ANNUAL INFORMATION FORM

For the Year ended March 31, 2021
June 23, 2021

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FORWARD-LOOKING AND OTHER STATEMENTS

This Annual Information Form (the "**AIF**") 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 AIF include, but are not limited to, statements relating to:

- our ability to maintain the listing of the Company's Class A common shares (the "**Common Shares**") on the Toronto Stock Exchange (the "**TSX**");
- our strategy;
- our ability to continue as a going concern;
- the sufficiency of our financial resources to support our activities;
- potential sources of funding;
- the effect of the coronavirus disease 2019 ("**COVID-19**") on the Company's business and operations;
- our deployment of resources;
- 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 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;
- our ability to hire and retain skilled staff; and
- our intention with respect to updating any forward-looking statements after the date on which such statement is made or to reflect the occurrence of unanticipated events;

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 AIF, the Company has made various material assumptions, including but not limited to (i) the Company's ability to initiate and complete its proposed clinical trials in a timely manner; (ii) the ability of the Company to secure the requisite level of patient and site enrollment; (iii) the Company's ability to enter into the requisite clinical trial agreements relating to any proposed clinical trials; (iv) obtaining positive results of clinical trials; (v) obtaining regulatory approvals; (vi) general business and economic conditions; (vii) the Company's ability to successfully out-license or sell its current products and in-license and develop new products; (viii) the availability of financing on reasonable terms; (ix) the Company's ability to attract and retain skilled staff; (x) market competition; (xi) the products and technology offered by the Company's competitors; (xii) the Company's ability to protect patents and proprietary rights; and (xiii) the effect of COVID-19 infections on the Company's business and operations.

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 effect of COVID-19 on the Company's business and operations;
- the Company's potential redeployment of resources;
- the ownership and protection of intellectual property;
- litigation and product liability risks;
- employee matters and managing growth;
- ownership of the Company's securities;
- working capital and capital resources;
- ability to retain key personnel;
- implementation and development delays;
- product deficiencies;
- volatility of share price; and
- the other risks discussed under the heading "*Risk Factors*".

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 AIF 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.

MEANING OF CERTAIN REFERENCES

As used in this AIF, unless the context otherwise indicates:

- the terms "Appili", "Company", "we", "us" and "our" mean Appili Therapeutics Inc.; and
- unless otherwise indicated all dollar amounts are in Canadian dollars.

For an explanation of certain technical terms and abbreviations used in this prospectus, see the "*Glossary of Terms*" section of this prospectus.

Except where otherwise expressly indicated, information relating to securities of the Company (including the issuance price or exercise price thereof, as applicable) is presented on a post-Share Split basis.

MARKET AND INDUSTRY DATA

Market and industry data presented in this AIF was obtained from third party sources, industry reports, journals, studies and publications, websites and other publicly available information, as well as industry and other data prepared by us or on our behalf on the basis of our knowledge of the health care industry, markets and economies (including our opinions, estimates and assumptions relating to such industry, markets and economies based on that knowledge). Certain statistical information and market research contained in this AIF, such as the results of studies or surveys, are based on surveys or studies conducted by independent third parties. We believe that the industry, market and economic data presented throughout this AIF is accurate and, with respect to data prepared by us or on our behalf, that our opinions, estimates and assumptions are currently appropriate and reasonable, but there can be no assurance as to the accuracy or completeness thereof. The accuracy and completeness of the industry, market and economic data presented throughout this AIF are not guaranteed. Actual outcomes may vary materially from those forecasted in such reports or publications, and the likelihood for material variation can be expected to increase as the length of the forecast period increases. Although we believe it to be reliable, we have not independently verified any of the data from third party sources referred to in this AIF, analyzed or verified the underlying studies or surveys relied upon or referred to by such sources, or ascertained the underlying industry, market, economic and other assumptions relied upon by such sources. Industry, market and economic data is subject to variations and cannot be verified due to limits on the

availability and reliability of data inputs, the voluntary nature of the data gathering process and other limitations and uncertainties inherent in any statistical survey.

THE CORPORATE STRUCTURE

Name, Address and Incorporation

The Company was incorporated under the name "Appili Therapeutics Inc." pursuant to the *Companies Act* (Nova Scotia) on May 7, 2015. The Company's articles of association were amended on July 10, 2015 to allow for the issuance of uncertificated securities. On November 15, 2018, the Company was continued as a federal corporation under the provisions of the *Canada Business Corporations Act* ("**CBCA**"). The articles of continuance of the Company (the "**Articles**") filed in connection with such continuance contained provisions amending the existing authorized capital of the Company to permit (in addition to the issuance of Class A common shares (the "Common Shares") the issuance of (i) an unlimited number of Class B non-voting common shares (the "**Non-Voting Shares**") and (ii) an unlimited number of preferred shares (the "**Preferred Shares**"), issuable in series, with such rights, privileges, restrictions and conditions as the board of directors of the Company (the "**Board**") may determine from time to time. On May 3, 2019, the Company amended the Articles to subdivide its Common Shares on the basis of 3.86 post-subdivision Common Shares for each one pre-subdivision Common Share (the "**Share Split**"). The Common Shares trade on the TSX under the symbol "APLI" and on the OTCQX under the symbol "APLIF". See "*Description of Share Capital*".

Appili's head office is located at #21 - 1344 Summer Street, Halifax, Nova Scotia B3H 0A8 and its registered office is located at 77 King Street West, Suite 400, Toronto-Dominion Centre Toronto, ON M5K 0A1 Canada.

Intercorporate Relationships

The Company has one wholly-owned subsidiary, Appili Therapeutics Inc. USA.

BUSINESS OF THE COMPANY

Overview of the Company

Appili is a pharmaceutical company focused on the acquisition and development of novel medicines 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 five programs, described below: a global partnership on the COVID-19 antiviral candidate REEQONUS™ / Avigan® / favipiravir ("**favipiravir**"), ATI-2307, ATI-1701, ATI-1503 and ATI-1501.

Favipiravir

Favipiravir is an orally delivered novel broad-spectrum antiviral drug originally developed by FUJIFILM Toyama Chemical Co., Ltd. ("**FFTC**") and approved in 2014 in Japan for use against pandemic influenza (flu) (PMDA 2014). Favipiravir is active against a wide range of RNA viruses, including many for which there are limited or no approved therapies (Furuta 2017). Favipiravir has been extensively studied and has a well-established safety profile. The drug is available in an oral tablet format, stable at room temperature, and amenable to use in a wide range of care settings (PMDA 2014; Furuta 2017). In collaboration with global partners, Appili is designing, overseeing, and funding pivotal clinical trials to evaluate favipiravir for COVID-19 and support global regulatory submissions.

ATI-2307

ATI-2307 is Appili's novel clinical stage antifungal candidate. It has a highly differentiated mechanism of action and has demonstrated antifungal activity against multiple high priority and clinically important fungi, including *Cryptococcus* and multi-drug resistant *Candida,* such as *Candida auris* (Mitsuyama 2008, Wiederhold 2016, Wiederhold 2019, Shibata 2012). ATI-2307 has been evaluated in three Phase 1 studies and is undergoing rigorous preclinical evaluation to inform clinical development strategy and support initiation of Phase 2 development expected in 2022. Potential target indications include cryptococcal meningitis and invasive candidiasis.

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 or 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, and can be fatal if untreated (CDC 2018, WHO 2007). Since it is a highly infectious pathogen capable of causing severe illness, medical counter measures for *F. tularensis* are a biodefense priority for the United States and other governments around the world. There is currently no approved vaccine for the prevention of tularemia in the United States or other major global markets.

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 US Centre for Disease Control ("**CDC**") priority pathogens, *Enterobacteriaceae*, *Acinetobacter* and *Pseudomonas*, with favourable pharmacokinetic properties (Guo 2015, McKinney 2015, Olivier 2014, Polikanov 2014).

ATI-1501

ATI-1501 is a taste-masked liquid oral suspension formulation of an antibiotic, metronidazole. 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, the only approved oral metronidazole products are in solid dose formats. Elderly and pediatric patients with difficulty swallowing must typically crush the tablets to ingest them. Metronidazole also has a strong bitter, metallic taste that is exacerbated during crushing and can reduce patient adherence to treatment. 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.

Appili has licensed United States development and commercialization rights to specialty pharmaceutical company Saptalis Pharmaceuticals LLC (**"Saptalis"**), a New York-based specialty pharmaceutical company.

Recent Developments

On May 17, 2021, the Company announced that an independent Data and Safety Monitoring Board ("**DSMB**") has recommended continuation without modification of Appili's ongoing Phase 3 PRESECO (PREventing SEvere COVID-19) trial evaluating favipiravir as a potential oral therapy for patients with mild-to-moderate COVID-19.

Three-Year History

Fiscal 2021 (April 2020 to March 2021)

On February 2, 2021, Rochelle Stenzler joined the Board.

On January 28, 2021, the Company announced that its Phase 3 PRESECO clinical trial, which dosed the first participant on December 2, 2020, was actively recruiting participants in 12 out of 20 sites in the United States. The Company had submitted the new protocol to its open Investigational New Drug ("**IND**") with the United States Food and Drug Administration ("**FDA**") to conduct the Phase 3 PRESECO clinical study on September 11, 2020.

On December 22, 2020, the Company announced that Dr. Reddy's Laboratories Ltd ("**DRL**") Canada had filed an application for favipiravir tablets for the acute treatment of mild to moderate COVID-19 adult patients under the Health Canada's Interim Order Respecting the Importation, Sale and Advertising of Drugs for Use in Relation to COVID-19 ("**Interim Order**"). The Interim Order was signed by the Canadian Minister of Health in September 2020 to create a new authorization pathway that will help expedite the authorization of drugs and vaccines for COVID-19. According to Health Canada, favipiravir tablets are the first oral solid dosage form submitted under the Interim Order.

On November 24, 2020, the Company announced that Health Canada had provided a No Objection Letter ("**NOL**") for Appili's Phase 3 PEPCO study to evaluate favipiravir tablets in the prevention of COVID-19 proposed study. The FDA had also accepted a submission of protocol amendment to conduct the trial in the United States. This study has not yet been initiated as it is dependent on receiving government funding to support the study.

Effective November 1, 2020, Don Cilla, PharmD, MBA joined Appili as the Company's new Chief Development Officer ("**CDO**").

On October 30, 2020, the Company announced that it has signed a collaboration, development, and supply agreement (the "**Collaboration Agreement**") with DRL and Global Response Aid ("**GRA**") for favipiravir.

On October 27, 2020, the Company announced it had entered into an agreement with Ology Bioservices ("**Ology**"), a biologics contract development and manufacturing organization, under which Ology will manufacture the Company's ATI-1701 vaccine candidate. The U.S. Department of Defense, through the Joint Science and Technology Office of the US Defense Threat Reduction Agency ("**DTRA**"), awarded Ology $6.3MM USD for ATI-1701 manufacturing and development work.

On October 20, 2020, the Company announced that investigators enrolled and dosed the first cluster of participants in Appili's Phase 2 CONTROL COVID-19 clinical trial evaluating favipiravir as a post-exposure outbreak control measure against COVID-19. The Company had received a Non-Objection Letter from Health Canada approving a Phase 2 clinical trial evaluating FFTC's drug favipiravir for the prevention of COVID-19 on May 21, 2020.

On September 16, 2020, the Common Shares began trading on the TSX under the trading symbol "APLI".

On August 10, 2020, the Company announced that the FDA has granted the Company clearance to proceed after Appili's filing of an IND application for favipiravir.

On June 15, 2020, the Common Shares began trading on the OTCQX Best Market under the ticker symbol "APLIF."

On June 10, 2020, the Company completed a prospectus offering ("**June 2020 Offering**") of 12,937,500 units (the "**June 2020 Units**"), at a price of $1.20 per June 2020 Unit, for aggregate proceeds of $15,535,000. Each June 2020 Unit consisted of one Common Share and one-half of one Common Share purchase warrant (each whole warrant, a "**June 2020 Warrant**"). Each June 2020 Warrant entitles the holder to acquire one additional Common Share at an exercise price of $1.50 for a period of 3 years, expiring on June 10, 2023. An aggregate of 902,825 broker warrants (the "**June 2020 Broker Warrants**") were issued as compensation to certain agents in connection with the June 2020 Offering. Each June 2020 Broker Warrant entitles the holder to acquire one Common Share at an exercise price of $1.20 for a period of 2 years, expiring on June 10, 2022. Concurrently with the closing of the June 2020 Offering the Company closed a non-brokered private placement of 1,200,000 June 2020 Units for aggregate gross proceeds of $1,440,000.

On April 21, the Company appointed Yoav Golan, MD, to serve as its first Chief Medical Officer ("**CMO**").

Fiscal 2020 (April 2019 to March 2020)

On February 20, 2020, the Company completed a prospectus offering ("**February 2020 Offering**") of 12,812,500 units (the "**February 2020 Units**"), at a price of $0.80 per February 2020 Unit, for aggregate proceeds of $10,250,000. Each February 2020 Unit consisted of one Common Share and one-half of one Common Share purchase warrant (each whole warrant, a "**February 2020 Warrant**"). Each February 2020 Warrant entitles the holder to acquire one additional Common Share at an exercise price of $1.10 for a period of 3 years, expiring on February 20, 2023. An aggregate of 896,875 broker warrants (the "**February 2020 Broker Warrants**") were issued as compensation to certain agents in connection with the February 2020 Offering. Each February 2020 Broker Warrant entitles the holder to acquire one Common Share at an exercise price of $0.80 for a period of 2 years, expiring on February 20, 2022.

On January 24, 2020, the Company appointed Juergen Froehlich, MD, MBA, to the Board. In addition, Appili announced the appointment of current board member and Xenon Pharmaceuticals Inc. ("**Xenon**") President and Chief Financial Officer Ian Mortimer as the Chair of the Board, replacing Stephen Nicolle, who resigned on January 27, 2020.

On December 3, 2019, the Company entered into a development and commercialization agreement with Saptalis, on ATI-1501, Appili's liquid suspension reformulation of the antibiotic metronidazole. Under the terms of the agreement, Appili is eligible to receive multiple milestone and royalty payments on the sale of ATI-1501 in the U.S. In addition, Saptalis will be responsible for overseeing the regulatory review, manufacturing, and preparation for the anticipated commercialization of ATI-1501 in the U.S.

On December 2, 2019, the Company appointed Dr. Armand Balboni to serve as its new Chief Executive Officer, replacing the former CEO, Kevin Sullivan. Dr. Balboni had served as Appili's Chief Development Officer and a member of the Company's board since 2018 and brings over 20 years of clinical and regulatory experience to the role of Appili CEO.

On November 21, 2019, the Company announced the signing of an Asset Purchase Agreement ("**APA**") with FFTC, to acquire and develop ATI-2307 (formerly T-2307) to treat invasive fungal infections. The 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 acquired exclusive worldwide rights, excluding Japan, to develop and commercialize this antifungal candidate. 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's 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 in non-human primates, which showed complete (100%) protection 90 days after vaccination from a lethal exposure to the pathogen *F. tularensis*.

On July 2, 2019, the Company announced that it executed the contract with the United States Department of Defense, Congressionally Directed Medical Research Programs, Peer Reviewed Medical Research Program ("**PRMRP**") of a $3.0 million USD grant awarded in February 2019.

On June 24, 2019, the Company announced that the TSX-V has accepted the Company's application to list the Common Shares on the TSX-V. 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 "**Special Warrant Prospectus**") in connection with its $3,586,813 special warrant offering (the "**Special Warrant Offering**") that closed in multiple tranches during the period commencing on November 21, 2018 and ending on March 19, 2019. Subsequent to the completion of the Special Warrant Offering, on May 3, 2019, the Company subdivided its Common Shares on the basis of 3.86 post subdivision Common Shares for each one pre subdivision Common Share.

The Special Warrant 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 were 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 Special Warrant 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.

On May 3, 2019, the Company amended the Articles to effect the Share Split. The Share Split was completed to enhance the liquidity and encourage a wider distribution of the Common Shares among a broader investment base.

In April 2019, the Company was granted a $476,000 repayable contribution from the Atlantic Canada Opportunities Agency to support the transition of the Company to a public company.

Fiscal 2019 (April 2018 to March 2019)

During the period commencing on November 21, 2018, and ending on March 19, 2019, the Company closed the Special Warrant Offering for aggregate gross proceeds of $3,586,813.

In February 2019, Mr. Stephen Nicolle was appointed as Chair of the Board and Dr. Armand Balboni was appointed as director of the Company.

Also in February 2019, the Company was awarded additional significant non-dilutive funding to support the continued development of ATI-1503 in the form of a US$3,000,000 PRMRP government grant. The contract for this award was finalized on July 2, 2019.

In December 2018, the Company achieved positive efficacy data for an ATI-1503 analogue in a *Klebsiella pneumonia* lung model of disease after achieving efficacy in both *Escherichia coli* and *K. pneumonia* thigh models of disease.

In October 2018, the Company appointed Dr. Theresa Matkovits to serve on the Board. Dr. Matkovits is currently the Chief Development Officer at Matinas Biopharma Holdings, Inc. ("**Matinas Biopharma**").

In October 2018, the Company also named Dr. Armand Balboni as its first Chief Scientific Officer (subsequently changed to Chief Development Officer). Dr. Balboni has over 20 years of medical and drug development experience with both civilian and military organizations. He is a partner, senior advisor and member of the board of directors of Bloom Burton & Co. Dr. Balboni has served as the senior advisor on scientific, regulatory and medical affairs for the companies within Bloom Burton & Co.'s "incubation" program, advising some of their most recent Canadian biotech companies.

In July 2018, the Company announced positive top-line results of the pivotal relative bioavailability study evaluating pharmacokinetics, safety and palatability of ATI-1501 in healthy, normal adults.

Our Business Strategy

The Company was founded by Bloom Burton Development Company ("**BBDC**") to acquire, develop and commercialize 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 Company has recruited a team of experienced drug development and commercialization professionals to, among other things: (i) identify high value commercial and R&D anti-infective assets, (ii) leverage available incentive programs to accelerate development, and (iii) maximize market access, reimbursement, and partnerships and alliances to realize stakeholder value. The Appili team has built a portfolio of anti-infective assets through internal innovation and acquisition from partners, and is actively evaluating additional antiviral, antibacterial, antifungal, antiparasitic and vaccine assets for acquisition or partnership.

Our Development Programs

Appili is dedicated to the acquisition, discovery, development, and commercialization of novel infectious disease therapeutics and vaccines. The Company's anti-infective portfolio currently includes five major programs: favipiravir, ATI-2307, ATI-1701, ATI-1503, and ATI-1501, described below.

Favipiravir

On October 30, 2020, Appili announced the Collaboration Agreement with DRL and GRA for the oral COVID-19 antiviral candidate favipiravir. The Collaboration Agreement followed on and was harmonized with the previously announced global licensing transaction (excluding Japan, Russia, and China) between DRL, GRA and FFTC, the originator of favipiravir tablets. The various consortium agreements (including the Collaboration Agreement) work together to coordinate and accelerate the worldwide development, commercialization, and distribution of favipiravir tablets for the potential treatment and prevention of COVID-19. Under the terms of the Collaboration Agreement and in collaboration with its partners, Appili is designing, overseeing, and funding pivotal clinical trials to support global regulatory submissions. Partners DRL, GRA, and FFTC will be responsible for manufacturing, distribution, and commercialization worldwide outside of Japan, China and Russia. Appili will receive a profit share on Canadian and US commercial sales for a specified term and is eligible to receive royalties on the rest of the world sales of favipiravir realized by DRL and GRA in Europe and Latin America for a specified term.

COVID-19 remains an urgent public health threat worldwide. Although several vaccines have been developed and authorized for emergency use, the Company believes the need for other COVID-19 therapies, including oral antivirals, will continue, both to protect those unable to receive access to the vaccines, as well as to contain outbreaks of future variants of the virus. Easy-to-use oral therapeutics, available as a pill that could be taken at home or outside of the hospital, would allow earlier treatment of patients, before they progress to more severe disease and hospitalization. Early intervention could also help limit the spread of disease, and oral therapeutics may also enable step-down from intravenous therapy in hospitals, reducing costs and freeing up beds. Oseltamivir, sold under the brand name of Tamiflu®, is an oral antiviral for influenza, which is regularly prescribed despite widespread influenza vaccine availability, underscoring the importance of oral agents for the treatment and containment of acute respiratory viral infections.

Favipiravir is an orally delivered novel broad-spectrum antiviral drug originally developed by FFTC and approved in 2014 in Japan for use against pandemic influenza (flu) (PMDA 2014). Favipiravir is active against a wide range of RNA viruses, including many for which there are limited or no approved therapies (Furuta 2017). Favipiravir has been extensively studied and has a well-established safety profile. Over 3,000 subjects had received at least one dose of favipiravir prior to the COVID-19 pandemic, with additional trials initiated and completed since (Pilkington 2020,). The drug is available in an oral tablet format, stable at room temperature, and amenable to use in a wide range of care settings (PMDA 2014; Furuta 2017).

Multiple clinical studies suggest favipiravir may be used to effectively treat COVID-19. As of June 15, 2021, there were over 30 clinical studies listed on clinicaltrials.gov evaluating favipiravir for COVID-19. Researchers in China were the first to report in February 2020 that favipiravir exhibited antiviral activity *in vitro* against SARS-CoV-2, the virus that causes COVID-19 (Wang 2020). Other small-scale clinical trials conducted in China, Russia, and India provided early indications of clinical benefit to patients with COVID-19, although some studies were also inconclusive (Cai 2020; Chen 2020; Glenmark Jul 22 2020 PR; Doi 2020; Ivashchenko 2020, Udwadia 2020). Based on initial data, Russia and India have approved favipiravir for the emergency treatment of COVID-19. Researchers are currently conducting trials evaluating favipiravir for COVID-19 in various countries, including the United States, China, and the United Kingdom. However, robust randomized controlled Phase 3 trials are needed to support regulatory approvals globally.

Appili and its consortium partners are engaged in a comprehensive clinical development program to evaluate the potential efficacy of favipiravir for the treatment of COVID-19. Appili partners DRL and FFTC have each reported on trials conducted in the hospital setting, while Appili continues to focus on evaluation of favipiravir in community and outpatient settings.

In September 2020, FFTC announced the results of its Phase 3 study evaluating favipiravir for the treatment of hospitalized COVID-19 patients with non-severe pneumonia. The study met its composite primary endpoint, with

favipiravir showing a statistically significant improvement in time to elimination of COVID-19-related symptoms (defined as no fever, SpO2[†] >95%, and improvement on chest imaging) and undetectable SARS COV-2 by PCR testing. This randomized, placebo-controlled study was conducted in 156 COVID-19 patients (n=107 on favipiravir; n=49 on placebo). The median time to achieving the endpoint with favipiravir was reduced by 2.8 days compared to the control group (p= 0.0136) (FFFTC PR Sept 23 2020).

In January 2021, DRL announced interim results from its Phase 3 trial conducted in Kuwait evaluating favipiravir for the treatment of hospitalized patients with moderate-to-severe COVID-19. The primary endpoint analyzed was sustained resolution of hypoxia, a condition where not enough oxygen makes it to the cells and tissues in the body. Length of hospitalization was analyzed as a secondary endpoint. The study's primary endpoint met the pre-specified definition of futility, and the trial was stopped. A subgroup analysis, however, of subjects with a low National Early Warning Risk Score, a system for predicting severe COVID-19 outcomes, revealed that the patients were discharged 3 days earlier than the control group (median time to discharge; 8 days vs. 11 days; $p < 0.05$).

The data generated by DRL and FFTC suggests that favipiravir may provide important clinical benefits when given early to COVID-19 patients and has little or no effect when given to later-stage hospitalized patients. This observation is consistent with earlier trials conducted on favipiravir in India and China (Chen 2020; Glenmark Jul 22 2020) and in-line with findings reported by both Gilead and Eli Lilly showing greater clinical benefit with Veklury® (remdesivir) and bamlalnivimab when administered to patients with milder, earlier-stage disease (Beigel 2020; ACTIV-3/TICO LY-CoV555 Study Group 2020; Chen 2020). Previous clinical experience with other acute viral infections such as influenza also suggests that the potential clinical benefit of antivirals is highest when administered either prior to or early during infection, before widespread tissue damage and progression to severe illness has occurred (Fiore 2011, Welliver 2001, Romagnoli 2020).

Appili's announced clinical trials are summarized below:

- ***PRESECO: Phase 3 Early Treatment of Mild-to-Moderate COVID-19***

PRESECO is a double-blinded, randomized, placebo-controlled Phase 3 trial designed to evaluate the efficacy of favipiravir for the early treatment of mild-to-moderate COVID-19 in the outpatient setting. The study is actively enrolling and expected to enroll approximately 826 patients at COVID-19 treating sites in the US, Brazil, and Mexico. The primary endpoint will be time to resolution of symptoms, with additional secondary endpoints assessing impact on hospitalization rates and more severe outcomes. PRESECO also includes a viral shedding sub-study involving a subset of study participants.

PRESECO enrollment commenced in November 2020. The Company subsequently announced that the DSMB recommended the continuation of the study in May 2021. Enrollment is expected to be completed in Q3 2021, with final data readout anticipated in Q3 2021.

- ***PEPCO: Phase 3 Early Treatment of Mild-to-Moderate COVID-19***

PEPCO will be a double-blinded, randomized, placebo-controlled Phase 3 trial designed to evaluate the efficacy of favipiravir for COVID-19 post-exposure prophylaxis in the outpatient setting. The study is expected to enroll 1,156 COVID-19 household contacts in Canada and the US. The primary endpoint will be the proportion of subjects who develop symptomatic COVID-19, with additional secondary endpoints assessing asymptomatic infections rates, as well as impact on hospitalization rates and more severe outcomes.

The Phase 3 protocol has been submitted to the FDA and initiation of the study is subject to the Company receiving support to fund the clinical trial.

- ***CONTROL-COVID: Phase 2 COVID-19 Outbreak Control in Long-Term Care Facilities ("LTCs")***

CONTROL-COVID was a partially-blinded, placebo-controlled, cluster randomized controlled trial evaluating the utility of favipiravir as a preventative measure against COVID-19 outbreaks in LTCs. Under the trial protocol, upon

[†] Oxygen saturation (SpO2) is a measurement of how much oxygen your blood is carrying as a percentage of the maximum it could carry. For a healthy individual, the normal SpO2 should be between 96% to 99%.

confirmation of a COVID-19 outbreak in a long-term care unit, all consenting residents in that unit, including those with confirmed COVID-19, received either favipiravir or placebo. The study design called for enrollment of 16 long-term care units across Canada and the US, however due to the decline in cases of COVID-19 in LTC's, the Company announced it was stopping the trial due to lack of enrolment in June 2021.

Along with partners DRL, FFTC, and GRA, Appili continues to monitor the clinical and commercial landscape for COVID-19 therapies and may elect to initiate additional trials or development activities to accelerate or expand market access for favipiravir in the US, Canada, and globally.

ATI-2307

Appili acquired novel antifungal ATI-2307 (formerly T-2307) from FFTC in November 2019. Appili holds worldwide rights to the program with the exception of Japan, which was licensed back to FFTC as part of the APA.

ATI-2307 is a novel small molecule antifungal with a highly differentiated mechanism of action, and broad-spectrum activity against fungal pathogens, including *Candida*, *Aspergillus*, and *Cryptococcus* (Mitsuyama 2008). ATI-2307 interferes with fungal mitochondria, making it cidal (deadly) against *Cryptococcus* (Mitsuyama 2008, Nishikawa 2017, Shibata 2012). The compound has demonstrated *in vivo* efficacy in multiple animal models of fungal infection, including 100% survival in a lethal mouse lung *Cryptococcus* infection model. The Company is planning on evaluating the potential effectiveness of ATI-2307 for the treatment of a variety of invasive fungal infections, including those caused by *Cryptococcus* and *Candida* species. The target patient population will likely consist of severely ill and hospitalized, highly comorbid patients with suspected or confirmed invasive 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 tested in humans.

The Company is developing ATI-2307 for the treatment of invasive fungal infections with a near-term focus on those caused by *Cryptococcus* and *Candida*. Generally regarded as an opportunistic infection, *Cryptococcus* infections occur most commonly in immunosuppressed patients, such as those undergoing chemotherapy for cancer treatment, immunosuppression for transplant, or HIV-positive patients (May 2016). *Cryptococcus* is often invasive, and infections frequently progress to the central nervous system, resulting in a disease known as cryptococcal meningitis. Cryptococcal meningitis is a life-threatening disease despite current therapies (Pyrgos 2013, Pappas 2013). The current standard of care for cryptococcal meningitis, which is amphotericin B in combination with flucytosine (Perfect 2010), is also associated with significant toxicity, including the potential for kidney failure (Saliba 2008, Hamill 2013, AmBisome® FDA Label 2012).

The Company is conducting proof of concept nonclinical studies evaluating the therapeutic effect of ATI-2307 in rabbit and mouse intracranial *Cryptococcus* infection models. These studies are being conducted in collaboration with leading *Cryptococcus* researchers, including Dr. John Perfect at Duke University and Drs. Thomas Patterson and Nathan Wiederhold at the University of Texas Health Science Center at San Antonio. The Company is also evaluating ATI-2307 activity *in vitro* against a panel of clinical isolates, including drug-resistant *Cryptococcus* strains. The proposed and ongoing nonclinical studies will guide the Company's development strategy. A portion of the work described above is being supported by the U.S. National Institute of Allergy and Infectious Diseases (**"NIAID"**). The Company held advisory meetings with key opinion leaders to discuss potential development pathways and Phase 2 trial designs for *Cryptococcus*. The Company has also initiated manufacturing, clinical, and regulatory activities to support initiation of a Phase 2 clinical trial expected in 2022.

The Company is also planning development activities to advance ATI-2307 as a potential therapeutic for invasive *Candida* infections through discussions with key opinion leaders and is exploring potential government grant sources to fund such activities. Multiple *Candida* species are capable of human infection, including the most commonly observed *Candida albicans* and the newly emerging pathogen *Candida auris* (Jeffery-Smith 2017). *Candida* species are generally treated with an echinocandin or an azole (Pappas 2015), but growing antifungal resistance is threatening the existing antifungal drugs on the market (Pristov 2019). Physicians often rely on toxic amphotericin B in cases of refractory and highly resistant *Candida* infections (Pappas 2015). In the case of *C. auris*, infections resistant to all three major classes have been reported (Ostrowsky 2020, Ostrowsky 2018, Lockhart 2017). Drug-resistant *Candida*

and *C. auris* in particular are now priority pathogens for the CDC (CDC 2019). The Company has also held advisory meetings with key opinion leaders to discuss potential regulatory pathways in regard to *Candida*.

Appili has initiated parallel preclinical, manufacturing, clinical, and regulatory activities to support initiation of a Phase 2 clinical trial targeted to commence in 2022.

Depending on the indication(s) pursued in the clinic, ATI-2307 may be eligible for registration under the Limited Population Pathway for Antibacterial and Antifungal Drugs ("**LPAD**"). Introduced in 2016 as part of the 21st Century Cures Act, the LPAD provides a mechanism for accelerated clinical development for antibiotics and antifungals that treat serious or life-threatening conditions in a limited population, by potentially allowing for smaller, shorter, or fewer clinical trials (FDA, 2018). Additional conditions may need to be met in order to be eligible for development and approval under the LPAD, including but not limited to specific labeling requirements. The Company is evaluating the eligibility and appropriateness of applying the LPAD to ATI-2307 development.

The Company believes that ATI-2307 would be eligible for an Orphan Drug Designation ("**ODD**") from the FDA if developed for either the treatment of cryptococcal meningitis or certain forms of invasive candidiasis. This would qualify ATI-2307 for seven years of regulatory exclusivity upon FDA approval of the ODD. *Candida* and *Cryptococcus* are also both qualifying pathogens for the Qualified Infectious Disease Product ("**QIDP**") designation and the Company believes ATI-2307 would be eligible for an additional five-year exclusivity extension if approved for the treatment of either pathogen.

The milestones set out above are based on management's current expectations with respect to the development and advancement of ATI-2307 and are subject to certain underlying assumptions and general risks. Due to the nature of the Company's business and stage of operations, there is no assurance that these objectives will be achieved, and there can be no assurance with respect to the time or resources that may be required. See *"Risk Factors"*.

ATI-1701

Appili licensed the exclusive worldwide rights to biodefense vaccine candidate ATI-1701 from the National Research Council of Canada (**"NRC"**) in December 2017.

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 when inhaled (PHAC PSDS Anthrax 2011, PHAC PSDS Tularemia 2011). Category A pathogens are organisms or biological agents that, according to the National Institutes of Health ("**NIH**"), 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, medical counter measures for *F. tularensis* are a top biodefense priority for the United States and governments around the world. There is currently no approved vaccine for the prevention of tularemia in the United States or other major global markets.

Preliminary studies in mice conducted by the NRC and colleagues have demonstrated 100% survival of ATI-1701-immunized mice compared to no survival in unvaccinated mice (Conlan 2010, Shen 2010). Drug manufacturing activities have been initiated and animal work commenced in 2019. Preliminary data from ongoing non-human primate study showed a protective effect from ATI-1701 when animals were challenged with a lethal dose of *F. tularensis* 28 days after vaccination, and complete (100% survival) protection from lethal challenge 90 days after vaccination. Analysis of data is ongoing from an additional experiment where non-human primates were challenged at 365 days post-vaccination. Once complete, this will be followed by pivotal animal studies as well as a human safety Phase 1 study targeted to start in 2023.

The primary commercialization focus for ATI-1701 is the United States market. To be marketed in the United States, ATI-1701 must be approved by the FDA. Rare, severe diseases such as tularemia present challenges during clinical development as few patients are available to enroll in clinical trials, experimental infection studies carry unreasonable risk for patients, and field studies are not feasible.

The FDA has provided guidance on an alternate product development path for rare and severe diseases that may be applicable to ATI-1701. Its report dated October 2015 and entitled 'Product Development Under the Animal Rule' provides that for drugs developed to ameliorate or prevent serious or life-threatening conditions caused by exposure to lethal or permanently disabling toxic substances, when human efficacy studies are not ethical and field trials are not feasible, FDA may grant marketing approval based on adequate and well-controlled animal efficacy studies when the results of those studies establish that the drug is reasonably likely to produce clinical benefit in humans. This is commonly referred to as the "**Animal Rule**". Drugs evaluated for efficacy under the Animal Rule should be evaluated for safety under the existing requirements for establishing the safety of new drugs.

Appili and its strategic partners are evaluating the feasibility of developing ATI-1701 under the 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.

ATI-1701 activities have been, and are continuing to be, funded with Appili's current resources and grant funding received from DTRA, including an award which was announced in October 2020 of $6.3M USD in additional funding to support advanced development and manufacturing of the vaccine.

The milestones set out above are based on management's current expectations with respect to the development and advancement of ATI-1701 and are subject to certain underlying assumptions and general risks. Due to the nature of the Company's business and stage of operations, there is no assurance that these objectives will be achieved, and there can be no assurance with respect to the time or resources that may be required. See "*Risk Factors*".

ATI-1503

The ATI-1503 program aims to develop a new class antibiotic targeting Gram-negative bacteria. The program builds off the molecular structure of negamycin, a naturally occurring compound originally isolated from *Streptomyces* bacteria. Negamycin has a novel, well-characterized mechanism of action. The molecule has activity against a wide range of Gram-negative bacteria, has a low frequency of resistance, high solubility, and favourable pharmacokinetic properties (Guo 2015, McKinney 2015, Olivier 2014, Polikanov 2014) that support development of the ATI-1503 program.

In an effort to increase its potency, the ATI-1503 development team has generated over 270 negamycin analogs to date and have identified two novel and structurally-distinct lead series. Members of each lead series have exhibited over 10-fold increases in antibiotic activity compared to the parent negamycin compound itself. The best-performing compounds now have low, single-digit minimum inhibitory concentrations ("**MICs**") against many Gram-negative bacteria, including carbapenem-resistant *Enterobactericiae* and *Acinetobacter*, both of which are top priorities for the CDC. These analogues have demonstrated *in vivo* proof-of-concept against *Klebsiella* and *Escherichia*, with evidence of bactericidal activity observed in these models. The most promising compounds continue to advance through structured preclinical screening and evaluation, including *in vivo* efficacy animal models, safety screening, and pharmacokinetic studies.

Characterization of *in vivo* toxicology is currently ongoing. Compounds that successfully complete this preclinical development process may be nominated as clinical candidates for investigational new drug ("**IND**") enabling studies. In order to support IND enabling studies, the manufacturing route had to be optimized as the original synthetic route was only capable of generating milligram to gram quantities of material. The newly developed manufacturing process is now amenable to scale up to > 100-gram amounts. While Appili aims to identify a preclinical lead in 2021, the Company recognizes that the negamycin molecular structure could potentially yield multiple derivative compounds with distinct efficacy, safety, and pharmacokinetic profiles suitable for parallel development. The Company may elect to continue pursuing additional optimization activities to produce follow-on compounds with additional clinical potential and value.

ATI-1503 activities are continuing to be funded with Appili's current resources and grant funding received under the U.S. government's PRMRP program.

The milestones set out above are based on management's current expectations with respect to the development and advancement of ATI-1503 and are subject to certain underlying assumptions and general risks. Due to the nature of the Company's business and stage of operations, there is no assurance that these objectives will be achieved, and there can be no assurance with respect to the time or resources that may be required. See *"Risk Factors"*.

ATI-1501

ATI-1501 is a taste-masked liquid oral suspension formulation of the antibiotic metronidazole. 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, the only approved oral metronidazole products are in solid dose formats. Elderly and pediatric patients with difficulty swallowing typically have to crush the tablets to ingest them. Metronidazole also has a strong bitter and metallic taste that is exacerbated by crushing and can reduce patient adherence to treatment. 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.

The primary commercialization focus for ATI-1501 is the United States market. To be marketed in the United States, ATI-1501 must be approved by the FDA. Since ATI-1501 is a reformulation of an 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 (the "**FDCA**"). The 505(b)(2) regulatory pathway allows companies to use previously published clinical data about the approved active ingredient as part of its application package, a feature that reduces clinical costs and time to approval. The quantity of new clinical data required for a 505(b)(2) application is dependent on the reformulation in question and is determined in consultation with the FDA. If the application via the 505(b)(2) pathway is successful, ATI-1501 is expected to be approved for the same approved indications for which metronidazole is currently approved.

Appili ran a Phase 1 clinical trial, which was completed in the 2017, with database lock in the first quarter of 2018. Clinical trial data which Appili released in July 2018, included results from a total of 44 healthy adults 18 to 63 years of age who completed the bioavailability / bioequivalence portion of the trial. Data revealed that a single 500 mg dose of ATI-1501 achieved equivalent systemic drug levels to a 500 mg dose of metronidazole tablet under fasted and fed conditions. ATI-1501 was also well tolerated and safety observations for ATI-1501 were consistent with the known safety profile of metronidazole. A subset of 25 subjects also participated in an additional taste test portion of the trial comparing ATI-1501 with crushed metronidazole suspended in apple sauce. Subjects were asked to assess the palatability of both drug forms based on taste, bitterness, smell, and texture, as well as indicate which form was preferred. Assessments of taste, smell, and texture were all conducted using a nine-point hedonic scale commonly used in taste preference studies. ATI-1501 exhibited meaningful and statistically significant improvements across all palatability measures, including taste, bitterness, smell, texture, compared to crushed metronidazole including reductions in bitterness and a strong preference for ATI-1501 over the current standard of care. These data are expected to support ATI-1501's patent filings and differentiated product claims.

In December 2019, Appili entered into a development and commercialization agreement with Saptalis for the manufacturing, development, and commercialization of ATI-1501. Under the terms of the agreement, Appili is eligible to receive multiple milestone and royalty payments on the development and sale of ATI-1501 in the United States. In addition, Saptalis will be responsible for overseeing the regulatory review, manufacturing, and preparation for the filing of an NDA with the FDA (now expected to be completed in 2022), as well as the anticipated commercialization of ATI-1501 in the United States, which are the next major development milestones for ATI-1501. Upon signing the commercialization agreement with Saptalis, the Company received the initial upfront payment of USD$150,000 that was recognized as revenue in December 2019. In November 2020, Saptalis requested and obtained a Type C meeting with the FDA to discuss potential adjustments to the formulation. The continued development of the drug product will be adapted to the feedback received from the regulatory agency. See *"Business of the Company – Market Opportunity"* for additional detail on the projected commercial opportunity.

The milestones set out above are based on management's current expectations with respect to the development and advancement of ATI-1501 and are subject to certain underlying assumptions and general risks. Due to the nature of the Company's business and stage of operations, there is no assurance that these objectives will be achieved, and there can be no assurance with respect to the time or resources that may be required. See *"Risk Factors*".

Management and Employees

The drug development and commercialization process are complex and requires expertise in multiple areas. In order to successfully develop a pharmaceutical product, a company must have expertise in the design of preclinical and clinical drug development programs that are in line with regulatory guidelines. A company must also have access to specialized equipment, materials, and scientific personnel to execute experiments at all stages of the development process, which may include chemists, biologists, microbiologists, toxicologists, clinicians, and regulatory affair professionals.

Appili has assembled a team of drug development experts to build high-value anti-infective assets. The Appili executive team has extensive experience in the design and management of both preclinical and clinical stage drug development programs, including regulatory submissions to the FDA and Health Canada. In addition, Appili executives have substantial experience in raising capital through public and private markets for various issuers and private companies to support drug development and commercialization efforts. See "*Executive Officers and Directors*".

The Appili team includes multiple subject matter experts in infectious disease and drug development to advance and grow the R&D pipeline. As of June 23, 2021, Appili has a total of 14 full-time employees and two part-time employees, including a medicinal chemist, multiple project management employees, regulatory, clinical, business development and four senior executives (CEO, CMO, CDO and CFO). The Appili team includes two Medical Doctors, five individuals holding postgraduate doctoral degrees and several holding other professional designations. The majority of Appili staff operate out of either the Halifax or Toronto office. No Appili employees are unionized. The Company expects to grow its workforce gradually as its R&D and commercial portfolio is expanded.

Appili recognizes that continued workforce expansion is dependent on the recruitment of skilled and knowledgeable personnel which is not assured. However, the Company believes that its geographic footprint and corporate structure are well-suited for future recruitment. With a presence in two major Canadian academic centers and growing relationships with internationally renowned academic institutions (McGill University, Montréal; Dalhousie University, Halifax), Appili has access to a large number of highly skilled MSc and PhD level scientists. Appili's strategic presence in Canada's largest biotechnology and healthcare hub located in Toronto, Ontario, Canada also positions it well for recruitment of experienced pharmaceutical industry professionals, with many mid- and large-scale pharmaceutical companies, Clinical Research Organizations ("**CROs**'), and healthcare vendors operating in the region.

Appili enters into subcontracting, consulting, and R&D collaboration agreements as required to supplement core expertise. The Appili team has established relationships with reputable CROs, and consultants in North America and this experience allows the Company to negotiate competitive market rates. Subcontractors and collaborators currently involved in Appili product development efforts are outlined in the "*Research and Development*" section below.

Facilities

Appili's head office is located at 1344 Summer Street, Halifax, Nova Scotia. Appili leases office space and medicinal chemistry laboratory space from Innovacorp, a Nova Scotia-based crown corporation which promotes innovation in the Atlantic Canada region. Appili also has a Toronto office leasing space from Regus PLC located at 151 Yonge St, Toronto, ON.

Market Opportunity

Appili has built a diversified portfolio of first-in-class and highly differentiated agents including an antifungal, an antiviral, an antibiotic, and a vaccine. It is the Company's belief that with existing incentives, these programs address clear unmet needs with well-defined, attractive market opportunities. The Company continues to seek out licensing, partnership, and acquisition opportunities on programs that meet these criteria and expect to generate shareholder value through acquisition and development of such programs, with additional potential upside if additional incentives or long-term demographic, epidemiologic, and socioeconomic trends materialize.

Multiple incentives exist to promote the development of priority anti-infectives, particularly in the US. The Company is proactive in designing its development programs to maximize alignment with existing and potential future incentive

programs. One incentive relevant to multiple Appili programs is the Priority Review Voucher (**"PRV"**) program. The PRV program was designed to incentivize industry investment in government priority areas, which currently includes the development of drugs and vaccines for select tropical infectious diseases and biothreats. A PRV is a transferable voucher issued to an innovator company upon approval of an eligible product by the FDA. The PRV can be applied to any subsequent drug development program and reduce the NDA review time to as little as six months. Over 20 PRVs have been sold since the program was initiated in 2007, with an average selling price in excess of USD$130 million.

Favipiravir

As described in "*Our Development Programs"* above, Appili entered into the Collaboration Agreement with DRL and GRA for the development, manufacturing, and commercialization of oral COVID-19 antiviral candidate favipiravir. This agreement follows on and is harmonized with the previously announced global licensing transaction (excluding Japan, Russia, and China) between DRL, GRA and FFTC, the originator of favipiravir tablets. Under the terms of the Collaboration Agreement, Appili is eligible to receive profit shares on sales in Canada and the United States and royalties on sales in the EU and Latin American regions. Based on the structure of the deal, the most relevant commercial markets for Appili are Canada and the US, discussed herein. The market opportunity for favipiravir will ultimately depend on the outcome of ongoing and planned clinical trials. Appili may target the adult COVID-19 patient population broadly, or high-risk cohorts including the elderly and those with other risk factors. The description provided below is a general overview of the market opportunity for an oral COVID-19 antiviral for the treatment and prevention of COVID-19, with a focus on the US and Canada.

There exists an urgent and durable need for effective oral antivirals to treat and prevent COVID-19. As discussed further in *"Competitive Conditions"* below, the only antiviral therapies approved or authorized in Canada or the United States require infusion or injection, and many patients only receive therapy once they reach the hospital. Easy-to-use oral therapeutics, available as a pill that could be taken at home or outside of the hospital, would allow physicians to treat patients early before they progress to more severe disease and hospitalization. Early intervention could also help limit the spread of disease, and oral therapeutics may also enable step-down from intravenous therapy in hospitals, reducing costs and freeing up beds.

Oral antivirals can also be valuable tools for outbreak control and post-exposure prophylaxis (CDC 2016, Tan 2017, Uyeki 2019). Several meta-analyses have reported significant reductions in incident cases of seasonal influenza with post-exposure antiviral prophylaxis and antivirals play an important role in outbreak control even with the widespread availability of vaccines (Jefferson 2014, Doll 2017, Okoli 2014). Observational data has also suggested post-exposure antiviral prophylaxis may have provided benefits against another recently emerged coronavirus, the Middle East Respiratory Syndrome related coronavirus (Park 2019).

Despite the tremendous advancement in vaccines, the Company believes that oral antivirals will play important roles in long-term infection control, both to protect and treat those unable to receive access to the vaccines, as well as to contain outbreaks of future variants of the virus. For example, oseltamivir, sold under the brand name of Tamiflu®, is an oral antiviral approved for the treatment and prevention of influenza. Despite widespread influenza vaccine availability, oseltamivir remains regularly prescribed, underscoring the importance of oral agents for the treatment and containment of acute respiratory viral infections. In the last two years of US exclusivity, Roche reported US Tamiflu® revenues were over $500M USD per year.

If successfully developed as either a treatment or preventative, the Company also anticipates that favipiravir would be an attractive stockpiling candidate for government agencies, with the additional advantage to its broad-spectrum antiviral activity may expand future utility beyond COVID-19.

ATI-2307

Appili is developing ATI-2307 initially for use in the United States market for invasive *Cryptococcus* and *Candida* infections. The Company also expects to pursue broader market opportunities in non-US jurisdictions through partnership, including China and Europe. ATI-2307 may not be viable in certain markets due to local epidemiology and burden of ATI-2307-susceptible pathogens. National intellectual property laws and regulatory exclusivity provisions may also impact regional commercial opportunities. The Company intends to focus partnering efforts on markets where the ability to secure premium pricing and unmet need for antifungal therapies are highest.

The Company envisions ATI-2307 as a potentially safer and more efficacious alternative to amphotericin B-based regimens, initially for the induction treatment of cryptococcal meningitis. The Company also intends to evaluate ATI-2307 for the treatment of refractory or resistant invasive *Candida* infections, including *Candida auris.* It is Appili's view that both represent attractive orphan market opportunities with premium price potential. The *Cryptococcus* and *Candida* markets are discussed separately below.

Invasive Cryptococcus market

In the United States, standard of care induction therapy for cryptococcal meningitis is amphotericin B in combination with flucytosine (Perfect et al., 2010). There are multiple forms of amphotericin B approved in the United States, including amphotericin B deoxycholate, a liposomal form of the drug (Ambisome®) and a lipid-complex form of the drug (Abelcet®). The lipid-complex and liposomal forms of the drug have improved safety profiles, but the rates of some adverse reactions including renal failure are still unacceptably high. Based on institutional amphotericin B utilization data obtained from IQVIA, Appili estimates that upwards of 5,000 patients may be receiving amphotericin B for the treatment of *Cryptococcus* infections each year.

Market research commissioned by Appili has validated the high costs and poor outcomes associated with current cryptococcal meningitis management and suggests significant premium pricing potential for ATI-2307 (Research America, 2019). Appili's market research includes responses from over 86 infectious disease physicians responsible for hospital formulary management as either contributors or members of their institutional Pharmacy and Therapeutics Committee. Respondents confirmed that cryptococcal meningitis is a costly disease to treat, reported in-hospital mortality rates of 10-15% and emphasized toxicity and safety as major concerns of physicians when treating patients with amphotericin B, estimating that adverse event management extended hospital stays by one week (Research America, 2019). Respondents were receptive to formulary listing and stocking at a premium price of $60,000-$90,000 per course of therapy in the orphan *Cryptococcus* market (Research America, 2019). At $70,000 per prescription, this could represent an orphan market opportunity of over $350 million per year.

In 2018, cryptococcal meningitis was added to the list of tropical diseases potentially eligible under the PRV program.

Invasive Candida market

Available preclinical data suggest ATI-2307 may have utility for the treatment of *Candida*. Most invasive *Candida* infections in the United States are treatable with incumbent echinocandin or azole class antifungals. However, an important subset of *Candida* infections are either refractory or resistant to these first line agents. Amphotericin B is a toxic, last resort option for these patients. Based on institutional amphotericin B utilization data obtained from IQVIA, Appili estimates that upwards of 8,000 patients may be receiving amphotericin B for the treatment of *Candida* infections each year. If pursued, this may present an additional niche market opportunity for ATI-2307.

ATI-2307 is a broad-spectrum antifungal agent and the Company may pursue additional indications and/or formulations in the future.

ATI-1701

The objective of the ATI-1701 program is to develop a safe and effective preventative vaccine for tularemia. The Company expects that multiple, international military and government agencies may have an interest in procuring ATI-1701 for biodefense purposes; however, given existing US military funding for the program and stated biodefense procurement objectives of both civilian and military US agencies, Appili will be focusing initial commercialization efforts on the United States market. The Company also intends to evaluate procurement interest for ATI-1701 in non-US jurisdictions when appropriate, including Canada, Europe, South Korea, Japan, and the Middle East.

US awareness and funding for biodefense initiatives has grown dramatically in the wake of the September 11, 2001 terrorist attacks. The Strategic National Stockpile ("**SNS**") has been developed in the U.S. as a repository of antibiotics, vaccines, and other critical medical supplies for use in the event of a national or regional public health emergency.

On behalf of the US government, the Biomedical Advanced Research and Development Authority (**"BARDA"**) has deployed significant funds for the stockpiling and development of medical countermeasures. Included below is a non-exhaustive list of contracts issued by BARDA excluding COVID-19 contracts (total potential value listed):

- 2019: USD$285 million to Paratek Pharmaceuticals Inc., for development and procurement of Nuzyra® (omadacycline) for the treatment of pulmonary anthrax (announced on December 18, 2019)
- 2018: Up to USD$629 million to SIGA Technologies, Inc. ("**SIGA Technologies**") for smallpox antiviral (TPOXX) (designed to maintain stockpile of 1.7M courses)
- 2017: USD$539 million to Bavarian Nordic, Inc. ("**Bavarian Nordic**") for smallpox vaccine Imvamune® (also named Jynneos®) (announced on September 27, 2017)
- 2016: USD$1.6 billion to Emergent Biosolutions Inc. ("**Emergent Biosolutions**") for anthrax vaccine NuThrax® (50M+ units) (announced on September 30, 2016)
- 2011: USD$472 million to SIGA Technologies, Inc. for smallpox antiviral ST-246 (2M courses) (initially disclosed on May 31, 2011 with the total value disclosed on July 13, 2018)
- 2011: UDS$1.25 billion to Emergent Biosolutions for anthrax vaccine BioThrax® (44.75M units) (announced on March 8, 2012)

Notably, the United States Department of Health and Human Services ("**HHS**") and/or BARDA have routinely engaged in medical countermeasure procurement and development in advance of FDA approval, including the SIGA Technologies contract for USD$472 million and the Bavarian Nordic contract for USD$539 million listed above.

The Company provides no projections on the size or timing of any potential procurement contract. The Company monitors government publications on biodefense to ensure ATI-1701 remains aligned with government interests and a priority for procurement.

In addition to biodefense procurement for civilian populations, United States military agencies may have an interest in procuring additional medical countermeasure supply. The Company is exploring procurement mechanisms in the United States military and will seek out opportunities to maximize revenue potential for the ATI-1701 product.

An additional market consideration for the ATI-1701 program is its potential eligibility to secure a PRV. In 2016, the 21st Century Cures Act (US Public Law 114-255) expanded the PRV eligible program definition to include medical countermeasures. As such, if ATI-1701 is approved by the FDA as a countermeasure for the prevention of tularemia, it is the Company's expectation that the program would be eligible for a PRV. The Company may elect to retain or sell the PRV to a third party.

The 21st Century Cures Act includes a sunset clause of October 1, 2023, at which point medical countermeasures may lose PRV eligibility unless the law is renewed. Although rare pediatric priority review vouchers had similar sunset provisions that were subsequently renewed, there is no certainty that this will occur.

ATI-1503

The objective of the ATI-1503 program is to develop a broad-spectrum Gram-negative agent for the treatment of bacterial infections resistant to currently available antibiotics.

Antimicrobial resistance is an urgent threat to public health around the globe. It is estimated that at least 700,000 deaths occur worldwide each year due to antimicrobial resistance (O'Neill 2014). The CDC have reported that each year in the United States over 2.8 million people are infected with antimicrobial-resistant pathogens resulting in more deaths and up to $20 billion in excess direct healthcare costs (CDC 2019). In the European Union, the European Center for Disease Prevention and Control ("**ECDC**") attributes 25,000 deaths and at least €1.5B in direct and indirect costs to antimicrobial resistant bacteria (ECDC 2014).

The Company's current market estimates have focused on carbapenem-resistant infections and will be revised once a lead candidate and indication(s) have been selected. Carbapenems are generally regarded as a last resort antibiotic for the treatment of severe Gram-negative infections and carbapenem-resistant infections are an especially pressing and costly clinical need (Bartsch 2017, Playford, 2007, CDC 2013). Over 160,000 carbapenem-resistant *Pseudomonas, Acinetobacter, and Enterobacteriaceae* infections are estimated to occur in the United States annually (DRG 2018).

An additional 200,000 cases are estimated to occur annually in France, Germany, Spain, Italy, and the United Kingdom (collectively; "**EU-5**") (DRG 2018). The Company provides no guidance on pricing at this time but given the high cost of care and risk of severe complications in patients with multi-drug and/or carbapenem-resistant infections, pharmacoeconomic data to support premium pricing is possible (Bartsch 2017, Playford, 2007, CDC 2013, Mauldin 2010, Neidell 2012, Evans 2007, Lautenbach 2001, Lee 2006, Roberts 2009).

Over the past two decades, antibiotic resistance has been rising rapidly (Sanchez 2013, ECDC 2016 CRE Rapid Risk Assessment, EARS-Net Nov 2016). If these trends continue, market demand for novel antibiotics could continue to grow; however, the trajectory of antibiotic resistance and demand is unclear given conflicting underlying factors.

The Company's primary commercial focus for the ATI-1503 product is expected to be the United States and EU-5 markets. It is believed these jurisdictions are commercially attractive given the estimated burden of carbapenem-resistant infection and potential for premium pricing. However, the problem of antibiotic resistance is global (O'Neill 2014) and the Company intends to evaluate opportunities in other jurisdictions, including Japan, China, South Korea, India, Brazil, Canada, and the rest of Europe.

ATI-1501

Appili originally initiated development of ATI-1501 primarily for use in the United States market. Appili entered into a license agreement with New York-based specialty pharmaceutical company Saptalis on December 3, 2019, in which they were assigned development and commercialization responsibilities. Under the license agreement, Appili is entitled to receive a series of milestone payments and royalties. Appili may pursue markets outside of the United States if warranted by market conditions. In some markets, ATI-1501 will likely not be viable due to generic pricing practices and categorization of reformulations against a generic benchmark below Appili's cost of goods. Any future partnering activity conducted by the Company will be focused on markets where the ability to secure premium pricing for the innovation is high and competitive environment is favourable.

As described under "*Our Development Programs - ATI-1501*", metronidazole is a front-line antibiotic for the treatment of protozoal and anaerobic bacterial infections including *C. difficile* (Flagyl® FDA Label 2003, Surawicz 2013, FDA Orange Book 2018, Lofmark 2010). It is estimated that over 10 million prescriptions for oral metronidazole are written in the United States annually, predominantly for confirmed or suspected anaerobic bacterial infections (Quintles 2016, QuintilesIMS 2017).

The ATI-1501 product is designed to facilitate metronidazole ingestion and improve adherence. Appili expects patients of all ages that are prescribed metronidazole to benefit from this product but has identified two enriched segments of patients requiring metronidazole that are most likely to benefit: geriatrics (> 65 years) with dysphagia and pediatrics (< 16 years). These patient populations most often exhibit difficulties with swallowing, and in the case of geriatrics, are also heavily burdened by the anaerobic bacterial infections for which metronidazole is most often prescribed. Appili has commissioned multiple physician and payer surveys to determine potential pricing strategies and guide the Company's overall understanding of the potential market opportunity.

Competitive Conditions

Favipiravir

Favipiravir is a clinical-stage broad-spectrum oral antiviral candidate highly differentiated from COVID-19 therapeutics currently on the market.

Under the terms of the Collaboration Agreement, Appili's economic interests are primarily tied to the US and Canadian markets. The original composition of matter patent for favipiravir has expired in major markets including Canada and the United States. However, FFTC has licensed to the consortium a global patent portfolio generated by FFTC which includes methods of synthesis, formulations, and methods of use, many of which are granted in the United States and Canada. Together with its development partners, the Company will continue to seek out opportunities to file additional patent protections, restrict competitor freedom to operate, and maximize product exclusivity.

As a novel chemical entity not approved in the US or Canada, the Company anticipates that, if approved, favipiravir would be eligible for 5-year data exclusivity in the United States and 8-year market exclusivity in Canada, in addition to any market protections conferred by existing and future patents. The Company believes that its clinical program, developed in collaboration with DRL, GRA, and FFTC, is the most advanced and best positioned to secure potential regulatory approvals and benefit from any exclusivity protections for favipiravir in Canada and the United States. The duration of market exclusivity in other jurisdictions will vary depending on local regulatory law and patents in force. The Company acknowledges that other pharmaceutical companies have manufactured and sold favipiravir in various jurisdictions outside of Canada and the US. Appili's partners, FFTC, DRL, and GRA, are monitoring competitor activities and may explore options to enforce existing patent rights, where applicable, at their discretion.

Global rollout of multiple COVID-19 vaccines has begun. Vaccine adoption is expected to have a major impact on the incidence of COVID-19 and potential market opportunities for COVID-19 therapeutics. However, there are still issues surrounding limited supply and timely distribution of vaccines (Bloomberg 2021), and long-term efficacy and safety of vaccines is uncertain, particularly in the context of newly emerging virus strain variants (Abu-Raddad 2021). In addition to challenges with vaccine access, many individuals may not receive optimal protection from vaccination and remain at risk. Appili continues to monitor emerging data on authorized and pipeline vaccines for potential market impact. Based on existing data, the Company anticipates a seasonal endemic pattern of infection in which effective therapeutics will continue to be required to contain outbreaks as well as treat and protect individuals unable or unwilling to receive regular vaccinations.

The Company is developing favipiravir to address the unmet need for an effective, safe oral COVID-19 antiviral suitable for use outside of the hospital. Currently the only available agents for potential outpatient use are monoclonal antibodies. In the United States, Eli Lilly's bamlanivimab and etesvimab antibody cocktail and Regeneron's REGEN-COV (casirivimab and imdevimab) cocktail have both received emergency use authorization (FDA EUA List May 6 2021). In Canada, Eli Lilly's single antibody bamlanivimab is authorized, and Roche has received an authorization for the casirivimab and imdevimab cocktail product (Health Canada IO List June 22 2021). These products are generally authorized for the treatment of mild-to-moderate COVID-19 in patients at high-risk for severe disease. Monoclonal antibody therapies are injectable products and often require specialized healthcare infrastructure to administer, limiting access. The Company expects favipiravir to be compare favourably to monoclonal antibodies due to cost competitiveness and its oral dose format better suited for widespread use. Favipiravir also does not target the viral spike protein to exert its antiviral effect which may make it less susceptible to resistance by emerging variants. Recent variants with altered spike proteins have also been shown to be less susceptible to certain monoclonal antibodies, leading the FDA to revoke an authorization to Eli Lilly's single antibody product bamalanivimab in April 2021 (FDA PR Apr 16 2021). Regeneron, Eli Lilly, and others are continuing to evaluate and develop antibody products for the treatment and prevention of COVID-19, including evaluation of lower dose products and formulations suitable for subcutaneous delivery which may help overcome access and cost issues. The Company continues to monitor clinical developments related to monoclonal antibody products.

There are multiple oral COVID-19 antivirals in development that may emerge as potential competitors in the outpatient setting. These include Merck's molnupiravir, Roche / Atea's AT-527, and Pfizer's PF-07321332 and PF-07304814. Molnupiravir (also known as MK4482 or EIDD-2801) is an oral antiviral currently being developed by Merck. Molnupiravir targets the viral RNA-dependent RNA polymerase. Merck recently announced that they would be advancing molnupiravir into Phase 3 study for the treatment of mild-to-moderate COVID-19 in non-hospitalized patients. Merck has guided that data from the Phase 3 will be available in Q3/Q4 2021. Merck has also indicated that they will be initiating a clinical program evaluating molnupiravir for post-exposure prophylaxis in the second half of 2021 (Merck PR Apr 15 2021). AT-527 is being developed by Roche and Atea Pharmaceuticals as an oral antiviral agent for COVID-19. Initially designed and evaluated in Phase 1/2 as a potential hepatitis C therapy, it has been repurposed and is currently under investigation in multiple Phase 2 and Phase 3 studies for COVID-19. The clinical studies are being conducted in both non-hospitalized subjects with mild or moderate COVID-19 as well as hospitalized subjects with moderate COVID-19. Atea's outpatient Phase 3 study in mild-to-moderate COVID-19 patients with risk factors was initiated in April 2021 and Atea has guided results in the second half of 2021 (Atea PR May 13 2021).

PF-07321332 and PF-07304814 are being developed by Pfizer as oral antiviral agents for COVID-19. Both agents target the viral protease 3C. Both candidates are currently in Phase 1 study.

Appili is actively monitoring the COVID-19 competitive landscape and development pipeline. The Company will pursue business and development activities to maximize favipiravir differentiation and value.

ATI-2307

ATI-2307 is a clinical-stage broad-spectrum antifungal candidate highly differentiated from products currently on the market. The Company is maintaining an extensive patent portfolio covering composition of matter, methods of synthesis, and methods of use for the product, that will likely expire before an approved drug will be developed. The Company will continue to seek out opportunities to file additional patent protections, restrict competitor freedom to operate, and maximize product exclusivity.

If initially developed for *Cryptococcus* or *Candida*, the Company anticipates that ATI-2307 will meet the criteria for QIDP designation by the FDA under the GAIN Act, as well be eligible for ODD, both which will confer additive regulatory exclusivities of 5 and 7 years, respectively, for a total of 12 years. Appili does not expect direct competition for the period of exclusivity afforded by the Company's patent position and these regional regulatory incentives. The exact duration of market exclusivity will depend on the patentability of innovations made by Appili and duration of clinical development.

ATI-2307's initial target indication is induction therapy of cryptococcal meningitis. The primary competitive threat and current standard of care induction therapy for cryptococcal meningitis is amphotericin B, often used in combination with flucytosine (Perfect 2010). Although widely used and recommended, amphotericin B-based regimens have important limitations. All-cause in-hospital mortality for cryptococcal meningitis patients is ~10-15% in the US (Pyrgos 2013). Furthermore, amphotericin B treatment is highly toxic, increasing duration and cost of care as well as imposing a heavy burden on patients. Although the lipid-complex (Abelcet®) and liposomal (AmBisome®) forms of the drug have improved safety profiles, the rates of some adverse reactions including renal failure are still unacceptably high and impose heavy costs on the healthcare system, as evidenced by the Research America study commissioned by Appili. It is the Company's view that a safer and more efficacious alternative to amphotericin B-based treatment regimens would assume significant market share at premium pricing.

A larger competitive landscape exists for the treatment of invasive *Candida* infections. Echinocandins are now widely considered front-line agents for the treatment of invasive *Candida* infections, supported by an attractive safety profile and cidal activity (Pappas 2015). Multiple drugs of the echinocandin class are generic in the US. A notable limitation of echinocandins is a requirement for regular intravenous dosing which limits utility outside of the hospital setting. Azoles are commonly used as second-line agents in settings where echinocandin therapy is not feasible or effective. Multiple azoles are available in oral dose format and as low-cost generics, with demonstrated activity against *Candida* (Pappas 2015).

Despite the availability of echinocandin and azole class antifungals, an important subset of patients have resistant and/or refractory *Candida* infections that require treatment with amphotericin B as a drug of last resort. The Company believes that a safer alternative to amphotericin B could assume significant market share at a premium price owing to the toxicity issues associated with the class.

In addition to currently marketed drugs described above, there are antifungals in development that could present potential threats to ATI-2307. New formulations and dosing regimens of amphotericin B are under evaluation that may increase the utility, safety, or efficacy of the drug and in turn impact ATI-2307's competitive position. These include Matinas Biopharma's MAT2203, an oral encochleated form of amphotericin B that is currently being evaluated in a Phase 2 cryptococcal meningitis study.

Additional notable systemic antifungals currently in Phase 2 or 3 clinical stages of development include oteseconazole (Mycovia), rezafungin (Cidara Therapeutics), ibrexafungerp (Scynexis), and fosmanogepix (Pfizer; previously Amplyx). All of these agents have demonstrated activity against *Candida* and could significantly reduce the market opportunity for ATI-2307 in invasive *Candida* if approved for the indication. Scynexis' ibrexafungerp was recently approved for vulvovaginal candidiasis by the FDA. Additional trials evaluating ibrexafungerp for the treatment of refractory invasive fungal infections and *C. auris* are ongoing.

For the invasive *Cryptococcus* market, the primary pipeline threats are Pfizer's fosmanogepix and Matinas' MAT2203. Both products have received ODD and QIDP designations for the treatment invasive *Cryptococcus* infections and list the indication as one of their development targets. Mycovia are also developing a second antifungal agent, VT-1598, for a variety of indications including cryptococcal meningitis but have yet to proceed to Phase 2 study for any indication.

The Company is actively monitoring incumbents and potential entrants of the antifungal marketplace and adjusting the ATI-2307 program to seek to achieve production of a highly differentiated antifungal class with significant commercial potential.

ATI-1701

ATI-1701 is a novel, live attenuated vaccine for the prevention of tularemia. The Company has licensed from the NRC a robust intellectual property portfolio relating to composition of matter, methods of synthesis, and methods of use to restrict competitor freedom to operate and maximize product exclusivity. See "*Intellectual Property Rights*". The Company also plans to file additional patents to further strengthen its competitive position. ATI-1701 may be eligible for ODD designation by the FDA, providing Appili with additional mechanisms for extending product exclusivity. Appili does not expect direct competition for the period of exclusivity afforded by the Company's patent position and regional regulatory incentives (e.g. ODD designation). The exact duration of market exclusivity will depend on the patentability of innovations made by Appili and duration of clinical development. To our knowledge, there are no other organizations developing tularemia vaccines based on the same *F. tularensis* genetic backbone with the potential to infringe on the Company's freedom to operate.

There is currently no approved vaccine for the prevention of tularemia either in the United States or in major markets around the world. The most advanced vaccine candidate and greatest competitive threat to ATI-1701 is the LVS vaccine, first developed in Russia and more recently manufactured and stockpiled by the USAMRIID (Mulligan 2017). The USAMRIID vaccine ("**USAMRIID-LVS**") was never approved for use by the FDA and has been used by the United States military to vaccinate laboratory workers and other at-risk military personnel under an experimental IND application (Mulligan 2017). Despite sporadic military use, clinical data suggest the vaccine only affords incomplete and transient protection in the context of respiratory infection (Pasetti 2008, Saslaw 1961, Hornick 1966). Additional concerns specific to the USAMRIID-LVS vaccine were that it was produced using research-quality standards that do not meet modern GMP criteria for FDA approved products, has not been well studied in humans (e.g. safety, efficacy), and that the stockpile is now decades old (Pasetti 2008).

More recently the US Department of Defense's Joint Vaccine Acquisition Program contracted DynPort Vaccine Company LLC ("**DVC**") to develop a new batch of the LVS vaccine under GMP conditions. DVC developed a new formulation of the vaccine ("**DVC-LVS**") and performed preclinical and clinical characterization of the new product. Results from a safety and immunogenicity study were reported in 2017 but the Company is not aware of any subsequent development activities (Mulligan 2017).

In addition to the DVC-LVS program, there are multiple earlier stage vaccine development programs targeting tularemia (Sunagar 2016). The Company is monitoring competitor programs and plans to modify its development program appropriately to maximize procurement opportunities for the product.

ATI-1503

The ATI-1503 program is aimed at producing a novel class of antibiotic highly differentiated from products currently on the market. The Company intends to file multiple patents relating to composition of matter, methods of synthesis, and methods of use to restrict competitor freedom to operate and maximize product exclusivity. The Company also believes that the ATI-1503 product will meet the criteria for QIDP designation by the FDA under the GAIN Act, extending exclusivity for an additional 5 years. The exact duration of market exclusivity will depend on the patentability of innovations made by Appili and duration of clinical development. To our knowledge, there are no other organizations developing antibiotics based on the bacterial negamycin scaffold with the potential to infringe on the Company's freedom to operate.

The goal of the ATI-1503 program is to generate a novel class of antibiotic effective against highly resistant Gram-negative bacteria, with a focus on those bacteria resistant to carbapenems. Up until recently, physicians relied on older and/or more toxic antibiotics to treat these patients (Cerceo 2016, Morrill 2015). Since 2014, a growing number of new agents have been approved to fill this treatment gap, however, a common limitation with these agents is that they all are either derivatives of novel chemical classes or are combination products with older drug classes, and have generally provided only incremental clinical benefit via expansion of spectrum to cover a subset of resistant bacteria (Cerceo 2016, Morrill 2015, Lomovskaya 2017, Karaisakos 2015, Chen 2017, Grossman 2012, Nguyen 2014, Zerbaxa® FDA Label, Avycaz® FDA Label, Vabomere® FDA Label). These agents are often still ineffective against specific resistance mechanisms and may be at risk for more rapid resistance development overall (Karaiskos 2015, Zhanel 2016, Wong 2017).

Most late-stage pipeline agents are also derivatives or combinations with existing agents, such as aztreonam-avibactam (Pfizer), taniborbactam + cefepime (VenatoRx), durlobactam + sulbactam (Entasis), and turlobactam + sulbactam (Entasis). As such, these agents may suffer some of the same drawbacks as the incumbent agents discussed above, including increased risk for resistance due to prior bacterial exposure to the antibiotic class (Karaiskos 2015, Zhanel 2016, Wong 2017). However, novel classes and treatment modalities are in earlier stages of development and the Company continues to track their progress.

ATI-1501

The US is the primary target market for the ATI-1501 product. To our knowledge, ATI-1501 is the only oral suspension of metronidazole in development for FDA approval in the United States market and no direct competitor is approved and commercially available in the United States, Canada, and many other markets around the world. Competitor products may emerge if ATI-1501 is successful in capturing a significant share of the oral metronidazole market. In addition, a growing number of companies are engaged in reformulation activities for the United States market, including the development of oral liquid formulations. Appili has filed for patent protection on the ATI-1501 formulation and derivatives. It is expected that this will limit a competitor's room to operate if they were to develop an alternate formulation.

Metronidazole is a multi-sourced, low cost, generic product in the US. ATI-1501 is intended to serve as a substitute for oral metronidazole in patients with difficulty complying with oral solid metronidazole treatment. Substitution of metronidazole with an antibiotic product other than ATI-1501 is likely the major competitive threat to ATI-1501's commercial success. The most likely substitution threats identified by Appili are liquid oral forms of antibiotics, such as amoxicillin / clavulanate, and clindamycin, prescribed for swallowing-challenged patients with anaerobic bacterial infections (Bartlett JG 2016). Liquid formulations of drugs are available as generics and are marketed by multiple companies in the United States; however, efficacy of both competitor drugs is limited by gaps in pathogen coverage and/or growing bacterial resistance (Wexler HM 2007 Clin Microb Rev, Snydman DR 2011 Anaerobe, Hecht DW 2004 Clin Infect Dis, Nagy E 2010 Drugs, Koeth LM 2004 J Antimicrob Ther, Schuetz AN 2014 Clin Infect Dis). In contrast, metronidazole has comprehensive anaerobe coverage with resistance levels that remain low even after decades of use (Lofmark S 2010 Clin Infect Dis, Hecht DW 2004 Clin Infect Dis). The Company expects that ATI-1501 will be preferred over these substitutes due to its lower risk for treatment failure and resistance development.

Physicians in the institutional setting may consider substituting oral metronidazole with the intravenous form for patients with difficulty swallowing. The Company expects that greater convenience, reduced consumable costs, reduced nosocomial infection risk, and reduced nursing time, together with competitive pricing, position ATI-1501 favourably against intravenous competition. Furthermore, the Company does not view intravenous therapy as a credible threat outside of the hospital setting given the safety challenges and costs that would be associated with drug administration, further complicated by metronidazole's frequent dosing schedule (Norris 2018, Flagyl® FDA Label).

Another potential threat to ATI-1501 adoption is metronidazole compounding. Pharmacists and patients currently compound metronidazole in various liquids or semi-solids for patients with difficulty swallowing. A commercial kit is also currently available in the United States in support of this practice, sold by Azurity Pharmaceuticals. Section 503A of the FDCA restricts the compounding of drugs which mimic an FDA approved product and on approval the Company expects the competitive threat from compounding will be low. In addition, the Company expects that insurers and physicians would prefer ATI-1501 to compounding due to its potential for more reliable dosing and patient adherence to therapy. In the case of the Azurity Pharmaceuticals kit specifically, the kit uses a prodrug form

of metronidazole which exhibits altered pharmacokinetics that may limit utility and further weaken its competitive positioning versus ATI-1501 (Houghton 1982, Homeida 1986).

As stated above under the heading "*Market Opportunity*", the primary commercial focus for ATI-1501 is the United States market, where no oral suspension product is available. In some other jurisdictions, including Australia, the United Kingdom, and parts of Europe, a metronidazole benzoate prodrug oral suspension product is available limiting the feasibility of marketing the product in these geographies. The product exhibits altered pharmacokinetics that may limit utility in the acute setting (Houghton 1982, Homeida 1986). Although unlikely, if metronidazole benzoate were approved in the United States, it would also likely require the Company or its partners to engage in additional medical education to ensure the pharmacokinetic advantages of ATI-1501 are well understood by physicians. See also "*Risk Factors*".

Intellectual Property Rights

Appili has and will continue to pursue patent protection, register trademarks, and protect other intellectual property through trade secrets, copyright, confidential disclosure agreements, and other mechanisms as appropriate. This includes the use of confidential disclosure agreements with all prospective vendors and partners, reviewed by legal counsel under direction by Appili.

In order to maximize the duration of patent protection during the commercial life a potential product and/or allow the generation of data to strengthen a potential patent, Appili may on occasion delay patent filing, while ensuring it does not risk the product protection during this delay.

To ensure protection of all trade secrets, Appili has put in place strict confidentiality agreements with its directors, executive officers and staff and stores R&D materials and data in secure facilities requiring two level security access.

Favipiravir

Appili entered into the Collaboration Agreement with DRL and GRA on October 30, 2020, as part of which Appili received a license to favipiravir patents for development activities. The licensed patent portfolio generally relates to favipiravir formulations, methods of manufacture, and methods of use. The table below summarizes information on the issued patent portfolio relevant to Canada and the US licensed to Appili (Table 1). Patents issued or submitted in other jurisdictions are not listed. The original composition of matter patent for favipiravir has expired. Expired patents and patent applications are not listed.

Table 1. – Patents Licensed to Appili for Development Purposes Relevant to US and Canada

#	Title	Jurisdictions	Patent or Application Number	Expiry
1	PYRAZINE DERIVATIVES OR SALTS THEREOF, PHARMACEUTICAL COMPOSITION CONTAINING THE SAME, AND PRODUCTION INTERMEDIATES THEREOF	US	US 6,800,629	2021
2	PHARMACEUTICAL COMPOSITION COMPRISING PYRAZINE DERIVATIVES AND NEURAMINIDASE INHIBITORS FOR TREATING INFLUENZA INFECTIONS	US	US 8,759,354	2030
		Canada	CA 2,677,905	2028
3	ORGANIC AMINE SALT OF 6-FLUORO-3-HYDROXY-2-PYRAZINECARBONITRILE AND METHOD FOR PRODUCING THE SAME	US	US 8,168,789	2029
		Canada	CA 2,700,490	2028
4		US	US 8,513,261	2030

#	Title	Jurisdictions	Patent or Application Number	Expiry
	TABLET AND GRANULATED POWDER CONTAINING 6-FLUORO-3-HYDROXY-2-PYRAZINECARBOXAMIDE	Canada	CA 2,755,274	2030
5	MEGLUMINE SALT OF 6-FLUORO-3-HYDROXY-2-PYRAZINE CARBOXAMIDE	US	US 9,090,571	2031
6	SODIUM SALT OF 6-FLUORO-3-HYDROXY-2-PYRAZINE CARBOXAMIDE	US	US 9,096,547	2031
7	PYRAZINO[2,3-D]ISOXAZOLE DERIVATIVE WHICH IS USEFUL AS A PRODUCTION INTERMEDIATE OF PYRAZINE CARBOXAMIDE DERIVATIVE	US	US 8,901,302	2031
8	SUBSTITUTED PYRAZINO[2,3-D]ISOOXAZOLES AS INTERMEDIATES FOR THE SYNTHESIS OF SUBSTITUTED PYRAZINECARBONITRILES AND SUBSTITUTED PYRAZINECARBOXAMIDES	US	US 9,181,203	2031
9	PYRAZINO[2,3-D]ISOXAZOLE DERIVATIVE	Canada	CA 2,816,687	2031
10	CRYSTAL FORMS OF 6-BROMO-3-HYDROXY-2-PYRAZINECARBOXAMIDE	US	US 10,266,501	2036
11	CRYSTAL FORMS OF 6-BROMO-3-HYDROXY-2-PYRAZINECARBOXAMIDE	US	US 10,519,117	2036

ATI-2307

Appili entered into the APA with FFTC on November 21, 2019, pursuant to which FFTC agreed to assign all know-how and patents relating to its antifungal program to Appili (with an exclusive license back to FFTC for Japan. Appili and FFTC are in the process of completing patent assignments. The acquired patent portfolio generally relates to antifungal composition and methods of use. The acquisition included patents granted in a number of key commercially relevant jurisdictions, including the United States, Canada, and several European countries as well as a proprietary method of use covered by an as-yet unpublished patent application, the details of which are confidential until publication. The table below summarizes information on the patent portfolio relevant to Canada and the US acquired by Appili (Table 1). Patents issued or submitted in other jurisdictions, including a patent family describing a transdermal absorption preparation issued in various jurisdictions outside of the US and Canada, are not listed. Patents licensed back to FFTC for Japan are not listed.

Table 1. – Patents Acquired by Appili Relevant to US and Canada

#	Title	Jurisdictions	Patent or Application Number	Expiry
1	NOVEL ARYLAMIDINE DERIVATIVE OR SALT THEREOF	US	US 7,291,617	2023
		Canada	CA 2,477,212	2023
2	NOVEL ARYLAMIDINE DERIVATIVE, SALT THEREOF, AND ANTIFUNGAL CONTAINING THESE	US	US 7,700,623	2025
		Canada	CA 2,572,161	2025

#	Title	Jurisdictions	Patent or Application Number	Expiry
3	PHARMACEUTICAL COMPOSITION AND METHOD USING AN ANTIFUNGAL ARYLAMIDINE IN COMBINATION	US	US 8,993,603	2026
		Canada	CA 2,602,121	2026
4	CONFIDENTIAL (Method of Use)	Global (Patent Cooperation Treaty "**PCT**")	Pending	-

ATI-1701

Appili has exclusively licensed technology, know how and patents relating to its tularemia vaccine program from the NRC. The licensed patents relate to a vaccine composition comprising an attenuated *F. tularensis* mutant strain, as well as formulations of the vaccine suitable for human administration. The patents have been issued in a number of key commercially relevant jurisdictions, including the United States, Canada and several European countries. A proprietary manufacturing method for the vaccine composition is also licensed and is covered by patent applications, applications currently under review by regional patent offices. The table below summarizes information on the patent portfolio relevant to Canada and the US licensed by Appili (Table 2). Patents issued in other jurisdictions are not listed.

Table 3. – Patents Licensed by Appili

#	Title	Jurisdiction	Patent or Application Number	Expiry
1	MUTANTS OF FRANCISELLA TULARENSIS AND USES THEREOF	USA	US 8,993,302	2030
		Canada	CA 2,760,098	2030
2	A METHOD FOR LYOPHILIZING LIVE VACCINE STRAINS OF FRANCISELLA TULARENSIS	Global (PCT)	WO2019178687	-

ATI-1503

Appili's drug development program for Gram-negative bacteria includes two compounds that are both protectable by a combination of patents and regulatory strategies, without third party intellectual property licensing obligations. The new compounds developed by Appili chemists are analogs of negamycin, a natural product that was identified from *Streptomyces* in the 1970s. Lab results indicate that these analogs have significantly improved potency over negamycin, and patent applications will be filed on the compounds at an appropriate time prior to clinical development. Appili plans to apply for approval of these compounds as QIDPs, which provides an additional five years of exclusivity in addition to the 4-7 years of exclusivity available to new chemical entities.

ATI-1501

An international patent application was filed under the PCT on January 16, 2019. The patent application covers oral pharmaceutical compositions, as well as uses of such compositions to treat an infection in a patient. This application entered national phase in various jurisdictions in 2020 and is currently under review by regional patent offices. These patent applications relate to a taste masked formulation of Metronidazole directed to patients with the goal of improving compliance with prescribed dosing regimens, a long standing, commercial problem in the United States of metronidazole as a liquid in that patient population. Protection for this formulation involves a combination of regulatory exclusivity strategies and patent protection. A summary of Appili's patent applications is provided in the table below (Table 3).

Table 4. – Patents Filed and Held by Appili Therapeutics Relevant to US and Canada

#	Title	Jurisdiction	Application Number	Expiry
1	ORAL FORMULATIONS OF METRONIDAZOLE AND METHODS OF TREATING AN INFECTION USING SAME	Global (PCT)	WO2019140516	-

Regulatory Environment

Drug products must be approved by the appropriate governing body before it can be sold in that country or area. The FDA approves products for the United States market and Health Canada approves products for the Canadian market. The European Medicines Agency ("**EMA**") approves products for the European Union. While the process by which products are approved by the FDA and Health Canada is very similar, each regulatory body has its own unique requirements for a product. In both cases, the development of a product through to approval can be a lengthy process and, in some cases, can take over 10 years. While early studies conducted in one jurisdiction will usually be accepted in the other, further and somewhat modified studies may be required to have a product approved in another jurisdiction.

United States Government Regulation

In the United States, the FDA regulates drugs under the FDCA, and its implementing regulations, and biologics under the FDCA and the Public Health Service Act, and its implementing regulations. FDA approval is required before any new unapproved drug or biologic or dosage form, including a new use of a previously approved drug, can be marketed in the United States. In some cases, changes to aspects of an approved drug product also require pre-approval prior to implementation of these changes. Drugs and biologics are also subject to other federal, state, and local statutes and regulations. If Appili fails to comply with applicable FDA or other requirements at any time during the product development process, clinical testing, the approval process or after approval, Appili may become subject to administrative or judicial sanctions. These sanctions could include the FDA's refusal to approve pending applications, license suspension or revocation, withdrawal of an approval, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, civil monetary penalties, or criminal prosecution. Any FDA enforcement action could have a material adverse effect on Appili.

The process required by the FDA before drug products may be marketed in the United States generally involves the following:

- completion of extensive preclinical laboratory tests and preclinical animal studies, some performed in accordance with the GLP regulations;
- submission to the FDA of an IND, which must be reviewed by the FDA and become active before human clinical trials may begin and must be updated annually;
- approval by an independent review board ("**IRB**") or ethics committee representing each clinical site before each clinical trial may be initiated;
- performance of adequate and well-controlled human clinical trials conducted under Good Clinical Practices ("**GCP**") to establish the safety and efficacy of the product candidate for each proposed indication;
- preparation of and submission to the FDA of an NDA or BLA after completion of all pivotal clinical trials;
- a determination by the FDA within 60 days of its receipt of an NDA or BLA to file the application for review;
- potential review of the product application by an FDA advisory committee, where appropriate and if applicable;
- satisfactory completion of an FDA pre-approval inspection of the manufacturing facilities where the proposed product is produced to assess compliance with current GMP ("**cGMP**");
- a potential FDA audit of the preclinical research and clinical trial sites that generated the data in support of the NDA or BLA; and
- FDA review and approval of an NDA or BLA prior to any commercial marketing or sale of the product in the United States.

The preclinical research, clinical testing and approval process require substantial time, effort, and financial resources, and Appili cannot be certain that any approvals for the Company's product candidates will be granted on a timely

basis, if at all. An IND is a request for authorization from the FDA to administer an IND product to humans in clinical trials. The central focus of an IND submission is on the general investigational plan and the protocol(s) for human clinical trials. The IND also includes results of animal studies assessing the toxicology, pharmacokinetics, pharmacology, and pharmacodynamic characteristics of the product; chemistry, manufacturing, and controls information; and any available human data or literature to support the use of the IND. An IND must become effective before human clinical trials may begin. An IND will automatically become effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions related to the proposed clinical trials. In such a case, the IND may be placed on clinical hold and the IND sponsor, and the FDA must resolve any outstanding concerns or questions before clinical trials can begin. Accordingly, submission of an IND may or may not result in the FDA allowing clinical trials to commence. As drug product programs continue in development, clinical trial protocols, additional preclinical testing results, and manufacturing information is submitted with the IND to facilitate discussions with the FDA and approval of additional clinical trials.

Clinical Trials

Clinical trials involve the administration of the IND to human subjects under the supervision of qualified investigators in accordance with GCPs, which include the requirement that all research subjects provide their informed consent for their participation in any clinical trial. Clinical trials are conducted under protocols detailing, among other things, the objectives of the study, the parameters to be used in monitoring safety, and the efficacy criteria to be evaluated. A protocol for each clinical trial and any subsequent protocol amendments must be submitted to the FDA as part of the IND. Additionally, approval must also be obtained from each clinical trial site's IRB or ethics committee, before the trials may be initiated, and the IRB or ethics committee must monitor the trial until completed. All subjects must provide informed consent prior to participating in the trial. There are also requirements governing the reporting of ongoing clinical trials and clinical trial results to public registries.

The clinical investigation of a drug is generally divided into three or four phases. Although the phases are usually conducted sequentially, they may overlap or be combined.

- Phase I. The drug is initially introduced into healthy human subjects or, in some cases, patients with the target disease or condition. These studies are designed to evaluate the safety, tolerance, metabolism, pharmacokinetic and pharmacologic actions of the IND in humans, and the side effects associated with increasing doses.
- Phase II. The drug is administered to a limited patient population to evaluate safety and optimal dose levels for safety and efficacy, identify possible adverse side effects and safety risks, and preliminarily evaluate efficacy.
- Phase III. The drug is administered to an expanded patient population, generally at geographically dispersed clinical trial sites to generate sufficient data to statistically evaluate dose levels, clinical effectiveness, and safety, to establish the overall benefit-risk relationship of the IND product, and to provide an adequate basis for physician labeling.
- Phase IV. In some cases, the FDA may conditionally approve an NDA or BLA for a drug product with the sponsor's agreement to conduct additional clinical trials after approval. In other cases, a sponsor may voluntarily conduct additional clinical trials after approval to gain more information about the drug. Such post-approval studies are typically referred to as Phase IV clinical trials.

Clinical trial sponsors must also report to the FDA, within certain timeframes: (i) serious and unexpected adverse reactions, (ii) any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator's brochure, or (iii) any findings from other studies or animal testing that suggest a significant risk in humans exposed to the product candidate. The FDA, the IRB, the ethics committee, or the clinical trial sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects are being exposed to an unacceptable health risk. Additionally, some clinical trials are overseen by an independent group of qualified experts organized by the clinical trial sponsor, known as a data safety monitoring board or committee. This group provides authorization for whether or not a trial may move forward at designated check points based on access to certain data from the trial.

The clinical trial process can take years to complete, and there can be no assurance that the data collected will support FDA approval or licensing of the product. Results from one trial are not necessarily predictive of results from later

trials. The Company may also suspend or terminate a clinical trial based on evolving business objectives and/or competitive climate.

Submission of an NDA or BLA to the FDA

Assuming successful completion of all required preclinical studies and clinical testing in accordance with all applicable regulatory requirements, detailed IND product information is submitted to the FDA in the form of an NDA or BLA requesting approval to market the product for one or more indications. Under federal law, the submission of most NDAs and BLAs is subject to an application user fee. Applications for ODD products are exempted from the NDA and BLA application user fee, unless the application includes an indication for other than a rare disease or condition and may be exempted from product and establishment user fees under certain conditions.

An NDA or BLA must include all relevant data available from pertinent preclinical studies and clinical trials, including negative or ambiguous results as well as positive findings, together with detailed information relating to the product's chemistry, manufacturing, controls, and proposed labeling, among other things. Data comes from company-sponsored clinical trials intended to test the safety and effectiveness of a use of a product, and may also come from several alternative sources, including clinical trials initiated by investigators. To support marketing approval, the data submitted must be sufficient in quality and quantity to establish the safety and effectiveness of the IND drug product to the satisfaction of the FDA.

Once an NDA or BLA has been submitted, the FDA's goal is to review the application within ten months after it accepts the application for filing, or, if the application relates to an unmet medical need in a serious or life-threatening indication, six months after the FDA accepts the application for filing. The review process is often significantly extended by the FDA's requests for additional information or clarification. Before approving an NDA or BLA, the FDA typically will inspect the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA or BLA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP and related regulations.

The FDA is required to refer an NDA or BLA for a novel drug (in which no active ingredient has been approved in any other application) to an advisory committee or explain why such referral was not made. Typically, an advisory committee is a panel of independent experts, including clinicians and other scientific experts, that reviews, evaluates and provides a recommendation as to whether the application should be approved and the conditions thereof. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

The FDA's Decision on an NDA or BLA

After the FDA evaluates the NDA or BLA and conducts inspections of manufacturing facilities where the product will be produced, the FDA will issue either an approval letter or a complete response letter ("**Complete Response Letter**"). An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications. A Complete Response Letter indicates that the review cycle of the application is complete, and the application is not ready for approval. To satisfy deficiencies identified in a Complete Response Letter, additional clinical data and/or an additional Phase III clinical trial(s), and/or other significant, expensive, and time-consuming requirements related to clinical trials, preclinical studies or manufacturing may be required for the drug product. Even if such additional information is submitted, the FDA may ultimately decide that the NDA or BLA does not satisfy the criteria for approval. The FDA could also approve the NDA or BLA with a risk evaluation and mitigation strategy, which could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. The FDA may also conditionally approve a drug product subject to, among other things, changes to proposed labeling, development of adequate controls and specifications, or a commitment to conduct one or more post-market studies or clinical trials. Such post-market testing may include Phase IV clinical trials and surveillance to further assess and monitor the product's safety and effectiveness after commercialization. New government requirements, including those resulting from new legislation, may be established during the review process, or the FDA's policies may change, which could delay or prevent regulatory approval of the Company's products under development.

Canada Drug Products and Biologics Regulation

In Canada, Health Canada's Health Products and Food Branch is the national authority that regulates, evaluates and monitors the safety, efficacy and quality of drugs and biologics available to Canadians. Drugs and Biologics are regulated according to the *Food and Drugs Regulations*. A Notice of Compliance ("**NOC**") is issued following the satisfactory review of a submission that has met Health Canada's regulatory requirements, and a NOC is required along with a Drug Identification Number before any new unapproved drug can be marketed in Canada. In some cases, post-NOC changes to an approved drug require pre-approval by Health Canada prior to implementation of the changes.

Appili has to comply with all applicable *Food and Drug Act*, the *Food and Drug Regulations* and related policies and Health Canada guidelines. If Appili fails to comply with applicable *Food and Drugs Act* and *Regulations* or other requirements at any time during the product development process, clinical testing or the approval process, Health Canada may refuse to issue a NOC. The outcome after the comprehensive review could be a Notice of Noncompliance ("**NON**") or Notice of Deficiency ("**NOD**") for which a response is permitted. If the response is not deemed to be adequate, a withdrawal letter could be issued. After a NON is issued, Appili may become subject to administrative or judicial sanctions if found to be non-compliant by Health Canada. These sanctions could include marketing license suspension or revocation, warning letters, product recalls, product seizures, total or partial sale, suspension of production or distribution, civil monetary penalties, or criminal prosecution. Any Health Canada enforcement action could have a material adverse effect on Appili.

The process required by Health Canada before drug products may be marketed in Canada involves the following:

- completion of extensive preclinical laboratory (*in vitro*) tests and preclinical (*in vivo*) animal studies, adherence to GLP;
- submission to Health Canada of a CTA (except for Phase IV studies), which must be reviewed and approved by Health Canada with a no objection letter ("**NOL**"). Clinical studies must be conducted under principles of good clinical practices, as well as must be approved by a research ethics board ("**REB**") before study can be initiated;
- submission of a drug establishment licence or amend a DEL for new activities on the new drug submission ("**NDS**");
- preparation of and submission to Health Canada of a NDS after completion of all pivotal clinical trials and all preclinical studies that show the drug's potential therapeutic benefit outweighs its risks, and the CMC dossier is complete;
- screening of information related to NDS by Health Canada within 45 calendar days from NDS receipt and if NDS is found to be acceptable on screening, it will be accepted for review within 300 days. If deficiencies are identified during screening, a Screening Deficiency Notice will be issued and all requested information must be submitted within 45 calendar days from the date of request. If all requested information is not submitted, the NDS will be rejected and a Rejection Letter will be issued by Health Canada. However, if all requested information is received within 45 calendar days, a new screening period commences with a new performance target;
- satisfactory completion of a pre-approval inspection of the manufacturing facilities where the proposed product is produced to assess compliance with GMP and inspection of clinical sites as per GCP requirements; and
- Health Canada review and authorization of a NDS prior to any commercial marketing or sale of the product in Canada.

Clinical Trials

Appili is required to file a CTA for human drug clinical trials from phases I to III of development. The CTA consists of administrative, clinical information and detailed quality information about the drug product to be used in the proposed study. The CTA is subject to a 30-day review period and once review is completed, the CTA will either be authorized by Health Canada with a NOL or rejected (with a Not Satisfactory Notice). Post-authorization by Health Canada is required on some changes to a previously authorized CTA.

Clinical trials in Canada involve the administration of the IND to human subjects under the supervision of qualified investigators in accordance with GCPs, which include IRB approval before the trials may be initiated. Similar to the

US, the clinical investigation of a drug is generally divided into three or four phases. Phase IV (post-marketing) studies do not require a CTA however, these studies still require REB approval and must be conducted according to GCPs. Sponsors must follow Health Canada's adverse drug reactions reporting requirements. Division 5 of the *Food and Drug Regulation* mandates sponsors to report adverse drug reactions that are determined to be both serious and unexpected, as per ICH's E2A Guideline: *Clinical Safety Data Management: Definitions and Standards for Expedited Reporting*, which is adopted by Health Canada. Health Canada, the REB or the clinical trial sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects are being exposed to an unacceptable health risk. Additionally, some clinical trials are overseen by an independent group of qualified experts organized by the sponsor, known as a data safety monitoring board or committee. This group provides authorization for whether or not a trial may move forward at designated check points based on access to certain data from the trial. Health Canada must be notified: if a trial is prematurely terminated, of resumption of a trial, of completion of a trial or if a clinical site is closed.

Submission of a NDS to Health Canada

Assuming successful completion of all required preclinical studies and clinical testing in accordance with all applicable regulatory requirements, detailed preclinical, clinical and quality data to support the safe and effectiveness use of an IND product is submitted to Health Canada in the form of a NDS requesting approval to market the product for one or more indications.

Regulatory activities relating to human drugs (and biologics) are subject to fees as per Health Canada's Cost Recovery. The submission of a NDS is subject to Human Drug Submission Evaluation Fee, where Health Canada reviews the drug product information to assess its safety, efficacy, and quality, before issuing a NOC to allow the sale of the drug in Canada. The sponsor of an authorized NDS is also subject to a Drug Establishment Licensing fee for any establishment within Canada and for GMP-related activities covered within the NDS. In addition, the sponsor is subject to the "Annual Right to Sell Drug Fee" to allow Health Canada to monitor drugs through post-market surveillance, compliance, and enforcement activities.

Similar to an NDA/BLA in the United States, a NDS in Canada must include all relevant data available from pertinent preclinical studies and clinical trials, together with detailed information relating to the product's chemistry, manufacturing, controls, and proposed labeling (Product Monograph), among other things, to establish the safety and effectiveness of the IND product to meet Health Canada's regulatory requirements. Health Canada supports the use of foreign reviews, which fosters international collaboration among regulatory agencies.

Once a NDS has been submitted, Health Canada's target is to review the application in 300 days. For drugs intended for the treatment of serious or life-threatening conditions, there are alternative Health Canada approval mechanisms with shorter review periods that they may qualify:

- Drugs intended for the treatment, prevention or diagnosis of serious, life-threatening or severely debilitating conditions where there is no existing drug on the Canadian market or where the new product represents a significant improvement in the benefit/risk profile over existing products, could qualify under the priority review policy where a NDS will be reviewed in 180 days.
- Drugs intended for the treatment, prevention or diagnosis of a serious, life-threatening or severely debilitating disease or condition for which there is no existing therapy available on the Canadian market which possesses a similar therapeutic profile or for which the new submission demonstrates a significant improvement in the benefit/risk profile over alternate available products, authorization by Health Canada may be granted in 200 days based on promising evidence of clinical effectiveness under a Notice of Compliance with Conditions ("**NOC/c**"). However, the prerequisite is the sponsor's written commitment to pursue undertakings, such as carrying out additional clinical trials to verify the anticipated benefit within an agreed upon timeline *via* a Letter of Undertaking.

During a NDS review, Health Canada typically conducts pre-approval inspection on the facilities where the product is manufactured unless a successful inspection by a recognized foreign regulatory agency is accepted in lieu thereof. Health Canada will not issue a NOC unless it determines that the manufacturing processes and facilities are in compliance with GMP requirements and adequate to assure consistent production of the product within required specifications and as described in the NDS. Additionally, Health Canada has the authority to inspect clinical sites and other data to assure compliance with GCP and clinical trial regulations.

Health Canada's Decision on an NDS

After Health Canada completes reviewing the NDS and conducts inspections of manufacturing facilities where the product will be produced and clinical sites where clinical efficacy and safety data are generated, Health Canada will issue either a NOC or a NON/NOD. The deficiencies identified in all parts of the review will be specified on the NON/NOD and the sponsor has 90 calendar days to submit all the solicited information. When the response to a NON is received, a second screening period begins (with a new performance target review period). If the response to a NON/NOD is found to be incomplete, the response will be rejected, and the submission will be considered withdrawn without prejudice to a refiling. A NON/NOD-withdrawal letter will be issued to the sponsor.

If a NDS qualifies under the NOC/c policy, a NOC/c-Qualifying Notice will be issued to the sponsor upon completion of the NDS review. The NOC/c-QN will indicate that the submission qualifies for a NOC, under the NOC/c policy, as well as outline the additional clinical evidence to be provided in confirmatory studies, post-market surveillance responsibilities and any requirements related to advertising, labeling or distribution. The sponsor must submit all the appropriate information within the timelines outlined in the NOC/c-QN.

DIVIDENDS AND DISTRIBUTIONS

The Company has not declared dividends or distributions for any of its three most recently completed fiscal years and does not expect to declare dividends or distributions in the foreseeable future. Other than the applicable "solvency test" under the CBCA, there are no restrictions preventing the Company from declaring dividends on its Common Shares, however, any future payment of dividends will be dependent upon the earnings and financial condition of the Company and other factors that the directors may deem appropriate at the time.

DESCRIPTION OF SHARE CAPITAL

The authorized capital of the Company consists of an unlimited number of Common Shares (of which 62,832,120 Common Shares are currently issued and outstanding), an unlimited number of Non-Voting Shares (of which nil are issued and outstanding) and an unlimited number of Preferred Shares (of which nil are issued and outstanding).

The following summarizes the rights attached to each class of shares of the Company.

Common Shares

Each Common Share entitles the holder thereof to one vote at any meeting of our shareholders. Subject to the rights of the holders of any Preferred Shares, the holders of Common Shares are entitled to receive equally with the holders of the Non-Voting Shares if, as and when declared by our Board, dividends in such amounts as shall be determined by our Board. Subject to the rights of the holders of any Preferred Shares, in the event of the liquidation, dissolution or winding up of the Company, whether voluntary or involuntary, the holders of the Common Shares shall be entitled to receive equally with the Non-Voting Shares the remaining property and assets of the Company.

Non-Voting Shares

Subject to the rights of the holders of any Preferred Shares, the holders of the Non-Voting Shares shall be entitled to receive equally with the Common Shares, as and when properly declared by the Board, dividends on the Non-Voting Shares at any time outstanding which the directors may determine to declare and pay in any fiscal year of the Company. Subject to the rights of the holders of the Preferred Shares, in the event of the liquidation, dissolution or winding up of the Company, whether voluntary or involuntary, the holders of the Non-Voting Shares shall be entitled to receive equally with the Common Shares the remaining property and assets of the Company. The holders of Non-Voting Shares shall not be entitled to vote at any meeting of our shareholders; provided, however, that any amendment to the articles of the Company to delete or vary any right, privilege, restriction or condition attaching to the Non-Voting Shares or to create shares ranking in priority to or on a parity with the Non-Voting Shares, in addition to the authorization by special resolution, shall be authorized by at least two-thirds of the votes cast at a meeting of the holders of the Common Shares duly called for that purpose.

Preferred Shares

The Preferred Shares may include one or more series of shares. Subject to the provisions of the CBCA, the directors may, by resolution, if none of the shares of any particular series are issued, alter the Articles to: (i) determine the maximum number of shares of that series that the Company is authorized to issue, determine that there is no such maximum number, or alter any such determination; (ii) create an identifying name by which the share of that series may be identified, or alter any such identifying name; and (iii) attach special rights or restrictions to the shares of that series, including, but without limiting or restricting the generality of the foregoing, the rate or amount of dividends (whether cumulative, non-cumulative or partially cumulative), the dates and places of payment thereof, the consideration for, and the terms and conditions of, any purchase for cancellation or redemption thereof (including redemption after a fixed term or at a premium), conversion or exchange rights into other shares, bonds, debentures, securities or otherwise, the terms and conditions of any share purchase plan or sinking fund, restrictions respecting payment of dividends on, or the repayment of capital in respect of, any other shares of the Company and voting rights and restrictions; or alter any such special rights or restrictions.

Summary of Stock Option Plan

On September 16, 2020, the Board approved a third amended and restated stock option plan (the "**Stock Option Plan**"), amending and restating the stock option plan of the Company, which was originally adopted on June 12, 2015 and amended on May 10, 2017 and August 22, 2019. The Stock Option Plan was approved by the shareholders of the Company on August 12, 2020 and became effective on September 16, 2020. As of such date, all issued and outstanding Options will be governed under the most recent iteration of the Stock Option Plan.

The general terms and conditions of the Stock Option Plan are reflected in the disclosure below.

The Stock Option Plan was adopted to assist us in attracting, retaining, and motivating directors, officers, employees and consultants and to closely align their personal interests with those of our shareholders by providing them with the opportunity, through Options, to acquire Common Shares.

The maximum number of Common Shares issuable under the Stock Option Plan shall not exceed 10,000,000. If any Option granted under the Stock Option Plan is cancelled, expires, or terminates for any reason without having been exercised in full, the unpurchased Common Shares subject thereto shall again be available for the purposes of the Stock Option Plan.

The purchase price of the Common Shares issuable upon exercise of each Option granted under the Plan (the "**Option Price**") shall be the market price of the Common Shares on the day preceding the grant.

The Stock Option Plan also provides for adjustments to outstanding Options in the event of an alteration in the capital structure of Appili, merger or amalgamation involving Appili or Appili entering into a plan of arrangement. Moreover, upon a change of control, all Options outstanding under the Stock Option Plan shall become immediately exercisable.

The Board may, in its discretion, at the time of any grant, impose a schedule over which period of time Options will vest and become exercisable by the optionee.

Subject to any required approval of the TSX, the Board may terminate, suspend, or amend the terms of the Stock Option Plan, provided that for certain amendments, the Board must obtain shareholder approval, including with respect to changing the maximum number of Common Shares reserved for issuance under the Stock Option Plan.

Shareholder approval will not be required for Option grants made in accordance with the Stock Option Plan, except in certain circumstances as required by the policies of the TSX Company Manual.

MARKET FOR SECURITIES

Prior Sales

During the fiscal year ended March 31, 2021, the Company issued the following securities that are not listed or quoted on a marketplace:

Date of Issuance/Grant	Type of Security	Number of Securities Issued	Issue/Exercise Price
June 10, 2020	June 2020 Warrants	7,068,750	$1.50
June 10, 2020	June 2020 Broker Warrants	902,825	$1.20
September 16, 2020	Stock Options	1,110,000	$1.09
December 7, 2020	Stock Options	200,000	$1.22
January 31, 2021	Stock Options	140,000	$1.00

Trading Price and Volume

The Common Shares traded on the TSX-V until September 16, 2020, and then began trading on the TSX, both under the symbol "APLI". On June 23, 2021, being the last trading day prior to the date of this AIF, the closing price of the Common Shares on the TSX was $XX. The following tables sets out the high and low sales prices and the daily average trading volume of the Common Shares:

	TSX-V		
Calendar Period	High ($)	Low ($)	Volume
April 2020	1.55	0.68	3,542,750
May 2020	1.89	1.37	5,688,752
June 2020	1.67	0.90	4,428,151
July 2020	1.14	0.90	1,725,476
August 2020	1.03	0.74	1,789,376
September 1-15 2020	1.11	0.80	1,587,371

	TSX		
Calendar Period	High ($)	Low ($)	Volume
September 16-30 2020	1.40	1.03	1,394,332
October 2020	1.56	1.24	3,111,590
November 2020	1.60	1.04	4,169,301
December 2020	1.39	1.10	2,309,230
January 2021	1.24	0.95	1,938,718
February 2021	1.43	0.99	3,448,103
March 2021	1.11	0.86	2,419,331
April 2021	1.25	0.94	1,993,857
May 2021	1.31	0.82	2,993,499
June 1-23, 2021	0.89	0.64	1,218,180

ESCROWED SECURITIES AND SECURITIES SUBJECT TO CONTRACTUAL RESTRICTION ON TRANSFER

As at March 31, 2021, the Company did not have any securities that were subject to escrow or to the knowledge of the Company any securities subject to any contractual restrictions on transfer.

EXECUTIVE OFFICERS AND DIRECTORS

The following table sets forth the names and municipalities of residence of our directors and executive officers as well as their positions with the Company and principal occupations for the previous five years. Appili's directors, officers and employees are required to sign standard confidentiality and non-disclosure agreements with the Company.

Name, Age and Residence	Position[1]	Principal Occupation in the Past Five Years
Armand Balboni, 54[2] Virginia, United States	Chief Executive Officer (since December 2019) and Director (since February 2019)	CEO of Appili (December 2019 to Present) Chief Development Officer of Appili (April 2019 to December 2019) Chief Scientific Officer of Appili (October 2018 to April 2019) Assistant Professor, US Military Academy[5]
Kimberly Stephens, 42[2] Nova Scotia, Canada	Chief Financial Officer (since September 2016) and Corporate Secretary (since April 2019)	CFO of Appili (since September 2016 to Present) and Corporate Secretary of Appili (since April 2019 to Present) CFO of IMV Inc. (formerly known as Immunovaccine Inc.) (September 2010 to February 2017)
Yoav Golan, 59[2] Massachusetts, United States	Chief Medical Officer (since April 2020)	CMO of Appili (since April 2020) Physician, Tufts Medical Center (July 1999 to Present)
Don Cilla, 60[2] Maryland, United States	Chief Development Officer (since November 2020)	CDO of Appili (since November 2020)
Brian Bloom, 45 Ontario, Canada	Director (since May 2015)	CEO and Chairman of Bloom Burton & Co.[5]
Ian Mortimer, 45[3][4] British Columbia, Canada	Director (since November 2017)	President and CEO of Xenon Pharmaceuticals Inc. (since June 2021) CFO of Xenon (October 2013 to June 2021)
Theresa Matkovits, 53[3][4] New Jersey, United States	Director (since October 2018)	Chief Development Officer of Matinas Biopharma COO of ContraVir
Juergen Froehlich, 65[4] Massachusetts, United States	Director (since January 2020)	Acting Chief Medical Officer of EnBiotix, Inc.
Rochelle Stenzler, 67[3] Ontario, Canada	Director (since February 2021)	Principal, Rochelle Stenzler Consulting

Notes:

(1) All of the directors' appointments expire at the next annual meeting of the shareholders of the Company.
(2) Each member of management listed in the table above is either a full-time or part-time employee of the Company or its subsidiary and is subject to customary non-competition and non-disclosure restrictions pursuant to their employment agreements with the Company.
(3) Member of the Audit Committee.
(4) Member of the Nominating and Compensation Committee.
(5) In addition, (a) Mr. Bloom is a director of BBDC and a director and officer of BBSI; and (b) Mr. Balboni is partner, senior advisor and member of the board of directors of Bloom Burton & Co., and a director of BBSI.

Biographies

Armand Balboni, MD, PhD, JD, Chief Executive Officer and Director
Armand Balboni is Appili's Chief Executive Officer and Director. His career includes medical research and drug development experience in civilian, academic and military organizations, most recently as a partner at Bloom Burton & Co. where he was the firm's senior advisor for regulatory and medical affairs. As an active-duty military officer, Dr. Balboni served as a staff officer at the U.S. Army Research Institute of Infectious Diseases ("**USAMRIID**"). He completed a military staff fellowship at the U.S. Food and Drug Administration and went on to serve as the deputy director of clinical and regulatory affairs for the U.S. Army. Armand completed his doctoral work in the MD/PhD program at the Icahn School of Medicine at Mount Sinai and earned his law degree at Brooklyn Law School.

Kimberly Stephens, CPA, CA, CFO and Corporate Secretary
Kimberly Stephens, CPA, CA is the CFO and Corporate Secretary of Appili. She brings 20 years of financial management experience at public and private companies to her role at Appili. Most recently, Ms. Stephens was CFO of IMV (formerly Immunovaccine Inc.) (TSX: IMV; OTCQX: IMMVF), where she raised capital via equity financing and government funding. She was instrumental in both Appili's and IMV's graduation from the TSX-V to the TSX and listing on the OTCQX in the United States. Ms. Stephens began her career as an audit manager at PricewaterhouseCoopers LLP and has extensive experience across multiple industries in addition to the life science sector including financial services, software and oil and gas. Ms. Stephens holds a Bachelor of Commerce degree from Mount Allison University, and received her Chartered Professional Accountant, Chartered Accountant professional designation from the Atlantic School of Chartered Accountants.

Yoav Golan, MD, Chief Medical Officer
Yoav Golan is Appili's Chief Medical Officer. Dr. Yoav Golan's impressive 25+ year career as a medical specialist in infectious diseases, includes serving as an attending physician in the Division of Geographic Medicine and Infectious Diseases at Tufts Medical Center, and as an associate professor at Tufts University School of Medicine. His extensive research in the ID space has been published in several books and over 50 peer-reviewed studies in journals, including The New England Journal of Medicine and The Lancet Infectious Diseases. His research focuses on hospital-acquired infections with emphasis on ICU infections, the impact of antibiotic resistance on outcomes, and development of early culture-independent treatment strategies. Dr. Golan's recent work has focused on C. difficile infections as well as invasive candidiasis. He has been involved in the development of multiple anti-infectives, including, fidaxomicin, ceftaroline and bezlotuximab. He is a member of numerous medical societies, including the Infectious Disease Society of America and the American Society for Microbiology. Dr. Golan is a graduate of the Hadassah School of Medicine at the Hebrew University in Jerusalem, Israel.

Don Cilla, PharmD, MBA
Dr. Cilla brings to Appili more than 30 years of program management experience in the drug development industry, with extensive clinical and regulatory expertise that includes direct involvement with 20 programs that became commercialized products, including Lipitor™ and Difcid™. His career includes positions in program management, drug product team leadership, clinical pharmacology, clinical development, and administration in large pharmaceutical, biotechnology, and generic drug companies. He has worked across a broad range of development positions in companies including Shire Pharmaceuticals (Takeda), MedImmune (AstraZeneca), and Otsuka America Pharmaceuticals. He also has held multiple consulting roles, outsourcing his drug development expertise to help build and lead teams for companies in need of functional area expertise. Dr. Cilla earned his Doctor of Pharmacy from the University of Michigan and an MBA from the University of Phoenix.

Ian Mortimer, Chair
Ian Mortimer has over 20 years of experience in the biotechnology sector. He is currently President and Chief Executive Officer of Xenon (NASDAQ: XENE), a company developing innovative therapeutics to improve the lives of patients with neurological disorders. Prior to joining Xenon in 2013 as Chief Financial Officer, Mr. Mortimer spent six years at Tekmira Pharmaceuticals Corporation, now Arbutus Biopharma Corporation (NASDAQ: ABUS), as Executive Vice President and Chief Financial Officer. He led both Xenon's and Tekmira's listings on the NASDAQ, in 2014 and 2010 respectively. From 2004 to 2007, Mr. Mortimer was Chief Financial Officer of Inex Pharmaceuticals Corporation. Mr. Mortimer has an M.B.A. from Queen's University, a B.Sc. in Microbiology from the University of British Columbia, and is a Chartered Professional Accountant, Certified Management Accountant.

Brian Bloom, Director
Brian Bloom is a co-founder of Bloom Burton & Co. and serves as the firm's Chairman and Chief Executive Officer. Mr. Bloom serves on the Board of Triumvira Immunologics, Satellos Bioscience and Qing Bile Therapeutics. He is also on the Faculty of Science Dean's Advisory Board at McMaster University. Mr. Bloom was formerly the Chairman of the Board of Grey Wolf Animal Health, a member of the Life Sciences Advisory Board at the National Research Council of Canada and on the Boards of BIOTECanada and the Baycrest Foundation. Before co-founding Bloom Burton in 2008, Mr. Bloom spent six years at Dundee Securities in the healthcare and biotechnology institutional sales and equity research groups. He started his career at New York-based investment banking firms SCO Financial Group and Molecular Securities. Mr. Bloom received an Honors Bachelor of Science in Biochemistry from McMaster University and subsequently studied at the Mount Sinai Graduate School for Biological Sciences of New York University, with a focus in molecular endocrinology and biophysics. He is the proud recipient of the McMaster University 2017 Distinguished Alumni Award in Science.

Theresa Matkovits, Director
Dr. Theresa Matkovits has more than 20 years of experience as a leader in global drug development and commercialization, with extensive expertise in infectious disease. She currently serves as the Chief Development Officer at Matinas Biopharma where she serves as an Executive Leadership Team member, joining the company in October 2018. Dr. Matkovits is responsible for leading the global development efforts of the company's development pipeline products, including their Infectious Disease products. Prior to this role, she was the Chief Operating Officer at ContraVir (NASDAQ: CTRV) now Hepion, where she led global development of the company's clinical-stage antiviral portfolio. She also served as ContraVir's Executive Vice President, Head of Drug Development, where she was responsible for leading all global drug development functional areas for the company's infectious disease programs. Dr. Matkovits' career also includes steering the clinical development and approval efforts for Natpara® at NPS Pharmaceuticals; serving as a Vice President and Innovation Leader at The Medicines Company (NASDAQ: MDCO), where she managed global development and commercialization efforts for the Company's infectious disease franchise; and several leadership positions at Novartis in its U.S. Medical and Drug Regulatory Affairs and Global Development Divisions. Dr. Matkovits is a member of the Board of Directors for BioSurplus and previous director of Aradigm Corporation (NASDAQ: ARDM). Dr. Matkovits earned her PhD in Biochemistry and Molecular Biology from the University of Medicine and Dentistry of New Jersey - New Jersey Medical School.

Juergen Froehlich, Director
Dr. Froehlich's career spans multiple decades and covers a broad range of drug development successes. It includes strategic planning and execution of all phases of drug development and regulatory interactions across therapeutic areas such as cystic fibrosis, bronchiectasis, and hepatitis C. He has worked with biologics, peptides, small molecules and RNA therapeutics at companies including Boehringer Ingelheim, Genentech, Quintiles, Bristol-Myers-Squibb, Ipsen, Vertex, and Aradigm Corporation. Dr. Froehlich was instrumental in obtaining successful marketing authorizations worldwide, including in the U.S., Canada, and the E.U. As Chief Medical Officer and Head of Regulatory Affairs of Aradigm Corporation, he initiated, oversaw, and completed a Phase 3 trial program with a liposomal formulation of ciprofloxacin for inhalation in patients with non-cystic fibrosis bronchiectasis (NCFBE) and chronic Pseudomonas aeruginosa lung infections, which resulted in a New Drug Application (NDA) and Marketing Authorization Application (MAA) submission. He was an invited panel member at a U.S. Food and Drug Administration (FDA) workshop in 2018 for inhaled antibiotics in cystic fibrosis and NCFBE.

Rochelle Stenzler, Director
Rochelle Stenzler has more than 35 years of experience as a board director and senior operating executive in healthcare and other industries. A pharmacist by education and training, Ms. Stenzler has served as Board Chair of Spartan Bioscience since August 2020. Prior to this role, she served as Board Chair of Cynapsus Therapeutics, until it was

acquired for C$841M by Sunovion Pharmaceuticals in 2016. She has previously served as a Board Director & Vice Chair of Humber River Hospital; President & CEO of TouchLogic Corporation; President, International Operations of TLC Laser Eye Centers; President, Revlon Canada; and President and General Manager of Pharma Plus Drugmarts Ltd. Ms. Stenzler also has extensive corporate governance experience, which includes serving as a member of the Spartan Bioscience Finance, Audit and Risk Committee; Vice-Chair and Chair of the Nominating, Governance, and Human Resources Committee of the Humber River Hospital in Toronto; and as an Advisory Board member to Social Capital Partners. Ms. Stenzler is a graduate of the University of Toronto with a BSc.Phm. and a Gold Medal in Compounding and Dispensing, and the Rotman School of Management, Institute of Corporate Directors, with an ICD.D.

Share Ownership by Directors and Officers

As at the date of this AIF, as a group, the Company's directors and executive officers beneficially own, directly or indirectly, or exercise control over, 14,407,556 Common Shares, as well as warrants and Options to purchase up to 3,721,480 Common Shares.

Corporate Cease Trade Orders, Bankruptcies, Penalties and Sanctions

No director or executive officer of Appili is, as at the date of this AIF, or was, within 10 years before the date of this AIF, a director, CEO or CFO of any company (including Appili), that was subject to a cease trade order, an order similar to a cease trade order, or an order that denied the relevant company access to any exemption under securities legislation that was in effect for a period of more than 30 consecutive days:

- that was issued while the director or executive officer was acting in the capacity as director, CEO or CFO, or
- that was issued after the director or executive officer ceased to be a director, CEO or CFO and which resulted from an event that occurred while that person was acting in the capacity as director, CEO or CFO.

Except as disclosed herein, no director or executive officer of Appili, or a shareholder holding a sufficient number of securities of the Company to affect materially the control of Appili:

- is, as at the date of this AIF, or has been within the 10 years before the date of the AIF, a director or executive officer of any company (including the Company) that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or
- has, within the 10 years before the date of this AIF, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director, executive officer or shareholder.

Dr. Froehlich was the Chief Medical Officer and Dr. Matkovits was a director of Aradigm Corporation (NASDAQ: ARDM) ("**Aradigm**") until February 2019. In February 2019, Aradigm filed for protection under Chapter 11 of the U.S. Bankruptcy Code in Alameda County Court District to facilitate the sale of its assets.

Mrs. Stenzler is the current Chair of the Board of Spartan Bioscience Inc. **("Spartan").** In April 2021, Spartan filed a Notice of Intention to File a Proposal (**the "NOI Filing"**) under the Bankruptcy and Insolvency Act with the Office of the Superintendent in Bankruptcy. The NOI Filing was made with the intention of allowing Spartan to pursue all avenues of sale and/or refinancing of its business and property, in whole or in part.

No director or executive officer of Appili, or a shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company, has been subject to (a) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority or (b) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

Conflicts of Interest

Other than as disclosed herein, including with respect to the fact that Brian Bloom is a director and officer of BBSI and Armand Balboni is a director of BBSI, one of the agents involved in the Special Warrant Offering and the lead agent in each of the February 2020 Offering and the June 2020 Offering, none of our directors, officers or principal shareholders and no associates or affiliates of any of them, have or have had any material interest in any transaction which materially affects us. There are potential conflicts of interest to which our directors and officers will be subject in connection with our operations. In particular, certain of our directors are involved in managerial and/or director positions with other companies whose operations may, from time to time, be in direct competition with our operations or with entities which may, from time to time, provide financing to, or make equity investments in, our competitors. See "*Risk Factors*" and "*Promoters*".

Conflicts, if any, will be subject to the procedures and remedies available under the CBCA. The CBCA generally provides that in the event that a director has an interest in a material contract or proposed contract or transaction, the director shall disclose his interest in such contract or transaction and shall refrain from voting on any matter in respect of such contract or transaction unless otherwise provided by the CBCA.

AUDIT COMMITTEE

Composition of the Audit Committee

The Audit Committee of the Board (the "**Audit Committee**") is comprised of Ian Mortimer (Chair), Theresa Matkovits and Rochelle Stenzler, all of whom are "financially literate" as defined in National Instrument 52-110 – *Audit Committees* ("**NI 52-110**"). All three Committee members are considered independent pursuant to NI 52-110. A description of the education and experience of each Audit Committee member that is relevant to the performance of their responsibilities as an Audit Committee member may be found above under the heading "*Executive Officers and Directors*".

The Audit Committee is responsible for reviewing the Company's financial reporting procedures, internal controls and the performance of the financial management and the auditor. The Audit Committee also reviews the annual audited financial statements and makes recommendations to the Board. The Company is relying on the exemption set out in Section 6.1 of NI 52-110.

Audit Committee Charter

A copy of the charter of the Audit Committee is attached as Appendix A.

Audit Committee Oversight

Since the commencement of the Company's most recently completed financial year, there has not been a recommendation of the Audit Committee to nominate or compensate an external auditor which was not adopted by the Board.

Pre-Approval Policies and Procedures

The Audit Committee has authority and responsibility for pre-approval of all non-audit services to be provided to the Company or its subsidiary entities by the external auditor or the external auditor of the Company's subsidiary entities unless such pre-approval is otherwise appropriately delegated or if appropriate specific policies and procedures for the engagement of non-audit services have been adopted by the Audit Committee.

External Auditor Service Fees by Category

The aggregate fees billed by our current auditor in each of the last two fiscal years are set out in the table below.

Financial Year Ending	Audit Fees	Audit-Related Fees	Tax Fees	All Other Fees
March 31, 2021	$63,400	$84,770	$22,058	$nil
March 31, 2020	$41,250	$92,048	$40,969	$nil

Notes:

(1) *Audit Fees* consist of the aggregate fees billed by the auditor for audit services.
(2) *Audit-Related Fees* consist of the aggregate fees billed for assurance and related services that are reasonably related to the performance of the audit or review of the financial statements and are not reported under "Audit Fees" above and may include the provision of comfort letters and consents, the consultation concerning financial accounting and reporting of specific issues and the review of documents filed with regulatory authorities.
(3) *Tax Fees* include fees billed for tax compliance, tax advice and tax planning services, including the preparation of original tax returns and claims for refund; tax consultations, such as assistance and representation in connection with tax audits and appeals, tax advice related to mergers and acquisitions, and requests for rulings or technical advice from taxing authorities; tax planning services; and consultation and planning services.
(4) *All Other Fees* include the aggregate fees billed for products and services provided by the auditor, other than the services reported above.

RISK FACTORS

The Company is subject to a number of risks, including the risks described below. The risks and uncertainties described below are those believed to be material, but they may not be the only ones faced by the Company. Additional risks and uncertainties not presently known to us or that we believe to be immaterial may also adversely affect our business. If any of these risks actually occur or become material risks, our business, prospects, financial condition and results of operations could be seriously harmed.

Risks Related to the Company and our Business

The current COVID-19 pandemic may significantly impact the Company

The Company faces risks related to health epidemics, pandemics, and other outbreaks of communicable diseases, which could significantly disrupt its operations and may materially and adversely affect its business and financial conditions. The Company's business could be adversely impacted by the effects of the COVID-19 pandemic or other epidemics and/or pandemics. In December 2019, COVID-19 emerged in China and the virus has now spread with infections reported globally. On March 11, 2020, the World Health Organization declared the outbreak of COVID-19 to be a pandemic. The full extent to which COVID-19 impacts the Company's business, including its operations and the market for its securities, will depend on future developments, which are highly uncertain and cannot be predicted at this time, and include the duration, severity and scope of the pandemic and the actions taken to contain or treat the COVID-19 pandemic (including recommendations from public health officials). In particular, the continued spread of COVID-19 globally could materially and adversely impact the Company's business including without limitation, employee health, workforce productivity, reduced access to supplies, increased insurance premiums, limitations on travel, the availability of experts and personnel and other factors that will depend on future developments beyond the Company's control, which may have a material and adverse effect on its business, financial condition and results of operations. As a result of COVID-19, some of the development activities in the Company's product candidates had been delayed. There can be no assurance that the Company's personnel will not be impacted by these pandemic diseases and ultimately see its workforce productivity reduced or incur increased costs as a result of these health risks. In addition, the COVID-19 pandemic represents a widespread global health crisis that could adversely affect global economies and financial markets resulting in an economic downturn that could have an adverse effect on the Company.

Deviation of Company Resources

In connection with clinical trial of favipiravir, the Company redeployed certain resources that the Company had previously intended for other programs – ATI-2307, ATI-1701, ATI-1503 and ATI-1501. In the event that there is further redeployment of such resources, such other programs may experience additional delays in their respective timelines as currently forecasted.

Share Price Fluctuations

The market price of securities of many companies, particularly development stage pharmaceutical companies, experience wide fluctuations in price that are not necessarily related to the operating performance, underlying asset values or prospects of such companies, including:

- Appili's financial condition and operating results;
- Actual or anticipated changes in Appili's growth rate relative to its competitors;
- Adverse results or delays in any of the current or project clinical trials Appili will undertake to develop its products;
- Regulatory actions with respect to Appili's programs;
- Unanticipated efficacy, safety or tolerability concerns related to any of Appili's product candidates;
- Changes in laws or regulations applicable to Appili's current product candidates or any future product candidates, including but not limited to clinical trial requirements for approvals;
- The Company's inability to effectively promote and market any of its product candidates once approved;
- Competition from other Company's existing products or new products that they are developing;
- Failure to meet or exceed financial estimates and projections of the investment community;
- Issuance of new or updated research or reports by securities analysts;
- Fluctuations in the valuation of competitive companies to Appili;
- Share price and volume fluctuations attributable to inconsistent trading volume levels of the Company's shares;
- Additions or departures of key management or scientific personnel;
- Acquiring additional debt or equity financing efforts;
- Sales of the Company's Common Shares by the Company, its insiders or Appili's other shareholders; and
- General economic and market conditions.

These as well as other market and industry factors may cause the market price and demand for Appili's Common Shares to fluctuate substantially, regardless of the Company's actual operating performance, which may limit or prevent investors from readily selling their Common Shares and may otherwise negatively affect the liquidity of Appili's Common Shares. In addition, the stock market in general, and the TSX-V and the share prices of biotechnology companies in particular, have experienced extreme price and volume.

Potential Dilution

The Company's Articles allow it to issue an unlimited number of Common Shares, Non-Voting Shares and Preferred Shares for such consideration and on such terms and conditions as established by the Board, in many cases, without the approval of the Company's shareholders. The Company may issue additional Common Shares, Non-Voting Shares or Preferred Shares in subsequent offerings (including through the sale of securities convertible into or exchangeable for Common Shares, Non-Voting Shares or Preferred Shares). The Company cannot predict the size of future issuances of Common Shares, Non-Voting Shares or Preferred Shares or the effect that future issuances and sales of such securities will have on the market price of the Common Shares, should such a market develop. Issuances of a substantial number of additional Common Shares, Non-Voting Shares or Preferred Shares or the perception that such issuances could occur, may adversely affect prevailing market prices for the Common Shares, if any. With any additional issuance of Common Shares investors will suffer dilution to their voting power and the Company may experience dilution in its earnings per share.

The Company has never declared dividends and may not do so in the future

We have not declared or paid any cash dividends on the Common Shares to date. The payment of dividends in the future, if at all, will be dependent on the Company's earnings, financial condition and such other factors as the Board considers appropriate. Unless and until we pay dividends, shareholders may not receive a return on their shares. There is no present intention by the Board to pay dividends on the Common Shares.

The Company has incurred significant losses since inception and expects to incur losses for the foreseeable future and may never achieve or maintain profitability

Appili has a history of losses and may never achieve or maintain profitability. Since inception, the Company has incurred significant losses each year and expects to incur significant losses in the coming years as the Company continues to spend resources on R&D activities, clinical trials, and other regulatory and commercialization costs for its product candidates. The net loss was $14.3 million for the year ended March 31, 2021, and $5.4 million for the year ended March 31, 2020. As of March 31, 2021, Appili had an accumulated deficit of $31.0 million. The Company has dedicated its efforts to R&D and expects that its expenses will substantially increase if and as the Company expands its product pipeline and moves its product candidates through one stage of development to the next. To become and remain profitable, Appili must either develop and eventually commercialize a product or products with significant market potential on their own, or in collaboration with a partner. These development and commercialization activities are challenging, including successfully completing the preclinical activities, the clinical trials, obtaining regulatory approval and being able to market successfully approved products. The Company may never realize revenue from its products and even if it does, it may not generate sufficient revenue to be profitable. Profitability may not be sustainable or be able to be increased once achieved.

The Company will need substantial additional funding. Raising additional capital may cause dilution to existing shareholders, restrict operations or require the Company to relinquish rights to its technologies or product candidates

The Company's R&D efforts, including preclinical, clinical, and regulatory activities, are capital intensive and require significant investment to carry out. Appili expects expenses to increase as it acquires more product candidates and its current product candidates move through the various stages of development, including increased R&D expenses, clinical trial costs, regulatory costs, and commercialization costs. In order to continue its current business activities, reach its milestones and fund any significant additional acquisitions of new products, Appili will require additional capital. In order to secure financing, if available, it is likely that the Company would need to sell additional Common Shares or financial instruments that are exchangeable for or convertible into Common Shares and/or enter into development, distribution and/or licensing relationships, to fund all or a part of particular product development. Any future equity financing may also be dilutive to existing shareholders. It is probable that any future debt financing arrangements Appili enters into would contain restrictive covenants that would impose significant operating and financial restrictions on Appili. It is uncertain if these types of equity or debt financing will be available or available on reasonably acceptable terms to Appili. They will be dependent on, among other things, the results of its current products in development, its R&D activities, its ability to obtain regulatory approvals, the market acceptance of Appili's products, the state of the capital markets overall, agreements with partners, and other relevant commercial considerations.

Any additional financing may not be obtained on favourable terms, if at all. If Appili cannot obtain sufficient funding on reasonably acceptable terms, it may terminate or delay clinical trials, decrease R&D costs, scale-back on regulatory plans, and/or sell or assign rights to its technologies, products, or product candidates. Appili's expenditures are expected to consist primarily of internal and external R&D expenditures to advance the Company's product pipeline and general and administrative expenses to support its corporate activities. There may be substantial doubt about Appili's ability to continue as a going concern and realize assets and pay liabilities as they become due if the Company is not successful in accessing additional capital. Depending upon the results of Appili's R&D activities and the availability of financial resources, Appili could decide to accelerate, terminate, or decrease certain product costs, or commence new ones. If Appili is unsuccessful in raising additional funds on favourable terms, it may be required to significantly change or limit current or planned operations in order to safeguard its cash until such time, if ever, that sufficient proceeds from operations are generated. This also could lead to, among other things, Appili not taking advantage of business development opportunities, the termination or delay of clinical trials for one or more of its product candidates, limitations of its business development programs designed to identify new product candidates, the

sale or license of rights to Appili's technologies, products or product candidates, and/or Appili's inability to file an application for market clearance in the United States at all or in time to competitively market Appili's products.

Until the Company can generate substantial product revenues, Appili anticipates financing its cash requirements through a combination of equity offerings, debt financings, government or other third-party funding, marketing and distribution arrangements and other collaborations, partnership agreements and licensing arrangements. Appili currently has two committed external source of funds, the PRMRP grant of US$3 million and the DTRA grant of $1.7M. Appili will require substantial funding to complete the ongoing and planned R&D activities and to fund other operating expenses. Appili has been successful in receiving government grants to offset the cost of certain programs, but there is no certainty that this ability to secure repayable or non-repayable non-dilutive funding will continue. Some non-dilutive funding sources require commitments of matching funds, and so if successful at being offered these funds, there is no guarantee that Appili will be able to secure the matching funds needed to take advantage of these programs. To the extent that Appili raises additional capital through the sale of equity or convertible debt securities, the shareholders ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of shareholders. Debt financing, if available, may involve agreements that include covenants limiting or restricting the Company's ability to take specific actions, such as incurring additional debt, capital expenditures or declaring dividends. If the Company raises additional funds through government or other third-party funding, marketing and distribution arrangements or other collaborations, partnership agreements or licensing arrangements with third parties, the Company may have to surrender valuable rights to its technologies, future revenue streams, research programs or product candidates or to grant licenses on terms that may not be favourable.

The Company depends heavily on the success of its product candidates

Appili's product candidates are at various stages of development; risk decreases as the product progresses through the various stages of preclinical and clinical development. Clinical trials of the product candidates may not be successful or may result in unfavourable target product profiles, resulting in significantly lower commercial opportunity than currently anticipated. Significant delays and inability to fully realize the value of the product candidates may materially harm the business. The Company may never be able to obtain regulatory approval for any of its product candidates. Appili has committed significant resources, both human and financial, to the acquisition and development of products. The ability to generate revenues from any of these current or future product candidates will depend heavily on the successful development and eventual commercialization of these product candidates.

Some programs are at an early stage of development, whereby the Company's team undertaking pre-IND-enabling studies to determine if a clinical candidate can be declared for ATI-1503. There is no guarantee that the pre-IND-enabling studies will be successful, and that a pre-clinical or clinical candidate will ever be identified. If no pre-clinical or clinical candidate is identified, then the program will be discontinued. Even if the Company identifies an efficacious clinical candidate, there is no guarantee the product will be considered safe for clinical use. Preclinical studies conducted with the clinical candidate may demonstrate dose-limiting toxicities, precluding clinical evaluation of safety and efficacy in clinical trials. Other features of the products may hinder regulatory approval that are related to safety but are not an outcome of a clinical study such as the theoretical risk that the *clpB gene deletion mutant live attenuated bacterial vaccine* (otherwise known as ATI-1701) could revert to its pathogenic form. Studies have been done to characterize this risk and no reversions were noted, however regulatory authorities may require additional studies, and the outcome of those studies is not certain. These risks could impact ability to secure non-dilutive funding for the program.

Product candidates may be inherently challenging to synthesize, manufacture and/or formulate. Production of sufficient active pharmaceutical ingredient or final drug product may not be feasible for conduct of clinical trials or supply of commercial product. Furthermore, the drug product may prove unstable under appropriate storage and/or use conditions for the proposed indication. If stability studies of the product candidates fail to demonstrate stability to the satisfaction of the FDA or similar regulatory authorities outside the US or do not otherwise produce positive results, the Company may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and subsequent commercialization of the product candidates.

If clinical trials of the product candidates fail to demonstrate safety, efficacy, or stability to the satisfaction of the FDA or similar regulatory authorities outside the US or do not otherwise produce positive results, the Company may

incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and subsequent commercialization of the product candidates.

The Company must conduct extensive clinical trials to demonstrate the safety and efficacy of the product candidates in humans before it can obtain regulatory approval for the sale of its product candidates. These types of human clinical testing can be very expensive, challenging to design and implement, take significant time to complete and are at risk of achieving the desired outcome. It is common that a company can experience failure of one or more of its products during any one of the stages of testing in a clinical trial. The results of preclinical and early clinical trials may not be indicative of the success of later clinical trials. Furthermore, preclinical, and clinical data are often susceptible to different interpretations and analyses, and many companies that have thought their products performed well in preclinical and clinical trials unfortunately failed to obtain marketing approval of their products.

In particular, Appili is currently conducting a Phase 3 clinical trial evaluating favipiravir as a potential early treatment for patients diagnosed with COVID-19. There is no guarantee the clinical trial will be successful. Even if the trial results are determined to be statistically significant and clinically meaningful, there is no guarantee the FDA will approve the drug candidate under the FDA's Emergency Use Act ("**EUA**") or require further clinical studies for NDA approval. If the drug is approved under a EUA or NDA, the Company is reliant on its partners for the manufacturing, distribution, and commercialization of favipiravir. While FFTC, DRL and GRA have manufacturing, logistics and commercial experience, there is no guarantee that Appili's partners will successfully manufacture, distribute, and commercialize favipiravir.

Appili may also experience various unexpected events during, or as a result of, clinical trials that could delay or prevent the Company's ability to receive regulatory approval or commercialize its product candidates.

If clinical trials of the product candidates fail to demonstrate safety, efficacy or stability to the satisfaction of the FDA or similar regulatory authorities outside the US or do not otherwise produce positive results, the Company may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and subsequent commercialization of the product candidates

If the Company experiences delays or difficulties in the enrollment of volunteers or patients in the clinical trials, receipt of necessary regulatory approvals could be delayed or prevented

Clinical trials for drug candidates require identification and enrollment of a large number of volunteers or eligible patients. The Company may not be able to enroll sufficient volunteers or eligible patients to complete clinical trials in a timely manner or at all. Patient enrollment is a function of many factors, including the following: design of the protocol, size of the patient population, eligibility criteria for the study in question, perceived risks, and benefits of the drug under study, availability of competing therapies, efforts to facilitate timely enrollment in clinical trials, patient referral practices of physicians, and availability of clinical trial sites. If Appili has difficulty enrolling sufficient volunteers or patients to conduct its clinical trials as planned, it may need to delay, forego or terminate ongoing clinical trials.

If serious adverse or intolerable side effects are identified during the development of the product candidates, the Company may need to abandon or limit the development and expected commercial value of some of its product candidates

The Company's product candidates are still in preclinical or clinical development and as such, they have a high risk of failure. If serious adverse or intolerable side effects are identified during the development of the product candidates, the Company may need to abandon their development or limit development to certain uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective. It is impossible to predict when or if any of the Company's product candidates will prove effective or safe in humans or will receive regulatory approval.

If serious adverse or intolerable side effects are identified post-approval, the Company may need to recall its products and depending on the serious adverse event or intolerable side effects, the Company may have to abandon the product completely and could be subject to substantial product liability claims. The Company may be able to limit sales to certain uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective.

*Even if any of the Company's product candidates receive regulatory approval, they may fail to achieve market access, reimbursement and pricing approval and be incorporated into medical guidelines supported by public or private insurers ("**Payers**") and health care practitioners necessary for commercial success*

Even if any of the Company's product candidates receive marketing approval by the FDA, there is no guarantee they will gain sufficient market acceptance by physicians, patients, healthcare practitioners and others in the medical community. If the Company's product candidates do not achieve sufficient level of acceptance, the Company may not generate sufficient revenues and may not become profitable. The degree of market acceptance of the Company's product candidates will depend on a number of factors, including the potential advantages the Company's product candidate provides compared to alternative treatments, the price, the convenience and ease of administration compared to alternative treatments, the willingness of the physicians to prescribe the Company's new products, the strength of marketing and distribution support through its partners, sufficient third party coverage or reimbursement and the prevalence and severity of any side effects.

If the Company is unable to establish sales and marketing capabilities or enter into agreements with third parties to sell and market its product candidates, the Company may not be successful in commercializing its product candidates if and when they are approved

The Company intends to establish commercialization arrangements with third-parties. The Company's likely collaborators for any development, distribution, marketing, licensing or broader collaboration arrangements include large and mid-size pharmaceutical companies, regional and national pharmaceutical companies and biotechnology companies. The Company may not be successful in establishing these agreements with third parties and may not be successful in commercializing its products at all or to the extent required to be profitable.

If a licensing partner is not contracted, the Company must establish commercial reimbursement, contracting and sales/marketing capabilities or enter into agreements with Contract Sales Organizations to provide this service at a cost. This would impact the Company's resources and opportunities and the Company may still not be successful in commercializing its product candidates if and when they are approved

For some of the Company's products, the Company intends on licensing the rights to a partner to take over the commercialization activities of the product. If the Company is not successful in finding a licensing partner, Appili may have to establish its own commercialization activities, either on its own which includes commercial reimbursement activities, contracting and sales and marketing activities, or through a Contract Sales Organization. The Company currently does not have these capabilities and such efforts would lead to significant additional costs which the Company may not be in a position to fund. Failure to secure additional funding may result in material delays and there is no certainty that the Company would attain successful commercialization of its products in a reasonable timeframe or at all.

The Company faces substantial competition, which may result in others discovering, developing or commercializing products before or more successfully resulting in reduced market opportunity for the product and Company. Lack of clinical advantages versus existing or new competitive therapeutic launches may result in an undifferentiated product label limiting product opportunity and asset value to partners

The Company faces competition with respect to its product candidates, and any new product candidates the Company may acquire, from pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies around the world. Many of Appili's competitors have greater financial resources and development and selling and marketing capabilities. Potential competitors also include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization. The Company may face further competition from both pharmaceutical and biotechnology companies that focus their efforts on developing and marketing products that are similar in nature to its products, but may offer improvements over the Company's product candidates, in either effectiveness or price. As well, some of these competitive products and therapies are based on entirely novel scientific approaches. Appili's success will partly depend on its ability to secure superiority in its product and operations and maintain such superiority in the face of new products and competition. Many marketed therapies for the infectious diseases that the Company is currently pursuing, or diseases that it may in the future seek to address, are widely accepted by physicians, patients and Payers, which may make it difficult for the Company to replace such products with any products that the Company successfully develops and are permitted to market. If the

Company's products are not competitive, it would negatively affect Appili's business, prospects, financial condition and operating results.

Despite launching products, the Company may experience limits in market access, unfavourable reimbursement or pricing, healthcare policy reform initiatives, which would limit the value of the portfolio and harm the business

The Company's ability to commercialize any products successfully will depend, in part, on the extent to which coverage and reimbursement for these products and related treatments will be available from government healthcare programs, private health insurers, managed care plans, and other organizations. Government authorities and third-party Payers, such as private health insurers and health maintenance organizations, decide which medications they will pay for and establish reimbursement levels. A primary trend in the U.S. healthcare industry is cost containment. Government authorities and third-party Payers have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. Increasingly, third party Payers are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. The Company cannot be sure that coverage and reimbursement will be available for any product that Appili or any partner commercializes and, if reimbursement is available, the level of reimbursement. Reimbursement may impact the demand for, or the price of, any product candidate for which Appili obtains marketing approval. Obtaining reimbursement for some of the Company's products may be particularly difficult because of the higher prices often associated with drugs administered under the supervision of a physician. If reimbursement is not available or is available only to limited levels, Appili may not be able to successfully commercialize any product candidate for which the Company obtained marketing approval.

There may be significant delays in obtaining coverage and reimbursement for newly approved drugs, and coverage may be more limited than the purposes for which the drug is approved by the FDA, EMA or other regulatory authorities. Moreover, eligibility for coverage and reimbursement does not imply that a drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution expenses. Interim reimbursement levels for new drugs, if applicable, may also be insufficient to cover our and any collaborator's costs and may not be made permanent. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost drugs and may be incorporated into existing payments for other services. Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private Payers and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the U.S. Third party Payers often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement policies. The Company's inability to promptly obtain coverage and profitable payment rates from both government-funded and private Payers for any approved products that we or our collaborators develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize products and our overall financial condition.

The Company's reliance on government funding adds uncertainty to the Company's research and commercialization efforts of its government-funded product candidates

The Company has received significant funding from government organizations either directly or indirectly since its inception totalling over $25.3 million. There is no guarantee the Company will continue to be eligible and/or successfully awarded additional government funding in the future. If Appili is unsuccessful in obtaining additional government funding, the Company will have to either obtain future financing through issuing additional equity, debt financing or license arrangements with strategic partners or others, if available, that may require the Company to surrender material rights to certain technologies or potential markets, or not complete certain R&D activities as planned. There is no certainty that financing will be available in amounts the Company requires to pursue the planned activities or on acceptable terms, if at all.

Products for which the primary customer will be the government, either through civilian or military contracts, are at risk of changes in policy, strategic priorities and funding commitments tied to political timelines (i.e. elections)

Appili's product pipeline includes a product candidate, ATI-1701, whose primary customer will be the government, either through civilian or military contracts. If the Company is unable to hire the appropriate employees or engage third party contractors with a specialized skill set to contract with government agencies, the Company may not be able to successfully commercialize the product at all or to the extent required to be profitable. If the Company is able to secure a government contract, there is no guarantee it will be at optimal terms, including with respect to volume, price

and terms. Any changes in policy, strategic priorities or funding commitments with these government agencies increase the risk that the Company may not be able to secure a government contract and successfully commercialize the product.

Product liability lawsuits against the Company could cause the Company to incur substantial reputational risk and legal liabilities limiting commercialization of the Company's portfolio

There is an inherent risk of product liability exposure related to the testing of the Company's product candidates in human clinical trials and Appili will face an even greater risk if it commercially sells any products that it may develop. The Company's current product candidates have not been widely used over an extended period of time, and therefore, safety data is limited.

If the Company cannot successfully defend itself against claims that its product candidates or products caused injuries, it will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in decreased demand for any product candidates or products that it may develop, injury to the Appili's reputation and significant negative media attention, withdrawal of clinical trial participants, significant costs to defend the related litigation, substantial monetary awards to trial participants or patients, loss of revenue and the inability to commercialize any products that the Company may develop.

Appili currently maintains clinical trial liability insurance coverage in the amount of $10 million, which may not be adequate to cover all liabilities that it may incur. When Appili begins to commercialize its product candidates, the Company will need to increase its insurance coverage, which is increasingly expensive. The Company may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise.

The Company may expend its limited resources to pursue a particular product candidate but fail to unlock the value due to market, reimbursement or healthcare practitioner use. This would limit capitalizing on product candidates or indications that may be more profitable or for which there is a greater likelihood of success

The Company has limited financial and managerial resources to expend on research programs and product candidates. As a result, the Company may sacrifice or delay pursuit of opportunities with certain product candidates or for other indications that later prove to have a greater commercial potential. Appili may make decisions to allocate resources on product candidates that may not be viable commercial products or profitable market opportunities and as a result, may fail to capitalize on other product candidates that could be commercially viable products.

The Company's strategy is to develop a pipeline of balanced-risk products to meet the unmet medical needs of patients in the infectious disease space. As such, the Company evaluates multiple opportunities to potentially acquire and further develop new product candidates and makes decisions based on the scientific merit, commercial opportunity and the Company's current resources. Notwithstanding the large investment to date and anticipated future expenditures in its current product candidates, the Company has not yet developed, and may never successfully develop, any marketed drugs using this approach. As a result of pursuing the development of product candidates using this business strategy, the Company may fail to acquire and/or develop product candidates based on other scientific approaches that may offer greater commercial potential or for which there is a greater likelihood of success.

Research and business development programs to identify new product candidates require substantial technical, financial and human resources. These research programs may initially show promise in identifying potential product candidates, yet fail to yield product candidates for clinical development.

If the Company does not accurately evaluate the commercial potential or target market for a particular product candidate, the Company may relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for the Company to retain sole development and commercialization rights to such product candidate.

Failure to maintain adequate internal controls over financial processes and reporting may negatively impact the Company's results of operations or its ability to comply with its reporting obligations

Effective internal controls are necessary for the Company to provide reliable financial reports and to help prevent fraud. Although the Company has implemented a number of internal control procedures in order to help ensure the reliability of its financial reports, including those imposed on it under Canadian securities laws, the Company cannot be certain that such measures will ensure that the Company will maintain adequate control over financial processes and reporting. Failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm the Company's results of operations or cause it to fail to meet its reporting obligations once it becomes a reporting issuer.

Risks Related to the Company's Dependence on Third Parties

If the Company is not able to establish collaborations, the Company may have to alter its development and commercialization plans

For some of Appili's product candidates, the Company plans to collaborate with pharmaceutical and biotechnology companies for the development and potential commercialization of those product candidates. The Company faces significant competition in seeking appropriate collaborators. Whether the Company reaches a definitive agreement for a collaboration will depend, among other things, upon its assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration, and the proposed collaborator's evaluation of a number of factors. Those factors may include the likelihood of approval by the FDA, Health Canada or similar regulatory authorities outside the United States and Canada, the potential market for the product candidate, the costs and complexities of manufacturing and delivering such product candidate to patients, and the potential of competing products. The collaborator may also consider alternative product candidates or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with Appili for its product candidate. The Company may also be restricted under existing license agreements from entering into agreements on certain terms with potential collaborators. Collaborations are complex and time-consuming to negotiate and document. Appili may not be able to negotiate collaborations on a timely basis, on acceptable terms, or at all.

The Company intends to develop collaborations with third parties to commercialize some of its products. If the Company is not able to enter into collaborations for any such product candidate, the Company may have to curtail the development of such product candidate, reduce or delay its development program or one or more of its other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase its expenditures and undertake development or commercialization activities at the Company's own expense. If Appili elects to increase its expenditures to fund development or commercialization activities on its own, the Company may need to obtain additional capital, which may not be available to the Company on acceptable terms or at all. If the Company does not have sufficient funds, the Company may not be able to further develop these product candidates or bring these product candidates to market and generate product revenue.

The Company may depend on collaborations with third parties for the development and commercialization of its product candidates. If those collaborations are not successful, the Company may not be able to capitalize on the market potential of these product candidates

The Company's collaborators may fail to meet contractual obligations. Potential delays include delays in manufacturing for clinical trials, failure to produce sufficient quantities of product to conduct trials, or failure to complete trials. They could also pursue other technologies or develop alternative products that could compete with the products the Company is developing. If the Company does enter into any such arrangements with any third parties, the Company will likely have limited control over the amount and timing of resources that its collaborators dedicate to the development or commercialization of its product candidates. The Company's ability to generate revenues from these arrangements will depend on its collaborators' abilities to successfully perform the functions assigned to them in these arrangements.

Collaborations involving the Company's product candidates would pose the following risks to the Company:

(a) collaborators have significant discretion in determining the efforts and resources that they will apply to these collaborations;

(b) collaborators may not pursue development and commercialization of the Company's product candidates or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in the collaborator's strategic focus or available funding, or external factors such as an acquisition that diverts resources or creates competing priorities;

(c) collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;

(d) collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with the Company's products or product candidates if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than those of the Company;

(e) a collaborator with marketing and distribution rights to one or more products may not commit sufficient resources to the marketing and distribution of such product or products;

(f) collaborators may not properly maintain or defend the Company's intellectual property rights or may use the Company's proprietary information in such a way as to invite litigation that could jeopardize or invalidate the Company's proprietary information or expose the Company to potential litigation;

(g) disputes may arise between the collaborators and the Company that result in the delay or termination of the research, development or commercialization of the Company's products or product candidates or that result in costly litigation or arbitration that diverts management's attention and resources; and

(h) collaborations may be terminated and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable product candidates. For example, the Company could have to build a sales force.

Collaboration agreements may not lead to development or commercialization of product candidates in the most efficient manner, or at all. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators.

The Company relies on third parties to conduct its clinical trials, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such trials

The Company must rely on third parties including academic institutions, CROs, hospitals, clinics, and other third party collaborators, to monitor, support, conduct and/or oversee preclinical and clinical studies of the Company's current and potentially future product candidates. If Appili is unable to maintain or enter into agreements with these third parties on acceptable terms, or if any such engagement is terminated prematurely, the Company may be unable to enroll patients on a timely basis or otherwise conduct the preclinical and clinical trials in the manner and timeframe originally agreed to. There is no guarantee that these third parties will devote adequate time and resources to the Company's clinical studies or perform as required by the agreed terms in the contract or in accordance with regulatory requirements. If these third parties fail to meet expected deadlines, fail to transfer to the Company's regulatory information in a timely manner, fail to adhere to protocols or fail to act in accordance with regulatory requirements or fail to perform under the agreed contract terms, or if they otherwise perform in a substandard manner or in a way that compromises the quality or accuracy of their activities or the data they obtain, then clinical trials of the Company's product candidates may be extended or delayed with additional costs incurred, or the Company's data may be rejected by the FDA, Health Canada or other regulatory agencies.

The Company and its third party CROs are required to comply with cGCP regulations and guidelines enforced by the FDA, Health Canada, and comparable foreign regulatory authorities for products in clinical development. Regulatory authorities enforce these cGCP regulations through periodic inspections of clinical trial sponsors, principal investigators and clinical trial sites. Failure to comply with applicable cGCP regulations may result in the clinical data generated in the Company's clinical trials being deemed unreliable and Appili's submission of marketing applications

may be delayed or the FDA, EMA or another regulatory authority may require the Company to perform additional clinical trials before approving Appili's marketing applications. In addition, the clinical trials must be conducted with product produced under the cGMP regulations enforced by the FDA, Health Canada and other regulatory authorities. Failure to comply with either of these regulations may require the Company to repeat clinical trials, which would delay the regulatory approval process and increase costs. In addition, the Company's reputation may be negatively affected if any of the Company's CROs violates federal or state fraud and abuse or false claims laws and regulations or healthcare privacy and security laws. If any of the clinical trial sites terminates for any reason, the Company may lose follow-up information on patients enrolled in Appili's ongoing clinical trials unless the Company is successfully able to transfer the care of those patients to another qualified clinical trial site, which is not guaranteed. Further, if the Company must terminate the agreements with any of the Company's CROs, the Company may not be able to enter into arrangements with alternative CROs on commercially reasonable terms, or at all. Finally, if the Company is required to switch or add new CROs or other suppliers, it will significantly impact management's resources, potentially significantly delay the timeline and can result in substantial costs.

The Company depends on third party suppliers to obtain the Company's raw ingredients, intermediate drug substances and specialized equipment, which are necessary for the production of the Company's products

Appili currently obtains ingredients and API for the manufacturing of the Company's pipeline products from specialized suppliers. For some components, including raw ingredients, the Company has so far identified only one supplier which is qualified for the Company's outsourcing and/or cGMP process. If that supplier were to stop supplying the required ingredient(s), the Company would need to identify an alternative source of such components, if possible, and may need to wait until it is qualified for the Company's outsourcing and/or cGMP process before procuring the components, which may cause substantial delays to one or all of the Company's development programs, as well as a significant increase in costs. If no alternate suppliers were identified, such supply issues could terminate the program.

Risks Related to the Manufacturing of the Company's Product Candidates

If the Company is unable to manufacture its products, the Company could face delayed trial approvals, revenues from marketed sales and be in default to supply a partner obligation

Appili has no experience manufacturing commercial quantities of products and does not currently have the resources to commercially manufacture any products that the Company may develop. Accordingly, if the Company becomes successful in developing any product with commercial potential, the Company would either have to build the facilities to manufacture the product independently or secure a contract manufacturer or enter into another arrangement with third parties to manufacture the products. If Appili is unable to develop such capabilities or enter into any such arrangement on reasonably favourable terms, the Company may be unable to offer the product at a competitive rate, if at all. If the Company is unable to manufacture or contract for a sufficient supply of product on acceptable terms, or if the Company encounters delays or difficulties in its relationships with manufacturers or collaborators, its preclinical, clinical testing and/or product sales could be delayed, thereby delaying the submission of products for regulatory approval and/or market introduction and subsequent sales of such products.

Currently Appili is utilizing the GMP services of a CMO located in Quebec for one of its clinical drug product manufacturing, and indirectly a CMO in the United States for another one of its product candidates and does not have fully qualified and approved backup facilities for either one of these products. The Company may need to approve an alternative CMO to avoid delays in planned clinical programs should there be any issues with the current CMO. Some of the Company's products require a unique manufacturing process that is not easily replicated by a third party manufacturer.

*If a contract manufacturer of the Company's products or the Active Pharmaceutical Ingredient ("**API**") or excipient supplier to the Company experiences quality assurance/quality control issues or receives an inspection by a regulatory authority and is required to enact remediation which delay supply, it may impact the supply and timing of clinical or commercialized products, the potential for product recall and expose the Company to risk*

The Company currently does not own or operate any manufacturing facilities and does not have any significant in-house manufacturing experience or personnel. As such, the Company relies on third party contract manufacturers to manufacture product candidates and work with multiple third party suppliers to produce sufficient quantities of

materials, including API and excipients, required for the manufacture of Appili's product candidates for preclinical testing and clinical trials and intends to do so for the commercial manufacture of the Company's products.

Reliance on third party manufacturers entails risks to which Appili would not be subject if the Company manufactured its product candidates, including the following:

- reliance on the third party for regulatory compliance and quality control and assurance;
- the possibility of breach of the manufacturing agreement by the third party because of factors beyond the Company's control (including a failure to synthesize and manufacture the Company's product candidates in accordance with the product specifications); and
- the possibility of termination or nonrenewal of the agreement by the third party at a time that is costly or damaging to us.

In particular, the Company relies upon a contract manufacturer to manufacture the API for some or all of its product candidates. The manufacturers may encounter difficulties in scaling up production, including production yields, quality control and quality assurance. There may only be a limited number of manufacturers can supply API for the Company's product candidates, including API for favipiravir and ATI-1501 and failure by the manufacturer to deliver the required quantities of API on a timely basis and/or at commercially reasonable prices, may have a material adverse effect on the Company. In the event that a manufacturer stops supplying the required ingredient(s), including API, the Company may need to identify an alternative source of such components and may need to wait until it is qualified for the Company's GMP process before procuring the components, which may cause substantial delays to one or all of the Company's clinical programs.

In addition, the FDA, Health Canada, EMA and other regulatory authorities require that Appili's product candidates be manufactured according to cGMP and similar foreign standards. Pharmaceutical manufacturers and their subcontractors are required to register their facilities and/or products manufactured at the time of submission of the marketing application and then annually thereafter with the FDA, EMA and other regulatory agencies. They are also subject to periodic unannounced inspections by the FDA, EMA and other regulatory agencies. Any subsequent discovery of problems with a product, or a manufacturing or laboratory facility used by the Company or Appili's collaborators, may result in restrictions on the product or on the manufacturing or laboratory facility, including product recall, suspension of manufacturing, product seizure or a voluntary withdrawal of the drug from the market. Any failure by our third party manufacturers to comply with cGMP or any failure to deliver sufficient quantities of product candidates in a timely manner, could lead to a delay in, or failure to obtain, regulatory approval of any of the Company's product candidates.

Once the Company has products on the market, delays in supply due to manufacturing require a high frequency of public reporting on government drug shortage databases, increasing the workload and risk to the Company

The Company intends to take every precaution with commercial manufacturing to ensure continuity of the market supply through Appili or its commercial partners. Contracting API and excipients from suppliers with proven track records for quality and partnering with manufacturing sites with established audit records by regulatory authorities will both aid in minimizing this risk. Shortage of API and key excipients from approved vendors or delays in manufacturing would require Appili or its commercial partner to meet compliance standards for reporting on government drug shortage databases. In the United States, manufacturers of all covered prescription drugs are required to notify the FDA of a temporary interruption in manufacturing that is likely to lead to a meaningful disruption in the supply of a covered drug in the United States. The notification is required six months in advance, or if that is not possible, as soon as practicable thereafter, but in no case later than five business days after the discontinuance or interruption in manufacturing. The FDA is required to send a noncompliance letter to firms that fail to so notify the FDA. Similar requirements exist in other target markets. This increased workload for reporting would significantly increase resources to ensure compliance limiting ongoing business development activities. The added risk for noncompliance with communications to the regulatory authority poses the risk of the Company being cited publicly for non-compliance with the FDA. This may impact Appili's corporate reputation with the FDA, delay review of other submissions and expose Appili to contract penalties with its commercial partner.

If the Company has to make changes in methods formulation or manufacturing of the product candidates, it may result in additional costs or delay

As product candidates are developed through pre-clinical to late stage clinical trials towards approval and commercialization, various aspects of the development program, such as manufacturing methods and formulation, may be altered in an effort to optimize processes, product stability and results. There is no certainty that these changes will achieve the intended objectives. Any of these changes could cause a significant delay in product candidates' development timeline and/or cause the product candidates to perform differently and affect the results of planned clinical trials or other future clinical trials conducted with the altered materials. This could delay completion of clinical trials, require the conduct of bridging clinical trials or the repetition of one or more clinical trials, increase clinical trial costs, delay approval of our product candidates and/or jeopardize our or our collaborators' ability to commence product sales and generate revenue.

Risks Related to the Company's Intellectual Property, Personally Identifiable Information ("PII") and Sensitive Personally Identifiable Information ("sPII")

If the Company fails to comply with its obligations under its intellectual property licenses with third parties, the Company could lose license rights that are important to its business

The Company is party to an intellectual property license agreement with the NRC and expects to enter into additional license agreements in the future. Appili's existing license agreement imposes, and future license agreements, will most likely impose various milestone payments, royalties, insurance, indemnification and other obligations on the Company.

The Company's current agreement with the NRC requires the Company to maintain its patents and pay annual license fees and research fees. If Appili fails to comply with its obligations under this license, the NRC may have the right to terminate this license agreement. In such event, the Company might not be able to market any product that is covered by such license, or to convert such license to a non-exclusive license. This could materially adversely affect the value of the product candidate being developed under the NRC license agreement.

Termination of any license agreement or reduction or elimination of the Company's licensed rights may result in Appili having to negotiate new or reinstated licenses with less favourable terms.

If the Company is unable to obtain and maintain patent protection for its technology and products, or if the Company's licensors are unable to obtain and maintain patent protection for the technology or products that it licenses from them, or if the scope of the patent protection obtained is not sufficiently broad, the Company's competitors could develop and commercialize technology and products similar or identical to that of the Company's, and its ability to successfully commercialize its technology and products may be adversely affected

Appili's success will depend on its ability to obtain and maintain patent and other intellectual property protection with respect to its product candidates. The Company and its licensors have sought to protect the Company's proprietary position by filing patent applications in the United States and abroad related to its novel technologies and products that are important to its business. This process is expensive and time-consuming, and the Company may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. In addition, patents might not be issued or granted with respect to Appili's patent applications that are currently pending, and issued or granted patents might later be found to be invalid or unenforceable, be interpreted in a manner that does not adequately protect the Company's current product or any future products, or fail to otherwise provide us with any competitive advantage. The patent position of biotechnology and pharmaceutical companies is generally uncertain because it involves complex legal and factual considerations and in recent years has been the subject of much litigation. The standards applied by the U.S. Patent and Trademark Office and foreign patent offices in granting patents are not always applied uniformly or predictably. As a result, the issuance, scope, validity, enforceability and commercial value of the Company's and its licensors' patent rights are highly uncertain. The degree of future protection that Appili will have on its proprietary products and technology, if any, is uncertain and a failure to obtain adequate intellectual property protection with respect to the Company's product candidates and proprietary technology could have a material adverse impact on the success of its business.

Even if Appili's owned and licensed patent applications issue as patents, they may not issue in a form that will provide the Company with any meaningful protection, prevent competitors from competing with the Company or otherwise provide the Company with any competitive advantage. Appili's competitors may be able to circumvent its owned or licensed patents by developing similar or alternative technologies or products in a non-infringing manner. The issuance of a patent is not conclusive as to its scope, validity or enforceability, and the Company's owned and licensed patents may be challenged in the courts or patent offices in Canada, the United States and abroad. Such challenges may result in patent claims being narrowed, invalidated or held unenforceable, which could limit Appili's ability to stop or prevent the Company from stopping others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of its technology and products. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, the Company's owned and licensed patent portfolio may not provide it with sufficient rights to exclude others from commercializing products similar or identical to Appili's.

The Company may become involved in lawsuits to protect or enforce its patents, which could be expensive, time consuming and whether successful or unsuccessful, limit the commercial value of the Company's product or have a material adverse effect on the Company's business

Competitors may infringe any of Appili's current or future patents. To counter infringement or unauthorized use, the Company may be required to file expensive and time-consuming infringement claims. Also, the court may decide in an infringement proceeding that a specific patent held by the Company is not valid or enforceable or may refuse to stop the other party from using the Company's intellectual technology at issue on the grounds that its patents do not cover the intellectual property being disputed. An adverse result in any litigation proceeding could put one or more of the Company's patents at risk of being invalidated or interpreted narrowly. Additionally, due to the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of Appili's confidential information could be compromised by disclosure during this type of litigation. In addition, the Company's licensor may have rights to file and prosecute such claims and it is reliant on them.

The Company's commercial successes depends upon its ability and the ability of its partners and other collaborators to develop, manufacture, market and sell its product candidates and use its proprietary technologies without infringing the proprietary rights of third parties. Third parties may assert infringement claims against the Company based on existing patents or patents that may be granted in the future. The Company may become party to, or threatened with, future adversarial proceedings or litigation regarding intellectual property rights with respect to its products and technology, including interference proceedings before the U.S. Patent and Trademark Office or other similar regulatory authorities. If the third party is successful and the Company is found to infringe on their intellectual property rights, the Company could be forced to negotiate the rights to the third party's intellectual property in order to continue to develop and market the Company's products and technology. There is no guarantee that the Company will be able to obtain any required license on commercially reasonable terms or at all. Even if the Company was able to obtain a license, it could be non-exclusive, thereby giving its competitors access to the same technologies licensed to the Company. If the Company is not able to obtain a license for the rights to their technology, the Company could be forced, including by court order, to cease commercializing the infringing technology or product. In addition, the Company could be found liable for additional monetary damages. A finding of infringement could prevent the Company from commercializing its product candidates or force the Company to cease some of its business operations, which could materially harm the Company's business. Claims that the Company has misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on its business.

Litigation or other legal proceedings relating to intellectual property claims may cause the Company to incur significant expenses, and could distract the Company's employees from their normal responsibilities, even if it is resolved in the Company's favor. Also, any public announcements of the results of hearings, motions or other interim proceedings or developments could be perceived to be negative by securities analysts or investors, leading to a potential adverse effect on the price of the Common Shares. These types of litigation or proceedings could substantially increase the Company's operating losses and reduce the resources available for product development activities. The Company may not have sufficient financial or other resources to adequately conduct such litigation or proceedings. Some of the Company's competitors may be able to sustain the costs of such litigation or proceedings more effectively than it can because of their greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on the Company's ability to compete in the marketplace.

The Company may be subject to claims that its employees have wrongfully used or disclosed alleged trade secrets of their former employers

The Company makes efforts to ensure that its employees do not use the proprietary information or know-how of others in their work for the Company, however the Company may be subject to claims that it or these employees have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such employee's former employer. This would most likely result in the Company having to enter litigation to defend against these claims. If the Company fails in defending any such claims, in addition to paying monetary damages, it may lose valuable intellectual property rights and/or personnel. Even if the Company is successful in defending against such claims, litigation could result in substantial costs and be a distraction to management.

If the Company is unable to protect the confidentiality of its trade secrets, the Company's business, competitive position, and reputation as a preferred business/licensing partner would be harmed

The Company relies on trade secrets, including unpatented know-how, technology and other proprietary information, to maintain its competitive position, in addition to filing patents for some of its technology and products. The types of protections available for trade secrets are particularly important with respect to the ATI-1503 program, which involve significant unpatented know-how. Appili seeks to protect these trade secrets, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as the Company's employees, corporate collaborators, outside scientific collaborators, sponsored researchers, contract manufacturers, consultants, advisors and other third parties. The Company also enters into confidentiality and invention or patent assignment agreements with its employees and consultants. Despite these efforts, any of these parties may breach the agreements and disclose the Company's proprietary information, including its trade secrets, and the Company may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, courts in certain jurisdictions are less willing or unwilling to protect trade secrets. If any of the Company's trade secrets were to be lawfully obtained or independently developed by a competitor, it would have no right to prevent them from using that technology or information to compete with the Company. If any of the Company's trade secrets were to be disclosed to or independently developed by a competitor, its competitive position would be harmed.

The Company must protect and manage confidential PII and sPII data, including reporting from marketed product adverse event reporting and clinical trials. Accidental release of information could harm the Company.

As the Company's programs advance in development, the Company expects to generate or otherwise obtain clinical data that may include PII and sPII. These data are required for successful development and commercialization of pharmaceutical products, such as clinical trial data to support regulatory submissions and pharmacovigilance data to monitor for potential adverse events following product launch. The Company recognizes the sensitivity of this data and will apply protections to minimize the risk of PII or sPII release, including strict data blinding protocols and secure information technology infrastructure. However, despite these measures, it is possible that PII or sPII could be released and may expose the Company to substantial reputational risk and legal liabilities. Regardless of merit or eventual outcome, liability claims may result in decreased demand for any product candidates or products that it may develop, injury to Appili's reputation and significant negative media attention, withdrawal of clinical trial participants, significant costs to defend the related litigation, substantial monetary awards to trial participants or patients, loss of revenue and the inability to commercialize any products that the Company may develop.

Risks Related to Regulatory Approval of the Company's Product Candidates and Other Legal Compliance Matters

If the Company, one of its contractors, or license partners are not able to comply with regulations and guidelines governing pharmaceutical product development (including, but not limited to GMP, Good Clinical Practices, GLP, quality assurance/quality control, and guidelines set forth by the International Conference for Harmonization), it could impact the overall development and/or commercialization activities, the timing of development or result in a supply disruption of commercial product that would negatively impact the business

The development and manufacturing of pharmaceutical products is strictly governed by a series of standardized regulations and guidelines to ensure data and product quality including, but not limited to GMP, GLP, and additional guidelines set forth by the International Conference for Harmonization. These guidelines are mandatory standards for

most regulatory agencies and designed to ensure the highest quality of research and manufacturing for pharmaceutical products. The Appili team has experience in the development and commercialization of pharmaceutical products under these regulations. The Company has put in place infrastructure to ensure compliance with relevant guidelines, including standard operation procedures and third-party audits. Despite these precautions, it is possible that activities conducted internally or by a third party may be non-compliant with industry standard regulations, with significant negative impact on the Company.

During product development, non-compliance with standard guidelines and regulations may invalidate drug product and/or data such that they are not appropriate to support regulatory filings. The Company may be required to repeat development activities as a result, incurring additional development risk and costs. Repeating specific development activities could also delay overall development and commercialization timelines, negatively impacting a product's revenue potential. Adverse effects on timing and costs could lead to discontinuation of product development. In the event that non-compliance with standard guidelines adversely impacts clinical trial activities and trial participants, the Company could also be exposed to substantial reputational risk and legal liabilities. Regardless of merit or eventual outcome, liability claims may result in decreased demand for any product candidates or products that it may develop, injury to the Appili's reputation and significant negative media attention, significant costs to defend the related litigation, substantial monetary awards to trial participants, loss of revenue and the inability to commercialize any products that the Company may develop.

For commercial products, non-compliance with standard guidelines and regulations may prevent the Company from releasing product to the market or require the Company to withdraw product from the market. In either case, the Company would incur manufacturing costs for product without the potential to generate revenues. In addition, delays in delivery of product to the market could adversely impact long-term product utilization and drive substitution to competitor products. In the case where product released to the market is retroactively found to be non-compliant with existing guidelines, the Company could also incur significant costs related to the returns, refunds, and destructions of non-compliant product. Additionally, the Company could be exposed to substantial reputational risk and legal liabilities with potential negative consequences outlined above.

In any situation of guideline non-compliance, the Company will be required to undertake a comprehensive investigation and engage in activities to remedy and prevent future deviations. These activities could impose significant costs on the Company and draw resources away from other Company objectives.

If the Company or one of the license partners contravenes regulated pricing or reimbursement and/or promotion guidelines, the legal costs, penalties and corporate/reputational risk would impact the Company's business

The Company intends to seek out partnership opportunities with third parties to maximize product penetration and revenues in global markets. Any prospective partner under consideration by the Company will be subjected to thorough due diligence including assessment of commercialization capabilities and track record in the pharmaceutical industry. The Company intends to seek out partners with a history of successful product launches and compliance with regional reimbursement and promotional guidelines. The Company will also include in any licensing agreements provisions that provide Appili mechanisms to influence partner behaviour up to and including claw back provisions. However, a partner may deliberately or accidentally engage in activities that contravene regional pricing and promotion regulations. Partner behaviour may adversely impact revenues for licensed regions and also may expose the Company to reputational risk and legal liabilities within the licensed region and globally. Although the Company would seek reparations and if necessary, sever partnerships with licensees, the Company may not be able to obtain adequate remedies for such breaches. Litigation or other legal proceedings relating to licensing partners may cause the Company to incur significant expenses and could distract the Company's employees from their normal responsibilities, even if it is resolved in the Company's favor. Also, any public announcements of the results of hearings, motions or other interim proceedings or developments could be perceived to be negative by securities analysts or investors, leading to a potential adverse effect on the price of the Common Shares. These types of litigation or proceedings could substantially increase the Company's operating losses and reduce the resources available for product development activities. The Company may not have sufficient financial or other resources to adequately conduct such litigation or proceedings. Some of the third parties may be able to sustain the costs of such litigation or proceedings more effectively than it can because of their greater financial resources. Uncertainties resulting from the initiation and continuation of litigation or other proceedings could have a material adverse effect on the Company's ability to compete in the marketplace. Finally, even if successful, disruption of commercialization of the Company's products in the licensed region will adversely impact revenues and future adoption of the product in the region.

If the Company is not able to obtain, or if there are delays in obtaining, required regulatory approvals, the Company may not be able to fully realize the expected value of product candidates, and long-term profitability of the asset may be materially impaired.

The Company's product candidates, including favipiravir, ATI-1501, ATI-1503, ATI-1701 and ATI-2307, and the activities associated with their development and commercialization, including their design, testing, manufacture, safety, efficacy, record keeping, labeling, storage, approval, advertising, promotion, sale and distribution, are subject to comprehensive regulation by the FDA, Health Canada and by comparable authorities in other countries. Failure to obtain regulatory approval for a product candidate will prevent Appili and its partners from commercializing the product candidate. The Company has not received regulatory approval to market any of its product candidates in any jurisdiction. The Company has only limited experience in filing and supporting the applications necessary to gain regulatory approvals and expects to rely on third party contract research organizations to assist it in this process. Securing FDA or Health Canada approval requires the submission of extensive preclinical and clinical data and supporting information to the FDA or Health Canada for each therapeutic indication to establish the product candidate's safety and efficacy. Securing FDA or Health Canada approval also requires the submission of information about the product manufacturing process to, and inspection of manufacturing facilities by, the FDA or Health Canada. Appili's product candidates may not be effective, may be only moderately effective or may prove to have undesirable or unintended side effects, toxicities or other characteristics that may preclude the Company from obtaining regulatory approval or prevent or limit commercial use.

The process of obtaining regulatory approvals, both in the United States and abroad, is expensive, may take many years if additional clinical trials are required, and can vary substantially based upon a variety of factors, including the type, complexity and novelty of the product candidates involved. Changes in regulatory approval policies during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for each submitted product application, may cause delays in the approval or rejection of an application. The FDA or Health Canada has substantial discretion in the approval process and may refuse to accept any application or may decide that the Company's data is insufficient for approval and require additional preclinical, clinical or other studies. In addition, varying interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent regulatory approval of a product candidate. Any regulatory approval the Company ultimately obtains may be limited or subject to restrictions or post-approval commitments that render the approved product not commercially viable.

If the Company experiences delays in obtaining approval or if it fails to obtain approval of its product candidates, the commercial prospects for the Company's product candidates may be harmed and its ability to generate revenues will be materially impaired.

Failure to obtain regulatory approval in international jurisdictions would prevent the Company's product candidates from being marketed abroad. Risk of a rejection, incomplete response or poor approved label by a regulatory authority outside of the United States may adversely impact the United States market opportunity and limit the value of the asset to the Company

The Company intends to enter into agreements with third parties for the marketing of its products outside Canada and the United States. In order to market and sell the Company's products in the European Union and many other jurisdictions, Appili or its third parties must obtain separate regulatory approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can involve additional testing. The time required to obtain approval may differ substantially from that required to obtain FDA or Health Canada approval. The regulatory approval process outside the United States generally includes all the risks associated with obtaining FDA or Health Canada approval. In addition, in many countries outside the United States or Canada, it is required that the product be approved for reimbursement before the product can be approved for sale in that country. The Company may not obtain approvals from regulatory authorities outside the United States or Canada on a timely basis, if at all. Approval by the FDA or Health Canada does not ensure approval by regulatory authorities in other countries or jurisdictions, and approval by one regulatory authority outside the United States or Canada does not ensure approval by regulatory authorities in other countries or jurisdictions or by the FDA. The Company may not be able to file for regulatory approvals and may not receive necessary approvals to commercialize its products in any market.

Any product candidate for which the Company obtains marketing approval could be subject to restrictions or withdrawal from the market and the Company may be subject to penalties if it fails to comply with regulatory requirements or if it experiences unanticipated problems with its products, if any of them are approved

Any product candidate for which Appili acquires marketing approval, along with the manufacturing processes, post-approval clinical data, labeling, advertising and promotional activities for such product, will be subject to continual requirements of, and review by, the FDA and other regulatory authorities. These requirements include, among others, submissions of safety and other post-marketing information and reports, registration and listing requirements, cGMP requirements relating to quality control, quality assurance and corresponding maintenance of records and documents, requirements regarding the distribution of samples to physicians and record keeping. Even if regulatory approval of a product candidate is granted, the approval may be subject to limitations on the indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for costly post-marketing testing and surveillance to monitor the safety or efficacy of the product. The FDA closely regulates the post-approval marketing and promotion of drugs to ensure drugs are marketed only for the approved indications and in accordance with the provisions of the approved label. The FDA imposes stringent restrictions on manufacturers' communications regarding off-label use and if the Company does not market its products for their approved indications, Appili may be subject to enforcement action for off-label marketing.

In addition, later discovery of previously unknown problems with the Company's products, manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may yield various results, including the restrictions on such products, manufacturers or manufacturing processes; the restrictions on the marketing of a product; the restrictions on product distribution; requirements to conduct post-marketing clinical trials; withdrawal of the products from the market; refusal to approve pending applications or supplements to approved applications that it submits; recall of products; fines, restitution or disgorgement of profits or revenue; suspension or withdrawal of regulatory approvals; refusal to permit the import or export of Appili's products; product seizure; or injunctions or the imposition of civil or criminal penalties.

The Company's direct and indirect relationships with healthcare customers, government, Payers, and reimbursement/contract decision makers, will be subject to applicable anti-bribery anti-corruption and other healthcare laws and regulations, which could expose the Company to criminal sanctions, civil penalties, program exclusion, debarment, contractual damages, reputational harm and diminished profits and future earnings

Healthcare providers, physicians and third-party Payers play a primary role in the recommendation and prescription of any product candidates for which the Company obtains marketing approval. Appili's future arrangements with third party Payers and customers may expose the Company to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which it markets, sells and distributes its products for which it obtains marketing approval. Restrictions under applicable United States federal and state healthcare laws and regulations that may impact the Company's activities, include the following:

- the federal healthcare anti-kickback statute prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under federal and state healthcare programs;
- civil penalties could be imposed against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;
- criminal and civil liability could be imposed for executing a scheme to defraud any healthcare benefit program and also imposes obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;
- manufacturers of drugs, devices, biologics and medical supplies are generally required to report information related to physician payments and other transfers of value and physician ownership and investment interests; and
- analogous laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third party Payers, including private insurers, and some laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance

promulgated by the federal government in addition to requiring drug manufacturers to report information related to payments to physicians and other health care providers or marketing expenditures.

Costs will be substantial to ensure that the Company's business arrangements with third parties will comply with applicable healthcare laws and regulations in each jurisdiction when the Company products will eventually be offered. It is possible that governmental authorities will conclude that the Company's business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If the Company's operations are found to be in violation of any of these laws or any other governmental regulations that may apply to it, it may be subject to significant civil, criminal and administrative penalties, damages, fines, exclusion from government funded healthcare programs, such as Medicare and Medicaid in the United States, and the curtailment or restructuring of the Company's operations. If any of the physicians or other providers or entities with whom the Company's expects to do business are found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

Market access, legislative and pricing policy changes may increase the difficulty and cost for the Company to obtain optimal marketing approval to commercialize its product candidates and affect the prices it may obtain

In the United States and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of the Company's product candidates, restrict or regulate post-approval activities and affect its ability to profitably sell any product candidates for which it obtains marketing approval.

In the United States, the *Medicare Prescription Drug, Improvement, and Modernization Act of 2003* ("**Medicare Modernization Act**") changed the way Medicare covers and pays for pharmaceutical products. The legislation expanded Medicare coverage for drug purchases by the elderly and introduced a new reimbursement methodology based on average sales prices for physician administered drugs. In addition, this legislation provided authority for limiting the number of drugs that will be covered in any therapeutic class in certain cases. Cost reduction initiatives and other provisions of this legislation could decrease the coverage and reimbursement that is provided for any approved products. While the Medicare Modernization Act applies only to drug benefits for Medicare beneficiaries, private Payers often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates. Therefore, any reduction in reimbursement that results from the Medicare Modernization Act may result in a similar reduction in payments from private Payers.

In March 2010, President Obama signed into law the *Health Care Reform Law*, a law intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add new transparency requirements for health care and health insurance industries, impose new taxes and fees on the health industry and impose additional health policy reforms. Effective October 1, 2010, the Health Care Reform Law revised the definition of "average manufacturer price" for reporting purposes, which could increase the amount of Medicaid drug rebates to states. Further, the new law imposes a significant annual fee on companies that manufacture or import branded prescription drug products. Substantial new provisions affecting compliance have also been enacted, which may affect the Company's business practices with health care practitioners. The Company will not know the full effects of the Health Care Reform Law until applicable federal and state agencies issue regulations or guidance under the law. Although it is too early to determine the effect of the Health Care Reform Law, this law appears likely to continue the pressure on pharmaceutical pricing, especially under the Medicare program, and may also increase the Company's regulatory burdens and operating costs.

Since its enactment, there have been judicial and Congressional challenges to certain aspects of the Health Care Reform Law. As a result, there have been delays in the implementation of, and action taken to repeal or replace, certain aspects of the Health Care Reform Law. The Company expects that the current Presidential Administration and U.S. Congress will likely continue to seek to modify, repeal, or otherwise invalidate all, or certain provisions of, the Health Care Reform Law. The Company cannot be sure whether legislative changes will be enacted, or whether the FDA regulations, guidance or interpretations will be changed, or what the impact of such changes on the marketing approvals of the Company's product candidates, if any, may be.

With the enactment of the *Biologics Price Competition and Innovation Act of 2009* ("**BPCIA**"), as part of the Health Care Reform Law, an abbreviated pathway for the approval of biosimilar and interchangeable biological products was

created. The new abbreviated regulatory pathway establishes legal authority for the FDA to review and approve biosimilar biologics, including the possible designation of a biosimilar as "interchangeable" based on its similarity to an existing brand product. Under the BPCIA, an application for a biosimilar product cannot be submitted to the FDA until four years, or approved by the FDA until 12 years, after the original brand product identified as the reference product was approved under a BLA. The BPCIA is complex and is only beginning to be interpreted and implemented by the FDA. As a result, its ultimate impact, implementation and meaning is subject to uncertainty. While it is uncertain when any such processes may be fully adopted by the FDA, any such processes could have a material adverse effect on the future commercial prospects for the Company's biological products.

Appili believes that if any of its product candidates were to be approved as biological products under a BLA, such approved products should qualify for the four-year and 12-year periods of exclusivity. However, there is a risk that the United States Congress could amend the BPCIA to significantly shorten these exclusivity periods, or that the FDA will not consider the Company's product candidates to be reference products for competing products, potentially creating the opportunity for generic competition sooner than anticipated. Moreover, the extent to which a biosimilar, once approved, will be substituted for any one of the Company's reference products in a way that is similar to traditional generic substitution for non-biological products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing.

Inability of the Company to secure and advance the portfolio through development and regulatory hurdles to successful commercialization, may impact ability to partner the Company's portfolio

The Company will rely on third party partnerships to maximize the commercial potential of its product candidates in global markets. Success in securing commercial partners depends on multiple factors including the Company's reputation and its ability to advance a product through regulatory approval to market in a timely manner. Portfolio optimization and product launch strategies require years of advance notice and planning. Uncertainty around product development timelines, regulatory approval, and product availability may reduce the attractiveness of the Company's product candidates to partners and impact the Company's ability to secure accretive third party partnerships.

If the Company experiences delays in obtaining third party partnerships for its product candidates, the commercial prospects for the Company's product candidates will be impacted.

Risks Related to Employee Matters and Managing Growth

The Company is highly dependent upon certain key executives and other key personnel and their loss could adversely affect its ability to achieve its business objective

The Company is highly dependent on its executive officers. Although Appili has formal employment agreements with each of its executive officers, these agreements do not prevent them from terminating their employment with the Company at any time. The loss of the services of any of these persons could potentially harm the Company's research, development and commercialization objectives and financial condition.

Appili's success is also dependent on the Company's ability to recruit, retain and motivate qualified scientific, clinical, manufacturing and commercialization personnel. The Company may not be able to attract and retain these personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel, as well as the location of the head office in Halifax, NS or the satellite office in Toronto, ON. The Company also experiences competition for the hiring of scientific and clinical personnel from universities and research institutions. The Company also depends on scientific and clinical collaborators and advisors, all of whom have outside commitments that may limit their availability.

The Company expects to expand its development, regulatory, manufacturing and commercial market capabilities, and as a result, the Company may encounter difficulties in managing its growth, which could disrupt the Company's operations

As the Company executes on its business strategy and acquires additional product candidates, the Company expects to experience significant growth in the number of its employees and the scope of its operations, particularly in the areas of drug development, regulatory affairs, manufacturing and sales and marketing. As a result, the Company will need to identify, hire and integrate personnel who have not worked together previously.

This growth will also result in significant additional responsibilities on management, who may need to spend a disproportionate amount of its attention away from the business operations and spend a substantial amount of time to managing these growth activities. Managing this growth will also require the Company to continue to implement and improve its managerial, operational and financial systems, expand its facilities and continue to recruit and train additional qualified personnel. Due to its limited financial resources, the Company may not be able to effectively manage the expansion of its operations or recruit and train additional qualified personnel. If the Company is unable to effectively manage this growth, the expenses may increase greater than anticipated and the Company may not be able to effectively implement its business strategy.

The Company's ability to secure new assets and progress pipeline products to commercialization will be key to attracting new talent for growth

Appili has been successful attracting, retaining and motivating qualified management, clinical and scientific personnel. However if the Company does not secure new assets and progress its product candidates through its pipeline, the Company could experience difficulties attracting and retaining qualified employees as competition for qualified personnel in the biotechnology and pharmaceutical field is intense. As well, the Company will likely need to hire additional personnel as Appili expands its clinical development activities and develops commercial capabilities, including a potential sales infrastructure to support commercialization efforts if the Company so chooses to market its products independently. Appili may not be able to attract and retain personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for individuals with similar skill sets. The inability to recruit or loss of the services of any executive or key employee may impede the progress of the Company's research, development and commercialization objectives.

PROMOTERS

BBDC has acted as a promoter of the Company during the two years immediately preceding the date of this AIF. BBDC currently beneficially owns, either directly or indirectly, 14,350,120 Common Shares, 2,200 2018/2019 Broker Warrants exercisable into 8,491 Common Shares, 256,545 February 2020 Broker Warrants and 280,777 June 2020 Broker Warrants, representing approximately 22.84% of the issued and outstanding Common Shares on a non-diluted basis and 19.23% on a partially diluted basis assuming the exercise in full of the 2018/2019 Broker Warrants, February 2020 Broker Warrants and June 2020 Broker Warrants.

BBSI, is a registered dealer who participated in or led each of the Brokered Special Warrant Offering, the February 2020 Offering and the June 2020 Offering. BBSI received an aggregate cash fee of $494,184 for its services in connection with the Special Warrant Offering, February 2020 Offering and June 2020 Offering. In addition, BBSI was issued an aggregate of:

(a) 2,200 2018/2019 Broker Warrants exercisable into 8,491 Common Shares;

(b) 256,545 February 2020 Broker Warrants; and

(c) 280,777 June 2020 Broker Warrants.

Each of BBSI and BBDC (a principal shareholder and the promoter of the Company), are wholly owned subsidiaries of Bloom Burton & Co. As BBSI and BBDC are affiliated entities, the Company may be considered to be a "related issuer" of BBSI pursuant to NI 33-105.

On August 17, 2020, BBSI and the Company entered into a consulting services agreement pursuant to which BBSI agreed to assist Appili in identifying and evaluating potential opportunities for a merger, acquisition, or other transactions. The initial term of such agreement was one month and BBSI was paid a cash fee of $15,000 under the consulting services agreement.

LEGAL PROCEEDINGS AND REGULATORY ACTIONS

We are not aware of any legal proceedings involving the Company or to which any of its property is subject during the Appili's most recently completed financial year, nor are any such proceedings known by us to be contemplated.

During the financial year ended March 31, 2021, there were no: (a) penalties or sanctions imposed against the Company by a court relating to securities legislation or by a securities regulatory authority; (b) other penalties or sanctions imposed by a court or regulatory body against the Company that would likely be considered important to a reasonable investor in making an investment decision; or (c) settlement agreements the Company entered into before a court relating to securities legislation or with a securities regulatory authority.

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Other than as described elsewhere in this AIF, none of (i) the directors or executive officers of the Company, (ii) a person or company that beneficially owns, or controls or directs, directly or indirectly, more than 10% of any class or series of outstanding voting securities of the Company, or (iii) any associate or affiliate of the persons or companies referred to in (i) and (ii), has or has had any material interest, direct or indirect, in any transaction within the three most recently completed financial years of the Company or during the current financial year that has materially affected or is reasonably expected to materially affect the Company.

TRANSFER AGENT AND REGISTRAR

The registrar and transfer agent for the Common Shares is Computershare Investor Services Inc. at its offices located at 1500 Robert-Bourassa Boulevard, 7th Floor, Montreal, Quebec.

MATERIAL CONTRACTS

Except for contracts entered into in the ordinary course of business, the only contracts entered into by Appili since the beginning of the last financial year, or before the beginning of the last financial year that are still in effect, which may be regarded as material, are as follows:

1. The Collaboration Agreement. See "*Our Development Programs*" for more information.

2. License Agreement with the NRC for the world-wide rights to NRC's intellectual property related to the ClpB and CapB Mutants of *F. tularensis*. See "*Our Development Programs*" for more information.

3. APA FFTC to purchase, assume and accept all rights, interests and obligations of FFTC's anti-fungal compound. See "*Our Development Programs*" for more information.

4. License Agreement with Saptalis for the exclusive license of Appili's intellectual property for ATI-1501in the United States and its territories. See "*Our Development Programs*" for more information.

5. The agency agreement dated February 14, 2020 between the Company and BBSI, as lead agent, Mackie Research Capital Corporation, Haywood Securities Inc. and Industrial Alliance Securities Inc. in connection with the February 2020 Offering.

6. The warrant indenture dated February 20, 2020 between the Company and Computershare Trust Company of Canada with respect to the February 2020 Warrants.

7. The agency agreement dated June 5, 2020 between the Company and BBSI, as lead agent, Mackie Research Capital Corporation, Industrial Alliance Securities Inc, Haywood Securities Inc. and Richardson GMP Limited in connection with the June 2020 Offering.

8. The warrant indenture dated June 10, 2020 between the Company and Computershare Trust Company of Canada with respect to the June 2020 Warrants.

All of the material contracts of the Company are available on the SEDAR website at www.sedar.com.

INTERESTS OF EXPERTS

The Company's auditors PricewaterhouseCoopers LLP, who have prepared the Auditor's Report to Shareholders dated June 24, 2020. PricewaterhouseCoopers LLP has confirmed that it is independent from the Company in

accordance with the Chartered Professional Accountants of Nova Scotia Code of Professional Conduct in Nova Scotia, Canada.

ADDITIONAL INFORMATION

Additional information, including directors' and officers' remuneration and indebtedness, principal holders of the Company's securities and securities authorized for issuance under the Company's equity compensation plans, where applicable, is contained in the Company's information circular dated July 13, 2020 and will also be included in the Company's information circular for its next annual meeting of securityholders that involves the election of directors. Additional financial information relating to the Company is contained in the Company's comparative financial statements and associated management's discussion and analysis for its most recently completed fiscal year ended March 31, 2021.

All of these documents as well as additional information relating to the Company are (or will be) available on SEDAR at www.sedar.com.

GLOSSARY OF TERMS

As used in this AIF, the following terms have the respective meaning as specified below:

"**2018/2019 Broker Warrants**" means the 34,597 broker warrants granted to the agents in connection with the Brokered Special Warrant Offering, with each Broker Warrant exercisable to acquire 3.86 Common Shares at an exercise price of $1.10, subject to adjustment in certain circumstances, until November 21, 2020.

"**AIF**" has the meaning given to such term under the heading entitled *"Forward-Looking and Other Statements"*.

"**Animal Rule**" has the meaning given to such term under the heading entitled *"Business of the Company - Our Development Programs - ATI-1701"*.

"**APA**" has the meaning given to such term under the heading entitled *"Business of the Company - Three-Year History - Fiscal 2020 (April 2019 to March 2020)"*.

"**API**" has the meaning given to such term under the heading entitled *"Risk Factors - Risks Related to the Manufacturing of the Company's Product Candidates"*.

"**Aradigm**" has the meaning given to such term under the heading entitled *"Executive Officers and Directors - Corporate Cease Trade Orders, Bankruptcies, Penalties and Sanctions"*.

"**Articles**" has the meaning given to such term under the heading entitled *"The Corporate Structure - Name, Address and Incorporation"*.

"**Audit Committee**" has the meaning given to such term under the heading entitled *"Audit Committee – Composition of the Audit Committee"*.

"**BARDA**" means the Biomedical Advanced Research and Development Authority.

"**Bavarian Nordic**" has the meaning given to such term under the heading entitled *"Business of the Company - Market Opportunity - ATI-1701"*.

"**BBDC**" has the meaning given to such term under the heading "*Business of the Company – Overview of the Company – Our Business Strategy*".

"**BBSI**" means Bloom Burton Securities Inc.

"**BLA**" has the meaning given to such term under the heading entitled *"Business of the Company - Regulatory Environment - United States Government Regulation"*.

"**Bloom Burton & Co.**" means Bloom Burton & Co. Inc., a company existing under the laws of the Province of Ontario.

"**Board**" has the meaning given to such term under the heading entitled *"The Company - Name, Address and Incorporation"*.

"**BPCIA**" has the meaning given to such term under the heading entitled *"Risk Factors - Risks Related to Regulatory Approval of the Company's Product Candidates and Other Legal Compliance Matters"*.

"**Brokered Offering**" means the brokered private placement offering of 432,478 Special Warrants in accordance with Agency Agreement, and which forms part of the Offering.

"**Brokered Special Warrant Offering**" means the brokered private placement offering of 432,478 Special Warrants and which forms part of the Special Warrant Offering.

"**CBCA**" has the meaning given to such term under the heading entitled *"The Corporate Structure - Name Address and Incorporation"*.

"**CBD S&T**" has the meaning given to such term under the heading entitled *"Business of the Company - Three-Year History - Fiscal 2020 (April 2019 to March 2020)"*.

"**CDC**" has the meaning given to such term under the heading entitled *"Business of the Company - Overview of the Company - ATI-1503"*.

"**CDO**" has the meaning given to such term under the heading entitled *"Business of the Company - Three-Year History - Fiscal 2021 (April 2020 to March 2021)"*.

"**CEO**" means Chief Executive Officer.

"**CFO**" means Chief Financial Officer.

"**cGMP**" has the meaning given to such term under the heading entitled *"Business of the Company - Regulatory Environment - United States Government Regulation"*.

"**CMO**" has the meaning given to such term under the heading entitled *"Business of the Company - Three-Year History - Fiscal 2021 (April 2020 to March 2021)"*.

"**Collaboration Agreement**" has the meaning given to such term under the heading entitled "*Business of the Company – Three-Year History – Fiscal 2021 (April 2020 to March 2021)*".

"**Common Share**" has the meaning given to such term under the heading "*Corporate Structure – Name, Address and Incorporation*."

"**Complete Response Letter**" has the meaning given to such term under the heading entitled *"Business of the Company - Regulatory Environment - The FDA's Decision on an NDA or BLA"*.

"**COO**" means Chief Operating Officer.

"**COVID-19**" has the meaning given to such term under the heading entitled *"Forward-Looking and Other Statements"*.

"**CRO**" has the meaning given to such term under the heading entitled *"Business of the Company – Management and Employees "*.

"**CTA**" has the meaning given to such term under the heading entitled *"Business of the Company - Regulatory Environment - Canada Drug Products and Biologics Regulation"*.

"**DRL**" has the meaning given to such term under the heading entitled "*Business of the Company – Three-Year History – Fiscal 2021 (April 2020 to March 2021)*"

"**DSMB**" has the meaning given to such term under the heading entitled "*Business of the Company – Recent Developments*".

entitled *"Business of the Company - Our Development Programs - ATI-1701"*.

"**DVC**" has the meaning given to such term under the heading entitled *"Business of the Company - Competitive Conditions - ATI-1701"*.

"**DVC-LVS**" has the meaning given to such term under the heading entitled *"Business of the Company - Competitive Conditions - ATI-1701"*.

"**ECDC**" has the meaning given to such term under the heading entitled *"Business of the Company - Market Opportunity - ATI-1503"*.

"**EMA**" has the meaning given to such term under the heading entitled *"Business of the Company - Regulatory Environment"*.

"**Emergent Biosolutions**" has the meaning given to such term under the heading entitled *"Business of the Company - Market Opportunity - ATI-1701"*.

"**EU-5**" has the meaning given to such term under the heading entitled *"Business of the Company - Market Opportunity - ATI-1503"*.

"***F. tularensis***" has the meaning given to such term under the heading entitled *"Business of the Company - Overview of the Company - ATI-1701"*.

"**Favipiravir**" has the meaning given to such term under the heading entitled "*Business of the Company – Overview of the Company"*

*"**FDA**" has the meaning given to such term under the heading entitled "Business of the Company – Three-Year History – Fiscal 2021 (April 2020 to March 2021)".*

"**FDCA**" has the meaning given to such term under the heading entitled *"Business of the Company - Our Development Programs - ATI-1501"*.

"**February 2020 Broker Warrants**" has the meaning given to such term under the heading entitled *"Business of the Company - Three-Year History - Fiscal 2020 (April 2019 to March 2020)".*

"**February 2020 Offering**" has the meaning given to such term under the heading entitled *"Business of the Company - Three-Year History - Fiscal 2020 (April 2019 to March 2020)".*

"**February 2020 Units**" has the meaning given to such term under the heading entitled *"Business of the Company - Three-Year History - Fiscal 2020 (April 2019 to March 2020)".*

"**February 2020 Warrant**" has the meaning given to such term under the heading entitled *"Business of the Company - Three-Year History - Fiscal 2020 (April 2019 to March 2020)".*

"**FFTC**" means FUJIFILM Toyama Chemical Co., Ltd.

"**Finder Warrants**" has the 30,918 finder's warrants granted to the Finders in connection with the Non-Brokered Special Warrant Offering, with each Finder Warrant being exercisable to acquire 3.86 Common Shares at a price of $1.10, subject to adjustment in certain circumstances, until November 21, 2020.

"**Finders**" means certain persons who acted as finders in connection with the Non-Brokered Special Warrant Offering.

"**forward-looking statements**" has the meaning given to such term under the heading entitled *"Forward-Looking and Other Statements"*.

"**GAIN Act**" has the meaning given to such term under the heading entitled *"Business of the Company - Competitive Conditions - ATI-2307"*.

"**GCP**" has the meaning given to such term under the heading entitled *"Business of the Company - Regulatory Environment - United States Government Regulations"*.

"**GLP**" means good laboratory practices.

"**GMP**" means good manufacturing practices.

"**GRA**" has the meaning given to such term under the heading entitled "*Business of the Company – Three-Year History – Fiscal 2021 (April 2020 to March 2021)*".

"**HHS**" has the meaning given to such term under the heading entitled *"Business of the Company - Market Opportunity - ATI-1701"*.

"**IND**" has the meaning given to such term under the heading entitled *"Business of the Company - Our Development Programs - ATI-1503"*.

"**Interim Order**" has the meaning given to such term under the heading entitled "*Business of the Company – Three-Year History – Fiscal 2021 (April 2020 to March 2021)*".

"**IQVIA**" means IQVIA Holdings, Inc.

"**IRB**" has the meaning given to such term under the heading entitled *"Business of the Company - Regulatory Environment - United States Government Regulation"*.

"**June 2020 Broker Warrants**" has the meaning given to such term under the heading entitled *"Business of the Company - Three-Year History - Fiscal 2021 (April 2020 to March 2021)"*.

"**June 2020 Offering**" has the meaning given to such term under the heading entitled *"Business of the Company - Three-Year History - Fiscal 2021 (April 2020 to March 2021)"*.

"**June 2020 Units**" has the meaning given to such term under the heading entitled *"Business of the Company - Three-Year History - Fiscal 2021 (April 2020 to March 2021)"*.

"**June 2020 Warrant**" has the meaning given to such term under the heading entitled *"Business of the Company - Three-Year History - Fiscal 2021 (April 2020 to March 2021)"*.

"**LPAD**" has the meaning given to such term under the heading entitled *"Business of the Company – Our Development Programs - ATI-2307.*

"**LTC**" has the meaning given to such term under the heading entitled *"Business of the Company - Our Development Programs - Favipiravir"*.

"**Matinas Biopharma**" has the meaning given to such term under the heading entitled *"Business of the Company - Three-Year History – Fiscal 2019 (April 2018 to March 2019)"*.

"**Medicare Modernization Act**" has the meaning given to such term under the heading entitled *"Risk Factors - Risks Related to Regulatory Approval of the Company's Product Candidates and Other Legal Compliance Matters"*.

"**MIC**" means minimum inhibitory concentration which is the lowest concentration of a drug which prevents visible growth of bacterium.

"**NDA**" means a New Drug Application to FDA.

"**NDS**" has the meaning given to such term under the heading entitled *"Business of the Company - Regulatory Environment - Canada Drug Products and Biologics Regulation"*.

"**NI 33-105**" means National Instrument 33-105 – *Underwriting Conflicts.*

"**NI 52-110**" has the meaning given to such term under the heading entitled *"Audit Committee – Composition of the Audit Committee"*.

"**NIAID**" has the meaning given to such term under the heading entitled "*Business of the Company – Our Development Programs – ATI-2307*".

"**NIH**" has the meaning given to such term under the heading entitled *"Business of the Company - Our Development Programs - ATI-1701"*.

"**NOC**" has the meaning given to such term under the heading entitled *"Business of the Company - Regulatory Environment - Canada Drug Products and Biologics Regulation"*.

"**NOC/c**" has the meaning given to such term under the heading entitled *"Business of the Company - Regulatory Environment - Canada Drug Products and Biologics Regulation"*.

"**NOD**" has the meaning given to such term under the heading entitled *"Business of the Company – Regulatory Environment – Canada Drug Products and Biologics Regulation"*.

"**NOL**" has the meaning given to such term under the heading entitled *"Business of the Company - Regulatory Environment - Canada Drug Products and Biologics Regulation"*.

"**NON**" has the meaning given to such term under the heading entitled *"Business of the Company - Regulatory Environment - Canada Drug Products and Biologics Regulation"*.

"**Non-Brokered Special Warrant Offering**" means the non-brokered private placement offering of 411,478 Special Warrants completed concurrently with the Brokered Special Warrant Offering and which forms part of the Special Warrant Offering.

"**Non-Voting Shares**" has the meaning given to such term under the heading entitled *"The Company - Name Address and Incorporation"*.

"**NRC**" has the meaning given to such term under the heading entitled *"Business of the Company - Our Development Programs - ATI-1701"*.

"**ODD**" has the meaning given to such term under the heading entitled *"Business of the Company – Our Development Programs - ATI-2307"*.

"**Ology**" has the meaning given to such term under the heading entitled *"Business of the Company - Three-Year History – Fiscal 2021 (April 2020 to March 2021)*."

"**Option Price**" has the meaning given to such term under the heading "*Description of Share Capital – Summary of Stock Option Plan*".

"**Options**" means stock options of the Company governed by the Stock Option Plan.

"**Payers**" has the meaning given to such term under the heading entitled *"Risk Factors – Risks Related to the Company and our Business"*.

"**PCT**" has the meaning given to such term under the heading entitled *"Business of the Company – Intellectual Property Rights – ATI-2307"*.

"**PII**" has the meaning given to such term under the heading entitled *"Risk Factors - Risks Related to the Company's Intellectual Property, Personally Identifiable Information and Sensitive Personally Identifiable Information"*.

"**Preferred Shares**" has the meaning given to such term under the heading entitled *"The Corporate Structure - Name Address and Incorporation"*.

"**PRMRP**" has the meaning given to such term under the heading entitled *"Business of the Company - Three-Year History - Fiscal 2020 (April 2019 to March 2020)"*.

"**PRV**" has the meaning given to such term under the heading entitled *"Business of the Company - Market Opportunity"*.

"**QIDP**" has the meaning given to such term under the heading entitled *"Business of the Company – Our Development Programs – ATI-2307"*.

"**R&D**" has the meaning given to such term under the heading entitled *"Forward-Looking and Other Statements"*.

"**REB**" has the meaning given to such term under the heading entitled *"Business of the Company - Regulatory Environment - Canada Drug Products and Biologics Regulation"*.

"**Saptalis**" has the meaning given to such term under the heading entitled *"Business of the Company – Overview of the Company – ATI-1501"*.

"**SEDAR**" means the System for Electronic Document Analysis and Retrieval.

"**Share Split**" has the meaning given to such term under the heading "*The Corporate Structure – Name, Address and Incorporation*.

"**SIGA Technologies**" has the meaning given to such term under the heading entitled *"Business of the Company - Market Opportunity - ATI-1701"*.

"**SNS**" has the meaning given to such term under the heading entitled *"Business of the Company - Market Opportunity - ATI-1701"*.

"**Special Warrant Offering**" has the meaning given to such term under the heading "*Business of the Company – Three-Year History - Fiscal 2020 (April 2019 to March 2020)*".

"**Special Warrant Prospectus**" has the meaning given to such term under the heading "*Business of the Company – Three-Year History - Fiscal 2020 (April 2019 to March 2020)*".

"**Special Warrants**" has the meaning given to such term under the heading "*Business of the Company –Three-Year History - Fiscal 2020 (April 2019 to March 2020)*".

"**sPII**" has the meaning given to such term under the heading entitled *"Risk Factors - Risks Related to the Company's Intellectual Property, Personally Identifiable Information and Sensitive Personally Identifiable Information"*.

"**Stock Option Plan**" has the meaning given to such term under the heading entitled *"Description of Share Capital - Summary of Stock Option Plan"*.

"**TSX**" means the Toronto Stock Exchange.

"**TSX-V**" means the TSX Venture Exchange.

"**U.S.**", "**US**" or "**United States**" means the United States of America.

"**USAMRIID**" has the meaning given to such term under the heading entitled *"Executive Officers and Directors – Biographies"*.

"**USAMRIID-LVS**" has the meaning given to such term under the heading entitled *"Business of the Company - Competitive Conditions - ATI-1701"*.

"**WHO**" means the World Health Organization.

"**Xenon**" has the meaning given to such term under the heading entitled *"Business of the Company - Three-Year History - Fiscal 2020 (April 2019 to March 2020)"*.

APPENDIX A
AUDIT COMMITTEE CHARTER

I. MANDATE

The Audit Committee (the "**Committee**") is appointed by the Board of Directors (the "**Board**") of Appili Therapeutics Inc. (the "**Corporation**") to assist the Board in fulfilling its oversight responsibilities relating to financial accounting and reporting process and internal controls for the Corporation. The external auditors will report directly to the Committee and the Committee shall have direct communication channels with the external auditors of the Corporation. The Committee's mandate and responsibilities are to:

- recommend to the Board the external auditors to be nominated and the compensation of such auditors;
- oversee and monitor the work and performance of the Corporation's external auditors, including meeting with the external auditors and reviewing and recommending all renewals or replacements of the external auditors and their remuneration;
- pre-approve all non-audit services to be provided to the Corporation by the external auditors;
- review the financial statements and management's discussion and analysis (MD&A) and annual and interim financial results press releases of the Corporation;
- oversee the integrity of internal controls and financial reporting procedures of the Corporation and ensure implementation of such controls and procedures; and
- provide oversight to any related party transactions entered into by the Corporation.

II. AUTHORITY OF THE AUDIT COMMITTEE

The Committee shall have the authority to:

- engage independent counsel and other advisors as it determines necessary to carry out its duties;
- set and pay the compensation for advisors employed by the Committee; and
- communicate directly with the external auditors.

III. COMPOSITION AND MEETINGS

The Committee and its membership shall meet all applicable legal, regulatory and listing requirements, including those of all applicable securities regulatory authorities.

The Committee shall be composed of three directors as shall be designated by the Board from time to time. The members of the Committee shall appoint from among themselves a member who shall serve as Chair. A minimum of two members of the Committee present either in person or by telephone shall constitute a quorum.

The Committee members will be elected annually at the first meeting of the Board following the annual general meeting of shareholders.

Each member of the Committee shall be "financially literate" and a majority of the members of the Committee shall be "independent" (as each such term is defined in Multilateral Instrument 52-110 *Audit Committees*). At least one member of the Committee shall have accounting or related financial expertise.

The Committee shall meet at least quarterly, as circumstances dictate or as may be required by applicable legal or listing requirements.

Any member of the Committee may participate in the meeting of the Committee by means of conference telephone or other communication equipment, and the member participating in a meeting pursuant to this paragraph shall be deemed, for purposes hereof, to be present in person at the meeting.

IV. RESPONSIBILITIES

The Committee shall review the annual audited financial statements to satisfy itself that they are presented in accordance with International Financial Reporting Standards (IFRS) and report thereon to the Board and recommend to the Board whether or not same should be approved, prior to their being filed with the appropriate regulatory authorities. The Committee shall also review the interim financial statements.

The Committee shall oversee the integrity of internal controls and financial reporting procedures of the Corporation and ensure implementation of such controls and procedures. The Committee shall review any internal control reports prepared by management and the evaluation of such report by the external auditors, together with management's response.

The Committee shall be satisfied that adequate procedures are in place for the review of the Corporation's public disclosure of financial information extracted or derived from the Corporation's financial statements, management's discussion and analysis and annual and interim earnings press releases before the Corporation publicly discloses this information.

The Committee shall review management's discussion and analysis relating to annual and interim financial statements and any other public disclosure documents, including interim earnings press releases, before the Corporation publicly discloses this information.

The Committee shall meet no less frequently than annually with the external auditors to review accounting practices, internal controls and such other matters as the Committee deems appropriate (including the establishment of the independence of the external auditor). The Committee shall be directly responsible for overseeing the work of the external auditor.

The Committee shall resolve any disagreements between the management and the external auditors.

The Committee shall establish procedures for:

- the receipt, retention and treatment of complaints received by the Corporation regarding accounting, internal accounting controls or auditing matters; and
- the confidential, anonymous submission by employees of the Corporation of concerns regarding questionable accounting or auditing matters.

The Committee shall annually make recommendations to the Board regarding the selection, appointment and fees of the independent auditors.

The Committee shall provide oversight to any related party transactions entered into by the Corporation.

In the event that the Corporation wishes to retain the services of the Corporation's external auditors for tax compliance or tax advice or any non-audit services, the Committee must first pre-approve any such non-audit services (however, the Committee may delegate such approval to one independent committee member if desired, subject to compliance with applicable laws). The Committee shall maintain a record of non-audit services approved by the Committee for each fiscal year and provide a report to the Board on an annual basis.

The Committee shall review and approve the Corporation's hiring policies regarding partners, employees and former partners and employees of the present and former auditors of the Corporation.

The Committee shall perform any other activities consistent with this Charter and governing law, as the Committee or the Board deems necessary or appropriate.