



MANAGEMENT'S DISCUSSION AND ANALYSIS

For the Interim Period Ended September 30, 2019

APPILI THERAPEUTICS INC.

The following Management's Discussion and Analysis ("MD&A") of Appili Therapeutics Inc. ("Appili", the "Company", "we", "us" or "our") is prepared as of November 27, 2019 provides information concerning the Company's financial condition and results of operations. This MD&A should be read in conjunction with our audited annual financial statements for the fiscal years ended March 31, 2019 and 2018, and our unaudited interim condensed financial statements for the three and six months ended September 30, 2019 and 2018, including the related notes thereto. The preparation of financial information included in the MD&A has been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board, unless otherwise noted. Unless stated otherwise, all references to "\$" are to Canadian dollars.

FORWARD-LOOKING STATEMENTS

This MD&A contains forward-looking statements or forward-looking information (collectively, "**forward-looking statements**") under applicable Canadian securities legislation including, without limitation, statements containing the words "believe," "may," "plan," "will," "estimate," "continue," "anticipate," "intend," "expect," "predict," "project," "potential," "continue," "ongoing" or the negative or grammatical variations of these terms or other comparable terminology, although not all forward-looking statements contain these words and similar expressions. Forward-looking statements are necessarily based on estimates and assumptions made by us in light of our experience and perception of historical trends, current conditions and expected future developments, as well as the factors we believe are appropriate. Forward-looking statements in this MD&A include, but are not limited to, statements relating to:

- our strategy;
- the sufficiency of our financial resources to support our activities;
- our ability to continue as a going concern;
- potential sources of funding;
- our ability to obtain necessary funding on favourable terms or at all;
- our expected expenditures and accumulated deficit level;
- our outcomes from ongoing and future research and research collaborations;
- our exploration of opportunities to maximize shareholder value as part of the ordinary course of our business through collaborations, strategic partnerships and other transactions with third parties;
- our plans for the research and development ("R&D") of certain product candidates;
- our strategy for protecting our intellectual property;
- our ability to identify licensable products or research suitable for licensing and commercialization;
- our ability to obtain licenses on commercially reasonable terms;
- our plans for generating revenue;
- our plans for future clinical trials; and
- our ability to hire and retain skilled staff.

Such statements reflect our current views with respect to future events, are subject to risks and uncertainties and are necessarily based upon a number of estimates and assumptions that, while considered reasonable by Appili as of the date of such statements, are inherently subject to significant medical, scientific, business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause our actual results, performance or achievements to be materially different from any future results, performance, or achievements that may be expressed or implied by such forward-looking statements. In making the forward-looking statements included in this MD&A, the Company has made various material assumptions, including but not limited to (i) obtaining positive results of clinical trials; (ii) obtaining regulatory approvals; (iii) general business and economic conditions; (iv) the Company's ability to successfully out-license or sell its current products and in-license and develop new products; (v) the availability of financing on reasonable terms; (vi) the Company's ability to attract and retain skilled staff; (vii) market competition; (viii) the products and technology offered by the Company's competitors; and (ix) the Company's ability to protect patents and proprietary rights.

In evaluating forward-looking statements, current and prospective shareholders should specifically consider various factors, including risks related to:

- limited operating history and early stage of development;
- identifying, developing and commercializing product candidates;
- regulatory risks;
- market competition;
- the Company's dependence on third parties;
- clinical trial risks;
- third party manufacturing and supplier risks;
- the ownership and protection of intellectual property;
- litigation and product liability risks;
- employee matters and managing growth;
- ownership of the Company's securities; and
- the other risks discussed under the heading "*Risk Factors*" in the Company's annual information form dated July 3, 2019.

Should one or more of these risks or uncertainties, or a risk that is not currently known to us, materialize, or should assumptions underlying those forward-looking statements prove incorrect, actual results may vary materially from those described herein. These forward-looking statements are made as of the date of this MD&A and we do not intend, and do not assume any obligation, to update these forward-looking statements, except as required by applicable securities laws. Investors are cautioned that forward-looking statements are not guarantees of future performance and are inherently uncertain. Accordingly, investors are cautioned not to put undue reliance on forward-looking statements.

BUSINESS OVERVIEW

Appili is a pharmaceutical company focused on the acquisition and development of novel treatments targeting unmet needs in infectious disease. Since incorporation in 2015, the Company has been focused on building and advancing a diverse portfolio of anti-infective programs. Key activities have included the acquisition and development of novel technologies, the development of strategic partnerships, targeted hiring and building out drug development capabilities, securing intellectual property, and raising funds through equity capital raises and non-dilutive funding mechanisms.

The Company's anti-infective portfolio currently includes four major programs, described below: ATI-2307, ATI-1701, ATI-1503, and ATI-1501.

ATI-2307

Recently acquired from FUJIFILM Toyama Chemical Co., LTD ("**FFTC**"), ATI-2307 is a small molecule antifungal with a novel mechanism of action and broad-spectrum activity against fungal pathogens, including *Candida*, *Aspergillus*, and *Cryptococcus*. (Mitsuyama et al., 2008). ATI-2307's mechanism of action interferes with fungal mitochondria, making it cidal (deadly) against *Cryptococcus* (Mitsuyama et al., 2008; Nishikawa et al., 2017; Shibata et al., 2012). The Company is evaluating the potential effectiveness of ATI-2307 for the treatment of a variety of invasive fungal infections, including *Cryptococcus* and *Candida*. The target patient population will likely consist of severely ill and hospitalized, highly comorbid patients with suspected or confirmed fungal infection, in which ATI-2307 will be administered via intravenous infusion.

The safety and pharmacokinetics of ATI-2307 have been evaluated in 80 human subjects as part of three Phase 1 Single Ascending Dose ("**SAD**") and/or Multiple Ascending Dose ("**MAD**") clinical studies conducted in the United States. ATI-2307 has been safe and well tolerated at all doses in humans including anticipated therapeutic dose levels.

The initial development target for ATI-2307 is the treatment of *Cryptococcus* infections including cryptococcal meningitis. Generally regarded as an opportunistic infection, *Cryptococcus* infections are most commonly reported in immunosuppressed patients, such as those undergoing chemotherapy for cancer treatment, immunosuppression during

transplantation operations and recovery, and HIV-positive patients (May et al., 2016). *Cryptococcus* is highly neurotropic and infections are often invasive, resulting in central nervous system infections and cryptococcal meningitis. In-hospital death from cryptococcal meningitis continues to remain high despite current therapies (Pyrgos et al., 2013; Pappas, 2013). The current standard of care for cryptococcal meningitis, which is amphotericin B in combination with flucytosine (Perfect et al., 2010), is also associated with significant toxicity, including the potential for kidney failure (Saliba et al., 2008; Hamill et al., 2013; AmBisome® FDA Label 2012).

The Company may also pursue development activities to advance ATI-2307 as a potential therapeutic for invasive *Candida* infections. Multiple *Candida* species are capable of human infection, including the most commonly observed *Candida albicans* and the newly emerging pathogen *Candida auris* (Jeffery-Smith et al., 2017). *Candida* species are generally treated with an echinocandin or an azole (Pappas et al., 2015), but growing antifungal resistance is threatening the existing antifungal drugs on the market (Pristov and Ghannoum, 2019). Physicians often rely on toxic amphotericin B in cases of refractory and highly resistant *Candida* infections (Pappas et al., 2015). In the case of *Candida auris*, infections resistant to all three major classes have been reported (Lockhart et al., 2017). Drug-resistant *Candida* and *C. auris* in particular are now priority pathogens for the US Centers for Disease Control (“CDC”) (CDC, 2019).

ATI-1701

ATI-1701 is a novel, live-attenuated vaccine for *Francisella tularensis* (“*F. tularensis*”). *F. tularensis*, which causes tularemia, is a Category A pathogen which can be aerosolized and is over 1,000 times more infectious than anthrax (PHAC PSDS Anthrax 2011, PHAC PSDS Tularemia 2011). Category A pathogens are those organisms/biological agents that according to the National Institutes of Health pose the highest risk to National Security and public health (NIH website). The signs, symptoms, and prognosis of tularemia depends on the route of infection. Pneumonic tularemia, caused by inhalation of *F. tularensis*, is among the most severe forms of tularemia, causing respiratory issues and difficulty breathing in patients and can be fatal if untreated, (CDC 2018, WHO 2007). Since it is a highly infectious pathogen capable of causing severe illness, *F. tularensis* is a top biodefense priority for the United States and governments around the world.

Appili is developing ATI-1701, a novel, live-attenuated vaccine, that was initially developed by the National Research Council of Canada (“NRC”) and exclusively licensed to Appili. Preliminary studies in mice conducted by the NRC and colleagues have demonstrated 100% survival immunized mice compared to no survival of the mice that were not vaccinated (Conlan 2010, Shen 2010).

Appili and its strategic partners are evaluating the feasibility of developing ATI-1701 under the United States Food and Drug Administration (“FDA”) Animal Rule, including the development of suitable experimental models to demonstrate ATI-1701 efficacy. Appili intends to work with the NRC and existing partners to complete the preclinical and clinical testing required under the Animal Rule to evaluate the immunogenicity, efficacy, and safety of the ATI-1701 vaccine and ultimately support the Company’s submission of a Biological License Application for ATI-1701 to the FDA. Good Manufacturing Practices activities have been started and animal work commenced in the first half of 2019, with preliminary non-human primate efficacy data expected in 2020 evaluating the vaccines efficacy up to 365 days after vaccination. This will be followed by pivotal animal studies as well as a human safety Phase 1 study. Preliminary data from the ongoing preclinical non-human primate study showed complete (100%) protection 90 days after vaccination from a lethal exposure to the pathogen *Francisella tularensis*.

ATI-1503

The ATI-1503 program encompasses efforts to develop a new class of Gram-negative targeting antibiotics. The ATI-1503 program is building off the molecular structure of negamycin, a naturally occurring compound that can kill Gram-negative bacteria, with multiple attractive drug-like properties that support its development. Negamycin has a novel, well-characterized mechanism of action, activity against a wide range of Gram-negative bacteria, including CDC priority pathogens *Enterobacteriaceae*, *Acinetobacter* and *Pseudomonas*, with favourable pharmacokinetic properties (Guo 2015, McKinney 2015, Olivier 2014, Polikanov 2014).

The ATI-1503 development team is now working on two novel, structurally distinct lead series based on the negamycin scaffold, each of which has exhibited over 10-fold increases in antibiotic activity compared to the original

negamycin compound. These lead compounds now have low, single digit MICs against multiple species of *Enterobacteriaceae*, including CDC top priority pathogen carbapenem-resistant *Enterobacteriaceae* and *Acinetobacter*. These most promising compounds continue to advance through Appili's structured preclinical assessment process, which includes multiple *in vivo* efficacy animal models, safety screening, and pharmacokinetic profiling.

Characterization of *in vivo* toxicology is currently ongoing. Compounds that successfully complete this preclinical development process may be nominated as clinical candidates for IND-enabling studies. While Appili aims to identify a preclinical lead in 2020, the Company recognizes that the negamycin compound may have the potential to yield multiple derivative compounds with distinct efficacy, safety, and pharmacokinetic profiles suitable for parallel development. Following nomination of a first clinical candidate, the Company may elect to continue pursuing additional optimization activities to produce follow-on compounds with additional clinical value.

ATI-1503 activities have been and are continuing to be funded with Appili's current resources and grant funding received from the National Research Council of Canada-Industrial Research Assistance Program and the U.S. government's Peer Reviewed Medical Research Program ("PRMRP").

ATI-1501

Appili's founding R&D program is focused on the development of ATI-1501, a taste-masked liquid oral suspension formulation of an antibiotic, metronidazole. The program was conceived and initiated during the first quarter of 2015 in consultation with infectious disease experts at Bloom Burton Development Corporation ("BBDC") and key opinion leaders in gastrointestinal infectious disease.

Metronidazole is a front-line antibiotic for the treatment of anaerobic bacterial and parasitic infections (Quintiles 2016, Solomkin 2010, Flagyl® FDA Label 2018). In many jurisdictions including the United States and Canada, oral metronidazole is only available in solid form. Metronidazole also has a strong bitter, metallic taste that may reduce patient adherence to treatment, especially in elderly and pediatric patients with difficulty swallowing. These patients must typically crush the tablets to ingest them, which exacerbates the bitter taste profile of the drug. ATI-1501 is aimed at making it easier for patients with difficulties swallowing and sensitivity to taste to take metronidazole, supporting adherence and clinical outcomes.

Since ATI-1501 is a reformulation of an already approved pharmaceutical product, the Company expects it to qualify for FDA approval pursuant to Section 505(b)(2) of the US Federal Food, Drug and Cosmetic Act. Appili completed a single bioavailability / bioequivalence trial with oral metronidazole tablets as comparator and released the clinical trial results in July 2018, which included results from a total of 44 healthy adults 18 to 63 years of age, that demonstrated bioequivalence of ATI-1501 with oral metronidazole tablets.. In addition, Appili completed a taste test study comparing ATI-1501 with crushed metronidazole suspended in apple sauce, which resulted in Appili's ATI-1501 formulation demonstrating meaningful and statistically significant improvements across all palatability measures.

With clinical development complete, the next major development milestones for ATI-1501 are evaluating formulation options to maximize product stability and shelf-life and the filing of a new drug application ("NDA") with the FDA. Approval of the NDA is required for a drug to be marketed in the United States. The NDA must include Appili's clinical data demonstrating the product is safe and effective, as well as certain additional components. The Company intends to identify a partner to complete development and commercialize ATI-1501 in the US market. Appili is readying the product for the partner to complete manufacturing and NDA filing. Partnering discussions are ongoing.

Our Business Strategy

The Company focuses on acquiring, developing and commercializing novel therapeutics in the area of infectious disease. The strategic decision to focus on infectious disease was driven by the large unmet clinical need in the therapeutic area, as well as the increasing number of regulatory and financial incentives available to support anti-infective R&D. The founders have built a team of experienced drug development professionals and a portfolio of anti-infective assets through internal innovation and licensing from partners. Appili continues to actively evaluate new programs for acquisition or partnership in order to build shareholder value.

RECENT DEVELOPMENTS

Overall Performance

The Company has no revenues, so its ability to ensure continuing operations is depending on obtaining necessary financing to complete the development of the Company's anti-infective portfolio, which includes four major programs: ATI-2307, ATI-1701, ATI-1503, and ATI-1501.

The Company had the following recent key developments and achievements:

- On November 21, 2019, the Company announced the signing of an Asset Purchase Agreement (“**APA**”) with FUJIFILM Toyama Chemical Co., Ltd, to acquire and develop ATI-2307 (formerly T-2307) to treat invasive fungal infections. This drug candidate is a novel broad-spectrum antifungal agent that has been evaluated in multiple preclinical studies and three human Phase I clinical trials. Under the APA, Appili is acquiring exclusive worldwide rights, not including Japan, to develop and commercialize this antifungal candidate. With the execution of the APA, Appili did not pay any upfront payments, but rather, FFTC is eligible to receive from Appili future regulatory and commercial milestones payments, as well as a percentage of royalties on future net sales.
- On November 18, 2019, the Company announced new positive interim data on Appili Therapeutics' ATI-1701 biodefense program, which was presented at the 2019 Chemical and Biological Defense Science & Technology Conference (“**CBD S&T**”). The poster presentation at CBD S&T summarized the latest findings from the ongoing preclinical study of ATI-1701, which showed complete (100%) protection 90 days after vaccination from a lethal exposure to the pathogen *Francisca tularensis*.
- On September 16, 2019, the Company retained BND Projects Inc. (“**BND**”) to provide strategic investor relations services. BND is aiding the Company in building awareness in the financial community by introducing, maintaining and protecting relationships between the management of the Company and professional investors.
- On August 20, 2019, the Company presented updated data on the Company's ATI-1701 and ATI-1503 programs at the Military Health System Research Symposium (“**MHSRS**”).
- On July 2, 2019, the Company announced that the United States Department of Defense, Congressionally Directed Medical Research Programs, Peer Reviewed Medical Research Program (“**PRMRP**”) has awarded the Company a \$3.0 million USD grant.
- On June 24, 2019, the Company announced that the TSX Venture Exchange (the “**TSXV**”) has accepted the Company's application to list its Class A common shares (the “**Common Shares**”) on the TSXV. The Common Shares began trading on June 25, 2019, under the symbol “**APLI**”.
- On June 12, 2019, the Company filed and obtained receipt for its final prospectus (the “**Prospectus**”) in connection with its \$3.6 million special warrant offering (the “**Offering**”) that closed in multiple tranches during the period commencing on November 21, 2018 and ending on March 19, 2019. The Offering was led by Mackie Research Capital Corporation and included Echelon Wealth Partners Inc. and Bloom Burton Securities Inc. Subsequent to the completion of the Offering, on May 3, 2019, the Corporation subdivided its Common Shares on the basis of 3.86 post subdivision Common Shares for each one pre subdivision Common Share.

The Prospectus qualified the distribution of 3,257,665 Common Shares issuable for no additional consideration upon the exercise or deemed exercise of special warrants of the Company (the “**Special Warrants.**”) The Special Warrants were issued under, and are governed by, the terms and conditions of a special warrant indenture dated November 21, 2018, as amended on May 3, 2019, between Computershare Trust Company of Canada and the Company.

As a result of obtaining the receipt for the Prospectus, all unexercised Special Warrants were deemed to be automatically exercised on June 17, 2019 without any further action on the part of the holders.

- In April 2019, the Company was granted a \$476,000 repayable contribution from the Atlantic Canada Opportunities Agency (“ACOA”) to support the transition of the Company to a public company.

SELECTED FINANCIAL INFORMATION

	Three months ended September 30, 2019 (\$)	Three months ended September 30, 2018 (\$)
Net loss and comprehensive loss for the period	(1,149,820)	(1,332,841)
Basic and diluted loss per share	(0.03)	(0.04)

	As at September 30, 2019	As at March 31, 2019
Cash and short-term investments	3,071,631	5,451,578
Total assets	3,787,612	6,835,017
Long-term debt	1,007,400	1,118,600

RESULTS FOR THE THREE MONTHS ENDED SEPTEMBER 30, 2019 (“Q2 2020”), COMPARED TO THE THREE MONTHS ENDED SEPTEMBER 30, 2018 (“Q2 2019”)

	Three months ended September 30, 2019 (\$)	Three months ended September 30, 2018 (\$)
R&D	562,836	1,023,954
General and administration (“G&A”)	685,031	641,692
Business development (“BD”)	135,840	167,214
Accreted interest	37,156	33,400
Government assistance	(271,043)	(533,419)
Net loss and comprehensive loss	(1,149,820)	(1,332,841)

Operating expenses

Overall operating expenses decreased by \$183,021 to \$1,149,820 during Q2 2020 compared to \$1,332,841 in Q2 2019 due mainly to the decrease in R&D activities by \$461,118, as well as a decrease in BD costs by \$31,374. This was offset by a reduction of government assistance by \$262,376, an increase of G&A costs by \$43,339 and an increase of accreted interest by \$3,756. Explanations of the nature of costs incurred, along with explanations for those changes in costs are discussed below.

i. R&D expenses

The Company's R&D expenses include the costs incurred in performing research and development activities, that include non-clinical and clinical trial costs and clinical manufacturing costs for ATI-1501, pre-clinical costs for ATI-1503 including laboratory materials, chemicals and supplies, and license fees, patent costs, stability testing and regulatory costs for ATI-1701, as well as salaries and benefits, consulting fees paid to various independent contractors with specific research and development expertise required by the Company, rental of laboratory facilities, insurance, as well as other non-material R&D related expenses for all of the Company's product candidates and other non-material research projects.

R&D expenses consist of the following:

	Three months ended September 30, 2019	Three months ended September 30, 2018
	(\$)	(\$)
ATI-1501 expenses	88,725	338,208
ATI-1503 expenses	81,677	367,211
ATI-1701 expenses	57,513	18,750
General R&D expenses	104,933	33,642
Amortization of property and equipment	2,868	3,575
Salary and benefits	184,176	228,337
Stock-based compensation	42,944	34,231
Total	562,836	1,023,954

The decrease in R&D expenses by \$461,118 from \$1,023,954 in Q2 2019 to \$562,836 in Q2 2020 is mainly attributable to a \$249,483 decrease in the ATI-1501 program, a \$285,534 decrease in the ATI-1503 program, a \$44,161 decrease in salary and benefits, offset by a \$71,291 increase in general R&D expenses, a \$38,763 increase in expenses related to the ATI-1701 program, and a \$8,713 increase in stock-based compensation.

ATI-1501

The decreased costs in the ATI-1501 program are a result in the change of activities the Company undertook in Q2 2020 in comparison to Q2 2019. The significant cost differences are relating to the Phase 1 pivotal bioavailability study costs, regulatory and manufacturing and stability work for ATI-1501 that occurred in Q2 2019, whereas the Company only had manufacturing and stability expenses in Q2 2020.

ATI 1503

The significant decreased costs in the ATI-1503 program are a result in the change of activities the Company undertook in Q2 2020 in comparison to Q2 2019.

ATI-1701

The increase in expenses related to the ATI-1701 program is due to stability costs and intellectual property management in Q2 2020 in comparison to Q2 2019.

General R&D Expenses

The increase in general R&D expenses is mainly related to the increase of consulting fees paid to the Chief Development Officer and other R&D research projects the Company is exploring.

Salary and Benefits and Stock base compensation

Salary and benefits decreased in Q2 2020 due mainly due to staff changes.

The increase in stock-based compensation expenses is due mainly to timing on the vested stock options that were granted to the R&D employees in fiscal year 2019, as well as those granted at the end of fiscal year 2018.

ii. G&A expenses

The Company's G&A expenses include salary and benefits, stock-based compensation expenses, professional fees including legal, auditing and tax, costs associated with the public listing on the TSX-V, regulatory, travel expenses, office rent, operating and information technology costs, director compensation, and director's and officer's insurance premiums.

G&A expenses consist of the following:

	<u>Three months ended September 30, 2019</u> (\$)	<u>Three months ended September 30, 2018</u> (\$)
G&A expenses, excluding salaries	388,964	337,023
Salary and benefits	202,548	163,337
Stock-based compensation	91,931	139,537
Amortization of property and equipment	1,588	1,795
Total	<u>685,031</u>	<u>641,692</u>

G&A expenses increased by \$43,339 from \$641,692 in Q2 2019 to \$685,031 in Q2 2020 due to an increase of \$51,941 in G&A expenses, excluding salaries and an increase of \$39,211 in salary and benefits, offset by a \$47,606 decrease in stock-based compensation.

G&A expenses, excluding salaries

G&A expenses, excluding salaries, for Q2 2020 increased by \$51,941 mainly due to recruitment fees for additional staff, regulatory fees required as a publicly listed on the TSXV and the professional fees paid in association with obtaining the PRMRP government grant, offset by a decrease in legal fees and a foreign exchange gain.

Salary and Benefits and Stock-based compensation

Salaries and benefits increased in Q2 2020 by \$39,211 due mainly to the additional staff being hired.

The decrease in stock-based compensation in Q2 2020 in comparison to Q2 2019 by \$47,606 is due to no options being granted in Q2 2020.

iii. BD expenses

BD expenses consist of business development travel expenses, office rent, and consulting and services fees paid to various independent contractors with specific business development expertise required by the Company.

BD expenses decreased by \$31,375 mainly due to staffing changes and a decrease in stock-based compensation.

iv. Accreted Interest

Accreted interest relates entirely to the valuation of zero interest bearing government loans which are repayable based on a percentage of future gross revenue or are repayable over 84 or 120 months. Under IFRS, these zero-interest bearing government loans from ACOA must be initially valued at fair value and the difference between the fair value of the loans and the contribution received must be treated as government assistance. These loans then are then accreted to their original value over time. For the loan repayable on a percentage of future gross revenue from ATI-1501, management is required to revise the estimated cash flows whenever new information related to ATI-1501 and its potential market is made available. Management recalculates the carrying amount by computing the present value of the estimated future cash flows at the original effective interest rate and any adjustments are recognized in the statements of loss and comprehensive loss as accreted interest after initial recognition. The slight increase of accreted interest by \$3,756 from \$33,400 in Q2 2019 to \$37,156 in Q2 2020 is due mainly to the accreted interest associated with the payments of the loans.

v. Government assistance

Government assistance consists of investment tax credits, conditionally repayable government loans, repayable government loans and government grants.

Government assistance decreased by \$262,376 from \$533,419 in Q2 2019 to \$271,042 in Q2 2020. This is due mainly to different government grants and loans the Company had in Q2 2019 versus Q2 2020.

vi. Net loss and comprehensive loss

The net loss and comprehensive loss was \$1,149,820 for Q2 2020 which was \$183,021 higher than the net loss and comprehensive loss of \$1,332,841 for Q2 2019.

RESULTS FOR THE SIX MONTHS ENDED SEPTEMBER 30, 2019, COMPARED TO THE SIX MONTHS ENDED SEPTEMBER 30, 2018

	Six months ended September 30, 2019 (\$)	Six months ended September 30, 2018 (\$)
Net loss and comprehensive loss for the period	(2,948,832)	(1,816,607)
Basic and diluted loss per share	(0.09)	(0.06)

	<u>Six months ended September 30, 2019</u> (\$)	<u>Six months ended September 30, 2018</u> (\$)
R&D	1,135,599	1,946,502
General and administration (“G&A”)	1,548,529	1,127,872
Business development (“BD”)	630,774	370,559
Accreted interest	(50,163)	(163,100)
Government assistance	(315,907)	(1,465,226)
Net loss and comprehensive loss	<u>2,948,832</u>	<u>1,816,607</u>

Operating expenses

Overall operating expenses increased by \$1,132,225 to \$2,948,832 during the six months ended September 30, 2019 compared to \$1,816,607 in the six months ended September 30, 2018 due to the reduction of government assistance by \$1,149,319, the increase of G&A costs by \$420,657, the increase in BD costs by \$260,215 and the reduction of accreted interest by \$112,937, offset by a decrease in R&D by \$810,903. Explanations of the nature of costs incurred, along with explanations for those changes in costs are discussed below.

i. R&D expenses

The Company’s R&D expenses include the costs incurred in performing research and development activities, that include non-clinical and clinical trial costs and clinical manufacturing costs for ATI-1501, pre-clinical costs for ATI-1503 including laboratory materials, chemicals and supplies, and license fees, patent costs and stability testing and regulatory costs for ATI-1701, as well as salaries and benefits, consulting fees paid to various independent contractors with specific research and development expertise required by the Company, rental of laboratory facilities, insurance, as well as other non-material R&D related expenses for all three Company product candidates.

R&D expenses consist of the following:

	<u>Six months ended September 30, 2019</u> (\$)	<u>Six months ended September 30, 2018</u> (\$)
ATI-1501 expenses	120,532	580,181
ATI-1503 expenses	203,330	683,047
ATI-1701 expenses	94,674	60,738
General R&D expenses	190,021	72,468
Amortization of property and equipment	5,736	7,151
Salary and benefits	454,642	463,919
Stock-based compensation	66,664	78,998
Total	<u>1,135,599</u>	<u>1,946,502</u>

The decrease in R&D expenses by \$810,903 from \$1,946,502 in the six months ended September 30, 2018 to \$1,135,599 in the six months ended September 30, 2019 is mainly attributable to a \$459,649 decrease in the ATI-1501 program, a \$479,717 decrease in the ATI-1503, a \$9,277 decrease in salary and benefits, and a \$12,334 decrease in stock-based compensation, offset by a \$117,553 increase in general R&D expenses and a \$33,935 increase in expenses related to the ATI-1701 program, as well as immaterial fluctuations in amortization.

ATI-1501

The decreased costs in the ATI-1501 program are a result in the change of activities the Company undertook in the six months ended September 30, 2019 in comparison to the six months ended September 30, 2018. The significant cost differences relate to the Phase 1 pivotal bioavailability study costs and manufacturing and stability work for ATI-1501 that occurred in the six months ended September 30, 2019.

ATI 1503

The significant decreased costs in the ATI-1503 program are a result in the change of activities the Company undertook in the six months ended September 30, 2019 in comparison to the six months ended September 30, 2018.

ATI-1701

The increase in the ATI-1701 costs by \$33,936 is due mainly to stability costs and intellectual property management in the six months ended September 30, 2019 in comparison to the six months ended September 30, 2018.

General R&D Expenses

The \$117,552 increase in general R&D expenses is mainly related to the increase of consulting fees paid to the Chief Development Officer and other R&D research projects the Company is exploring.

Salary and Benefits and Stock base compensation

Salary and benefits decreased in the six months ended September 30, 2019 due mainly due to staff changes.

The decrease in stock-based compensation expense due mainly to timing on the vested stock options that were granted to the R&D employees in fiscal year 2019, as well as those granted at the end of fiscal year 2018.

ii. G&A expenses

The Company's G&A expenses include salary and benefits, stock-based compensation expense, professional fees including legal, auditing and tax, costs associated with the public listing on the TSX-V, regulatory, travel expenses, office rent, operating and information technology costs, director compensation, and director's and officer's insurance premiums.

G&A expenses consist of the following:

	<u>Six months ended September 30, 2019</u> (\$)	<u>Six months ended September 30, 2018</u> (\$)
General and administrative expenses, excluding salaries	955,698	441,904
Salary and benefits	413,350	365,880
Stock-based compensation	176,348	316,874
Amortization of property and equipment	3,133	3,124
Total	<u>1,548,529</u>	<u>1,127,872</u>

G&A expenses increased by \$420,657 from \$1,127,872 in the six months ended September 30, 2018 to \$1,548,529 in the six months ended September 30, 2019 mainly due to the professional fees paid in association with the public listing on the TSXV, offset by a decrease in stock-based compensation of \$140,526.

G&A expenses, excluding salaries

G&A expenses, excluding salaries, for the six months ended September 30, 2019 increased mainly due to the \$295,440 increase in legal and audit fees mainly in relation to preparing the Company for the listing on the TSXV.

Salary and Benefits and Stock-based compensation

Salaries and benefits increased in the six months ended September 30, 2019 by \$47,470 due mainly to the increase in salaries, as well as other changes in staff.

The decrease in stock-based compensation in the six months ended September 30, 2019 in comparison to the six months ended September 30, 2018 by \$140,526 is due to no options being granted in the six months ended September 30, 2019.

iii. BD expenses

BD expenses consist of business development travel expenses, office rent, and consulting and services fees paid to various independent contractors with specific business development expertise required by the Company.

BD expenses increased by \$260,215 the six months ended September 30, 2019 mainly due to warrants that were issued in connection with an agency agreement signed in relation to the licensing efforts for ATI-1501, as well as an increase in salaries and benefits, BD research, consulting and legal fees in relation to both licensing efforts for ATI-1501, in-licensing efforts for new potential programs and in stock-based compensation.

iv. Accreted Interest

Accreted interest relates entirely to the valuation of zero interest bearing government loans which are repayable based on a percentage of future gross revenue or are repayable over 84 or 120 months. Under IFRS, these zero-interest bearing government loans from ACOA must be initially valued at fair value and the difference between the fair value of the loans and the contribution received must be treated as government assistance. These loans then are then accreted to their original value over time. For the loan repayable on a percentage of future gross revenue from ATI-1501, management is required to revise the estimated cash flows whenever new information related to ATI-1501 and its potential market is made available. Management recalculates the carrying amount by computing the present value of the estimated future cash flows at the original effective interest rate and any adjustments are recognized in the statements of loss and comprehensive loss as accreted interest after initial recognition. The decrease of negative

accreted interest by \$112,937 from \$163,100 in the six months ended September 30, 2018 to \$50,163 in the six months ended September 30, 2019 is due mainly to the revaluation of the loan due to new information and estimated cash flows.

v. Government assistance

Government assistance consists of investment tax credits, conditionally repayable government loans, repayable government loans and government grants.

Government assistance decreased by \$1,149,319 from \$1,465,226 in the six months ended September 30, 2018 to \$315,907 in the six months ended September 30, 2019. This is due mainly to different government grants and loans the Company had in the six months ended September 30, 2018 versus the six months ended September 30, 2019.

vi. Net loss and comprehensive loss

The net loss and comprehensive loss was \$2,948,832 for the six months ended September 30, 2019 which was \$1,132,225 higher than the net loss and comprehensive loss of \$1,816,607 for the six months ended September 30, 2018.

CASH FLOWS

At September 30, 2019, the Company had cash and short-term investments of \$3,071,631 and working capital of \$2,718,292 compared to \$5,451,578 and \$5,405,447, respectively as at March 31, 2019.

To date, operations have been financed through the issuance of equity securities, interest income on funds available for investment, government loans and assistance and tax credits.

Operating activities

During the six months ended September 30, 2019, \$2,560,318 was used in operating activities, including a reported net loss of \$2,948,832 prior to being decreased by \$8,869, \$9,793, \$140,671 and \$192,875, for non-cash items including amortization, unrealized loss from changes in foreign currency exchange, warrants issued for services and stock-based compensation, respectively. This was offset by an increase by \$50,163 for the accretion to long-term debt and a net increase of cash of \$106,055 as a result of changes in working capital balances.

Financing activities

The Company received \$242,175 through the proceeds of long-term debt, less \$25,107 and \$35,605 for the repayment of long-term debt and the accreted interest involving cash, respectively, in the six months ended September 30, 2019. The Company also raised \$42,196 through the exercise of warrants, less \$52,016 for share issuance costs.

Investing activities

During the six months ended September 30, 2019, there were no material investing activities.

LIQUIDITY AND CAPITAL RESOURCES

The Company prepares and updates the cash flow forecasts on a regular basis to manage the Company's liquidity, ensuring that the Company has sufficient cash to meet operational needs.

The Company aims to maintain adequate cash and cash resources to support planned activities which include: regulatory, clinical manufacturing and non-clinical studies for ATI-2307, business development activities to out-license the ATI-1501 program; chemistry and biological testing expenses to identify a clinical candidate for ATI-1503; supportive activities for pre-IND costs for ATI-1701 including regulatory and preclinical activities; business development costs incurred relating to assessing and evaluating new drug product candidates that fit within the Company's strategic focus; and administration costs, and intellectual property maintenance and expansion.

It is common for early-stage biotechnology companies to require additional funding to further develop product candidates until successful commercialization of at least one product candidate. Some of Appili's product candidates are still in the early-development stage of the product cycle and therefore are not generating revenue to fund operations. The Company continuously monitors its liquidity position, the status of its development programs, including those of its partners, cash forecasts for completing various stages of development, the potential to license or co-develop each product candidate, and continues to actively pursue alternatives to raise capital, including the sale of its equity securities, debt and non-dilutive funding.

At September 30, 2019, the Corporation had approximately \$3.44 million of existing and identified potential sources of cash including:

- cash and short-term investments of \$3.07 million; and
- amounts receivable and investment tax credits receivable of \$0.37 million.

In addition to the sources of cash above, the Company also announced the award of the US PRMRP government grant that is up to \$3.0 million USD over the next three years to fund the Company's ATI-1503 program, of which the Company had only drawn down approximately \$0.1 million USD as of September 30, 2019.

While the Company has cash resources of \$3.44 million, as well as the access to the \$2.9 million USD remaining PRMRP government grant, management does not believe it will be sufficient to fund operations for the next twelve months while maintaining adequate working capital unless significant reduction of the Company's discretionary expenditures are made and further financing is obtained. The ability of the Company to continue as a going concern is dependent upon raising additional capital to fund the Company's current R&D activities, general and administration expenses and any expansion of operations through equity financings and non-dilutive funding and partnerships. As there can be no assurance that the Company will be successful in its efforts to raise additional financing on terms satisfactory to the Company, there is substantial doubt about the Company's ability to continue as a going concern. The Company is currently analyzing financing alternatives that could include equity and/or debt financings, out-licensing agreements for ATI-1501, and/or new strategic partnership agreements to fund some or all costs of development. There can be no assurance that the Company will be able to obtain the capital sufficient to meet any or all of the Company needs. The availability of equity or debt financing will be affected by, among other things, the results of the R&D, the Company's ability to obtain regulatory approvals, the market acceptance of the Company's products, the state of the capital markets generally, strategic alliance agreements and other relevant commercial considerations. In addition, if the Company raises additional funds by issuing equity securities, the existing security holders will likely experience dilution, and any incurring of indebtedness would result in increased debt service obligations and could require the Company to agree to operating and financial covenants that would restrict the Company's operations. There can be no assurance that the Company will have sufficient capital to fund its ongoing operations, develop or commercialize any products without future financings. Any failure on Appili's part to raise additional funds on terms favorable or at all may require the Company to significantly change or curtail the current or planned operations in order to conserve cash until such time, if ever, that sufficient proceeds from operations are generated, and could result in the Company not taking advantage of business opportunities, in the termination or delay of clinical trials for our products, in curtailment of the product development programs designed. Such adjustments or delays could be material.

RELATED PARTY TRANSACTIONS

The Company's Chief Development Officer is a partner of Bloom Burton & Co., which is a principal shareholder of the Company. At September 30, 2019, the Company owed \$nil (March 31 2019 - \$9,165) and during the six months ended September 30, 2019, the Company was charged \$109,977 (September 30, 2018 - \$nil) for services performed by the Chief Development Officer. At September 30, 2019, the Company also owed \$45,000 (March 31, 2019 - \$nil) and during the six months ended September 30, 2019, was charged \$75,000 (September 30, 2018 - \$nil) for consulting services in relation to business development activities by Bloom Burton Securities Inc.

CONTRACTUAL OBLIGATIONS

There is no material change in the contractual obligations of the Company since the beginning of the 2020 fiscal year. Details on the contractual obligations of the Company can be found in the audited financial statements and related notes in the audited annual financial statements for the year ended March 31, 2019 and unaudited interim condensed financial statements for the six months ended September 30, 2019.

OFF-BALANCE SHEET ARRANGEMENTS

The Company was not party to any off-balance sheet arrangements as of September 30, 2019.

OUTSTANDING SECURITIES

As of November 27, 2019, the Company had 33,588,947 issued and outstanding Common Shares and 2,716,025 stock options and 934,251 warrants outstanding.

RISKS AND UNCERTAINTIES

The Company is a clinical-stage company that operates in an industry that is dependent on a number of factors that include the capacity to raise additional capital on reasonable terms, obtain positive results of clinical trials without serious adverse or inappropriate side effects, and obtain market acceptance of its product by physicians, patients, healthcare payers and others in the medical community for commercial success, etc. An investment in the Common Shares is subject to a number of risks and uncertainties. An investor should carefully consider the risks described under the heading “*Risk Factors*” in the Company’s annual information form dated July 3, 2019 filed in respect of the fiscal year ended March 31, 2019. If any of such described risks occur, or if others occur, the Company’s business, operating results and financial condition could be seriously harmed and investors may lose a significant proportion of their investment. There are important risks which management believes could impact the Company’s business.

DISCLOSURE CONTROLS AND PROCEDURES AND INTERNAL CONTROLS OVER FINANCIAL REPORTING

The Company has implemented a system of internal controls that it believes adequately protects the assets of the Company and is appropriate for the nature of its business and the size of its operations. The internal control system was designed to provide reasonable assurance that all transactions are accurately recorded, that transactions are recorded as necessary to permit preparation of financial statements in accordance with IFRS, and that our assets are safeguarded. These internal controls include disclosure controls and procedures designed to ensure that information required to be disclosed by the Company is accumulated and communicated as appropriate to allow timely decisions regarding required disclosure. Internal control over financial reporting means a process designed by or under the supervision of the CEO and the CFO, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS as issued by the IASB. The internal controls are not expected to prevent and detect all misstatements due to error or fraud. Although the Company believes its financial reporting and financial statements are prepared with reasonable safeguards to ensure reliability, the Company cannot provide absolute assurance in this regard.

BASIS OF PRESENTATION OF FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES

The financial statements have been prepared in accordance with the IFRS as issued by the IASB. The accounting policies, methods of computation and presentation applied in the financial statements are consistent with those of previous financial years except for the presentation of government assistance now presented as a separate item in the statements of loss and comprehensive loss. The Company’s significant accounting policies are detailed in the notes to the audited financial statements for March 31, 2019.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

Estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. The determination of estimates requires the exercise of judgement based on various assumptions and other factors such as historical experience and current and expected economic conditions. Actual results could differ from those estimates. Critical judgements in applying the Company's accounting policies are detailed in the unaudited interim condensed financial statements for the three and six months ended September 30, 2019.

FINANCIAL INSTRUMENTS

Financial instruments are defined as a contractual right or obligation to receive or deliver cash on another financial asset. The following table sets out the approximate fair values of financial instruments as at the statement of financial position date with relevant comparatives:

	September 30, 2019		March 31, 2019	
	Carrying value \$	Fair value \$	Carrying value \$	Fair value \$
Cash	3,041,077	3,041,077	5,421,097	5,421,097
Short-term investments	30,554	30,554	30,481	30,481
Amounts receivable	145,631	145,631	479,500	479,500
Accounts payable and accrued liabilities	933,576	933,576	1,287,525	1,287,525
Long-term debt	1,007,400	1,007,400	1,118,600	1,118,600

Assets and liabilities, such as commodity taxes, that are not contractual and arise as a result of statutory requirements imposed by governments, do not meet the definition of financial assets or financial liabilities and are, therefore, excluded from amounts receivable and accounts payable and accrued liabilities in this table.

Fair value of items, which are short-term in nature, have been deemed to approximate their carrying value. The above noted fair values, presented for information only, reflect conditions that existed only at September 30, 2019, and do not necessarily reflect future value or amounts, which the Company might receive if it were to sell some or all of its assets to a willing buyer in a free and open market.

The following table outlines the contractual maturities for long-term debt which includes loans with a set repayment schedule, as well as loans that are repayable based on a percentage of revenues, for the Company's financial liabilities. The long-term debt is comprised of the contributions received described in note 9 of the unaudited interim condensed financial statements as at September 30, 2019:

	Total	Year 1	Years 2 to 3	Years 4 to 5	After 5 years
Accounts payable and accrued liabilities	933,575	933,575	-	-	-
Long-term debt	4,009,261	149,144	347,816	364,530	3,147,771
Operating leases	52,245	50,139	2,106	-	-
	<u>4,995,081</u>	<u>1,132,858</u>	<u>349,922</u>	<u>364,530</u>	<u>3,147,771</u>

ADDITIONAL INFORMATION

Additional information relating to the Company, including the Company's annual information dated July 3, 2019 filed in respect of the fiscal year ended March 31, 2019, is available under the Company's profile on SEDAR at www.sedar.com.