Management Discussion and Analysis (Expressed in Canadian Dollars)

KANE BIOTECH INC.

Years ended December 31, 2018 and 2017



Management Discussion and Analysis

The following management discussion and analysis ("MD&A") covers information up to March 25, 2019 and should be read in conjunction with the financial statements for the years ended December 31, 2019 and 2018. Except as otherwise noted, the financial information contained in this MD&A and in the financial statements has been prepared in accordance with IFRS. All amounts are expressed in Canadian Dollars unless otherwise noted. Additional information regarding the Company is available on SEDAR at www.sedar.com and on the Company's website at www.kanebiotech.com.

This MD&A has been prepared to help investors understand the financial performance of the Company in the broader context of the Company's strategic direction, the risks and opportunities as understood by management, and the key success factors that are relevant to the Company's performance. Management has prepared this document in conjunction with its broader responsibilities for the accuracy and reliability of the financial statements, as well as the development and maintenance of appropriate information systems and internal controls to ensure that the financial information is complete and reliable. The Audit Committee of the Board of Directors has reviewed this document and all other publicly reported financial information for integrity, usefulness, reliability and consistency.

FORWARD-LOOKING STATEMENTS

This Management's Discussion and Analysis contains certain forward-looking information and statements within the meaning of securities law which may not be based on historical fact, including without limitation statements containing the words "believes,", "should", "may," "plan," "will," "estimate," "predict," "continue," "anticipates," "potential", "intends," "expects," or other similar expressions. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual results, events or developments to be materially different from any future results, events or developments expressed or implied by such forward-looking statements. Such factors include, among others, the Company's stage of development, lack of product revenues, additional capital requirements, risks associated with the completion of clinical trials and obtaining regulatory approval to market the Company's products, the ability to protect its intellectual property and dependence upon collaborative partners. These factors should be considered carefully, and readers are cautioned not to place undue reliance on such forward-looking statements. The forward-looking statements are made as of the date hereof, and the Company disclaims any obligation to update any such factors or to publicly announce the result of any revisions to any of the forward-looking statements contained herein to reflect future results, events or developments.

Actual results and developments are likely to differ, and may differ materially, from those expressed or implied by the forward-looking statements contained in this MD&A. Such statements are based on a number of assumptions which may prove to be incorrect, including, but not limited to, assumptions about:

- general business and economic conditions;
- interest rates and foreign exchange rates;
- the timing of the receipt of regulatory and governmental approvals for the Company's research and development projects;
- the availability of financing for the Company's research and development projects, or the availability of financing on reasonable terms;
- the Company's costs of trials;
- the Company's ability to attract and retain skilled staff;
- market competition;
- tax benefits and tax rates;
- the Company's ongoing relations with its employees and with its business partners.

Management cautions you, the reader, that the foregoing list of important factors and assumptions is not exhaustive. Events or circumstances could cause actual results to differ materially from those estimated or projected and expressed in, or implied by, these forward-looking statements. The Company undertakes no obligation to update publicly or otherwise revise any forward-looking statements or the foregoing list of factors, whether as a result of new information or future events or otherwise

OVERVIEW

Kane Biotech Inc. ("Kane Biotech" or the "Company") is a biotechnology company engaged in the research, development and commercialization of technologies and products that prevent and remove microbial biofilms. Biofilms are thin slimy films that develop when bacteria and other microorganisms form a protective matrix that acts as a shield against attack. Biofilms attach to and grow on living and inert surfaces. When protected by a biofilm, bacteria become highly resistant to antibiotics, antimicrobials, biocides and host immune responses. This resiliency contributes to numerous human and animal health related problems.

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According to the United States National Institutes of Health, biofilms are estimated to be responsible for 80% of all animal and human bacterial infections including tooth decay, wound care infections, chronic inflammatory skin disorders and wounds, recurrent urinary tract infections, medical device associated and hospital acquired infections (HAIs), and foodborne bacterial outbreaks. Biofilms cost society billions of dollars each year. As such, there is significant interest in safe and effective products that can combat the biofilm problem. Kane Biotech's mission is to be a royalty-based revenue company licensing its anti-biofilm technologies to global industry players.

Key Highlights of Kane Biotech include the following:

- A specialized focus on large markets for biofilm prevention and dispersion solutions
- · Strong patent portfolio of anti-biofilm technologies with 66 patents and patents pending
- First commercial licensing and distribution agreement signed (2017)
- Several anti-biofilm applications in development for large market opportunities

Kane Biotech has a portfolio of biotechnologies, intellectual property (patents, patents pending and trademarks) and products developed by the Company's own biofilm research expertise and acquired from leading research institutions. StrixNB™, DispersinB®, Aledex®, bluestem™, bluestem®, AloSera™, coactiv+™ and coactiv+® are trademarks of Kane Biotech Inc.

The Company is listed on the TSX Venture Exchange under the symbol "KNE" and on the OTC Pink Open Market under the symbol "KNBIF".

COMPANY FOCUS

With the recent change in CEOs, Kane Biotech's objective remains to license the Company's biofilm related intellectual property to strategic partners with already established large scale market and territory access.

Over the next year, Kane Biotech will focus on both Animal Health and Human Health within the following two main areas of development: (1) revenue growth generated by the sale of its premium companion animal products in the veterinary, pet specialty and e-commerce channels; (2) working toward 510k regulatory approval from the FDA on a medical device in the wound care space.

Although the objective to license its bluestem brand of premium oral care products remains, in order to achieve revenue growth Kane Biotech will be focussing its efforts on growing product sales in the pet specialty and online sales channels. The Company will achieve this by focussing its marketing efforts and by expanding the bluestem product line. With its recent introduction of water additive powder, chews and dental wipes to its ever-expanding bluestem product line, Kane Biotech now has the most comprehensive lineup of pet oral care products in the market. The preliminary response from major retailers to the expanded line and focused marketing has been very positive.

Kane Biotech will also be focused both on growing royalty revenue generated by the sale of its premium veterinary oral care line and the achievement of two key milestones: (1) Veterinary Oral Health Council (VOHC) certification; and (2) commercial launch of DispersinB for Canine Otitis. Both milestones carry a \$500,000 (USD) payment in the agreement signed with Dechra in 2017. Kane Biotech, with the support of Dechra, is working with Key Opinion Leaders in both oral health and dermatology to help achieve these milestones.

In addition to this, the Company is also exploring applications for its intellectual property in some key areas of the large animal market, where biofilms tend to cause significant issues.

Kane Biotech, with the support of the Scientific Advisory Board, has recently completed a business plan for its human health strategy. The objective is to secure funding specifically for Kane's human health portfolio. As part of this strategy, Kane Biotech has made the decision to take its first product through the FDA's 510k regulatory pathway. Completing this regulatory work will significantly reduce the risk for future partners and increase the value of a licensing agreement. Kane Biotech is working with external consultants in order to prepare for a pre-submission meeting with the FDA.

Targeted company milestones for 2019 include the following:

- · Continue to grow sales of the bluestem line of products while seeking a licensing partner
- Expand the sales of bluestem outside North America
- Increase royalties from Dechra through increased sales and the launch of new products in the veterinary channel
- Launch DispersinB® based products with Dechra triggering a \$500,000 USD milestone payment

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- Continue to pursue the lawsuit against Nestlé to defend Kane Biotech's intellectual property
- Complete additional trials and achieve International standard of canine oral care efficacy
- Make significant progress toward FDA 510k certification for a wound care product
- Rationalizing Kane's patents focusing on its most promising technologies
- Secure non-dilutive financing for the human health R&D program
- Raise capital via a dilutive financing

SUMMARY OF KANE BIOTECH PRESS RELEASES FROM JANUARY 2018 TO MARCH 25, 2019

On March 25, 2019, the Company announced its Fourth Quarter 2018 Financial Results.

On March 20, 2019, the Company announced it had scheduled its Fourth Quarter Conference Call and Business Update on Tuesday, March 26, 2019 at 4:00pm E.T. to discuss its financial results for the fourth quarter, in conjunction with the filing of its Financial Statements for the fourth quarter ended December 31, 2018.

February 19, 2019, the Company announced that it had signed a non-exclusive Distribution Agreement with a major Chinese distributor and secured its first order valued at \$25K USD. The order included Kane's StrixNB™ Water Additive for the Chinese Veterinary market as well as its bluestem™ Water Additive and Oral Spray for the Chinese pet specialty market.

On February 4, 2019, the Company announced that the U.S. District Court of Eastern Missouri that is overseeing the lawsuit filed by Kane Biotech against Nestec, Ltd., aka Nestec, S.A., Nestle Purina Petcare Global Resources, Inc. ("Nestle") had ruled against Nestle's motion to dismiss on all six counts of the sealed complaint, paving the way for the ultimate trial of the case on the merits.

On January 30, 2019, the Company announced that it had secured an additional purchase order for bluestem™ products from the North America pet retail chain that recently purchased the largest order in Kane Biotech's history.

On January 25, 2019, the Company announced that it would be hosting a conference call and webcast on Wednesday, January 30, 2019 at 4:00pm Eastern Time to provide an update on the Company's business strategy including product developments, licensing and business development and other initiatives in progress.

On January 24, 2019, the Company announced that it closed and delivered its single largest purchase order in the history of the company for \$440,000 of bluestem products to one of the largest pet retail operations in North America.

On January 17, 2019, the Company announced its new human health strategy. Efforts are to be focused on development of a wound care hydrogel containing Kane's patented enzyme DispersinB®. The Company also announced that it had renewed its exclusive worldwide license agreement with the University of Medicine and Dentistry of New Jersey, now part of Rutgers University, for all human, animal and industrial applications of the DispersinB® enzyme. The Company has also submitted a funding proposal under the Military Infectious Diseases Research Program (MIDRP) with Medical Technology Enterprise Consortium (MTEC). MTEC has already given first stage approval to this project.

On December 12, 2018, the Company announced that it would be launching four new products under its bluestem™ brand in Canada and the United States in the first quarter of 2019. The four products to be launched were a powder water additive, a dental wipe and a small and medium sized dental chew in January 2019, followed shortly thereafter with a medium- and large-sized rawhide chew by the end of March 2019.

On November 14, 2018, the Company announced its Third Quarter 2018 Financial Results.

On November 12, 2018, the Company announced that it has amended the terms of its 34,504,997 common share purchase warrants (the "Warrants") issued on July 17, 2017 (the "Initial Closing") and August 17, 2017 (the "Final Closing") pursuant to a private placement of units, by extending the expiry thereof from January 17, 2019 to July 17, 2020 for the 33,404,997 Warrants issued pursuant to the Initial Closing (the "Initial Closing Warrants") and from February 17, 2019 to August 17, 2020 for the 1,100,000 Warrants issued pursuant to the Final Closing (the "Final Closing Warrants"). The TSX Venture Exchange granted its approval for the extension to the term of the Initial Closing Warrants and Final Closing Warrants.

On November 9, 2018, the Company announced that it has experienced significant year-over-year growth in online sales of its bluestem™ product line on Amazon.com.





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On November 8, 2018, the Company announced it had scheduled its Third Quarter Earnings Conference Call and Business Update on Thursday, November 15, 2018 at 4:30pm E.T. to discuss its financial results for the third quarter, in conjunction with the filing of its Financial Statements for the third quarter ended December 31, 2018.

On November 7, 2018, the Company announced that Marc Edwards, Chief Executive Officer, and Ray Dupuis, Chief Financial Officer of Kane Biotech recently completed the purchases, from the open market, of a combined total of approximately 1.9 million shares of Kane Biotech's common stock.

On November 5, 2018, the Company announced the appointment of Gordon Guay, Ph.D., a member of Kane's Scientific Advisory Board (SAB), to Chief Scientific Officer of the Company.

On October 17, 2018, the Company announced a new manufacturing partner for their bluestem™ product line. The company signed an agreement with Nature Soap & Spa, a Winnipeg-based company whose Director has more than 30 years of experience in GMP-certified manufacturing. They took over manufacturing responsibilities effective November 5, 2018.

On September 24, 2018, the Company announced the formation of a Scientific Advisory Board, chaired by Board of Director Rivka Gluck. The board is comprised of world-leading experts in human health and industrial biotech and includes Gordon Guay, PH.D, and Robert Huizinga, PH.D. The board will work closely with senior management to advance the Company's integration and scope of clinical applications of its patented anti-microbial technology. They will work to actively identify and explore the potential of the Company's intellectual patent portfolio to positively impact untapped applications in industrial and human health applications.

On September 11, 2018, the Company announced the departure of CEO Mark Ahrens-Townsend and the appointment of Marc Edwards as Interim CEO.

On August 21, 2018, the Company announced its Second Quarter 2018 Financial Results.

On August 15, 2018, the Company announced it had scheduled its Second Quarter Earnings Conference Call and Business Update on Wednesday, August 22, 2018 at 4:30pm E.T. to discuss its financial results for the second quarter, in conjunction with the filing of its Financial Statements for the second quarter ended June 30, 2018.

On August 14, 2018, the Company announced that it had secured eligibility by The Depository Trust Company ("DTC") for its shares on the OTCQB Venture Market. DTC eligibility will simplify the process of trading and is expected to enhance liquidity of the Corporation's common shares on the OTC marketplace where Kane Biotech trades under the symbol "KNBIF".

On August 9, 2018, the Company announced the engagement of Dave D. Hood, President and Chief Executive Officer of DH3 & Associates, as a strategic consultant to help secure non-dilutive funding opportunities through government research or industry grants, foundations, industry partnerships and other avenues. Kane Biotech's strategy, developed in conjunction with Mr. Hood, will emphasize the pursuit and capture of non-dilutive funding coupled with institutional and strategic investors and will also emphasize identifying new and unique opportunities such as those within defense-related government organizations following the Corporation's recently-announced extended Cooperative Research and Development Agreement (CRADA) with the U.S. Army.

On July 31, 2018, the Company announced that a three-year CRADA extension has been signed with the U.S. Army Institute of Surgical Research (USAISR) in Fort Sam Houston, Texas. The primary objective of this collaboration on "Treatments to Prevent Biofilm Formation for Promoting Wound Healing" is to develop an antibiofilm-antimicrobial wound gel formulation and test the said gel formulation to address the needs of the United States Army Dental and Trauma Research Detachment's (USADTRD) programs and that can be readily translated into clinical testing for improving the outcomes of wounded casualties.

On July 24, 2018, the Company announced that it had, subject to regulatory approval, agreed to retain Venture Liquidity Providers Inc. to initiate its market-making service to provide assistance in maintaining an orderly trading market for the common shares of the Corporation. The market-making service was undertaken by VLP through a registered broker, W.D. Latimer Co. Ltd., in compliance with the applicable policies of the TSX Venture Exchange and other applicable laws.

On July 17, 2018, the Company announced that it had received a loan in the amount of \$500,000 from Individual Investment Corporation, an arm's length third-party lender. The loan bears interest at 12% per annum and is repayable in six months. Additional consideration for the loan guarantee was the issuance of 3,500,0000 share purchase warrants at a price of \$0.08 per common share for a period of one year from the date of issuance of the warrants. The Company used the proceeds of the loan for general working capital to continue its operations.

On June 21, 2018, the Company announced that it would be attending SuperZoo, North America's leading pet retail trade



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exposition and conference, taking place June 26-28, 2018 at the Mandalay Bay Convention Center in Las Vegas, NV. Mark Ahrens-Townsend, Chief Executive Officer of Kane Biotech, along with key members of the Kane Biotech team attended the conference to showcase Kane Biotech's bluestem™ brand of premium pet oral care products and to highlight their new bluestem™ skin care shampoo for dogs and cats.

On June 14, 2018, the Company announced that it would present at The MicroCap Conference being held in Toronto on June 21, 2018. Mark Ahrens-Townsend, President & CEO of Kane Biotech, presented and met with investors attending the conference.

On June 1, 2018, the Company announced that it would be attending the 2018 BIO International Convention being held June 4-7, 2018 at the Boston Convention Center in Boston, MA. showcasing the Company's technologies and products that break up bacterial biofilm in the human, animal, commercial, institutional and industrial sectors. Kane Biotech management participated in meetings with potential clinical and commercial partners, investors and other parties at their booth and in the Business Forum.

On May 31, 2018, the Company announced it had been granted a significant patent in the area of wound care by the U.S. Patent and Trademark Office (the "USPTO"). The patent is titled "Antimicrobial-Antibiofilm Compositions and Methods of Use Thereof".

On May 24, 2018, the Company announced that it would present at the TakeStock! Investor Forum being held in Calgary, Alberta on May 31, 2018. Mark Ahrens-Townsend, Chief Executive Officer of Kane Biotech, presented and met with investors attending the conference.

On May 22, 2018, the Company announced the appointment of pharmaceutical executive Rashieda Gluck to its Board of Directors. With over 20 years of experience in the global pharmaceutical, biotechnology, and life science industries, Ms. Gluck's career has spanned all levels and functions in clinical development. As an executive, her focus has been on leading the strategic planning and successful implementation of high-quality clinical development programs.

On May 17, 2018, the Company announced its First Quarter 2018 Financial Results, Granting of Options and Investor Relations Improvements.

On May 10, 2018, the Company announced it had scheduled its First Quarter Earnings Conference Call and Business Update on Friday, May 18, 2018 at 8:30am E.T. to discuss its financial results for the first quarter, in conjunction with the filing of its Financial Statements for the first quarter ended March 31, 2018.

On April 5, 2018, the Company announced that it would present at the MicroCap Conference being held in New York, NY from April 9-10, 2018 with Mark Ahrens-Townsend, Chief Executive Officer of Kane Biotech, giving a presentation and meeting with investors attending the conference.

On March 21, 2018, the Company announced its 2017 Year End and Fourth Quarter Financial Results and Business Update.

On March 20, 2018, the Company announced that for the third consecutive year it would be attending the 14th Annual Global Pet Expo being held on March 21-23, 2018 at the Orange County Convention Center in Orlando, Florida. It will be attending the Expo to help showcase Kane Biotech's bluestem™ brand of premium pet oral care products and to introduce the Company's new bluestem skin care shampoo for dogs and cats.

On March 16, 2018, the Company announced it had scheduled its Fourth Quarter and Full Year 2017 Earnings Conference Call and Business Update on Thursday, March 22, 2018 at 4:30pm E.T. to discuss its financial results for the fourth quarter and full year 2017, in conjunction with the filing of its annual Year End Financial Statements for the fourth quarter and full year ended December 31, 2017.

On February 26, 2018, the Company announced that it had filed a lawsuit against Nestec, Ltd., a/k/a Nestec, S.A. ("Nestec"), and Nestlé Purina Petcare Global Resources, Inc. ("Nestlé Purina"), (collectively "Nestlé") for breach of agreements between the parties, and misappropriation of Kane Biotech's trade secrets and intellectual property.

On February 1, 2018, the Company announced that it had retained Edison Advisors, a global strategic advisory firm, as the Corporation's investor relations counsel. Edison was engaged to provide investor relations services to Kane Biotech as it works towards its mission to be a global leader in creating innovative technologies for licensing and product commercialization that breakdown and disperse biofilms.



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On January 31, 2018, the Company announced that its shares were approved for and will commence trading on the OTCQB Venture Market, operated by OTC Markets Group under the symbol "KNBIF".

INTELLECTUAL PROPERTY

Dotont #	Title	lunia di ati an
Patent # 2,452,032	Title Synergistic Antimicrobial Compositions and Methods of Inhibiting Biofilm Formation	<u>Jurisdiction</u> Canada
7,314,857	Synergistic Antimicrobial Compositions and Methods of Inhibiting Biofilm Formation	United States
7,144,992	Synergistic Antimicrobial Compositions and Methods for Reducing Biofilm Formation	United States
8,906,364	Antimicrobial Compositions for Inhibiting Growth and Proliferation of Microbial Biofilms	United States
2,006,265,707	Antimicrobial Compositions for Inhibiting Growth and Proliferation of Microbial Biofilms	Australia
2,612,729	Antimicrobial Compositions for Inhibiting Growth and Proliferation of Microbial Biofilms	Canada
	57.1 Antimicrobial Compositions for Inhibiting Growth and Proliferation of Microbial Biofilm	China
EP1906736	Antimicrobial Compositions for Inhibiting Growth and Proliferation of Microbial Biofilms	Europe
286291	Antimicrobial Compositions for Inhibiting Growth and Proliferation of Microbial Biofilms	India
4999842	Antimicrobial Compositions for Inhibiting Growth and Proliferation of Microbial Biofilms	Japan
564904	Antimicrobial Compositions for Inhibiting Growth and Proliferation of Microbial Biofilms	New Zealand
EP1906736	Antimicrobial Compositions for Inhibiting Growth and Proliferation of Microbial Biofilms	Germany
EP1906736	Antimicrobial Compositions for Inhibiting Growth and Proliferation of Microbial Biofilms	France
EP1906736	Antimicrobial Compositions for Inhibiting Growth and Proliferation of Microbial Biofilms	United Kingdom
6,923,962	Signal Peptides, Nucleic Acid Molecules and Methods for Treatment of Caries	United States
7,597,895	Signal Peptides, Nucleic Acid Molecules and Methods for Treatment of Caries	United States
7,294,497	Compositions and Methods for Enzymatic Detachment of Bacterial and Fungal Biofilms	United States
540731	Compositions and Methods for Enzymatic Detachment of Bacterial and Fungal Biofilms	New Zealand
555378	Compositions and Methods for Enzymatic Detachment of Bacterial and Fungal Biofilms	New Zealand
2,003,284,385	Compositions and Methods for Enzymatic Detachment of Bacterial and Fungal Biofilms	Australia
7,833,523	Compositions and Methods for Enzymatic Detachment of Bacterial and Fungal Biofilms	United States
7,989,604	Compositions and Methods for Enzymatic Detachment of Bacterial and Fungal Biofilms	United States
5,073,169	Compositions and Methods for Enzymatic Detachment of Bacterial and Fungal Biofilms	Japan
8,580,551	Dispersin B Polypeptides and uses thereof	United States
8,821,862	Soluble β-N-Acetylgucosaminidase Based Antibiofilm Compositions and Uses Thereof	United States
8,617,542	Dispersin B, 5-Fluorouracil, Deoxyribonuclease I and ProteinaseK-Based Antibiofilm	
0.700.004	Compositions and uses thereof	United States
2,720,301	Dispersin B, 5-Fluorouracil, Deoxyribonuclease I and ProteinaseK-Based Antibiofilm	0
ED0000400	Compositions and uses thereof	Canada
EP2283130	Dispersin B, 5-Fluorouracil, Deoxyribonuclease I and ProteinaseK-Based Antibiofilm	l limite al IVia arabana
ED0000400	Compositions and uses thereof	United Kingdom
EP2283130	Dispersin B, 5-Fluorouracil, Deoxyribonuclease I and ProteinaseK-Based Antibiofilm	C
ED0000400	Compositions and uses thereof	Germany
EP2283130	Dispersin B, 5-Fluorouracil, Deoxyribonuclease I and ProteinaseK-Based Antibiofilm	France
0.752.602	Compositions and uses thereof	France United States
8,753,692	Biofilm-Removing Antimicrobial Compositions and uses thereof Biofilm-Removing Antimicrobial Compositions and uses thereof	Canada
2,750,340 5,752,051		_
5,752,051 10733164.7	Biofilm-Removing Antimicrobial Compositions and uses thereof Biofilm-Removing Antimicrobial Compositions and uses thereof	Japan
		Europe
EP2389071	Biofilm-Removing Antimicrobial Compositions and uses thereof	United Kingdom
EP2389071	Biofilm-Removing Antimicrobial Compositions and uses thereof	Germany
EP2389071	Biofilm-Removing Antimicrobial Compositions and uses thereof	France
9,622,481	Biofilm-Removing Antimicrobial Compositions and uses thereof	United States
2012332014	Compositions and Methods for Treatment and Prevention of Oral Diseases	Australia
CN104010653	Compositions and Methods for Treatment and Prevention of Oral Diseases	China
6,038,167	Compositions and Methods for Treatment and Prevention of Oral Diseases	Japan Now Zoaland
624,850 9,980,497	Compositions and Methods for Treatment and Prevention of Oral Diseases Compositions and Methods for Treatment and Prevention of Wound Infections	New Zealand United States
6,401,720	Compositions and Methods for Treatment and Prevention of Wound Infections Compositions and Methods for Treatment and Prevention of Wound Infections	
2,014,225,252	Compositions and Methods for Treatment and Prevention of Wound Infections Compositions and Methods for Treatment and Prevention of Wound Infections	Japan Australia
2,014,225,252 2662764	Compositions and Methods for Treatment and Prevention of Wound Infections Compositions and Methods for Treatment and Prevention of Wound Infections	Russia



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The Company has 46 issued and 20 pending patents. Successful development of products to prevent and remove microbial biofilms may be dependent upon the ability to obtain approval for patents that are currently in pending status as well as successfully file new patents; however, there is no guarantee that new patents will be obtained, and, if obtained, it may not be possible to successfully defend against any subsequent infringements to these patents. Currently the Company is unaware that it has infringed upon any existing patents issued to third parties and success may, in part, depend on operating without such infringement.

Trademark	Jurisdiction
DispersinB®	Canada
	United States
	Europe
	United Kingdom
StrixNB TM	Canada
	Europe
Aledex TM	Canada
Aledex®	United States
bluestem™	Canada
	United States
bluestem®	Europe
AloSera [™]	Canada
O C TM	United States
Coactiv+™	Canada
	United States
Coactiv+®	Europe

KANE BIOTECH TECHNOLOGIES

StrixNB™ and bluestem

The Company's trademarks for the companion pet oral care market are StrixNBTM, bluestem[®] and bluestemTM. The companion pet oral care market in the U.S. was estimated to be \$775 million in 2015 and is projected to grow to nearly \$1 billion by 2020. According to the American Veterinary Medical Association (AVMA) oral health is one of the top three concerns for companion animal owners. Bacteria in the mouth cavity form plaque and as the plaque grows this causes tartar build-up, gum infection (gingivitis) and periodontitis. By the time they are three years old 80% of dogs and 70% of cats develop some sort of periodontal disease.

The Company introduced its companion pet oral care products in Canada under the StrixNB and bluestem brands and received Health Canada's Low Risk Veterinary Health Products (known as LRVHP) which Health Canada replaced in 2017 with the Veterinary Health Products (VHP) - Notification Program. Approvals under these programs are in place for oral care liquid water additives, a water additive powder formulation, an oral spray formulation and a toothpaste. The Company pursued a strategy to license out its intellectual property on a broader scale which led to Kane Biotech's StrixNB technology and trademarks being part of a 10-year exclusive licensing and distribution agreement with Dechra Veterinary Products LLC for the North American veterinary market announced March 6, 2017. Dechra introduced its Vetradent™ oral care brand into the U.S. and Canadian veterinary channel in Q4 2017. In conjunction with Dechra, additional formulations are in development to expand Dechra's complete oral health program of pet oral care products for veterinary clinics and dog and cat parents. Dental wipe and water additive powder products were added to the Vetradent product family in Q2 and Q4, 2018 respectively. A dental rawhide chew is in development for market release later in 2019.

Kane Biotech's bluestem brand of products are sold in approximately 900 pet specialty retail stores in Canada and the U.S., as well as Amazon.com (U.S.) and Amazon.ca (Canada). Based on the Company's science, efficacy, safety and value the bluestem products are well received in the market. In line with the Company's licensing strategy, Kane Biotech intends to license the bluestem brand and technology to a partner with significant market access for the pet specialty, grocery mass and internet e-commerce markets.



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DispersinB®

Kane Biotech's trademark for the wound care market is DispersinB® for both animal and human wound care applications. The Company has started to pursue its strategy to license out its wound care intellectual property on a broader scale.

For animal applications, the use of Kane Biotech's DispersinB technology and trademarks are part of the 10-year exclusive licensing and distribution agreement with Dechra Veterinary Products LLC announced on March 6, 2017. The introduction of DispersinB products for canine otic (ear) infections in conjunction with Dechra is targeted for 2019. Additional DispersinB products are in development.

In terms of human applications, in 2018, the Company renewed its exclusive worldwide license agreement with the University of Medicine and Dentistry of New Jersey, now part of Rutgers University, for all human, animal and industrial applications of the DispersinB® enzyme. In 2019, efforts will be focused on the development of a human wound care hydrogel containing DispersinB with the view of filing an Investigational Device Extension (IDE) application with the Food and Drug Administration (FDA) in 2020.

Aledex®

The Company's trademark for the medical device coating market is Aledex®. Kane Biotech has both in vitro and in vivo data that demonstrates the product's ability to inhibit the activity of numerous catheters associated pathogens and protect against urinary catheter related infections. In 2017 and 2018, Kane Biotech supplied Aledex for the coating of catheters as the positive control for a collaborative effort between the Center for Biofilm Engineering – Montana State University (www.biofilm.montana.edu) and the FDA to develop and validate an in vitro method to test the ability of surface modified urinary catheters to prevent and/or delay biofilm development and reduce the risk of bacterial infections. This research was funded by the Burroughs Wellcome Foundation (www.bwfund.org).

In 2007, Kane Biotech Inc. entered into a global commercial license agreement with Harland Medical, Inc. which provided Harland with world-wide rights to Kane's Aledex® antimicrobial technology for use in coatings for urinary, venous access and veterinary catheters. Kane would earn up to 50% royalties on sales. Due to regulatory and safety issues associated with one of the main ingredients within the Aledex coating, Harland has been unable to commercialize this technology

After reviewing the commercial potential and the key priorities of Kane on December 24, 2018, the Scientific Advisory Board recommended that further work with Aledex be discontinued. This decision was ratified by the Board of Directors on March 4, 2019. As of December 31, 2018, Kane has expensed in its financial statements all previously capitalized patent and trademark costs associated with Aledex and does not intend to pursue this technology in the future.

KBI Disinfectant Technology

KBI Antibacterial Disinfectant was issued a Drug Identification Number or DIN (02374463) in 2011 by the Therapeutic Products Directorate of Health Canada as a hard surface disinfectant for use in domestic, hospital, and industrial environments. The Company is continuing its efforts in the research and development of these disinfectant technologies in pursuit of further antimicrobial and anti-biofilm claims.

Kane has not been actively focused on this technology over the past few years due to its concentration of financial and human resources on StrixNB and DispersinB commercialization. However, based on the sizeable market opportunity related to KBI, management believes KBI represents significant future opportunity and value for the Company and has full intent to continue its pursuit of the commercialization of this technology in the future.

OUTLOOK

The strategic direction of the Company is centered on developing and commercializing solutions to biofilm related problems. To advance these programs, management expects Kane Biotech to continue incurring operating losses in the foreseeable future. Based on current projections, total revenue is expected to increase significantly in fiscal 2019 as compared to fiscal 2018. Operating expenses in 2019 are expected to be lower than in 2018. Depending upon timing and other factors, research



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expenditures are expected to be higher in 2019 than 2018.

The Company's funding of future operations is dependent upon its ability to negotiate collaboration or licence royalty agreements with upfront and subsequent milestone payments, generate product sales, obtain research grant funding, and/or secure additional funds. While the Company is striving to achieve funding through the above-mentioned alternatives, there is no assurance that such sources will be available or obtained on favourable terms. If the Company cannot realize sufficient funding from these sources, it will have to consider additional strategic alternatives which may include, among other strategies, exploring the monetization of certain tangible and intangible assets as well as seeking to license assets or potential asset divestitures.

The ability of the Company to continue as a going concern and to realize the carrying value of its assets and discharge its liabilities and commitments when due is dependent on the successful completion of the actions taken or planned, some of which are described above, which management believes will mitigate the adverse conditions and events which raise doubt about the validity of the going concern assumption used in preparing its financial statements. There is no certainty that these and other strategies will be sufficient to permit the Company to continue as a going concern.

The Company may decide to accelerate, terminate or reduce its focus in certain research areas, or commence research in new areas as a result of the Company's research progress and the availability of financial resources. These decisions are made with the goals of managing the Company's cash resources and optimizing the Company's opportunities. Management is not presently aware of any factors that would change its strategy over the next year. See also "Note 2(c) Going concern" to the accompanying financial statements.

SELECTED ANNUAL FINANCIAL INFORMATION

The following is selected financial information about the Company, for its 2018, 2017, and 2016 fiscal years:

Years ended December 31,	 2018	2017	2016
License & Royalty	\$ 111,333	\$ 73,400	\$ 135,134
Sale of goods	394,940	347,071	244,756
Total Revenue	506,273	420,471	379,890
Cost of sales-sale of goods	390,802	483,750	124,225
Gross Profit	115,471	(63,279)	255,665
General and administration expenses	2,371,777	2,395,933	2,116,764
Research expenses	922,526	850,578	573,423
Net finance costs	82,167	91,216	114,226
Loss and comprehensive loss	(3,260,999)	(3,401,006)	(2,548,748)
Basic and diluted loss per share	(0.04)	(0.06)	(0.07)
Cash and cash equivalents	75,425	1,975,723	739,568
Total assets	1,555,936	3,397,087	2,131,211
Non-current liabiltiies	480,685	547,758	-
Total liabilities	2,060,091	726,108	783,716
Deficit	(23,928,851)	(20,667,852)	(17,266,847)
Total capital stock, warrants, convertible note option			
and contributed surplus	22,944,011	22,791,073	18,614,342

SELECTED QUARTERLY FINANCIAL INFORMATION

The selected financial information provided below is derived from Kane Biotech's unaudited quarterly financial statements for each of the last eight quarters:



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	Q4-2018	Q3-2018	Q2-2018	Q1-2018	Q4-2017	Q3-2017	Q2-2017	Q1-2017
	\$	\$	\$	\$	\$	\$	\$	\$
License	16,769	16,768	16,768	16,768	16,768	16,768	16,768	5,590
Royalty	12,355	9,590	9,218	13,097	9,671	4,480	3,355	-
Sales of goods and services	128,034	100,201	86,592	80,113	73,998	56,247	102,651	114,175
Total Revenue	157,158	126,559	112,578	109,978	100,437	77,495	122,774	119,765
Cost of Sales	86,390	95,579	93,489	115,344	129,160	115,540	123,596	115,453
Gross Profit	70,768	30,980	19,089	(5,366)	(28,723)	(38,045)	(822)	4,312
Operating Expenses	783,550	941,442	702,381	866,930	842,949	809,170	659,468	934,923
Loss for the Qtr	(622,497)	(1,013,456)	(718,482)	(906,564)	(871,918)	(852,478)	(773,781)	(902,828)
Loss per share	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)

It is important to note that historical patterns of expenditures cannot be taken as an indication of future expenditures. The amount and timing of expenditures, and therefore liquidity and capital resources, may vary substantially from period to period depending on the business and research activities being undertaken at any one time and the availability of funding from investors and prospective commercial partners.

The Company's ongoing operating expenses relate primarily to the execution of research programs, the commercialization of its intellectual property and general and administrative expenses. The operations of the Company are not subject to any material seasonality or cyclical factors.

Dechra licensed the Company's StrixNB products and technology for the North American companion pet veterinary market commencing in early March 2017. The Company's StrixNB product revenues were significantly reduced once Dechra moved to its own brand (Vetradent) sourced from its own contract manufacturer. As Dechra increases its sales of Vetradent in Canada, the United States and Mexico, Kane Biotech expects to receive increasing royalty payments. The Company retains the ability to sell StrixNB outside of North America and is pursuing options for licensing in Europe, Asia and other geographies. International sales of StrixNB have been modest since the signing of the licensing agreement with Dechra.

Gross profit has been gradually improving due to overall revenue growth and reductions in manufacturing expenses. Effective November 5, 2018 all product manufacturing is being outsourced resulting in the elimination of internal fixed manufacturing costs as well as the capacity to significantly scale-up product manufacturing volumes to accommodate anticipated future revenue growth. During the fourth quarter of 2018, retroactive to Q1 2017, the Company reclassified certain expenses to Costs of Sales that were previously classified as General and Administrative expenses.

Total operating expenses in earlier quarters include higher product marketing spending than in more recent quarters reflecting the subsequent licensing of StrixNB to Dechra and recently reduced spending on bluestem marketing. Previous quarters up to and including Q1 2018 include significant spending on contract research. The four quarters in 2018 include legal expenses pertaining to the Nestle lawsuit which were not incurred in earlier quarters as well as higher investor relations costs compared to 2017. Q3 2018 includes separation costs relating to the departure of the Company's former President and CEO.

RESULTS OF OPERATIONS

Revenue

Revenue consists of License and Royalty revenue from its licensing agreement with Dechra, product sales from the Company's bluestem and StrixNB brands and contract manufacturing and quality control services revenue related to the Company's relationship with Dechra.

The Company's revenue by category for the three months ended December 31, 2018 and 2017 is summarized in the table below:



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Three Months ended December 31,	2018	2017	Change	% Change
License	\$ 16,769	\$ 16,768	\$ 1	0.0%
Royalty	12,355	9,671	2,684	27.7%
Sales of goods and services	128,034	73,998	54,036	73.0%
Total Revenue	\$ 157,158	\$ 100,437	\$ 56,721	56.5%

License revenue consists of the recognition over 10 years of an upfront payment of \$500,000 USD received from Dechra upon signing the License Agreement in March 2017. As per Note 4 of the Company's 2018 Financial Statements, the \$500,000 USD initial payment received upon signing the Dechra agreement, which was initially recognized as license revenue in its entirety in Q1 2017, has been restated as deferred revenue on the Statement of Financial Position retroactive to March 2017 and is being recognized over the 10-year life of the agreement.

Royalty revenue consists of royalties received from Dechra on their sales of Vetradent products in the North American veterinary market. In the three months ended December 31, 2018, royalty payments received from Dechra increased by 28% to \$12,355 compared to \$9,671 in the three months ended December 31, 2017 as Dechra continues to roll out the Vetradent product line to its North American veterinarian customer base.

Revenue from product sales in the three months ended December 31, 2018 was \$104,143, an increase of 48% compared to \$70,611 in the three months ended December 31, 2017 due mainly to an increase in online sales.

Services revenue consists of contract manufacturing and quality control services related to the Company's relationship with Dechra. In the three months ended December 31, 2018, services revenue was \$23,891 compared to \$3,387 for the three months ended December 31, 2017. Contract services revenue related to Dechra commenced toward the end of 2017.

The Company's revenue by category for the years ended December 31, 2018 and 2017 is summarized in the table below:

Year ended December 31,	2018	2017	Change	% Change
License	\$ 67,073 \$	55,894 \$	11,179	20.0%
Royalty	44,260	17,506	26,754	152.8%
Sales of goods and services	394,940	347,071	47,869	13.8%
Total Revenue	\$ 506,273 \$	420,471 \$	85,802	20.4%

License revenue consists of the recognition over 10 years of an upfront payment of \$500,000 USD received from Dechra upon signing the License Agreement in March 2017. As per Note 4 of the Company's 2018 Financial Statements, the \$500,000 USD initial payment received upon signing the Dechra agreement in March 2017, which was initially recognized as license revenue in its entirety in Q1 2017, has been restated as deferred revenue on the Statement of Financial Position retroactive to March 2017 and is being recognized over the 10-year life of the agreement.

Royalty revenue in the year ended December 31, 2018 increased by 153% to \$44,260 compared to \$17,506 in the year ended December 31, 2017. Royalty payments from Dechra did not commence until Q2 2017 and since that time, Dechra has continued to roll out the Vetradent product line to its North American veterinarian customer base.

Revenue from bluestem and StrixNB product sales in the year ended December 31, 2018 was \$313,207, a decrease of 9% compared to \$343,684 in the year ended December 31, 2017. This decrease is due to the Company recognizing StrixNB revenue of \$84,958 in the year ended December 31, 2017 reflecting nearly a full quarter of StrixNB revenue in that year prior to the Company signing the Licensure Agreement with Dechra in March 2017.

Services revenue consisting of contract manufacturing and quality control services related to the Company's relationship with Dechra in the year ended December 31, 2018 was \$81,733 compared to \$3,387 for the year ended December 31, 2017.

General and Administration Expenses

General and administration expenses include those costs not directly related to research and development. These include expenses associated with management and administrative staff compensation, commercialization activities and professional fees



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such as legal, audit, and investor relations.

The changes in general and administration expenditures by category for the three months ended December 31, 2018 and 2017 are reflected in the following table:

Three Months ended December 31,	2018	2017	Change	% Change
Compensation related costs	\$ 208,694 \$	300,218 \$	(91,524)	-30.5%
Business development costs	119,225	163,943	(44,718)	-27.3%
Legal costs	44,556	33,460	11,096	33.2%
Other administration costs	31,468	46,844	(15,376)	-32.8%
General and adminstration expenses	\$ 403,943 \$	544,465 \$	(140,522)	-25.8%

Lower compensation related costs in the three months ended December 31, 2018 compared to the three months ended December 31, 2017 are primarily due to lower salaries and lower short-term compensation expenses in the current period.

Lower business development costs in the three months ended December 31, 2018 compared to the three months ended December 31, 2017 are primarily due to decreased spending on bluestem marketing programs.

Higher legal costs in the three months ended December 31, 2018 compared to the three months ended December 31, 2017 are primarily due to legal costs incurred in the current period related to the Nestle lawsuit.

Lower other administration costs in the three months ended December 31, 2018 compared to the three months ended December 31, 2017 are primarily due to lower general office expenditures in the current period related to less general and administration staff.

The changes in general and administration expenditures by category for the year ended December 31, 2018 and 2017 are reflected in the following table:

Year ended December 31,	2018		2017	Change	% Change
Compensation related costs	\$ 1,371,690	\$ 1	1,203,845	\$ 167,845	13.9%
Business development costs	512,930		716,454	(203,524)	-28.4%
Legal costs	335,665		269,460	66,205	24.6%
Other administration costs	151,492		206,174	(54,682)	-26.5%
General and adminstration expenses	\$ 2,371,777	\$ 2	2,395,933	\$ (24,156)	-1.0%

Higher compensation related costs in the year ended December 31, 2018 compared to the year ended December 31, 2017 are primarily due to separation costs in the current period relating to the departure of the Company's former President and CEO partially offset by lower salaries, short-term and long-term compensation expenses in the current period compared to the previous period.

Lower business development costs in the year ended December 31, 2018 compared to the year ended December 31, 2017 are primarily due to decreased spending on bluestem marketing programs and the elimination of marketing spending on StrixNB once it was licensed to Dechra in Q1 2017 partially offset by higher spending on investor relations costs in the current period.

Higher legal costs in the year ended December 31, 2018 compared to the year ended December 31, 2017 are primarily due to legal expenses related to the Nestle lawsuit in the current period partially offset by legal expenses in the comparative period related to the Dechra License Agreement and higher general legal expenses in the comparative period.

Lower other administration costs in the year ended December 31, 2018 compared to the year ended December 31, 2017 are primarily due to external accounting costs that were incurred in the comparative period having been replaced with the costs of a full time Chief Financial Officer (accounted for in Compensation related costs) for the full current period as well as lower general office expenditures in the current period than in the comparative period.



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Research and Development Expenses

Research and development expenses are associated with the Company's research and development programs. The Company is in the development and commercialization stage and devotes a significant portion of its financial resources to research and market-ready product development activities.

The changes in research and development expenses by category for the three months ended December 31, 2018 and 2017 are reflected in the following table:

Three Months ended December 31,	2018	2017	Change	% Change
Compensation related costs	\$ 86,761 \$	89,508	(2,747)	-3.1%
Contract research and scientific consulting	19,351	163,287	(143,936)	-88.1%
Patent related costs and other intangibles expensed	242,430	95,300	147,130	154.4%
Other research costs	38,060	26,891	11,169	41.5%
Government assistance	(6,997)	(76,502)	69,505	-90.9%
Research expenses	\$ 379,605 \$	298,484 \$	81,121	27.2%

Lower contract research and scientific consulting costs in the three months ended December 31, 2018 compared to the three months ended December 31, 2017 are due primarily to a reduced need for external contract research services during the current period.

Higher patent related costs and other intangibles expensed in the three months ended December 31, 2018 compared to the three months ended December 31, 2017 are due mainly to higher patent write-off expenses in the current period.

Higher other research costs in the three months ended December 31, 2018 compared to the three months ended December 31, 2017 are due primarily to higher research consumables costs in the current period compared to the previous period.

Lower government assistance recorded in the three months ended December 31, 2018 compared to the three months ended December 31, 2017 is the result of the Company receiving no National Research Council Canada (NRC) Industrial Research Assistance Program (IRAP) grant funding in the current period whereas the Company did receive IRAP funding in the comparable period.

The changes in research and development expenses by category for the year ended December 31, 2018 and 2017 are reflected in the following table:

Year ended December 31,	2018	2017	Change	% Change
Compensation related costs	\$ 365,497 \$	320,309	45,188	14.1%
Contract research and scientific consulting	157,744	439,880	(282,136)	-64.1%
Patent related costs and other intangibles expensed	379,535	163,386	216,149	132.3%
Other research costs	164,848	162,433	2,415	1.5%
Government assistance	(145,098)	(235,430)	90,332	-38.4%
Research expenses	\$ 922,526 \$	850,578 \$	71,948	8.5%

Higher compensation related costs in the year ended December 31, 2018 compared to the year ended December 31, 2017 are due primarily to an increase in staffing in the current period to support increased research activities partially offset by a decrease in short-term compensation expense compared to the previous period.

Lower contract research and scientific consulting costs in the year ended December 31, 2018 compared to the year ended December 31, 2017 are due primarily to a reduced need for external contract research services.

Higher patent related costs and other intangibles expensed in the year ended December 31, 2018 compared to the year ended December 31, 2017 are due primarily to patent legal counsel expenses incurred in the current period in support of the Nestle



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lawsuit as well as higher patent write-off expenses in the current period.

Lower government assistance recorded in the year ended December 31, 2018 compared to the year ended December 31, 2017 is the result of the Company receiving lower National Research Council Canada (NRC) Industrial Research Assistance Program (IRAP) grant funding in the current period compared to the previous period.

Finance Costs (Income)

The change in finance costs (income) for the three months ended December 31, 2018 and 2017 are reflected in the following table:

Three Months ended December 31,	2018	2017	Change
Finance income	\$ (9,343) \$	(15,596) \$	6,253
Finance expense	20,786	(1,300)	22,086
Foreign exchange loss, net	(1,120)	17,142	(18,262)
Net finance costs	\$ 10,323 \$	246 \$	10,077

Higher finance expense in the three months ended December 31, 2018 compared to the three months ended December 31, 2017 is primarily due to the recognition of interest expense on the outstanding short-term loan in the current period.

The change in finance costs (income) for the year ended December 31, 2018 and 2017 are reflected in the following table:

Year ended December 31,	2018	2017	Change
Finance income	\$ (9,620) \$	(15,888) \$	6,268
Finance expense	89,777	90,758	(981)
Foreign exchange loss, net	2,010	16,346	(14,336)
Net finance costs	\$ 82,167 \$	91,216 \$	(9,049)

Finance expense in both periods relates to interest and other financing costs associated with short-term loans.

Loss and Comprehensive Loss

The losses and comprehensive losses for the three months and year ended December 31, 2018 and 2017 are reflected in the following tables:

Three Months ended December 31,	2018	2017	Change
Loss and comprehensive loss	\$ (622,497)	\$ (871,918)	\$ 249,422
Basic and diluted loss per share	\$ (0.01)	\$ (0.01)	\$ 0.00

Year ended December 31,	2018	2017	Change
Loss and comprehensive loss	\$ (3,260,999)	\$ (3,401,006) \$	140,007
Basic and diluted loss per share	\$ (0.04)	\$ (0.06) \$	0.02





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LIQUIDITY AND CAPITAL RESOURCES

Since inception, the Company has primarily financed its operations from revenues, public and private sales of equity, the exercise of warrants, loans and convertible notes, government grants and tax credits. As at December 31, 2018, the Company had cash of \$75,425 compared with \$1,975,723 at December 31, 2017.

Cash used in operating activities

Cash used in operating activities for the three months ended December 31, 2018 was \$603,845 compared to \$420,790 for the three months ended December 31, 2017.

Cash used in operating activities for the year ended December 31, 2018 was \$2,853,997 compared to \$2,015,756 for the year ended December 31, 2017. In Q1 2017, the Company received the \$500,000 USD initial payment from Dechra.

Cash from financing activities

Cash provided by financing activities for the three months ended December 31, 2018 was \$600,000 compared to nil received in the three months ended December 31, 2017.

Cash provided by financing activities for the year ended December 31, 2018 was \$1,100,000 compared to \$3,481,547 in the year ended December 31, 2017. In Q3 2018, the Company received a short-term loan in the amount of \$500,000 from Individual Investment Corporation. In Q3 2017, the Company received gross proceeds of \$3,996,345 from the closing of its aggregate private placement offering. In Q4 2018, the Company received cash advance of \$600,000 from a related party.

Cash used in investing activities

Cash used in investing activities during the three months ended December 31, 2018 was \$42,259 compared to \$66,308 in the three months ended December 31, 2017 reflecting lower spending on both new equipment and new patents in the current period.

Cash used in investing activities during the year ended December 31, 2018 was \$146,301 compared to \$229,636 in the year ended December 31, 2017 reflecting lower spending on both new equipment and new patents in the current period.

The Company continues to seek additional licensing and distribution partners for its various products and technologies currently in development. This in combination with ongoing royalties and potential milestone payments associated with its existing licensing agreement with Dechra will provide increasing liquidity in the future. The Company also intends to seek maximization of its use of government grant programs in order to offset some of its research costs.

However, it is possible that these sources of cash inflows will not be sufficient to entirely fund the Company's planned research activities and administration costs in 2019. If that is the case, the Company will consider financing alternatives including those used in the past such as private placements and debt financing to raise the necessary capital it requires to fund ongoing operations.

The Company manages its operational spending and determines its future financing requirements through a process of budgeting and ongoing cash flow forecasting.

Shares, options, and warrants

	March 25, 2019	December 31, 2018	December 31, 2017
Common shares issued and outstanding	80,113,536	80,113,536	80,113,536
Options outstanding	6,197,333	6,197,333	3,808,000
Warrants outstanding	38,004,997	38,004,997	35,304,997

A summary of the Company's share capital may be found in Note 13 of the accompanying financial statements.



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CONTRACTUAL OBLIGATIONS

The Company periodically enters into long-term contractual agreements for the licensing of technologies as well as the lease of facilities, equipment and certain purchased services. The following table presents commitments arising from agreements currently in force over the next five years:

	 Payments due by Period						
	Within		2-3		4-5		
	1 year		years		years		Total
Facility lease agreements	\$ 106,509	\$	35,605	\$	-	\$	142,114
Accounts payable and accrued liabilities	893,018		-		-		893,018
Due to related party	600,000		-		-		600,000
Short-Term Loan	500,000		-		-		500,000
	\$ 2,099,527	\$	35,605	\$	-	\$	2,135,132
Licence maintenance fees (USD)	\$ 10,000	\$	20,000	\$	20,000	\$	50,000

GUARANTEES

The Company periodically enters into research and licence agreements with third parties that include indemnification provisions customary in the industry. These guarantees generally require the Company to compensate the other party for certain damages and costs incurred as a result of claims arising from research and development activities undertaken on behalf of the Company. In some cases, the maximum potential amount of future payments that could be required under these indemnification provisions could be unlimited. These indemnification provisions generally survive termination of the underlying agreement. The nature of the indemnification obligations prevents the Company from making a reasonable estimate of the maximum potential amount it could be required to pay. Historically, the Company has not made any indemnification payments under such agreements and no amount has been accrued in the accompanying financial statements with respect to these indemnification obligations.

OFF-STATEMENT OF FINANCIAL POSITION ARRANGEMENTS

The Company does not have any off-Statement of Financial Position arrangements.

CONTROLS

As a result of the Company's limited administrative staffing levels, internal controls which rely on segregation of duties in many cases are not appropriate or possible. Due to resource constraints and the present stage of the Company's development, the Company does not have sufficient size and scale to warrant the hiring of additional staff to correct this potential weakness at this time. To help mitigate the impact of this potential weakness, the Company is highly reliant on the performance of compensating procedures and senior management's review and approval.

As a TSX-Venture Exchange issuer, the Company is not required to certify the design and evaluation of the Company's disclosure controls and procedures (DC&P) and internal controls over financial reporting (ICFR), and as such has not completed such an evaluation.

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



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CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The preparation of financial statements in conformity with International Financial Reporting Standards ("IFRS") requires the Company to select from possible alternative accounting principles and to make estimates and assumptions that determine the reported amounts of assets and liabilities at the statement of financial position date and reported costs and expenditures during the reporting period. Management believes that the estimates and assumptions upon which the Company relies are reasonable based upon information available at the time these estimates and assumptions are made. Estimates and assumptions may be revised as new information is acquired and are subject to change.

In addition to the going concern assumption described above, management believes that its most critical accounting policies and estimates relate to the following areas, with reference to notes contained in the accompanying financial statements:

Research and development costs

The Company's accounting policy over research and development costs may be found in Note 3(f)(i) in the Company's financial statements. Research expenditures are expensed as incurred. Development expenditures are deferred when they meet the criteria for capitalization in accordance with IFRS and the future benefits could be regarded as being reasonably certain. No development expenditures have been capitalized to date and there are no plans to capitalize development expenditures in the foreseeable future. Related Scientific Research & Experimental Development (SR&ED) investment tax credits are accounted for as a reduction to research and development expenditures in the period that they are earned and only to the extent they are refundable. Non-refundable SR&ED investment tax credits are not recorded in the financial statements as there is not assurance at this time there will be sufficient taxable income in the future to utilize those tax credits.

Patents and trademarks

The Company's accounting policy over patents and trademarks may be found in Notes 3(f)(ii) in the Company's financial statements. Patents and trademarks are reviewed for impairment on an ongoing basis whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. If any such indication exists, then the asset's recoverable amount is estimated. An impairment exists when the carrying value of an asset exceeds its recoverable amount, which is the higher of its fair value less costs to sell or its value in use. The fair value less costs to sell calculation is based on available data from observable market prices, less incremental costs. The value in use calculation is based on a discounted cash flow model. These calculations require the use of estimates and forecasts of future cash flows. Qualitative factors, including market size and market growth trends, strength of customer demand and degree of variability in cash flows, as well as other factors, are considered when making assumptions regarding future cash flows and the appropriate discount rate. A change in any of the significant assumptions of estimates used to evaluate the underlying assets could result in a material change to the results of operations.

Impairment losses recognized in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed, to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of amortization, if no impairment had been recognized. Write-downs as a result of impairment are recognized in research expense in the statement of comprehensive loss.

Stock-based compensation

The Company's accounting policy over stock-based compensation may be found in Notes 3(h)(ii) and 13(c) in the Company's financial statements. Where the Company issues warrants and stock options (to its employees, directors and officers), a fair value is derived using the Black-Scholes pricing model. The application of this pricing model requires Management to make assumptions regarding several variables, including the expected life of the options and warrants, the price volatility of the Company's stock over a relevant timeframe, the determination of a relevant risk-free interest rate and an assumption regarding the Company's dividend policy in the future.

A summary of all the Company's significant accounting policies and estimates may be found in Note 3 to the financial statements.