of these sales due to the ongoing COVID-19 pandemic and has taken actions to minimize expenses by eliminating non-essential personnel and imposing a temporary hiring freeze commencing in March 2020. The Company lifted the temporary hiring freeze in 4Q2021, now that the Canadian and United States (“US”) economies have started to demonstrate a sustainable business and economic recovery from COVID-19.

Theralase® continues to experience delays in patient enrollment and treatment rates in the Phase II Non-Muscle Invasive Bladder Cancer (“NMIBC”) clinical study due to the ongoing COVID-19 pandemic; however, these rates have improved as Canada and the US commence their recovery from the business and economic impacts of the COVID-19 pandemic.

Advancing the Theralase® Technology Platform

The Company’s primary focus is the ACT division, with strategic objectives of: preclinical research and clinical development of PDCs and the light and radiation systems that activate them, intended primarily for the destruction of various cancers, bacteria and viruses.

Theralase®’s patented lead study drug, TLD-1433, is currently under clinical investigation in Study II for the treatment of Bacillus Calmette Guérin (“BCG”)- Unresponsive Carcinoma In-Situ (“CIS”) NMIBC.

TLD-1433, has been demonstrated preclinically to bind with transferrin, a human glycoprotein, forming the Company named compound, Rutherrin®. Various cancer cells, in peer-reviewed publications, have demonstrated significantly more transferrin receptors versus healthy cells, allowing the deposition of the TLD-1433 payload inside the cancer cell, versus a healthy cell, through endocytosis. When light or radiation activated, TLD-1433 has been demonstrated to destroy cancer cells through the production of singlet oxygen and/or Reactive Oxygen Species (“ROS”), from the inside out, inducing oxidative stress, leading to Immunogenic Cell Death (“ICD”), known as apoptosis.

The ACT division is in the preclinical research and development of Rutherrin® intended to be utilized as an injectable form of TLD-1433, for the treatment of Glioblastoma Multiforme (“GBM”) and Non-Small Cell Lung Cancer (“NSCLC”).

There are no commercial and/or financial benefits of the ACT division for the Company at the present time, resulting in zero revenue, sales or commercial distribution of this technology.

Theralase® conducts its own research and development into the ACT technology, as well as enlisting the support of external scientific, research, regulatory and Clinical Research Organizations (“CROs”).

Phase Ib NMIBC Clinical Study

In 2018, Theralase® successfully completed a Phase Ib clinical study (“Study”) for BCG-Unresponsive patients diagnosed with NMIBC; whereby, patients were treated with a Study Drug (TLD-1433) and a Study Device (TLC-3200 Medical Laser System) (collectively the “Study Treatment”).

Under the Study, entitled “A Phase Ib Trial of Intravesical Photo Dynamic Therapy in Patients with NMIBC at High Risk of Progression, Who are Refractory to Therapy with Bacillus Calmette-Guérin and Who are Medically Unfit for or Refuse a Cystectomy”, treatment of patients commenced in March 2017. Three patients were treated at the Maximum Recommended Starting Dose (“MRSD”) (0.35 mg/cm²) and three patients were treated at the Therapeutic Dose (0.70 mg/cm²) of TLD-1433; whereby, both doses of the PDC were activated by laser light (520 nm, 90 J/cm²) delivered by the TLC-3200.

Theralase®’s Study successfully achieved the primary objective of safety and tolerability, secondary objective of pharmacokinetics and exploratory objective of efficacy. The Study results demonstrated a strong efficacy signal with a 67% Complete Response (“CR”) rate in the Therapeutic Dose group (0.70 mg/cm²) after only a single Study treatment, with patients five and six demonstrating a Complete Response (“CR”) (indicated by negative cystoscopy and negative urine cytology) with no presence, recurrence or progression of the disease at up to 24 months post treatment.

Based on the encouraging data from patients treated at the Therapeutic Dose, the Medical and Scientific Board (“MSAB”) unanimously recommended that the Company commence a registration Phase II NMIBC clinical study (“Study II”).

Phase II NMIBC Clinical Study (“Study II”)

Based on the recommendation of the MSAB, Theralase® designed Study II to utilize the Therapeutic Dose (0.70 mg/cm²) of TLD-1433 and focus on the treatment of approximately 100 to 125 BCG-Unresponsive NMIBC patients presenting with CIS alone or with recurrent Ta/T1 (non-invasive/resected papillary disease/tumour that invades the subepithelial connective tissue) disease within 12 months of completion of BCG therapy (BCG-Unresponsive) or who are intolerant to BCG therapy in approximately (“Study II”).

Study II was designed to enroll and treat patients in up to 15 Clinical Study Sites (“CSSs”) located in Canada and the US. To date, Theralase® has successfully launched 12 CSSs ; specifically, 5 CSSs in Canada and 7 CSSs in the US.

Study II (NCT03945162) is an ongoing, Phase II, open-label, single-arm, multi-center study conducted in Canada and the US evaluating the safety and efficacy of the Company’s study treatment.

Study II objectives:

Primary: Efficacy, evaluated by CR at any point in time in patients confirmed to have CIS with completely resected papillary disease (Ta / T1). CR is defined by at least one of the following:

- Negative cystoscopy and negative (including atypical) urine cytology
- Positive cystoscopy with biopsy-proven benign or low-grade NMIBC and negative cytology
- Negative cystoscopy with malignant urine cytology, if urothelial cancer is present in the upper tract or prostatic urethra and random bladder biopsies are negative

Secondary: Duration of CR at 12 months post initial CR.

Tertiary: Safety, evaluated by the incidence and severity of AEs, Grade 4 or higher that do not resolve within 450 days post treatment (Grade 1 = Mild, Grade 2 = Moderate, Grade 3 = Severe, Grade 4 = Life-threatening or disabling, Grade 5 = Death).

The Study Treatment consists of a Study Drug at the Therapeutic Dose (0.70 mg/cm²) (equivalent to 0.65 mg/cm² of active drug moiety) instilled into the patient’s bladder intravesically for approximately 60 minutes and subsequently activated by the Study Device (TLC-3200) to deliver an intended energy density of 90 J/cm² (approximately 60 to 180 minutes).

Patients will be asked to sign an Informed Consent Form (“ICF”), after which they will be evaluated according to Study II’s Clinical Protocol (inclusion and exclusion criteria) during the screening period, which may last up to 45 days, prior to primary Study Treatment. If successful, they will be enrolled into Study II. The enrolled patient will be administered a primary Study Treatment on Day 0 and a maintenance Study Treatment on Day 180. All patients enrolled and treated by the Study Treatment will be followed until the end of Study II, defined as completion of all required assessments after 15 months of follow-up post primary Study Treatment or earlier due to discontinuation or withdrawal of informed consent.

During the follow-up assessments, information on efficacy (i.e.: urine cytology, cystoscopy and where indicated Computerized Tomography (“CT”) scans and bladder and/or prostate biopsies) and safety (i.e.: AEs) will be collected. Primary assessments will be conducted on day 0, 7, 90, 180, 187, 270, 360 and 450.

In 2018, Health Canada granted the Company both a Clinical Trial Application (“CTA”) for the Study Drug (TLD-1433) and an Investigational Testing Authorization (“ITA”) for the Study Device (TLC-3200) to allow commencement of enrolling and treating patients in Study II.

As of April 28, 2022, Theralase® has the following CSSs open for patient enrollment and treatment:

Clinical Study Sites (Canada)	Location	Commenced
University Health Network (“UHN”)	Toronto, Ontario	April 25, 2019
McGill University Health Centre (“MUHC”)	Montreal, Quebec	July 30, 2019
London Health Sciences Centre (“LHSC”)	London, Ontario	October 7, 2019
Nova Scotia Health Authority (“NSHA”)	Halifax, Nova Scotia	February 25, 2020
University of British Columbia (“UBC”)	Vancouver, British Columbia	December 7, 2020
Clinical Study Sites (United States)	Location	Commenced
Virginia Urology (“VU”)	Richmond, Virginia	January 19, 2021
Urology Associates P.C. (“UAPC”)	Nashville, Tennessee	January 20, 2021
MidLantic Urology (“MLU”)	Bala Cynwyd, Pennsylvania	January 25, 2021
Carolina Urologic Research Center (“CURC”)	Myrtle Beach, South Carolina	January 27, 2021
University of Wisconsin-Madison (“UWM”)	Madison, Wisconsin	February 24, 2021
Urology San Antonio P. A. (“USAPA”)	San Antonio, Texas	March 25, 2021
University of Chicago (“UC”)	Chicago, Illinois	June 11, 2021

In 2020, the Company received FDA Investigational New Drug (“IND”) authorization (Study Drug and Study Device) to commence enrolling and treating patients in Study II in the United States. Theralase® has received study level approval through a central Institutional Review Board (“IRB”) to launch Study II in 7 US CSSs, subject to site level IRB approval.

Study II commenced in April 2019 with an estimated completion time of approximately 5 years and an estimated cost of approximately \$11 million. The timing and cost may vary significantly depending on numerous factors including; number of CSSs enrolling and treating patients, patient enrollment rates in total and at each CSS, patient compliance, successful achievement of Study II primary, secondary and tertiary objectives and the ability of participating CSSs to enroll and treat patients considering challenges caused by current COVID-19 pandemic restrictions.

Study II Clinical Study Site Update

As previously mentioned, patient enrollment and treatment rates have been significantly delayed due to the COVID-19 pandemic restrictions in place at various CSSs; however, they have improved as Canada and the US recover from the COVID-19 pandemic. Canadian CSSs placed themselves on temporary hold commencing March 20, 2020 and resumed normal operations between August 12, 2020 and September 24, 2020. Although Canadian CSSs recruiting activities were re-commenced in 4Q2020; patient recruitment and treatment activities have been significantly limited due to the second, third, fourth, fifth and sixth waves of COVID-19.

With the addition of 7 additional US-based CSSs in 1Q2021 and 2Q2021, Theralase® has increased patient enrollment and treatment activities and is hopeful this activity will continue throughout the remainder of Study II to help the Company achieve its strategic objectives.

To date, Theralase® has enrolled and treated 35 patients in Study II (including three patients from the Phase Ib NMIBC clinical study (“Study”) treated at the Therapeutic Dose) for a total of 38 patients.

Break Through Designation Update

In 2020, the FDA granted Theralase® Fast Track Designation (“FTD”) for Study II. As a Fast Track designee, Theralase® has access to early and frequent communications with the FDA to discuss Theralase®’s development plans and ensure the timely collection of clinical data to support the approval process. The accelerated communication with the FDA potentially allows, the Study Treatment, to be the first intravesical, patient-specific, light-activated, Ruthenium-based PDC for the treatment of patients diagnosed with BCG-Unresponsive NMIBC CIS, with or without papillary Ta or T1 tumors. FTD can also lead to Break Through Designation (“BTD”), Accelerated Approval (“AA”) and/or Priority Review, if certain criteria are met, which the FDA has previously defined to the Company for BTD as a complete clinical dataset on approximately 20 to 25 patients enrolled, treated and followed-up, who demonstrate significant safety and efficacy clinical outcomes.

In 2021, Theralase® completed its first significant milestone of Study II by enrolling and treating 25 patients. The Company will compile a clinical data report for submission to the FDA in support of the grant of a BTD approval after completion of the 450 assessments for 25 patients, expected in 4Q2022, subject to the CSSs availability to complete all required assessments.

Study II Preliminary Clinical Data

To date, Study II has provided the primary study treatment for 35 patients (including three patients from the Phase Ib NMIBC Clinical Study treated at the Therapeutic Dose (2-CR and 1- NR at 90, 180, 270, 360, 450 days, respectively)) for a total of 38 patients, providing the following interim results:

Assessment	Patient Assessment Visit				
	90	180	270	360	450
Complete Response ("CR")	17	14	9	5	5
Partial Response ("PR")	6	6	2	3	2
Pending	3	8	15	17	17
No Response ("NR")	12	10	12	13	14
Patients Treated	38	38	38	38	38

The Company implemented a Study Treatment optimization, as communicated via press release on July 30, 2020, specifically:

- a) Bladder volume calculation
- b) Study drug volume calculation
- c) Study device volume calculation
- d) Study device treatment time

which occurred in patients enrolled and treated by the CSSs, for either the primary or maintenance Study Treatment on or after August 1, 2020, providing the following interim results:

Assessment - Optimized Treatment (Post August 1, 2020)	Patient Assessment Visit				
	90	180	270	360	450
Complete Response ("CR")	11	9	4	1	1
Partial Response ("PR")	4	4	1	2	1
Pending	3	8	15	17	17
No Response ("NR")	5	4	5	5	6
Patients Treated	23	25	25	25	25

A further analysis of the Study II **Evaluable Patient** clinical data (with 3 patients from Study Ib) supports the following interim conclusions:

Note: Evaluable Patients are defined as patients who have evaluable data; hence, have been evaluated by the principal investigator and thus excludes patients who have clinical data pending.

Total Evaluable Patient population (all patients): CR for and Potential CR for the evaluable patient population (assuming PR patients are clinically determined to be CR at a later assessment date):

Patient Assessment Visit	Evaluable Patients	Complete Response ("CR")	Partial Response ("PR")	Total Response (CR + PR)
90 Days	35	49%	17%	66%
180 Days	30	47%	20%	67%
270 Days	23	39%	9%	48%
360 Days	21	24%	14%	38%
450 Days	21	24%	10%	34%

Total Evaluable Patient population (patients who received the optimized study treatment only): CR for and Potential CR for the evaluable patient population (assuming PR and patients are clinically determined to be CR at a later assessment date):

Patient Assessment Visit	Evaluable Patients	Complete Response ("CR")	Partial Response ("PR")	Total Response (CR + PR)
90 Days	20	55%	20%	75%
180 Days	17	53%	24%	76%
270 Days	10	40%	10%	50%
360 Days	8	13%	25%	38%
450 Days	8	13%	13%	25%

Note: For evaluable patients, who completed Study II, who achieved a CR at 90 days, 78% continue to demonstrate that CR at 180 and 270 days, while 56% continue to demonstrate that CR at 360 and 450 days.

In accordance with the FDA's 2018 guidelines to industry, the patients who have achieved a Partial Response ("PR") are being further assessed via Computerized Tomography ("CT") scan and/or biopsy of the prostatic urethra to determine if upper tract Urothelial Cell Carcinoma ("UCC") or prostatic urethra UCC can be detected to allow these patients to be re-categorized as CR.

Note: The current interim analysis presented above, should be read with caution, as the reported clinical data is extremely interim in its presentation, as Study II is still ongoing and new clinical data collected may or may not continue to support the current trends.

Note: The data analysis is only a representation of the data accrued to date and does not intend to represent a tendency or portray any conclusion as to the effectiveness, duration or safety of the investigational treatment.

Serious Adverse Events

For 38 patients treated in Study II, there have been 7 Serious Adverse Events ("SAEs") reported:

- 1 – Grade 2 (resolved within 1 day)
- 3 – Grade 3 (resolved within 5, 80 and 107 days, respectively)
- 2 – Grade 4 (resolved within 6 and 8 days, respectively)
- 1 – Grade 5

Theralase® believes all SAEs reported to date are unrelated to the Study Drug or Study Device, subject to final review and confirmation by the independent Data Safety Monitoring Board ("DSMB").

SAE is defined as any untoward medical occurrence that at any dose: Is life-threatening, requires inpatient hospitalization or prolongation of existing hospitalization, results in persistent or significant disability/incapacity, or is a congenital anomaly/birth defect or results in death.

Additional Oncology Targets:

Theralase® has been granted international patents supporting a comprehensive Intellectual Property (“IP”) platform of its PDCs, through the scientific and preclinical research and development of fine-tuning the photophysical and photochemical properties of the PDCs, which demonstrate both Type I (oxygen independent) and Type II (oxygen dependent) photoreactions and activation in hypoxia.

By combining these PDCs with transferrin (human glycoprotein), as a delivery system it has been preclinically demonstrated that transferrin is able to significantly:

- Increase the resistance of TLD-1433, the lead drug candidate, to photobleaching (loss of potency of the PDC over time)
- Increase ROS production (ability to destroy cancer cells quickly and effectively)
- Increase selective tumour uptake (destruction of cancer cells, while sparing healthy cells) through the Transferrin Receptor (“TfR”)
- Increase anti-cancer efficacy (efficiency in cancer cell destruction)
- Decrease systemic toxicity (damage to healthy cells and/or organs)

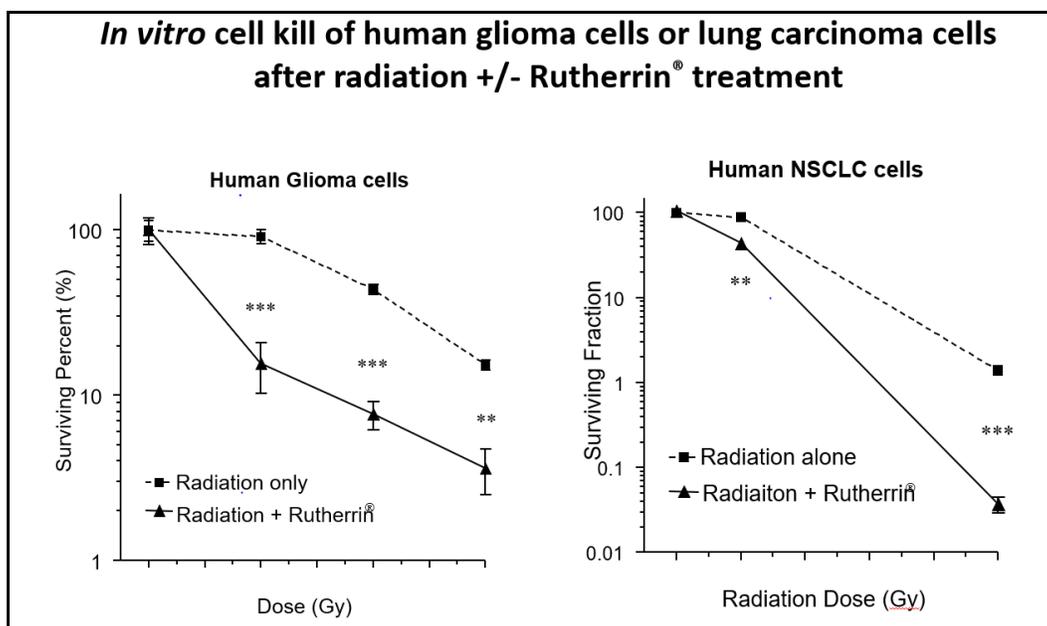
This allows Rutherrin® (TLD-1433 + transferrin) to be a strong candidate for the systemic treatment of recurrent, deep seated and/or progressive cancers. The Company continues to conduct extensive scientific and preclinical research and development towards new oncology indications and has developed significant expertise and IP assets regarding its patented PDCs, in pursuit of this goal.

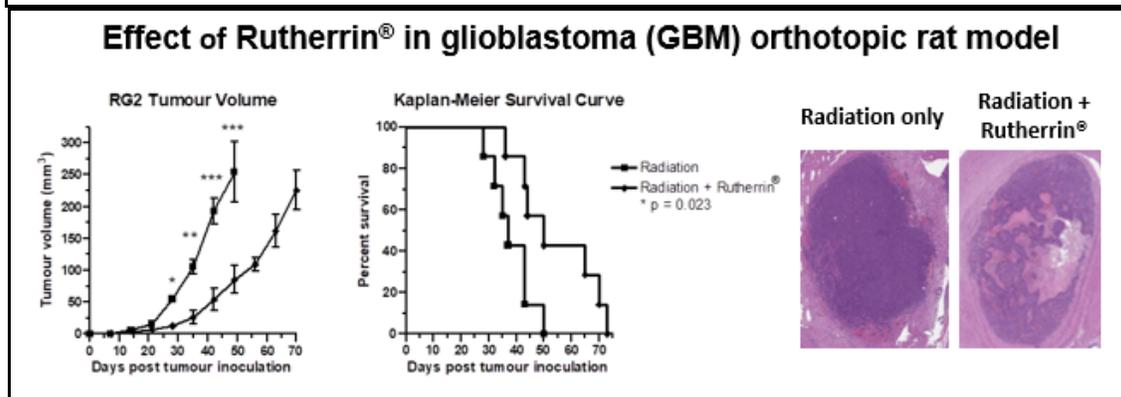
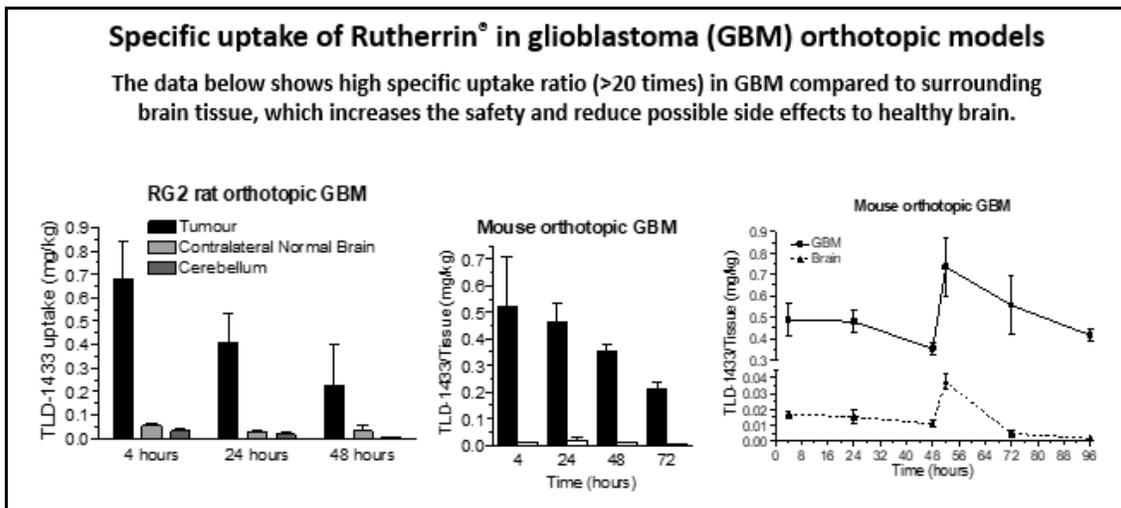
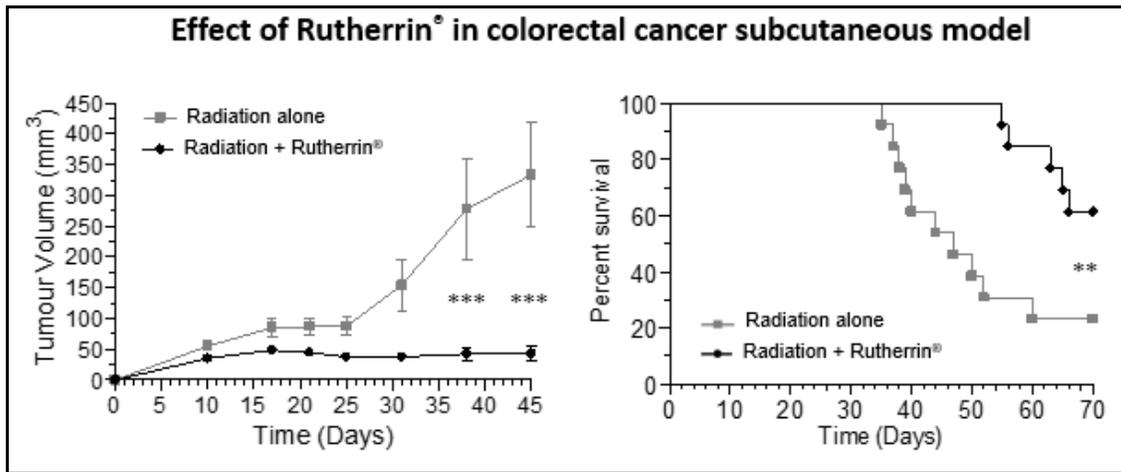
Due to the limitations of using laser light to activate Rutherrin® in deep oncological targets, Theralase®’s research strongly suggests that Rutherrin® may be activated with radiation therapy, which is able to increase the ‘tumor’s damage zone’ and the effectiveness of Theralase®’s ACT therapy beyond the reach of light in the body.

Radiotherapy (“RT”) is one of the primary treatment methodologies for many types of cancer, although it is currently a challenge to enhance radiation damage to tumor tissue, while reducing side effects to healthy tissue.

Rutherrin® is a unique agent that offers the ability to enhance injury to tumor tissue by accelerating damage through the production of free radicals; thereby, acting as a radio enhancer. Several preclinical strategies have been investigated by Theralase’s scientists to research, develop, optimize and advance highly selective and effective radio sensitizing properties of Rutherrin®. Below, we highlight recent progress on the current research and development initiatives utilizing Rutherrin®, in several *in vitro* and *in vivo* models is reported.

Rutherrin® activation via RT is preferential to light activation due to the much deeper tissue penetration of RT.





Further research and development is currently underway into the mechanisms of action of Rutherrin®, its multidisciplinary applications, delivery methodologies, safety and efficacy.

Once Rutherrin®'s Maximum Tolerated Dose (“MTD”) and hence Human Equivalent Dose (“HED”) limits have been determined through non-Good Laboratory Practices (“GLP”) and GLP toxicology studies, Theralase® plans to inject Rutherrin® systemically into patients via a Phase Ib clinical study, to allow localization to various cancer cells, including GBM and NSCLC and then activate Rutherrin® with radiation with the intent of safely and effectively destroying the cancer of interest.

Rutherrin®, if proven successful, would thus be able to “hunt” and “localize” into cancer cells and when activated by radiation “destroy” them; wherever, they may reside in the body.

Additional Virus Targets*

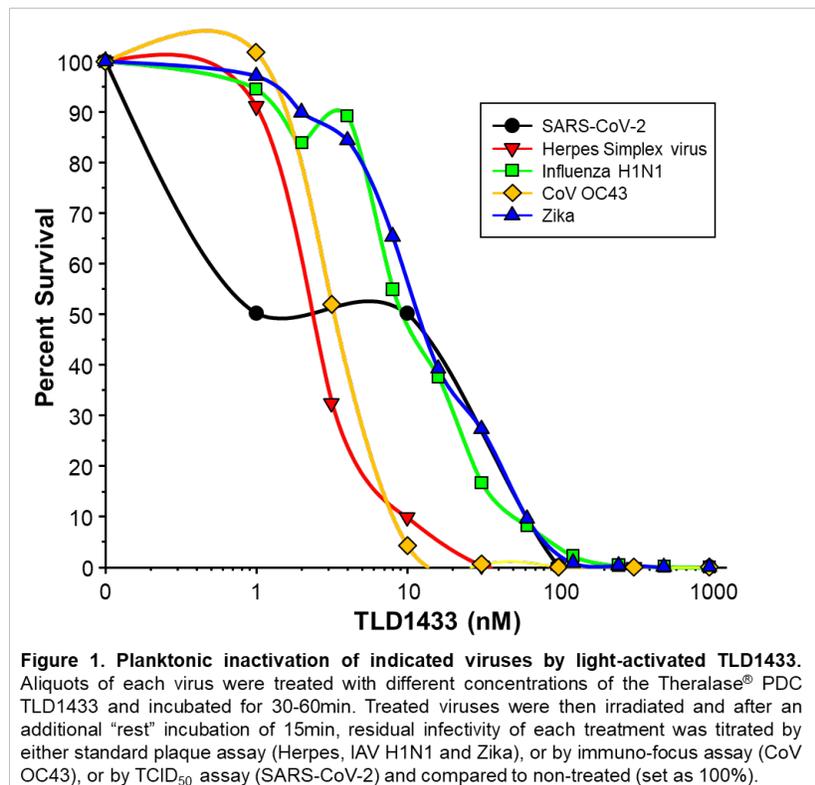
Theralase® executed a Sponsored Research Agreement (“SRA”) with the University of Manitoba (“UM”) Medical Microbiology department in 3Q2020 to commence development of a coronavirus vaccine utilizing Theralase®’s patented and proprietary PDCs. The primary objective of the SRA was to investigate the efficacy of Theralase®’s lead PDC to destroy a variety of viruses; including: H1N1 Influenza, Zika and coronaviruses (Biological Safety Level (“BSL”) 2). The secondary objective was to optimize the concentration of PDC required, the activation methodology and how to potentially administer the treatment to humans to be used as a vaccine (prevention of a patient from contracting COVID-19) (BSL-3).

The Company’s PDC technology was effective in the destruction of H1N1 Influenza and Zika viruses at low nanomolar concentrations and the research and development was expanded to include coronavirus (BSL-2).

Note: COVID-19 is caused by coronavirus (BSL-3), not coronavirus (BSL-2).

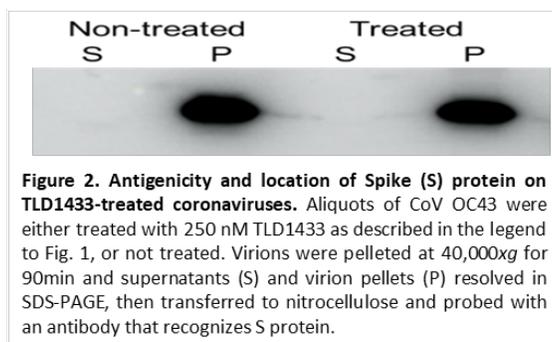
A rapid test was established to measure coronavirus destruction and using this new assay the Theralase® PDC technology was able to destroy coronavirus (BSL-2) with drug doses 5 times lower than what was used to kill H1N1 Influenza and Zika viruses. These drug doses are significantly lower than those used by the Company to treat cancers and are therefore considered safe for human use.

All coronaviruses are highly similar in their structure and these new results suggest that Theralase®’s proposed vaccine could be highly effective against the SARS-CoV-2 virus responsible for COVID-19. Further studies have shown that the human coronavirus (“CoV”) appears to be much more sensitive to the action of the activated Theralase® PDC vaccine, with a dose as low of 3.3 nM required to inactivate 50%, whereas; 9.2 nM was required to inactivate the same amount of H1N1 Influenza virus and 12 nM was required to inactivate the same amount of Zika virus. The amount of PDC required to inactivate 99.9% of each virus are 61 nM for CoV, 322 nM for Zika virus and 497 nM for H1N1 Influenza virus, respectively; thus, the Theralase® PDC is 3 to 5 times more effective against CoV compared to the other tested viruses.



The Theralase® compound is also effective without activation, but on average, its activation results in a 4.2 fold increase in Zika virus inactivation, a 12 fold increase in H1N1 Influenza inactivation and an 18.7 fold increase in CoV inactivation.

Further research by UM also identified that the spike protein responsible for the transmission of a coronavirus into a host cell, remained intact after light-activated TLD-1433 inactivation, suggesting that the vaccine developed by this technology could potentially stimulate a protective antibody immune response in a mammalian host.



In April 2021, Theralase® executed a Collaborative Research Agreement (“CRA”) with the National Microbiology Laboratory, Public Health Agency of Canada (“PHAC”) for the research and development of a Canadian-based SARS-CoV-2 (“COVID-19”) vaccine. Under the terms of the agreement, Theralase® and PHAC are collaborating on the development and optimization of a COVID-19 vaccine by treating the SARS-CoV-2 virus grown on cell lines with Theralase®’s patented PDC and then light activating it with Theralase®’s proprietary TLC-3000A light technology to inactivate the virus and create the fundamental building blocks of a COVID-19 vaccine. This inactivated virus could then be purified and used to inoculate naive animals, followed by challenge with the SARS-CoV-2 virus, to ascertain the efficacy of the vaccine. The project is entitled, “Photo Dynamic Compound Inactivation of SARS-CoV-2 Vaccine” and commenced in mid-April 2021.

In February, 2022 Theralase® reported that PHAC had demonstrated that light-activated TLD-1433, was effective in rapidly inactivating the SARS-CoV-2 virus by up to 99.99%, compared to control in an in vitro study. Further research is required to confirm these findings.

These results have now laid the groundwork for the next phase of the CRA, which is evaluating the Theralase® COVID-19 vaccine in the ability to prevent animals from contracting COVID-19, when exposed to the virus, which is expected to commence in 2Q2022 and be completed by 4Q2022.

Note: The Company does not claim or profess that they have the ability to treat, cure or prevent the contraction of the COVID-19 coronavirus.

ACT Research Centre

In April 2021, the Company launched the Theralase® Anti-Cancer Therapy (“ACT”) research center located within the Li Ka Shing Knowledge Institute of St. Michael’s Hospital, Unity Health Toronto, relocating its research team from University Health Network (“UHN”).

The ACT research center is a fully equipped laboratory dedicated exclusively to Theralase® ACT research and development, as Theralase® advances towards commercialization with its lead PDC, TLD-1433, as well as its systemic and targeted formulation – Rutherrin®.

Intellectual Property Portfolio Growth

Theralase® received the following decisions to grant a patent in 2021:

Country	Patent Title
China	Apparatus and Method for Multiwavelength Photo Dynamic Therapy
India	Metal-Glycoprotein Complexes and Their use as Chemotherapeutic Compounds
India	Metal-Based Coordination Complexes as Photodynamic Compounds and their Use
Russia	Metal-Glycoprotein Complexes and Their use as Chemotherapeutic Compounds
Europe	Metal-Glycoprotein Complexes and Their use as Chemotherapeutic Compounds
Canada	Metal-Based Coordination Complexes as Photodynamic Compounds and their Use

Apparatus and Method for Multiwavelength Photo Dynamic Therapy

This patent allows the treatment of new oncological applications, including targeting cancers that are able to be reached through an orifice in the body, but are too deep in tissue to have the instilled PDC adequately activated by low wavelength visible laser light, for example, esophageal cancer. The multiwavelength PDT system advances the clinical utility of Photo Dynamic Therapy (“PDT”) by expanding the volume of tissue able to be treated. By using various laser light sources to activate the PDCs at differing depths in the target tissue simultaneously or sequentially, Theralase® may be able to significantly increase the overall destruction of the cancerous tissue.

Metal-Glycoprotein Complexes and Their use as Chemotherapeutic Compounds

This patent is critical to providing IP protection of Theralase®’s systemic and targeted ACT, which allow PDCs and their associated drug formulations to be systemically injected to “hunt” and “localize” into cancer cells of interest for various cancer conditions and effectively “destroy” them when activated by laser light or radiation, safely and effectively.

Metal-Based Coordination Complexes as Photodynamic Compounds and their Use.

This invention relates to metal-based coordination complexes that are useful as therapeutic and diagnostic agents. The invention further relates to photodynamic compounds that can be activated with Ultra Violet (“UV”) to Near Infrared Light (“NIR”), that are useful as therapeutic and diagnostic agents. In particular, the invention provides tunable metal-based PDCs that are coordination complexes derived from organic ligands. The PDCs can be activated by light to destroy unwanted cells, for example hyperproliferative cells and microbial cells. The PDCs can also be activated by light to destroy viruses.

Theralase® received the following trademarks in 2021:

Country	Trademark
China	Rutherrin®

Research Publications

Theralase® published the following research publications in 3Q2021:

Optimizing Interstitial Photodynamic Therapy Planning with Reinforcement Learning-Based Diffuser Placement (Peer reviewed and published on ResearchGate.net)

ResearchGate is a professional network for scientists and researchers used to share, discover, and discuss research.

Interstitial Photo Dynamic Therapy (“iPDT”) has shown promising results recently as a minimally invasive stand-alone or intraoperative cancer treatment. The development of non-toxic photosensitizing drugs with improved target selectivity has increased its efficacy; however, personalized treatment planning that determines the number of photon emitters, their positions and their input powers while taking into account tissue anatomy and treatment response are lacking to further improve outcomes. New algorithms that generate high-quality plans by optimizing over the light source positions, along with their powers, to minimize the damage to organs-at-risk while eradicating the tumor were developed by using simulated-annealing as a baseline algorithm to place the sources. Algorithms were simulated on virtual brain tumors modeling real glioblastoma multiforme cases, assuming a 5-ALA PPIX induced photosensitizer that is activated at 635 nm wavelength. The algorithm generated plans that achieved an average of 46% less damage to organs-as-risk compared to the manual placement used in current clinical studies. Having a general and high-quality planning system makes iPDT more effective and applicable to a wider variety of oncological indications paving the way for more clinical trials.

This work was supported by Ontario Research Fund, Theralase®, Intel Inc. and International Business Machines (“IBM”).

Overview of Financial Performance

During the year ended December 31, 2021, the Company's financial performance and its operating results reflect the continued investment by the Company into its future prosperity through the research, development, preclinical and clinical initiatives culminating in the successful completion of the Phase Ib NMIBC clinical study and the launch of Study II.

Summary of Selected Audited Annual Information

(Canadian Dollars)

For the twelve-month periods ended December 31:

	2021	2020
Total revenues	\$ 780,641	\$ 929,122
Net loss	(4,411,061)	(5,598,540)
Basic and diluted loss per share	\$ (0.022)	\$ (0.027)
Total assets	\$ 5,944,986	\$ 10,020,782
Total liabilities	874,794	857,133
Deficit	(53,092,298)	(48,506,467)
Shareholders' Equity	\$ 5,070,192	\$ 9,163,649

Summary of Quarterly Results

(Canadian Dollars)

	2021			
	March 31	June 30	September 30	December 31
For the period ending:				
Total revenues	\$ 124,783	\$ 305,216	\$ 136,813	\$ 213,829
Net loss	(919,093)	(1,143,185)	(1,067,453)	(1,281,330)
Basic and diluted loss per share	(0.004)	(0.006)	(0.005)	(0.007)
As at:	March 31	June 30	September 30	December 31
Total assets	9,114,958	8,182,765	\$ 7,127,202	\$ 5,944,986
Total liabilities	756,842	861,848	822,071	874,794
Deficit	(49,600,330)	(50,743,513)	(51,810,968)	(53,092,298)
Shareholders' Equity	8,358,116	7,320,917	6,305,131	\$ 5,070,192
	2020			
	March 31	June 30	September 30	December 31
For the period ending:				
Total revenues	\$ 111,543	\$ 181,910	\$ 234,021	\$ 401,648
Net loss	(1,643,856)	(1,623,770)	(1,448,147)	(882,767)
Basic and diluted loss per share	\$ (0.008)	\$ (0.008)	\$ (0.007)	\$ (0.004)
As at:	March 31	June 30	September 30	December 31
Total assets	\$ 13,755,006	\$ 11,965,651	\$ 10,803,457	\$ 10,020,782
Total liabilities	1,279,104	867,009	944,419	857,133
Deficit	(44,296,010)	(46,107,474)	(47,623,698)	(48,506,467)
Shareholders' Equity	\$ 12,475,902	\$ 11,098,642	\$ 10,803,457	\$ 9,163,649

For the three-month period ended December 31, 2021, total revenue decreased to \$213,829 from \$401,648 for the same period in 2020, a 47% decrease. The decrease in revenues is primarily attributed to the COVID-19 pandemic.

Cost of sales for the three-month period ended December 31, 2021 was \$153,501 (72% of revenue) resulting in a gross margin of \$60,528 or 28% of revenue compared to a cost of sales of \$275,452 (69% of revenue) resulting in a gross margin of \$126,196 (31% of revenue). The cost of sales increase, year over year, is attributed to a write-down of obsolete inventory of \$54,911 (2020 - \$19,557) and decreased revenues, while fixed costs remained constant.

Selling and marketing expenses for the three-month period ended December 31, 2021 decreased to \$92,178 or 43% of sales, from \$114,019 or 28% of sales in 2020, a 19% decrease. Selling and marketing expenses decreased year over year, due to a decrease in marketing personnel and decreased spending in advertising and travel due to the COVID-19 pandemic.

Administrative expenses for the three-month period ended December 31, 2021 were \$351,033 representing a 36% decrease from \$458,082 in 2020.

The decreases in administrative expenses are attributed to the following:

- Administrative salaries decreased by 38%, as a result of decreases in administrative personnel due to the COVID-19 pandemic.
- Stock based compensation decreased by 78%, as no options were granted in 2021.

Net research and development expenses totaled \$888,318 for the three-month period ended December 31, 2021 compared to \$358,319 in 2020, a 148% increase. Research and development expenses increased primarily due to increased expenses for conducting a Phase II NMIBC clinical study sites commenced patient enrollment and treatment in 2021.

Liquidity and Capital Resources

As of December 31, 2021, current assets aggregated \$4,998,090 compared with current liabilities of \$874,974 netting working capital of \$4,123,296 and a current ratio (current assets versus current liabilities) of approximately 6:1.

The Company's objective is to maintain a sufficient capital base to support future research, development and strategic business initiatives allowing the Company to invest in its future and maintain investor, creditor and market confidence. The capital structure of the Company consists of cash, cash equivalents and shareholders' equity.

Sales of the TLC-2000, the Company's existing product line, have not been sufficient to enable the Company to fund its continuing research, development and commercialization efforts.

The Company's ability to continue as a going concern is dependent upon achieving a profitable level of operations and/or obtaining additional financing, neither of which is assured. The Company has successfully raised capital through previous equity offerings; however, there is no guarantee that the Company will be able to raise additional capital on terms and conditions agreeable to the Company, or at all.

On August 22, 2019, the Company closed a public offering of Units for gross proceeds of \$17,250,000.

As of December 31, 2021, the Company has cash and cash equivalents of \$3,691,659 and as a result the Company believes that it will be able to continue as a going concern for at least 12 months from the date of these audited consolidated financial statements.

Results of Operations

For the twelve-month period ended December 31, 2021, total revenue decreased to \$780,641 from \$929,122 for the same period in 2020, a 16% decrease.

	<u>2021</u>	<u>2020</u>
Sales Revenue	\$ 671,637	\$ 828,287
Service Revenue	90,778	82,586
Other Revenue	18,226	18,249
	<u>\$ 780,641</u>	<u>\$ 929,122</u>

The TLC-2000 represented 62% of sales for the year ended December 31, 2021 and 52% of sales for the same period in 2020.

In Canada, revenue decreased 14% to \$697,727 in 2021 from \$815,159 in 2020. In the US, revenue decreased 21% to \$69,725 in 2021 from \$87,923 in 2020. International sales decreased 49% to \$13,189 from \$26,040 in 2020.

The decrease in total revenue in 2021 is primarily attributed to the slower than anticipated Canadian and US economic recovery from the COVID-19 pandemic in 2021.

Cost of Sales

Cost of sales for the year ended December 31, 2021 was \$470,698 or 60% of revenue resulting in a gross margin of \$309,943 or 40% of revenue. In comparison, the cost of sales in 2020 was \$659,442 or 71% of revenue resulting in a gross margin of \$269,680 or 29% of revenue. Cost of sales is represented by the following costs: raw materials, subcontracting, direct and indirect labour and the applicable share of manufacturing overhead.

The gross margin increase, as a percentage of sales, year over year, is primarily attributed to a decrease in labour and material costs, and an inventory write-off of \$7,000 in 2021 versus \$99,000 in 2020.

Operating Expenses

For the year ended December 31, 2021, selling expenses decreased to \$363,886, from \$447,882 in 2020, a 19% decrease and consisted of the following items:

	2021	2020
Sales salaries	\$ 238,652	\$ 260,286
Advertising	47,998	84,106
Commission	36,027	43,665
Travel	12,801	10,637
Stock based compensation	351	1,328
Amortization and depreciation allocation	28,057	47,860
Total selling expenses	\$ 363,886	\$ 447,882

The decrease in selling expenses is primarily attributed to the COVID-19 pandemic, resulting in reduced advertising (43%), commissions (17%) and salaries (8%).

Administrative expenses for the year ended December 31, 2021, decreased to \$1,562,867 from \$2,070,261 in 2020, a 25% decrease and consisted of the following items:

	2021	2020
Insurance	\$ 51,448	\$ 43,087
Professional fees	463,199	482,138
Rent	39,549	39,967
General and administrative expenses	214,035	269,762
Administrative salaries	495,982	476,608
Settlement	-	85,000
Director and advisory fees	44,163	69,887
Stock based compensation	205,390	556,057
Amortization and depreciation allocation	49,101	47,755
Total administrative expenses	\$ 1,562,867	\$ 2,070,261

The decrease in administrative expenses is primarily attributed to decreased spending on director and advisory fees (37%) and general and administrative expenses (21%).

Stock based compensation expense decreased 63% in 2021 due to a reduction in stock options granted.

Research and Development Expense

Net research and development expenses for the year ended December 31, 2021, decreased to \$2,924,733 from \$3,448,243 in 2020, a 15% decrease, and consisted of the following items:

	2021	2020
Research and development (net of investment tax credit)	\$ 2,642,430	\$ 2,951,008
Stock based compensation	112,613	354,647
Amortization and depreciation allocation	169,690	142,588
Total research and development expenses	\$ 2,924,733	\$ 3,448,243

The decrease in research and development expenses for the year ended December 31, 2021, is primarily attributed to the significant delay in patient enrollment and treatment in Study II due to the COVID-19 pandemic. Research and development expenses represented 62% of the Company's operating expenses and represents investment into the research and development of the Company's ACT technology.

Net Profit (Loss)

The net loss for the year ended December 31, 2021 was \$4,411,061 which included \$618,586 of net non-cash expenses (i.e.: amortization, stock-based compensation expense and foreign exchange gain/loss). This compared to a net loss in 2020 of \$5,598,540 which included \$1,202,017 of net non-cash expenses. The ACT division represented \$3,426,488 of this loss (78%) for the year ended December 31, 2021.

The decrease in net loss is primarily attributed to the following:

- 1) Significant delay in patient enrollment and treatment due to the COVID-19 pandemic, resulting in decreased research and development expenses in Study II.
- 2) Decreased salaries due to the COVID-19 pandemic, resulting in the resignation or termination of certain non-essential administrative, research and production personnel.

Cash Flows

Funds used in operating activities, prior to net changes in other operating items, amounted to \$3,792,475 for the year ended December 31, 2021, compared to funds used in operating activities of \$4,396,523, in 2020.

Funds used in operating activities, after taking into account net changes in other non-cash operating items were \$4,030,391 for the year ended 2021, compared to funds used of \$4,446,166 for the same period in 2020. The decrease is a result of decreased research and development expenses in Study II and reduced administrative, research and production salaries due to the COVID-19 pandemic.

Funds used in investing for the year ended December 31, 2021, amounted to \$100,824 compared to \$164,576 for 2020. The decrease is primarily attributed to decreased spending on equipment related to Study II.

Funds used in financing activities amounted to \$57,369 for the year ended December 31, 2021, compared to \$57,565 for 2020.

Assets (other than Cash)

The Company holds essential and valuable intellectual property rights and assets; including: patents, trademarks, development and other related costs.

Commitments

As of December 31, 2021, the Company's commitments consisted of the following:

	Total	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Research Commitments (a)	\$ 24,969	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Research Agreement (b)	296,773	209,473	8,800	8,800	8,800	8,800	8,800	8,800	8,800	8,800	8,800	8,100
Research Agreement (c)	718,114	718,114	-	-	-	-	-	-	-	-	-	-
Total	\$ 1,039,856	\$ 927,587	\$ 8,800	\$ 8,100								

- a) Commitments under a research agreement with a Trial Management Organization for the TLC-3000 cancer therapy project. Under the terms of this agreement, the Company is required to pay \$126,324 (\$ USD 96,800) for the period from July 23,

2019 through to December 31, 2022. The Company has paid \$101,355 (\$ USD 76,400) relating to this commitment, of which \$24,969 (\$ USD 20,400) is the remaining commitment.

- b) Research Commitments under a research agreement with a Drug Manufacturer for the TLC-3000 cancer therapy project. Under the terms of this agreement, the Company is required to pay \$474,500 for the period from April 29, 2021 through to November 15, 2032. The Company has paid \$177,727 relating to this commitment, of which \$296,773 is the remaining commitment.
- c) Research Commitments under a research agreement with a Contract Development and Manufacturing Organization for the TLC-3000 cancer therapy project. Under the terms of this agreement, the Company is required to pay \$1,351,918 (\$ USD 1,079,865) for the period from April 29, 2021 through to April 29, 2022. The Company has paid \$633,804 (\$ USD 513,440) relating to this commitment, of which \$718,114 (\$ USD 566,425) is the remaining commitment.

The Company indemnifies its directors and officers against any and all costs, charges and expenses, including settlement of claims in respect of any civil, criminal or administrative action incurred in the performance of their service to the Company to the extent permitted by law. The Company maintains liability insurance for its officers and directors.

Lease Liabilities and Right-of-Use-Assets

	Property	Office Equipment	Total
Right-of-use Assets			
Balance at January 1, 2020	\$ 136,018	\$ 5,229	\$ 141,247
Depreciation charge for the year	49,461	1,793	51,254
Balance at December 31, 2020	\$ 86,557	\$ 3,436	\$ 89,993
Balance at January 1, 2021	\$ 86,557	\$ 3,436	\$ 89,993
Depreciation charge for the year	49,460	1,793	51,254
Balance at December 31, 2021	\$ 37,097	\$ 1,643	\$ 38,739
Lease Liabilities			
Balance at January 1, 2020	\$ 139,309	\$ 5,313	\$ 144,622
Interest charge for the year	9,321	360	9,680
Lease payments for the year ¹	(59,800)	(2,160)	(61,960)
Balance at December 31, 2020	\$ 88,830	\$ 3,513	\$ 92,343
Balance at January 1, 2021	\$ 88,830	\$ 3,513	\$ 92,343
Interest charge for the year	5,131	211	5,342
Lease payments for the year ¹	(59,800)	(2,161)	(61,961)
Balance at December 31, 2021	\$ 34,161	\$ 1,563	\$ 35,724

1) Lease payments are discounted using an incremental borrowing rate of 8%.

2) Lease payments does not include variable property lease payments of \$39,549 (2020 - \$39,997).

	As at December 31, 2021			As at December 30, 2020		
	Property	Office Equipment	Total	Property	Office Equipment	Total
Current portion of lease liabilities	\$ 34,161	\$ 1,563	\$ 35,724	\$ 54,669	\$ 1,950	\$ 56,619
Non-current portion of lease liabilities	-	-	-	34,161	1,563	35,724
	\$ 34,161	\$ 1,563	\$ 35,724	\$ 88,830	\$ 3,513	\$ 92,343

Principal repayments of the Company's leased premises and office equipment until maturity are as follows:

	Property	Office Equipment	Total
2022	34,161	1,563	35,724
	\$ 34,161	\$ 1,563	\$ 35,724

Share Capital Analysis

As of April 28, 2022, the share capital of the Company consisted of 204,425,875 common shares. Each common share entitles the holder to one vote per share.

As of April 28, 2022, there were 13,460,000 options outstanding, of which 9,900,000 were vested and exercisable into an equivalent number of the Company's common shares.

As of April 28, 2022, there were 67,768,165 warrants outstanding. Each whole warrant entitles the holder thereof to purchase one additional common share. The warrants are exercisable as follows: 3,009,000 at a price of \$0.30 until May 14, 2022 3,165,008 at a price of \$0.50 until October 3, 2022, 4,095,157 at a price of \$0.50 until January 9, 2023, and 57,499,000 at a price of \$0.35 until August 22, 2024.

As of April 28, 2022, there were 2,023,077 broker compensation units that were issued in connection with the August 22, 2019 public offering. Each broker compensation unit entitles the holder thereof to acquire one common share and one common share purchase warrant at a price of \$0.35 per unit until August 22, 2024.

Segmented Information

For management purposes, the Company is organized into two separate reportable operating divisions; the Anti-Cancer Therapy ("ACT") division and the Cool Laser Therapy ("CLT") division. The ACT division is responsible for the research and development of PDCs primarily for the treatment of cancer with assistance from the CLT division to develop medical lasers to activate them. The CLT division is responsible for the Company's medical laser business, which researches, develops, manufactures and distributes CLT systems to healthcare practitioners predominantly for the healing of pain.

The following table displays revenue and direct expenses from the ACT and CLT division for the year ended December 31:

	2021			2020		
	CLT	ACT	Total	CLT	ACT	Total
Sales	\$ 780,641	\$ -	\$ 780,641	\$ 929,122	\$ -	\$ 929,122
Cost of sales	470,698	-	470,698	659,442	-	659,442
Gross margin	309,943	-	309,943	269,680	-	269,680
Operating Expenses						
Selling expenses	363,886	-	363,886	447,882	-	447,882
Administrative expenses	753,115	809,752	1,562,867	955,673	1,114,588	2,070,261
Research and development expense:	308,708	2,616,025	2,924,733	230,936	3,217,307	3,448,243
(Gain) from legal settlement	(131,902)	-	(131,902)	-	-	-
(Gain) loss on foreign exchange	9,370	9,370	18,740	(2,080)	(2,080)	(4,160)
Interest accretion on lease liabilities	2,671	2,671	5,342	4,840	4,840	9,680
Interest income	(11,331)	(11,331)	(22,662)	(51,843)	(51,843)	(103,686)
	1,294,517	3,426,487	4,721,004	1,585,408	4,282,812	5,868,220
Loss for the period	\$ (984,574)	\$ (3,426,487)	\$ (4,411,061)	\$ (1,315,728)	\$ (4,282,812)	\$ (5,598,540)
Total Assets	\$ 1,820,223	\$ 4,124,763	\$ 5,944,986	\$ 2,837,811	\$ 7,182,971	\$10,200,782
Total Liabilities	335,592	539,202	874,794	419,166	437,967	857,133

The following table displays the revenue and direct expenses from the CLT division by product line and geographic area for the nine-month period ended December 31:

	2021			2020		
	Canada	USA	International	Canada	USA	International
Sales by Product Line						
TLC-1000	\$ 234,628	\$ 14,811	\$ -	\$ 411,391	\$ 25,525	\$ 7,347
TLC-2000	463,099	54,914	13,189	403,768	62,398	18,693
	697,727	69,725	13,189	815,159	87,923	26,040
Expenses						
Cost of Sales	420,704	42,042	7,952	578,556	62,404	18,482
Selling Expenses	323,119	27,019	13,748	376,408	49,873	21,601
	743,823	69,061	21,699	954,964	112,277	40,083
	\$ (46,096)	\$ 664	\$ (8,510)	\$ (139,805)	\$ (24,354)	\$ (14,043)

As of December 31, 2021 and 2020, respectively, the Company's long-lived assets used in operations are all located in Canada. Timing of revenue is recognized at a point in time.

Selected Financial Information and Accounting Policies

The audited consolidated financial statements for the year ended December 31, 2021, and all other financial statements referred to herein, have been prepared in accordance with International Financial Reporting Standards ("IFRS"), consistently applied, and all amounts and currencies reported therein, and in this MD&A, are in Canadian dollars, unless otherwise noted. The ongoing accounting policies are more particularly described in the Notes to the audited annual consolidated financial statements for the year ended December 31, 2021. Please refer to the Company's annual and quarterly financial statement filings, including material interim press releases, at www.sedar.com.

Use of Financial Instruments

The Company's financial instruments consists of cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities. The fair value of cash, accounts receivable, accounts payable and accrued liabilities approximate carrying value because of the short-term nature of these instruments.

IFRS 7 Financial Instruments Disclosures establishes a fair value hierarchy that reflects the significance of inputs used in making fair value measurements as follows:

- Level 1: quoted prices in active markets for identical assets or liabilities;
- Level 2: inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. from derived prices); and
- Level 3: inputs for the asset or liability that are not based upon observable market data.

The carrying amounts of cash and cash equivalents, accounts receivable and accounts payable and accrued liabilities approximate fair value due to the short-term maturities of these instruments.

Assets are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. As of December 31, 2021 and 2020, respectively, the Company's cash and cash equivalents are categorized as Level 1. There were no financial instruments categorized as Level 2 or 3.

(i) Credit risk:

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations and arises principally from the Company's trade and other receivable. The amounts reported in the consolidated balance sheets are net of allowances for credit losses, estimated by the Company's management based on prior experience and its assessment of the current economic environment. The Company reviews its trade receivable accounts regularly and reduces amounts to their expected realizable values by adjusting the allowance for credit losses

when management determines that the account may not be fully collectible. The Company has adopted credit policies in an effort to minimize those risks. The carrying value of trade and other receivables represent the Company's maximum exposure to credit risk.

(ii) Liquidity risk:

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they come due. The Company manages its liquidity risk by continuously monitoring forecasted and actual cash flows, as well as anticipated investing and financing activities. The Company does not have material long-term financial liabilities.

(iii) Interest rate risk:

Interest rate risk is the risk that changes in interest rates will affect the Company's income or the value of the financial instruments held. Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates.

The Company's exposure to interest rate risk is as follows:

Cash and cash equivalents	Short-term fixed and variable interest rate
Short-term investments	Short-term fixed interest rate
Financed trade receivables	Short-term and long-term fixed interest rate

(iv) Foreign currency exchange risk:

The Company is exposed to foreign currency exchange risk. This risk arises from the Company's holdings of US dollar denominated cash, trade and other receivables and payables and accrued liabilities. Changes arising from this risk could impact the Company's reported foreign currency exchange gains or losses.

The Company has not entered into any conventional or other financial instruments designed to minimize its investment risk, currency risk or commodity risk. No off-balance sheet arrangements have been established nor are there any pending proposals or indicated business requirements to this effect.

Critical Accounting Policies, Estimates and Judgments

As noted above, the Company's audited annual consolidated financial statements as of December 31, 2021 and 2020, respectively, and for the years ended December 31, 2021 and 2020, respectively, have been prepared in accordance with IFRS. The policies applied are based on IFRS issued and outstanding as of April 28, 2022 which is the date at which the Company's Board of Directors approved the audited consolidated financial statements.

Additionally, the preparation of the audited consolidated financial statements in accordance with IFRS often requires management to make estimates about and apply assumptions or subjective judgment to future events and other matters that affect the reported amounts of assets, liabilities, revenues, expenses and related disclosures. Assumptions, estimates and judgments are based on historical experience, expectations, current trends and other factors that management believes to be relevant at the time at which the audited consolidated financial statements are prepared. Management reviews, on a regular basis, the Company's accounting policies, assumptions, estimates and judgments, in order to ensure that the audited consolidated financial statements are presented fairly and in accordance with IFRS.

Critical accounting estimates and judgments are those that have a significant risk of causing material adjustment and are often applied to matters or outcomes that are inherently uncertain and subject to change. As such, management cautions that future events often vary from forecasts and expectations and that estimates routinely require adjustment. A summary of those areas where the Company's management believe critical accounting policies affect the significant judgments and estimates used in the preparation of the financial statements can be found in note 2 to the audited consolidated financial statements of December 31, 2021 and 2020.

Disclosure of Internal Controls

Management has established processes, which are in place to provide them sufficient knowledge to support management representations that they have exercised reasonable diligence that:

- (i) the financial statements do not contain any untrue statement of material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under which it is made, as of the date of and for the periods presented by the financial statements; and
- (ii) the financial statements fairly present in all material respects the financial condition, financial performance and cash flows of the Company, as of the date of and for the periods presented by the financial statements.

In contrast to the certificate required under National Instrument 52-109 *Certification of Disclosure in Issuers' Annual and Interim Filings* (NI 52-109), the Company utilizes the Venture Issuer Basic Certificate, which does not include representations relating to the establishment and maintenance of Disclosure Controls and Procedures ("**DC&P**") and Internal Control over Financial Reporting ("**ICFR**"), as defined in NI 52-109.

In particular, the certifying officers filing the Certificate are not making any representations relating to the establishment and maintenance of:

- (i) controls and other procedures designed to provide reasonable assurance that information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation; and
- (ii) a process to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with the issuer's GAAP. The Company's certifying officers are responsible for ensuring that processes are in place to provide them with sufficient knowledge to support the representations they are making in the certificate.

Investors should be aware that inherent limitations on the ability of certifying officers of a venture issuer to design and implement on a cost-effective basis DC&P and ICFR as defined in NI 52-109 may result in additional risks to the quality, reliability, transparency and timeliness of interim and annual filings and other reports provided under securities legislation.

In connection with the audits of the Company's consolidated financial statements for the years' ended December 31, 2021 and 2020, the Company's independent registered public accountants identified certain material weaknesses in the Company's internal control over financial reporting. Such material weaknesses continue to exist as of December 31, 2021. A "material weaknesses" is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely basis. The material weaknesses relate to not having a full segregation of duties within members of its accounting staff dedicated to financial reporting functions so that all journal entries and account reconciliations are reviewed by someone other than the preparer, heightening the risk of error or fraud, and a proper system for updating inventory values as of the end of each reporting period. If the Company is unable to remediate the material weakness, or other control deficiencies are identified, the Company may not be able to report its financial results accurately, prevent fraud or file its periodic reports as a public company in a timely manner.

Risks and Uncertainties

The Company's operations involve certain risks and uncertainties that are inherent to the Company's industry. The most significant known risks and uncertainties faced by the Company are described below.

COVID-19 Pandemic

On March 11, 2020, the World Health Organization declared the outbreak of a novel coronavirus ("**COVID-19**") as a global pandemic, which continues to spread throughout Canada and around the world. As of **, the Company is aware of significant changes in its business, as a result of the COVID-19 pandemic, resulting in the resignation and/or termination of certain non-essential personnel, personnel working remotely or virtually, delayed patient enrollment and treatment in Study II and significant delays / cancellations in customer purchase decisions. Management is uncertain of the full extent of these impacts on its financial statements and

believes that the business disruption caused by COVID-19 could be temporary; however, there is uncertainty around its duration and hence the potential impact on the business cannot be fully estimated.

Limited Operating History

The Company is still in the development and commercialization stages of its businesses and therefore will be subject to the risks associated with early-stage companies, including uncertainty of the success and acceptance of its products, uncertainty of revenues, markets and profitability and the continuing need to raise additional capital. The Company's business prospects must be considered in light of the risks, expenses and difficulties frequently encountered by companies in this stage of development. Such risks include the evolving and unpredictable nature of the Company's business, the Company's ability to anticipate and adapt to a developing market, acceptance by consumers of the Company's products, the ability to identify, attract and retain qualified personnel and the ability to generate sufficient revenue or raise sufficient capital to carry out its business plans. There can be no assurance that the Company will be successful in adequately mitigating these risks.

Working Capital and Capital Resources

The Company has not been able to consistently generate sufficient profits from its revenue to provide the financial resources necessary to continue to have sufficient working capital for the development of its products and marketing activities. There is no assurance that future revenues will be sufficient to generate the required funds to continue product development, business development and marketing activities or that additional funds required for such working capital will be available from financings.

These conditions indicate the existence of material uncertainties that cast substantial doubt about the Company's ability to continue as a going concern. The Company's ability to continue as a going concern is dependent upon achieving a profitable level of operations and obtaining additional financing, neither of which is assured. The Company has been able, to date, to raise capital to continue to market its products and continues to develop sales opportunities which could result in additional sales of its products in the future.

In order to achieve its long-term development and commercialization strategy for the Company's range of therapeutic laser systems and PDC anti-cancer technology, the Company may need to raise additional capital through the issuance of shares, collaboration agreements or strategic partnerships that would allow the Company to finance its activities. There is no assurance that additional funds will be available as required or that they may be available on acceptable terms and conditions. Additional financing may also result in dilution of shareholder value.

Key Personnel

The Company's success is dependent upon its ability to attract and retain a highly qualified work force, and to establish and maintain close relationships with research centers. Competition is intense and the Company's success will depend, to a great extent, on its senior and executive managers, scientific personnel and academic partners. The loss of one or more of its key employees or the inability to attract and retain highly skilled personnel could have a material adverse effect on the Company's development of its products, operations or business prospects.

Protection of Intellectual Property

The Company's success will depend in part on its ability to obtain patents, protect its trade secrets and operate without infringing the exclusive rights of other parties. There is no guarantee that any patent that will be granted to the Company will bring any competitive advantage to the Company, that its patent protection will not be contested by third parties, or that the patents of competitors will not be detrimental to the Company's commercial activities. It cannot be assured that competitors will not independently develop products similar to the Company's products, that they will not imitate the Company's products or that they will not circumvent or invalidate patents granted to the Company.

Although the Company does not believe that its products infringe the proprietary rights of any third parties, there can be no assurance that infringement or invalidity claims (or claims for indemnification resulting from infringement claims) will not be asserted or prosecuted against the Company or that any such assertions or prosecutions, valid or otherwise, will not materially adversely affect the Company's business, financial condition or results of operations. Irrespective of the validity of the successful assertion of such claims, the Company could incur significant costs and diversion of resources with respect to the defense thereof, which could have a material adverse effect on the Company. The Company's performance and ability to develop markets and compete effectively are dependent to a significant degree on its proprietary and patented technology. The Company relies on its patents and trade secrets, as well as confidentiality agreements and technical measures, to establish and protect its proprietary right. While the Company will endeavor to protect its intellectual property, there can be no assurance that the steps taken will prevent misappropriation or that agreements entered into for that purpose will be enforceable. The laws of certain other countries may afford the Company little or no effective protection of its intellectual property.

Competition

Many of the Company's current and potential competitors have longer operating histories, larger customer bases, greater name and brand recognition and significantly greater financial, sales, marketing, engineering, scientific, technical and other resources than the Company. These competitors have research and development capabilities that may allow them to develop new or improved products that may compete with the Company's products. New technologies and the expansion of existing technologies may also increase competitive pressures on the Company. Increased competition may result in reduced operating margins as well as loss of market share and could result in decreased usage in the Company's products and may have a material adverse affect on the Company.

Implementation Delays

Many of the Company's products will be in development, testing or preliminary stage and there may be delays or other problems in the introduction of the Company's products. The Company cannot predict when customers that are in a testing or preliminary use phase of the Company's products will adopt a broader use of the products. The market for the Company's products is relatively new and continues to evolve. The Company's products will involve changes in the manner in which businesses have traditionally used such products. In some cases, the Company's customers will have little experience with products offered by the Company. The Company will have to spend considerable resources educating potential customers about the value of the Company's products. It is difficult to assess, or predict with any assurance, the present and future size of the potential market for the Company's products or its growth rate, if any. The Company cannot predict whether or not its products will achieve market acceptance.

Strategic Alliances

The Company's ability to successfully complete the research and development of its products and its growth and marketing strategies are based, in significant part, in the strategic alliances it has in place and the licenses and agreements securing those strategic alliances. The Company's success will depend upon the ability to seek out and establish new strategic alliances and working relationships. There can be no assurance that existing strategic alliances and working relationships will not be terminated or adversely modified in the future, nor can there be any assurance that new relationships, if any, will afford the Company the same benefits as those currently in place.

Trade Secret Protection

Because the Company relies on third parties to develop its products, the Company must share trade secrets with them. The Company seeks to protect its proprietary technology in part by entering into confidentiality agreements and, if applicable, material transfer agreements, collaborative research agreements, consulting agreements or other similar agreements with its collaborators, advisors, employees and consultants prior to beginning research or disclosing proprietary information. These agreements typically restrict the ability of its collaborators, advisors, employees and consultants to publish data potentially relating to its trade secrets. The Company's academic collaborators typically have rights to publish data, provided that the Company is notified in advance and may delay publication for a specified time in order to secure its intellectual property rights arising from the collaboration. In other cases, publication rights are controlled exclusively by the Company, although in some cases the Company may share these rights with other parties. The Company also conducts joint research and development programs which may require the Company to share trade secrets under the terms of research and development collaboration or similar agreements. Despite the Company's efforts to protect its trade secrets, the Company's competitors may discover the Company's trade secrets, either through breach of these agreements, independent development or publication of information including the Company's trade secrets in cases where the Company does not have proprietary or otherwise protected rights at the time of publication. A competitor's discovery of the Company's trade secrets may impair the Company's competitive position and could have a material adverse effect on the Company's business and financial condition.

Product Deficiencies

Given that the Company's products are either fairly new, or are in various stages of development, there may be difficulties in product design, performance and reliability which could result in lost revenue, delays in customer acceptance of the Company's products and legal claims against the Company, which would be detrimental, perhaps materially to the Company's market reputation and ability to generate further sales. Serious defects are frequently found during the period immediately following the introduction of new products or enhancements to existing products and undetected errors or performance problems may be discovered in the future. Product defects may expose the Company to liability claims, for which the Company may not have sufficient liability insurance.

Dependence on Third Party Suppliers

The Company has established relationships with certain third-party suppliers upon whom, it relies to provide key materials and components for completion of its products. In the event of the inability of these third parties to supply such materials and components in a timely manner or to supply materials and components that continue to meet the Company's quality, quantity or cost requirements, the Company would be required to purchase these materials and components from other suppliers. There is no assurance that other suppliers can be found in such circumstances who can supply the materials and components in a timely manner or that meet the Company's quality, quantity or cost requirements.

Volatility of Share Price

The market price of the Company's common shares is subject to volatility. General market conditions as well as differences between the Company's financial, scientific and clinical results, and the expectations of investors, as well as securities analysts can have a significant impact on the trading price of the Company's common shares.

Regulatory Approvals

The Company is directly and indirectly engaged in the design, manufacture, sale and international marketing of therapeutic and medical laser equipment, as well as the research and development of light activated PDCs, all of which are subject to regulatory oversights, audits and controls by various national regulatory agencies (i.e.: FDA, Health Canada, CE) and authoritative quality standards bodies (i.e.: UL, CSA, ISO and TUV), which all possess strict quality certification procedures. The Company is in full compliance with all the governing regulatory and quality standards and approval requirements pertaining to the medical laser devices it currently designs, manufactures and markets and the PDCs it researches and develops. No assurance can be given that current regulations relating to regulatory approval will not change or become more stringent and product approvals may be withdrawn if compliance with regulatory standards is not maintained.

Early Stage of Product Development

Given the early stage of the Company's product development, the Company can make no assurance that its research and development programs will result in regulatory approval or commercially viable products. To achieve profitable operations, the Company alone or with others, must successfully develop, gain regulatory approval and market its future products. To obtain regulatory approvals for its product candidates being developed and to achieve commercial success, clinical studies must demonstrate that the product candidates are safe and tolerable for human use and that they demonstrate efficacy equal to or greater than standard of care.

Many product candidates never reach the stage of clinical testing and even than those that do have only a small chance of successfully completing clinical development and gaining regulatory approval. Product candidates may fail for a number of reasons, including, but not limited to: being unsafe for human use or due to the failure to provide therapeutic benefits equal to or better than the standard of treatment at the time of testing. Unsatisfactory results obtained from a particular study relating to a research and development program may cause the Company or its collaborators to abandon commitments to that program. Positive results of early preclinical research may not be indicative of the results that may be obtained in later stages of preclinical or clinical research. Similarly, positive results from early-stage clinical studies may not be indicative of favorable outcomes in later-stage clinical studies. The Company can make no assurance that any future studies, if undertaken, will yield favorable results.

Reliance on Third Parties

The Company relies and will continue to rely on third parties to conduct a significant portion of its preclinical and clinical development activities. Preclinical activities include: in-vivo studies providing access to specific disease models, pharmacology and toxicology studies and assay development. Clinical development activities include: trial design, regulatory submissions, clinical patient recruitment, clinical trial monitoring, clinical data management and analysis, safety monitoring and project management. If there is any dispute or disruption in the Company's relationship with third parties, or if they are unable to provide quality services in a timely manner and at a feasible cost, the Company's active development programs may face delays. Further, if any of these third parties fails to perform as the Company expects or if their work fails to meet regulatory requirements, the Company's testing could be delayed, cancelled or rendered ineffective.

Clinical Study Risk

Before obtaining marketing approval from regulatory authorities for the sale of the Company's product candidates, the Company must conduct preclinical studies in animals and extensive clinical studies in humans to demonstrate the safety, tolerability and efficacy of the product candidates. Clinical testing is expensive and difficult to design and implement, can take many years to complete and has uncertain outcomes. The outcome of preclinical experiments and early clinical studies may not predict the success of later clinical studies, and interim results of a clinical study do not necessarily predict final results. A number of companies in the

pharmaceutical and biotechnology industries have suffered significant setbacks in advanced clinical studies due to lack of efficacy or unacceptable safety profiles, notwithstanding promising results in earlier studies. The Company does not know whether the clinical studies it may conduct will demonstrate adequate efficacy and safety to result in regulatory approval to market any of the Company's product candidates in any jurisdiction. A product candidate may fail for safety, tolerability or efficacy reasons at any stage of the testing process. A major risk the Company faces is the possibility that none of the Company's product candidates under development will successfully gain market approval from Health Canada, the FDA or other regulatory authorities, resulting in the Company being unable to derive any commercial revenue from them after investing significant amounts of capital in multiple stages of preclinical and clinical testing.

From time to time, scientific studies or clinical studies on various aspects of biopharmaceutical products are conducted by academic researchers, competitors or others. The results of these studies, when published, may have a significant effect on the market for the biopharmaceutical product that is the subject of the study. The publication of negative results of scientific studies or clinical studies or adverse safety events related to the Company's product candidates, or the therapeutic areas in which the Company's product candidates compete, could adversely affect the Company's share price and the Company's ability to finance future development of its product candidates; hence, the Company's business and financial results could be materially and adversely affected.

Clinical Study Timing Delays

The Company cannot predict whether any clinical studies will begin as planned, will need to be restructured, or will be completed on schedule, or at all. The Company's product development costs may increase significantly if the Company experiences delays in clinical testing. Significant clinical study delays could shorten any periods during which the Company may have the exclusive right to commercialize its product candidates or allow the Company's competitors to bring products to market before the Company, which would impair the Company's ability to successfully commercialize its product candidates and may harm the Company's financial condition, results of operations and / or prospects. The commencement and completion of clinical studies for the Company's products may be delayed for a number of reasons, including delays related, but not limited, to:

- failure by regulatory authorities to grant permission to proceed or placing the clinical study on hold;
- patients failing to enroll or remain in the Company's studies at the rate the Company expects;
- suspension or termination of clinical studies by regulators for many reasons, including concerns about patient safety or tolerability
- any changes to the Company's manufacturing process that may be necessary or desired;
- delays or failure to obtain clinical supply from contract manufacturers of the Company's products necessary to conduct clinical studies;
- product candidates demonstrating a lack of safety, tolerability or efficacy during clinical studies;
- patients choosing an alternative treatment for the indications for which the Company is developing any of its product candidates or participating in competing clinical studies;
- patients failing to complete clinical studies due to dissatisfaction with the treatment, side effects or other reasons;
- reports of clinical testing on similar technologies and products raising safety, tolerability and/or efficacy concerns;
- competing clinical studies and scheduling conflicts with participating clinicians;
- clinical investigators not performing the Company's clinical studies on their anticipated schedule, dropping out of a study, or employing methods not consistent with the clinical study protocol, regulatory requirements or other third parties not performing data collection and analysis in a timely or accurate manner;
- failure of the Company's Contract Research Organizations, to satisfy their contractual duties or meet expected deadlines;
- inspections of clinical study sites by regulatory authorities, Review Ethics Boards ("REB"), or Institutional Review Boards ("IRBs") or ethics committees finding regulatory violations that require the Company to undertake corrective action, resulting in suspension or termination of one or more sites or the imposition of a clinical hold on the entire study;
- one or more IRBs or ethics committees rejecting, suspending or terminating the study at an investigational site, precluding enrollment of additional subjects, or withdrawing its approval of the study; or
- failure to reach agreement on acceptable terms with prospective clinical study sites.

The Company's product development costs may increase if the Company experiences delays in testing or approval or if the Company needs to perform more or larger clinical studies than planned. Additionally, changes in regulatory requirements and policies may occur, and the Company may need to amend study protocols to reflect these changes. Amendments may require the Company to resubmit its study protocols to regulatory authorities or IRBs or ethics committees for re-examination, which may impact the cost, timing or successful completion of that study. Delays or increased product development costs may have a material adverse effect on the Company's business, financial condition and prospects.

Patient Enrollment

As the Company's product candidates advance from preclinical testing to clinical testing, and then through progressively larger and more complex clinical studies, the Company may need to enroll an increasing number of patients that meet the Company's eligibility criteria. There is significant competition for recruiting cancer patients in clinical studies, and the Company may be unable to enroll the patients it needs to complete clinical studies on a timely basis or at all. The factors that affect the Company's ability to enroll patients are largely uncontrollable and include, but are not limited to, the following:

- size and nature of the patient population;
- eligibility, inclusion and exclusion criteria for the study;
- design of the clinical study protocol;
- competition with other companies for clinical sites or patients;
- the perceived risks and benefits of the product candidate under study;
- the patient referral practices of physicians; or
- the number, availability, location and accessibility of clinical study sites

Failure to Achieve Milestones

From time to time, the Company may announce the timing of certain events it expects to occur, such as the anticipated timing of results from the Company's clinical studies or product sales. These statements are forward-looking and are based on the best estimates of management at the time relating to the occurrence of such events; however, the actual timing of such events may differ from what has been publicly disclosed. The timing of events such as initiation or completion of a clinical study, filing of an application to obtain regulatory approval or announcement of additional clinical studies for a product candidate or adoption / sales of the Company's products may ultimately vary from what is publicly disclosed. These variations in timing may occur as a result of different events, including the nature of the results obtained during a clinical study or during a research phase or any other event having the effect of delaying the publicly announced timeline. The Company undertakes no obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, except as otherwise required by law. Any variation in the timing of previously announced milestones could have a material adverse effect on the Company's business plan, financial condition or operating results and the trading price of common shares.

Currency Risk

The Company's primary risks are exposure to foreign currency exchange risk. These risks arise from the Company's holdings of US and Canadian dollar denominated cash, accounts receivable and accounts payable. Changes arising from these risks could impact the Company's reported foreign exchange gains or losses. The Company limits its exposure to foreign currency risk by holding US denominated cash in amounts of up to 100% of forecasted twelve month US dollar expenditures; thereby, creating a natural hedge against foreign currency fluctuations and limiting foreign currency risk to translation of US dollar balances at the balance sheet date.

Credit Risk

Credit risk is the risk of financial loss to the Company, if a customer or counterparty to a financial instrument fails to meet its contractual obligations and arises principally from the Company's accounts receivable. The amounts reported in the balance sheet are net of allowances for bad debts, estimated by the Company's management based on prior experience and their assessment of the current economic environment. The Company reviews its trade receivable accounts regularly and reduces amounts to their expected realizable values by adjusting the allowance for doubtful accounts as soon as the account is determined not to be fully collectible. The Company has adopted credit policies in an effort to minimize these risks.

Product Liability

The Company has obtained product liability insurance coverage in the aggregate of \$5,000,000. This coverage is limited, and a product liability claim could potentially be greater than this coverage. The Company's profitability would be adversely affected by any successful product liability claim in excess of its insurance coverage.

Clinical Trial Liability

The Company has obtained clinical trial liability insurance coverage in the aggregate of \$5,000,000. This coverage is limited, and a clinical trial liability claim could potentially be greater than this coverage. The Company's profitability would be adversely affected by any successful product liability claim in excess of its insurance coverage.

Patent-Related Rights of the U.S. Government in PDT Technology

Some of Theralase's licensed patented PDT technology was developed with US federal government funding. When new technologies are developed with US government funding, the government obtains certain rights in any resulting patents, including a

nonexclusive license authorizing the government to use the invention for noncommercial purposes. These rights may permit the government to disclose Theralase®'s confidential information to third parties and to exercise "march-in" rights to use or allow third parties to use Theralase®'s patented technology. The government can exercise its march-in rights if it determines that action is necessary because Theralase® fails to achieve practical application of the US government-funded technology, because action is necessary to alleviate health or safety needs, to meet requirements of federal regulations or to give preference to US industry. In addition, US government-funded inventions must be reported to the government and US government funding must be disclosed in any resulting patent applications. Furthermore, Theralase®'s rights in such inventions are subject to government license rights and certain restrictions on manufacturing products outside the United States.

April 28, 2022

Kristina Hachey, CPA
Chief Financial Officer