

General

This management discussion and analysis of financial position and results of operations (“MD&A”) is prepared as of July 30, 2019 and should be read in conjunction with the audited consolidated financial statements for the year ended February 28, 2019 and related notes of LexaGene Holdings Inc. (“LexaGene” or the “Company”). This MD&A contains “forward-looking statements” that are subject to risk factors including those set out in the “Cautionary Statement” at the end of this MD&A. All information contained in this MD&A is current and has been approved by the Company’s Board of Directors as of July 30, 2019, unless otherwise indicated. Throughout this report we refer to “LexaGene”, as the “Company”, “we”, “us”, “our”, or “its”. All these terms are used in respect of LexaGene Holdings Inc. Additional information relating to the Company is available on the Company’s website at www.lexagene.com and on SEDAR at www.sedar.com.

Management is responsible for the preparation and integrity of the consolidated financial statements, including the maintenance of appropriate information systems, procedures and internal controls. Management is also responsible for ensuring that information disclosed externally, including the consolidated financial statements and Management Discussion and Analysis (“MD&A”), is complete, accurate, and reliable.

Business Description

LexaGene is engaged in the research, development and commercialization of automated genetic analyzers for pathogen detection and other applications in the clinical and life sciences industries. The Company’s shares trade on the TSX Venture Exchange (the “Exchange”) under the symbol LXG and on the OTCQB Venture Market in the United States under the symbol LXXGF.

Operational Highlights, Events and Future Plans

In March 2017, the Company closed a \$1.491M non-brokered private placement.

In December 2017, the Company closed a \$3.911M bought deal with an overallotment of \$318K conducted by a syndicate of underwriters led by Canaccord Genuity Corp. and including PI Financial Corp. and Echelon Wealth Partners Inc.

The Company used these monies to lease 17,600 square foot of office and R&D space in Beverly, Massachusetts. The Company renovated the R&D space to build a level 2 biosafety laboratory held under negative pressure, which was completed in April 2018. In addition, it built a positive-pressure clean-room for manufacturing reagents for the Company’s genetic analyzers. These engineering controls are intended to help keep the Company’s staff safe and maximize the performance of the Company’s technology.

The Company hired 16 Beverly-based employees and 2 Vancouver-based employees, bringing the total headcount of the Company to 21. Some of the Beverly-based strategic hires include the following:

Jeffrey Mitchell, MBA was hired to replace Zula Kropivnitski as the Company's Chief Financial Officer and Secretary. Mr. Mitchell has over two decades of financial and SEC experience. Before joining LexaGene, he worked at Palomar Medical Technologies, which was publicly traded on the NASDAQ. As Palomar's Controller and Director of Finance, he oversaw the company's financial reporting, audits, and financial planning. In 2013, Mr. Mitchell helped orchestrate the sale of Palomar to Cynosure for \$294 million. Mr. Mitchell has also served in numerous financial and strategic advisory roles for other medical device, imaging, and diagnostic companies.

Greg Dale was hired as VP of Product Development and Manufacturing. Mr. Dale has developed and manufactured more than a dozen products to date and is listed as an inventor on 32 issued U.S. patents on PCR and microfluidics devices. His medical device and *in-vitro* diagnostics product development experience includes work with instruments, microfluidics, sensors, disposables, reagents, wearables and implantables. Mr. Dale most recently served as Vice President of Product Development, Manufacturing and Quality at Emulate LLC. Prior to Emulate, Mr. Dale served as General Manager and Senior Director of NGS (Next-Generation Sequencing) Engineering at Qiagen, where his team developed the Qiagen GeneReader NGS system using Agile development methods. Mr. Dale has a degree in mechanical engineering from Virginia Tech.

Dr. Nathan Walsh was hired as Director of Applications – Bioinformatics. Dr. Walsh has over 20 years' experience interfacing between biology and bioinformatics. His experience with DNA sequence projects includes primer design, next-generation sequencing (NGS), cancer detection, microarrays, and pathway identification. Dr. Walsh most recently served as Head of Informatics at Bio-Rad's Digital Biology Center of Cambridge building a rapid-result next-generation sequencer; prior to that, he served as Senior Director of Informatics and IT to create drug hits from DNA encoded libraries. Dr. Walsh was a post-doctoral fellow at Harvard Medical School and Brigham and Women's Hospital Department of Genetics. He has a biochemistry degree from Brown University and a Ph.D. in biology from MIT.

Dr. Manoj Nair was hired as Senior Staff Scientist. Dr. Nair has over 7 years of experience developing and leading teams in the development of molecular diagnostics and pathogen typing assays in compliance with FDA IVD regulations for clinical diagnostics and AOAC guidelines for food safety applications. Before joining LexaGene, Dr. Nair served as a Staff Scientist at Beckman Coulter Molecular Diagnostics and as a Senior Scientist at Roche Molecular Systems, where he developed various qualitative and quantitative diagnostic assays for 510(k) clearance, PMA and CLIA waiver. Early in Dr. Nair career, he worked as a trained veterinarian that specialized in the diagnosis and treatment of animal diseases. Dr. Nair conducted his postdoctoral studies at the University of Pennsylvania and Albany Medical College, concentrating on host-pathogen interactions in infections caused by bio-threat agents. His doctoral training at the University of Connecticut focused on the molecular pathogenesis of *Cronobacter sakazakii* and its detection in contaminated infant formula.

In 2017, the Company exhibited at multiple conferences, including the International Association for Food Protection conference, the Southwest Veterinary Symposium, and the Association for Molecular Pathology conference.

In 2018, the Company exhibited at the Association of Molecular Pathology conference, the Clinical Virology Symposium, the Association for Public Health Laboratories conference, and the American College of Veterinary Internal Medicine conference.

The Company has performed some market assessment through surveys to determine the demand for the technology under development. One survey was carried out using the Food Safety Magazine's subscriber list, where 50 food safety officers responded – confirming a need for molecular testing in the food industry. The food safety market is expected to reach \$20.0 billion by 2024.

Another survey was performed through Ethos Veterinary Health Group. In this survey, the Company recognized the need for faster diagnostics in the veterinary market. LexaGene also engaged Ethos to determine a stack-rank list of pathogens and drug resistant targets that are of most interest to veterinarians. The Company is using this information to guide product development decisions. The market size for veterinary diagnostics is expected to reach \$4.2 billion by 2021.

The Company intends on pursuing human clinical diagnostics – otherwise known as the IVD market after it has first gained success in food safety and veterinary diagnostics. In order to sell into the IVD market, LexaGene will be required to seek 510k clearance from the FDA. The size of the infectious disease testing market is expected to reach \$19.3 billion by 2022.

In May 2018, the Company's alpha prototype started generating data, detecting *E. coli* and staphylococcus. In early 2019, the Company completed four small studies on the alpha prototype. The first focused on detecting pathogens responsible for urinary tract infections in dogs, the second focused on detecting pathogenic *E. coli* on romaine lettuce, the third on genotyping people from a cheek swab, and the fourth on detecting a common agricultural pathogen.

In March 2019, management directed its staff to focus efforts on completing the beta prototype. The beta prototype differs from the alpha prototype in that it is intended to process just one sample at a time, whereas the alpha prototype processes six samples at a time. The number of lanes (i.e. number of samples that can be simultaneously processed) was reduced in the beta to make the instrument more affordable, smaller, and easier to service and ship to potential customers.

The beta prototype incorporates many improvements, including shorter flow path, in-line degasser, improved software less junctions, better optical system, and overall is much smaller and easier to service. The team has already assembled a working breadboard of the beta, and expects to have a beta prototype functional very soon.

During the beta development process, the Company continues to work on optimizing the performance of the prototype, which includes developing more assays to detect additional pathogens, improving its sample preparation cartridge and the associated chemistry to make pathogen capture, lysis, and purification as efficient as possible, adjusting microfluidic protocols, improving master-mix composition, improving the reliability of the microfluidics and internal controls, and adjusting the instrument's thermal control for more efficient target amplification.

As beta development nears completion, management will begin transitioning the team to focus on developing the commercial system, which will likely process two samples at a time.

In June 2019, LexaGene placed its first beta prototype into a Massachusetts Veterinary Referral Hospital. The doctors at Mass Vet were eager to test LexaGene's cutting-edge technology providing the best possible treatment for their patients. The Company will continue to place units at various other sites throughout the United States as part of our ongoing beta test program. This will enable potential customers to experience the technology in their own facility so that they can compare LX-generated results to their standard testing methods.

In July 2019, LexaGene that it has filed additional patents to protect the proprietary science and designs of the LX2™ technology. Three US patents have been recently filed, adding to the LexaGene intellectual property portfolio. The patent applications provide continuing and additional coverage to the technology of the unique sample prep DNA extraction method, the data and image processing algorithms and the fast microfluidic PCR functions of the instrument and system. This intellectual property advancement plus existing IP are continuing to provide LexaGene with a state-of-the-art, powerful and competitive low-cost platform for genetic testing.

Other Notable Events

In June 2018, the Board of Directors welcomed Joseph Caruso to the management team. Mr. Caruso is a Medical Device Veteran with over 30 years of industry experience. Mr. Caruso was one of the founding members of the management team of Palomar Medical Technologies, Inc. (NASDAQ:PMTI) (now part of Hologic, Inc.: NASDAQ:HOLX) taking the company public in 1992. As CEO and Chairman of the Board of Directors, Mr. Caruso was instrumental in growing the company from a start up until its sale in 2013 for \$294M. Under Mr. Caruso's leadership, Palomar, with offices around the world, developed the first high powered laser hair removal system and helped create the multi-billion dollar cosmetic medical device industry. Mr. Caruso negotiated dozens of acquisitions, license agreements and joint development agreements in his career including with companies such as Johnson and Johnson, Inc. (NYSE:JNJ) and Gillette (now part of Procter and Gamble Company, Inc.: NYSE:PG).

In July 2018, the Company closed a \$3.9M bought deal, including an overallotment of \$570K conducted by a syndicate of underwriters led by Canaccord Genuity Corp. and including Echelon Wealth Partners Inc. Gross proceeds to the Company were approximately \$3.9M. Each unit consisting of one common share and one –half of one common share purchase warrant. Each whole warrant entitles the holder to purchase, subject to adjustment in certain circumstances, one additional common share at a price of CAD\$1.30 per common share until July 11, 2021. The net

proceeds of the Offering will be used to accelerate the commercialization and deployment of the Company's Microfluidic technology and for working capital purposes.

In November 2018, LexaGene was named one of the 10 most promising food solution providers by CIOReview based on the Company's pathogen detection system, the LX2™ Genetic Analyzer. LexaGene was chosen for this distinction by a panel of business leaders, along with CIOReview's editorial board.

In December 2018, Lexagene had an Industry Engagement Meeting with the United States Department of Homeland Security (DHS) regarding the applications of the Company's technology for DHS' program on Countering Weapons of Mass Destruction (CWMD).

In December 2018, LexaGene announced the completion of a syndromic panel to detect urinary tract infection (UTI) in small animals. The panel is capable of detecting each of the eight most common pathogens responsible for the majority (95%) of all clinical canine UTI cases. LexaGene's UTI panel is designed to detect causative pathogens with greater sensitivity and specificity than traditional culture-based detection which is prone to false positive results.

In January 2019, LexaGene announced that the Company formed a scientific advisory board (SAB) to assist the Company in product positioning and its go-to-market strategy. The SAB is comprised of key opinion leaders in the Company's targeted markets, namely food safety, veterinary diagnostics, and open-access markets such as biodefense.

In February 2019, LexaGene announced that its LX technology successfully detected the presence of two different pathogens from a single clinical urine sample in some of the first samples tested in the Company's recently initiated clinical study.

In February 2019, LexaGene announced that its LX technology can detect the presence of antibiotic resistance factors from pathogens that cause urinary tract infections (UTIs) in dogs.

In February 2019, LexaGene announced that the LX genetic analyzer technology, in a fully automated manner, successfully detected all six of the known pathogens in 107 canine urine samples tested. The Company confirms that the LX analyzer technology has robustly – in a sensitive and specific manner – detected each of the six most common pathogens in canine urinary tract infections (UTI) and is 97.5% concordant with reference laboratory generated results.

Selected Yearly Information

	February 28, 2019		February 28, 2018	
Total assets	\$	1,703,886	\$	3,724,167
Working capital	\$	622,565	\$	2,707,371
Loss for the year	\$	8,321,374	\$	4,005,452
Loss per share	\$	0.13	\$	0.08

Selected Quarterly Information

The following selected financial data has been prepared in accordance with IFRS and should be read in conjunction with the Company's financial statements. All dollar amounts are in United States dollars.

Quarter ended	Net income (loss) for the period	Net income (loss) per share (basic & diluted)	Total assets
May 31, 2019	\$ (1,834,223)	\$ (0.02)	\$ 3,943,796
February 28, 2019	\$ (2,171,768)	\$ (0.04)	\$ 1,703,886
November 30, 2018	\$ (2,254,124)	\$ (0.03)	\$ 3,053,711
August 31, 2018	\$ (2,026,264)	\$ (0.03)	\$ 4,913,268
May 31, 2018	\$ (1,869,218)	\$ (0.03)	\$ 2,339,003
February 28, 2018	\$ (1,327,174)	\$ (0.03)	\$ 3,724,167
November 30, 2017	\$ (1,319,312)	\$ (0.03)	\$ 969,067
August 31, 2017	\$ (741,064)	\$ (0.01)	\$ 1,514,817

Results of Operations

Three months ended May 31, 2019 compared to the three months ended May 31, 2018

Net loss

For the three months ended May 31 2019, the Company recorded a net loss of \$1,834,223 compared to a net loss of \$1,869,218 for the three months ended May 31, 2018. Although the net loss has decreased for the three months ended May 31, 2019 in comparison to the same period in 2018, the Company is committed to advancing its operations, which includes its research and development of its genetic analyzer device suited for the life sciences industry with a focus on the veterinary, food safety and open-access markets.

Operating expense

The total operating activities for the three months ended May 31, 2019, resulted in an expense of \$2,077,640 as compared to an expense of \$1,954,670 for the same period in 2018. This increase of \$122,970 is primarily the result of the following items:

Marketing and promotional expense

Comparing May 31, 2019, to the same period in 2018, marketing and promotional activities decreased slightly to \$285,426 from \$328,317. This decrease in expense of \$42,890 in marketing and promotional activities are primarily from the following items:

- Salaries and wages associated with marketing and promotional activities increased to \$93,845 in 2019, as compared to \$81,827 for the same period in 2018. This increase of \$12,018 in expense to salaries and wages is directly related to the increase in new employees and the allocation of salary expenses from executive management.
- Travel expense within the marketing and promotional groups decreased to \$18,649 in 2019, as compared to \$84,213 in the same period in 2018. This decrease of \$65,564 is due to the timing of conferences in the United States, Canada and Europe.
- Share based compensation expense increased to \$113,346 in 2019, as compared to \$20,641 in 2018. This increase of \$92,705 is primarily related to an increase in new options and restricted share units granted to employees as well as the vesting of previously granted options.

- Although LexaGene is committed to building its brand and promoting its technology, general marketing, advertising and promotional expenses decreased to \$59,586 in 2019 from \$141,636 for the same period in 2018. This decrease of \$82,049 was related to the timing of certain promotional campaigns and events.

General and administrative activities

Comparing May 31, 2019, to the same period in 2018, general and administrative activities increased in expenses to \$547,480 from \$439,887. This increase in expense of \$107,593 in general and administrative activities are primarily from the following items:

- Salaries and wages associated with general and administrative activities increased to \$60,124 in 2019, as compared to \$36,744 for the same period in 2018. This increase of \$23,380 in expense to salaries and wages is directly related to the increase in new employees.
- Share based compensation expense decreased to \$217,156 in 2019, as compared to \$233,274 in 2018. This decrease of \$16,118 is primarily related to decrease in new options and restricted share units granted to directors, employees, consultants offset by the vesting of previously granted options.
- General office and administrative costs decreased to \$18,672 for the three months ended May 31, 2019, compared to \$42,204 for the same period in 2018. This decrease of \$23,532 is mainly attributed to the increase in costs associated with the Company opening its new headquarters and lab space in April, 2018.
- During the year three months ended May 31, 2019, the Company recognized an expense of \$12,192 for the amortization of property and equipment in general and administrative expenses compared to \$6,269 during the same period in 2018. This increase of \$5,922 is due to leasehold improvements, the purchases of furniture and fixtures and the purchasing of office equipment.
- Travel decreased in general and administrative activities to \$10,987 for the year ended May 31, 2019, as compared to \$42,887 for the same period in 2018. This decrease of \$31,899 is related to the timing of certain promotional campaigns and events.

Research and development activities

Comparing May 31, 2019, to the same period in 2018, research and development activities increased in expenses to \$1,244,734 from \$1,186,466. This increase in expense of \$58,268 in research and development activities are primarily from the following items:

- Salaries and wages associated research and development activities increased to \$538,276 in 2019, as compared to \$331,796 for the same period in 2018. This increase

of \$206,480 in expense to salaries and wages is directly related to the increase in employees.

- Share based compensation expense decreased to \$178,049 in 2019, as compared to \$256,775 in 2018. This decrease of \$78,726 is primarily related to a decrease in new options and restricted share units granted to employees offset by the vesting of previously granted options.
- During the year ended May 31, 2019, the Company recognized an expense of \$23,135 for the amortization of property and equipment in research and development compared to \$21,867 during the same period in 2018. This increase of \$1,268 is mainly from the amortization of lab equipment.
- Consulting, lab admin and supplies and LX analyzer materials expenses during the three months ended May 31, 2019, totaled to \$494,155 compared to \$550,112 for the same period in 2018. This decrease of \$55,957 was comprised of \$193,667 paid to outside engineering and consulting firms and \$300,488 related to the purchases of parts and materials as compared to \$257,116 paid to outside engineering and consulting firms and \$292,996 related to the purchases of parts and materials for the same period in 2018.

Financial Condition, Liquidity and Capital Resource

The Company's working capital as of May 31, 2019, was \$1,099,869 including cash of \$1,337,901 compared to a working capital of \$616,246 and cash of \$670,921 as of February 28, 2019.

The Company's business currently does not generate revenue or positive cash flows from operations. The Company is reliant on equity financing to provide the necessary cash to continue research and development of the instrument described in the Summary of Operations, Events and Future Plans section of this management discussion and analysis. There can be no assurance that equity financings will be available to the Company in the future with terms that are satisfactory to the Company.

Off-Balance Sheet Arrangements

As of the date of this filing, the Company does not have any off-balance-sheet arrangements that have, or are reasonably likely to have, a current or future effect on the results of operations or financial condition of the Company, including, and without limitation, such considerations as liquidity and capital resources.

Related Party Transactions

Key Management includes personnel having the authority and responsibility for planning, directing and controlling the Company and includes the directors and current executive officers.

During the three months ended, May 31, 2019 and 2018, expenses incurred for Key Management compensation are summarized as:

	May 31, 2019	May 31, 2018
Salaries and benefits	\$ 193,549	\$ 197,295
Administration fees	-	-
Stock-based compensation	122,312	185,792
	<u>\$ 315,861</u>	<u>\$ 383,087</u>

As at May 31, 2019 and 2018, \$50,281 (2018 - \$nil) was payable to directors and officers of the Company.

All amounts payable and receivable are non-interest bearing, unsecured and due on demand. There are no post-employment expenses or other long-term expenses for key management.

Financial Instruments and Risk Management

LexaGene is active in the biotechnology industry, which means it is exposed to a number of risks. There is a financial risk as the continuing operations of the Company are dependent upon its ability to continue to raise adequate financing and to commence profitable operations in the future. The Company has incurred operating losses since its inception and has experienced negative operating cash flows.

The Company is dependent upon its current management and if the services of such personnel were withdrawn for any reason, this could have a material adverse impact on the Company's operating activities.

Fair Values

The fair values of cash, receivables and accounts payables approximate their book values because of the short-term nature of these instruments.

(a) Financial Risk Management

The Board of Directors has overall responsibility for the establishment and oversight of the Company's risk management framework. The Company considers the fluctuations of financial markets and seeks to minimize potential adverse effects on financial performance.

(b) Financial Instrument Risk Exposure

The Company is exposed in varying degrees to a variety of financial instrument related risks. The Board approves and monitors the risk management process.

Credit Risk

Credit risk is the risk of a financial loss to the Company if counterparty to a financial instrument fails to meet its contractual obligation. The Company's exposure to credit risk includes cash and receivables. The Company reduces its credit risk by maintaining its bank accounts at large international financial institutions. The Company's receivables consist of tax receivables due from federal government agencies. The maximum exposure to credit risk is equal to the fair value or carrying value of the financial assets.

Liquidity Risk

Liquidity risk is the risk that the Company will encounter difficulty in satisfying financial obligations as they become due. The Company manages its liquidity risk by forecasting cash flows from operations and anticipated investing and financing activities. The Company's objective in managing liquidity risk is to maintain sufficient readily available reserves in order to meet its liquidity requirements. The Company's accounts payable and accrued liabilities have contractual maturities of less than 30 days and are subject to normal trade terms.

Market risk

Market risk is the risk of loss that may arise from changes in market factors such as interest rates, foreign exchange rates, and commodity and equity prices. Such fluctuations may be significant.

(i) Interest rate risk

The Company has cash balances and no interest-bearing investments or debt.

(ii) Foreign currency risk

Currency risk is the risk that the fair values or future cash flows of the Company's financial instruments will fluctuate because of changes in foreign currency exchange rates. The Company is exposed to currency risk through financial assets and liabilities denominated in currencies other than the US dollar, the Company's presentation currency.

The Company's financial instruments denominated in currencies that are not the United States dollar as at May 31, 2019 are as follows:

	US\$	
	CAD\$	Equivalent
Cash	1,505,198	1,112,793
Accounts payable & accrued expenses	(176,570)	(130,538)
Net exposure	<u>1,328,628</u>	<u>982,255</u>

The impact of a 10% change in the foreign exchange rates of the Canadian dollar against the US dollar (USD) on the financial assets and liabilities of the Company as at May 31, 2019 is estimated to have an impact in the Company's loss in the amount of approximately \$92,000. The carrying amount of cash, accounts payable and accrued liabilities in USD represents the Company's exposure as at May 31, 2019.

(iii) Price risk

The Company is exposed to price risk with respect to commodity and equity prices. Equity price risk is defined as the potential adverse impact on the Company's earnings due to movements in individual equity prices or general movements in the level of the stock market. Commodity price risk is defined as the potential adverse impact on earnings and economic value due to commodity price movements and volatilities. The Company closely monitors commodity prices, individual equity movements and the stock market to determine the appropriate course of action to be taken by the Company.

(c) *Technical Risk*

The first beta prototype has been assembled and system checks are underway to ensure it meets physical, optical, electrical, and thermal specifications. Fluidic scripts are being optimized and management expect sample-to-answer functionality soon. As expected with any prototype, additional optimization is required to make the technology competitive with other automated technologies. Risk remains regarding optimizing the instrument's performance, improving its microfluidic reliability and internal controls, and integrating new components to generate an instrument that is competitive with other technologies. There is also risk associated with sourcing components required for developing the technology and the manufacturability of key components. Furthermore, although management is confident the instrument will effectively process simple matrices such as water, buffer, and enrichment broth, management is less confident the initial sample preparation cartridge will effectively process more complex matrices such as milk, blood, other fat-containing liquids, particulate laden samples, and viscous samples. The Company will need to test each of these different matrices to determine whether they can be successfully processed by the instrument. Management expects specialized cartridges will need to be designed and manufactured to effectively process these more challenging matrices. It is also possible that customers frequently processing some matrices may require their instrument to be serviced more frequently.

(d) *Competition*

The diagnostics market in which the Company participates is highly complex and competitive. The Company will compete with other companies that are developing or have developed genetic analyzers designed to exploit similar markets to those in which we intend to penetrate. Many of these other companies have substantially greater resources than the Company. There can be no assurance that developments by other companies will not adversely affect the competitiveness of the Company's technologies. The diagnostic industry is also characterized by extensive research efforts and rapid technological change. Competition can be expected to increase as technological advances are made and commercial applications for diagnostic technologies increase. Competitors of the Company may use different technologies or approaches to develop products similar to the products which the Company is seeking to develop, or may develop new or enhanced products or processes that may be more effective and less expensive. There can be no assurance that any product developed by the Company will compete successfully or that research and new industry developments will not render the Company's products obsolete or uneconomical.

(e) *Product Liability and Insurance*

The use of existing products or those under development by the Company may entail risk of product or other liability. The obligation to pay any product liability claim could have a material adverse effect on the business, financial condition and future prospects of the Company.

(f) *Share Price Risk*

LexaGene's share price is subject to equity market price risk, which may result in significant speculation and volatility of trading due to the uncertainty inherent in the Company's business and the technology industry.

There is a risk that future issuances of common shares may result in material dilution of share value, which may lead to declines in share price. The expectations of securities analysts and major investors about our financial or scientific results, the timing of such results, and future prospects, could also have a significant effect on the future trading price of LexaGene's shares.

(g) *People and Process Risk*

A variety of factors may affect LexaGene's future growth and operating results, including the strength and demand for the Company's products, the extent of competition in our markets, the ability to recruit and retain qualified personnel, and the ability to raise capital.

LexaGene's consolidated financial statements are prepared within a framework of IFRS selected by management and approved by the Board of Directors. The assets, liabilities, revenues, and expenses reported in the consolidated financial statements depend to varying degrees on estimates made by management. An estimate is considered a critical accounting estimate if it requires management to make assumptions about matters that are highly uncertain and if different estimates that could have been used would have a material impact. The significant areas requiring the use of management estimates relate to provisions made for impairment of non-financial assets, amortization of property and equipment and intangible assets, the recognition and valuation of tax liabilities and tax assets, provisions and the assumptions used in determining share-based compensation. These estimates are based on historical experience and reflect certain assumptions about the future that we believe to be both reasonable and conservative. Actual results could differ from those estimates. LexaGene continually evaluates the estimates and assumptions.

(h) *Loss of Key Personnel*

LexaGene relies on certain key employees whose skills and knowledge are critical to maintaining the Company's success. LexaGene always strives to identify and retain key employees and always strives to be competitive with compensation and working conditions.

(i) *Interruption of Raw Material Supply*

Interruption of key raw materials could significantly impact the development of our beta units, future commercial devices and our financial position. LexaGene attempts to purchase key components and raw materials in advance of their anticipated use.

(j) *Life sciences Market Risk*

LexaGene's technology offers some advantages that are not available in other sample-to-answer instruments. Most notably, the ability to process large volumes of fluid, the ability to customize genetic screens, the breadth of target detection, and the time-to-result. The Company believes these features are strong selling points that will result in rapid user adoption. However, the Company is only in the beta prototype development stage, so it only has a rough estimate of the expected list price of the instrument and the cost per test. These estimates are likely to change as more information is gathered during further beta prototype and commercial unit development. The final price point of LexaGene's instrument and tests, as well as its performance compared to competitive instruments will affect user adoption. These factors are yet to be determined and if they are not favorable for LexaGene, there is a possibility that the Company will generate little to no sales. The Company has engaged Ethos Veterinary Health Group to perform market research in veterinary diagnostics, and has completed a survey of food safety officers regarding the need for LexaGene's technology in the food market. The information gained through these efforts will be used to guide the Company's business development strategy and product marketing strategy leading up to commercial launch.

(k) *Additional Financing Requirements and Access to Capital*

LexaGene will require substantial, additional funds for future research and development, planned clinical testing, regulatory approvals, establishment of manufacturing capabilities and, if necessary, the marketing and sale of its products. LexaGene may attempt to raise additional funds for these purposes through public or private equity to accredited investors and institutions or debt financing, collaborations with other companies and/or from other sources. There can be no assurance that additional funding or partnerships will be available on terms acceptable to the Company and which would foster successful commercialization of LexaGene's products. Additionally, there are many conditions beyond the Company's control which have a direct impact on the level of investor interest in the purchase of Company securities. The Canadian and United States Stock markets have been volatile and may continue to fluctuate significantly in response to a number of factors of which we cannot control.

(l) *Share Price Risk*

LexaGene's share price is subject to equity market price risk, which may result in significant speculation and volatility of trading due to the uncertainty inherent in the Company's business and the technology industry. There is a risk that future issuance of common shares may result in material dilution of share value, which may lead to further decline in share price. The expectations of securities analysts and major investors about our financial or scientific results,

the timing of such results, and future prospects, could also have a significant effect on the future trading price of LexaGene's shares.

(m) Legal Matters

In the normal course of operations, LexaGene may be subject to a variety of legal proceedings, including commercial, product liability, employment as well as governmental and other regulatory investigations and proceedings. Such matters can be time-consuming, divert management's attention and resources, and cause us to incur significant expenses. Furthermore, because litigation is inherently unpredictable, and can be very expensive, the results of any such actions may have a material adverse effect on our business, operations, or financial condition.

The Company is not aware of any contingencies or pending legal proceedings as of July 30, 2019.

Outstanding Equity Instruments

As at July 30, 2019, we had authorized an unlimited number of common shares.

	As At July 30, 2019	As At May 31, 2019	As At February 28, 2019
Common Shares	71,657,074	71,549,224	66,704,103
Warrants	15,721,199	15,721,199	11,096,513
Stock Options	4,608,000 (1)	4,608,000	3,860,000
Restricted Share units	2,557,450	2,542,800	2,527,250
Total	94,543,723	94,421,223	84,187,866

(1) 1,776,750 of the 4,608,000 stock options are vested and exercisable.

The Company has 15,721,199 warrants outstanding at July 30, 2019, which are exercisable into common shares at exercise prices ranging between CAD\$0.60 and CAD\$1.45.

The Company has 4,608,000 stock options outstanding at July 30, 2019, which are exercisable into common shares at exercise prices ranging between CAD\$0.33 and CAD\$1.27.

Accounting pronouncements adopted by the Company

The accounting policies and basis of measurement applied in the condensed consolidated interim financial statements as at May 31, 2019 are the same as those applied by LexaGene in its consolidated financial statements for the year ended February 28, 2019, except as described below.

Changes in significant accounting policies in 2019

The Company has initially adopted IFRS 16, *Leases* from March 1, 2019.

IFRS 16 introduced a single, on-balance sheet accounting model for lessees. As a result, LexaGene, as a lessee, has recognized a right-of-use asset representing its rights to use the underlying asset and a lease liability representing its obligation to make lease payments in its statement of financial position in relation to its property lease.

The Company has applied IFRS 16 using the modified retrospective approach, under which the cumulative effect of initial application is recognized in retained earnings as at March 1, 2019. Accordingly, the comparative information presented for the year ended February 28, 2019 has not been restated. It is presented under IAS 17, Leases and related interpretations. Further information on this accounting change can be found in note 3 and note 7 to the May 31, 2019 condensed consolidated interim financial statements.

Disclaimer

The information provided in this document is not intended to be a comprehensive review of all matters concerning the Company. It should be read in conjunction with all other disclosure documents provided by the Company, which can be accessed at www.sedar.com. No securities commission or regulatory authority has reviewed the accuracy or adequacy of the information presented herein.

Cautionary Statement on Forward Looking Information

Certain statements contained in this document constitute “forward-looking statements”. Such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance, or achievements of the Company to be materially different from any future results, performance, or achievements expressly stated or implied by such forward-looking statements. Such factors include, among others, the following: product development technical risks, life sciences market risks, fluctuation in the equity markets that affect the Company’s ability to raise capital, government regulations, competition, litigation risks, and commercial viability risks.