LEXAGENE HOLDINGS INC.
Management's Discussion and Analysis
For the Six Months Ended
August 31, 2017

General

This management discussion and analysis of financial position and results of operations ("MD&A) is prepared as of October 27, 2017 and should be read in conjunction with the interim unaudited consolidated financial statements for the six months ended August 31, 2017 and related notes of LexaGene Holdings Inc. ("LexaGene" or the "Company"). These interim consolidated financial statements, including comparatives, have been prepared in accordance with the International Financial Reporting Standards ("IFRS") issued by the International Accounting Standards Board ("IASB") and interpretations of the IFRS Interpretations Committee ("IFRIC").

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 condensed interim consolidated financial statements and Management Discussion and Analysis ("MD&A"), is complete and reliable.

All dollar amounts included therein and in the following MD&A are expressed in United States dollars except where noted. This discussion contains forward-looking statements that involve risks and uncertainties. Such information, although considered to be reasonable by the Company's management at the time of preparation, may prove to be inaccurate and actual results may differ materially from those anticipated in the statements made. Additional information on the Company is available for viewing on SEDAR at www.sedar.com.

Description of Business

LexaGene Holdings Inc. (the "Company" or "LexaGene") was incorporated on April 26, 2007, under the laws of the province of British Columbia, Canada. The head office, principal address, records office and registered address of the Company are located at 750 West Pender Street, Suite 303, Vancouver, British Columbia, Canada, V6C 2T7. The Company's common shares are listed on the TSX Venture exchange under the trading symbol "LXG". On October 12, 2016, the Company completed a reverse takeover ("RTO") transaction with Bionomics Diagnostics Inc. (for additional details see Note 5 of the consolidated financial statements for the year ended February 28, 2017) for its TSX-V listing. Concurrent with the closing of the reverse takeover transaction the Company changed its name from Wolfeye Resources Corp. to LexaGene Holdings Inc. The principal business of the Company is to research, develop and commercialize pathogen detection devices in the life sciences industry.

The net assets and operating results of Lexagene Holdings Inc. have been included in the financial statements from the date of the RTO transaction, which is October 12, 2016. The Statement of

Financial Position as of February 29, 2016 is that of Bionomics Diagnostics Inc. ("BDI"), a wholly owned subsidiary of the Company starting from October 12, 2016. For allocation of the purchase price refer to the Note 5 of the consolidated financial statements for the year ended February 28, 2017 for additional details.

Up to May 2015 the Company was a natural resource company engaged in the acquisition, exploration, and evaluation of assets ("mineral properties"). Following the acquisition of BDI, the Company is engaged in development and commercialization of a proprietary technology for automated pathogen detection. The Company trades 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. In February 2017, LexaGene launched its new website www.lexagene.com. The website consolidates information already in the public domain.

Summary of Operations, Events and Future Plans

The Company is in the last stages of Phase 3 of product development, where we are determining the optimal geometric placement of instrument's components within its casing and putting the alpha prototype together. We are building two identical instruments. Once the instruments are fully assembled, we will begin Phase 4, which focuses on testing the prototypes to ensure they meet all the technical specification defined at the start of Phase 1. Phase 4 is scheduled to be completed by November 30th, at which point we anticipate being able to successfully demonstrate the functionality of our fully integrated sample-to-answer pathogen detection instrument. We remain on track to meet this significant milestone.

On August 15, 2017, the Company announced the appointment of Manohar Furtado, Ph.D., to the Company's Board of Directors.

We are actively promoting our technology at conferences. We unveiled a pre-alpha prototype at the International Association for Food Protection conference in Tampa, Florida on July 9th, 2017. We were very pleased from the response from the food safety community regarding the need for automated pathogen detection systems that can better serve this market.

In September, the Company exhibited at the Southwest Veterinary Symposium, in San Antonio Texas, where Dr. Jack Regan spoke to conference attendees about the advantages of LexaGene's technology for more quickly identifying pathogens important to both companion animals and farm animals.

Due to the excitement in this field, the Company engaged Ethos Veterinary Health Group to perform a deeper assessment of the needs of this market, and their report is expected by mid-November.

In November, the Company will exhibit at the Association for Molecular Pathology (AMP) in Salt Lake City, where it will have the opportunity to interface with clinical laboratory directors. The Company fully intends on pursuing the human clinical diagnostics – otherwise known as the *in vitro* diagnostics (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.

Lastly, we are in the process of having an animated video created that describes how the Company's technology works. We anticipate this video being completed before the end of November.

Selected Yearly Information

	February 28, 2017	February 29, 2016	19-day period ended February 29, 2015
Total assets	$ 1,052,274	$ 77,278	$ 5,865
Working capital (deficiency)	$ 818,142	$ (27,281)	$ (4,470)
Loss for the year	$ 4,483,215	$ 59,399	$ 5,262
Loss per share	$ 0.17	$ (0.01)	$ (53.15)

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
August 31, 2017	$ (741,064)	$ (0.01)	$ 1,514,817
May 31, 2017	$ (617,902)	$ (0.01)	$ 1,800,307
February 28, 2017	$ (434,753)	$ (0.01)	$ 1,052,274
November 30, 2016	$ (3,744,375)	$ (0.12)	$ 1,041,225
August 31, 2016	$ (200,818)	$ (0.01)	$ 62,452
May 31, 2016	$ (103,269)	$ (0.01)	$ 61,888
February 29, 2016	$ (20,552)	$ (0.00)	$ 77,278
November 30, 2015	$ (7,134)	$ (0.00)	$ 24,280
August 31, 2015	$ 521	$ (0.00)	$ 27,380

Results of Operations

Six months ended August 31, 2017

During the six months ended August 31, 2017, the Company recorded net loss of $1,358,966 compared to a net loss of $304,087 for the six months ended August 31, 2016. The significant change during the six months ended August 31, 2017 compared to the six months ended August 31, 2016 is due to the Company advancing its operations, which include research and development of pathogen detection devices in the life sciences industry. Research and development expense during the six months ended August 31, 2017 increased by $325,252 from $201,763 incurred during the six months ended August 31, 2016.

During the six months ended August 31, 2017 the Company spent $234,325 on advertising and promotion. Wages and salaries incurred during the six months ended August 31, 2017 totaled $180,014. During the current period, the Company spent $83,239 on travel expenses and $49,945 on consulting. During the year ended February 28, 2017 the Company granted stock options to directors, officers and consultants. Accordingly, $145,891 were recorded as share based compensation during the six months ended August 31, 2017. No such expenses were recorded during comparative period of the previous year.

These increases were offset by a decrease in professional fees by $39,934 as the Company did not require the same level of legal services after the reverse takeover transaction and acquisition of Bionomics Diagnostics Inc was completed in October 2016. For details of the transaction refer to the note 5 of the consolidated financial statements for the year ended February 28, 2017

Three months ended August 31, 2017

During the three months ended August 31, 2017, the Company recorded net loss of $736,724 compared to a net loss of $200,818 for the three months ended August 31, 2016. The significant change during the three months ended August 31, 2017 compared to the three months ended August 31, 2016 is due to the Company advancing its operations, which include research and development of pathogen detection devices in the life sciences industry. Research and development expense during the three months ended August 31, 2017 increased by $150,291 from $117,659 incurred during the three months ended August 31, 2016.

During the three months ended August 31, 2017 the Company spent $151,676 on advertising and promotion. Wages and salaries incurred during the three months ended August 31, 2017 totaled $89,940. During the current period, the Company spent $47,963 on travel expenses and $18,925 on consulting. During the year ended February 28, 2017 the Company granted stock options to directors, officers and consultants. Accordingly, $65,832 were recorded as share based compensation during the three months ended August 31, 2017. No such expenses were recorded during comparative period of the previous year.

These increases were offset by a decrease in professional fees by $31,058 as the Company did not require the same level of legal services after the reverse takeover transaction and acquisition of Bionomics Diagnostics Inc was completed in October 2016. For details of the transaction refer to the note 5 of the consolidated financial statements for the year ended February 28, 2017

Financial Condition, Liquidity and Capital Resource

The Company's working capital as of August 31, 2017 was $1,208,736 including cash of $1,284,273 compared to a working capital of $818,138 including cash of $867,483 as of February 28, 2017.

The Company's business currently does not generate positive cash flows from sales. 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.

The Company has not entered into any off-balance sheet arrangements.

Related Party Transactions

During the six months ended August 31, 2017 the Company paid $120,926 (2016 - $nil) to directors in salaries and benefits, $18,218 (2016 – $nil) in consulting fees to a company controlled by a director of the Company, $22,773 (2016 - $nil) in administration expenses to a management company for providing administrative services including CFO services. During the six months ended August 31, 2017 the Company recorded $127,288 (2016 - $nil) in share based compensation related to stock options granted to directors and officers in February 2017. 217,500 of these stock options vested on the date of grant and the rest of the options vest every six months thereafter.

As at August 31, 2017, $3,350 (2016 - $nil) was payable to directors and/or officer and/or companies controlled by officers of the Company.

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, short-term loan and trade 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 and a short-term loan. 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 not be able to meet its obligations as they become due. The Company's ability to continue as a going concern is dependent on management's ability to raise required funding through future equity issuances. The Company manages its liquidity risk by forecasting cash flows from operations and anticipating any investing and financing activities. Management and the Board of Directors are actively involved in the review, planning and approval of significant expenditures and commitments.

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 debt. The Company's current policy is to invest excess cash in investment-grade short-term deposit certificates issued by its banking institutions. The Company periodically monitors the investments it makes and is satisfied with the credit ratings of its banks.

(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 Canadian dollar, the Company's presentation currency.

The Company's financial instruments denominated in currencies that are not the United States dollar as at August 31, 2017 are as follows:

	CAD$	**US$ equivalent**
Cash	1,490,562	1,189,025
Accounts payable and accrued liabilities	92,053	83,431

(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

Although each individual step of the technology has been de-risked by Boston Engineering using subcomponents, some risk remains regarding integrating these subcomponents into a single instrument. Furthermore, although we are confident the instrument will effectively process simple matrices (e.g. water, buffer, enrichment broth, etc.), we are less confident the initial sample preparation cartridge will effectively process more complex matrices such as milk, blood, and fat-containing liquids. Once the instrument and cartridge are built, the Company will need to test each of these different matrices to determine performance. It is likely that specialized cartridges will need to be built 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) 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 and the ability to customize genetic screens. The Company believes these features are strong selling points that will result in user adoption. However, the Company is only in the Alpha 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 Beta Prototype development. The final price points will affect user adoption. The Company is in the process of engaging a firm to perform deeper market research in each of our target markets, namely food safety, veterinary diagnostics, and open-access. The "open-access" market includes all individuals and institutions that utilize LexaGene's technology and their own genetic tests to perform custom genetic screens. The information gained will be used to guide the Company's sales and product marketing strategy leading up to commercial launch.

Contingencies

The Company is not aware of any contingencies or pending legal proceedings as of October 27, 2017.

Additional share information

The Company is authorized to issue an unlimited number of common shares without par value. As at October 27, 2017, the Company has 52,106,333 common shares issued and outstanding.

The Company has the following warrants outstanding and exercisable as at October 27, 2017:

Number of warrants	Exercise Price		Expiry Date
1,360,000	$	0.08	June 20, 2019
1,000,000	$	0.08	May 7, 2018
244,090	$	0.25	October 4, 2018
5,996,363	$	0.60	March 13, 2020

As at October 27, 2017 the Company has stock options to purchase a total of 1,745,000 common shares at a price of CAD$0.33 per common share, and 500,000 common shares at a price of CAD$0.363 per common share. The stock options expire on July 27, 2020 and March 21, 2021. Weighted average expected life of the stock options as at October 27, 2017 is 2.85 years. Weighted average exercise price of the stock options as at October 17, 2017 is CAD$0.45. As at October 27, 2017 473,750 stock options are exercisable.

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, lifesciences 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.