Management Discussion and Analysis (Expressed in Canadian Dollars)

## KANE BIOTECH INC.

Three and nine months ended September 30, 2020 and 2019



## **Management Discussion and Analysis**

The following management discussion and analysis ("MD&A") covers information up to November 26, 2020 and should be read in conjunction with the financial statements for the three and nine months ended September 30, 2020 and 2019. 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 <a href="https://www.sedar.com">www.sedar.com</a> and on the Company's website at <a href="https://www.kanebiotech.com">www.sedar.com</a> and on the Company's website at <a href="https://www.kanebiotech.com">www.kanebiotech.com</a>.

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 and the Board of Directors have reviewed this document and all other publicly reported financial information for integrity, usefulness, reliability and consistency.

#### **COVID-19 PANDEMIC**

The outbreak of COVID-19, the disease caused by the novel SARS-CoV-2 strain of coronavirus was declared a global pandemic by the World Health Organization on March 11, 2020 and has resulted in a widespread health crisis that has affected economies and financial markets around the world, resulting in an economic downturn. The effects of this pandemic on the Company may include decreased customer demand, interruptions to supply chains, manufacturing activities and research and development programs and increased government regulations or interventions. The duration and impact of the COVID-19 outbreak is unknown at this time and it is not possible to reliably estimate the length and severity of these developments, nor the impact of these developments on the financial results and condition of the Company in future periods.

During the second and third quarters, the Company experienced both decreased demand for its products in the pet specialty and veterinary channels and interruptions to its manufacturing supply chain due to reduced workforces and shortages of raw materials.

The Company continues to monitor and implement recommendations from local and national health organizations and strictly adhere to COVID-19 related directives from government authorities. The Company has implemented precautionary measures such as working remotely where possible, strict preventive practices for those employees that must work on-site and the freezing of all non-essential travel. Certain marketing programs and other discretionary spending have been put on hold to preserve cash.

The Company has applied for certain Canadian Government COVID-19 economic relief funding programs. During the third quarter, the Company received a \$40,000 loan advance from the Canada Emergency Funding Account (CEBA) program and received salary subsidization under the Canada Emergency Wage Subsidy (CEWS) program. The Company is investigating other Government COVID-19 economic relief measures as these measures continue to evolve and it intends to maximize its use of these programs to the extent it meets the eligibility requirements.

#### 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



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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.

#### **BUSINESS OVERVIEW**

Kane Biotech Inc. ("Kane Biotech", "Kane" 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. According to the United States National Institute of Health, biofilms are estimated to be responsible for 80% of all animal and human bacterial infections including tooth decay, wound 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, and therefore significant opportunity, in safe and effective products that can combat the biofilm problem. Kane Biotech's mission is to capitalize on this large, addressable market by licensing its proprietary anti-biofilm technologies to global industry players.

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<sup>TM</sup>, DispersinB®, Aledex<sup>™</sup>, bluestem<sup>™</sup>, bluestem®, coactiv+<sup>™</sup>, coactiv+®, goldstem<sup>™</sup>, silkstem<sup>™</sup>, DermaKB<sup>™</sup> and DermaKB Biofilm<sup>™</sup> are trademarks of Kane Biotech Inc.

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

Key Highlights of Kane Biotech include the following:

- A specialized focus on the development and continual improvement of anti-biofilm technologies, targeting large markets for biofilm prevention and dispersion solutions
- Renewed licensing agreement for DispersinB® with Rutgers University
- Awarded \$3.8 million in non-dilutive funding from Western Economy Diversification Canada ("WD") in the form of
  interest-free repayable contributions to be repaid over five years, starting in April 2023
- Received the U.S. Department of Defense's ("DoD") Medical Technology Enterprise Consortium Research Project Award ("MTEC Award") in the amount of \$2.7 million USD.
- Awarded a non-repayable contribution of up to \$340,680 from the National Research Council of Canada Industrial Research Assistance Program ("NRC IRAP") to enhance its quality assurance, quality control, and supply chain capabilities
- · Robust patent portfolio of differentiated anti-biofilm technologies with 52 patents issued or pending
- Unique and expanding product line in the Animal Health market
- Continued product development of DispersinB® technology platforms for the Human Health market for which
  government funding has been awarded
  - Retained GR Consulting to develop and implement the regulatory and out-licensing strategy for DispersinB® wound care hydrogel
- First commercial licensing and distribution agreement signed in 2017, establishing a 10-year partnership with Dechra Veterinary Products (the "Dechra Agreement") wherein Kane Biotech receives an ongoing royalty from Dechra on net sales of the Company's Vetradent<sup>TM</sup> products in North America
  - Extension of the Dechra Agreement in 2019 to include South America



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- Expansion into multiple markets with mutually beneficial contractual agreements with North American and Asian distributors and retailers
- Completed a \$3.5 million private placement in 2020
- Shares of the Corporation have been reapproved for and have recommenced trading on the OTCQB Venture Market
- Entered into an agreement with UK-based veterinary products company, Animalcare Group PLC ("Animalcare") under which the parties formed STEM Animal Health Inc. ("STEM"), a company dedicated to treating biofilm-related ailments in animals.
  - Animalcare is to invest \$5 million consisting of \$3 million to acquire a one-third equity stake in STEM and \$2 million for the rights to commercialize products in global veterinary markets outside of the Americas.
- Entered into a one year credit agreement with Pivot Financial Inc. for a non-revolving term loan in the aggregate amount of \$1,480,000.

## **BUSINESS UPDATE AND STRATEGY**

Kane Biotech is focused on licensing and co-commercializing its biofilm-related intellectual property with strategic partners that have established large-scale market access. Kane's two primary markets for its technologies are Animal Health and Human Health. The Company recently announced the creation of STEM Animal Health Inc. (which is a joint venture with Animalcare Group PLC. STEM Animal Health aims to: (1) generate revenue and profit through the licensing of biofilm technologies in the veterinarian channels, and (2) expand distribution and growth of its premium companion animal products in the pet specialty and e-commerce channels. In Human Health, Kane intends to: (1) finalize product development of its DispersinB® hydrogel for the human wound care market and (2) pursue the optimal regulatory and commercialization path for this technology including joint ventures. As previously announced, the funding from WD and the DoD, has been critical to progressing the company's Human Health initiatives and we are looking forward to moving the Human Health initiatives into the commercialization phase.

Within the Animal Health division, the newly formed STEM has successfully recruited Kevin Cole as President and CEO. As announced October 13, 2020, Kevin is an experienced Consumer Packaged Goods and Animal Health business leader that is currently creating the foundation for STEM's growth in:

- Royalty revenue: Accelerating royalty revenue by supporting Dechra in North and South America via the sales of Dechra's premium veterinary oral care product range and supporting Animalcare's future veterinary oral care product range in Europe. The Company also aims to achieve a key milestone by obtaining the internationally recognized efficacy certification, which would result in \$1 million USD in milestone payments pursuant to the Dechra and Animalcare Agreements.
- 2. Expanding distribution of the bluestem<sup>TM</sup> product line in Specialty Pet Trade: The bluestem<sup>TM</sup> product line, which includes water additives (liquid & powder), chews, spray and dental wipes, is currently in limited distribution. The opportunity and potential for growth as a result of expanded distribution and availability in the Specialty Pet Channel is significant. STEM will focus its efforts on expanding distribution and building awareness of the benefits of bluestem<sup>TM</sup> to accelerate sales.

In addition to leveraging its established products and sales strategies, STEM Animal Health will continue to actively explore growth opportunities through new applications for its intellectual property in other key growth areas within Animal Health category.

In the Human Health Wound Care division, Kane Biotech is focused on the continued product development of DispersinB® for applications in chronic wound care. The Company believes that its DispersinB® applications will enhance current wound care treatments by improving the efficacy of antimicrobial and antibiotic wound treatments.

On June 18, 2020, Kane Biotech's proposal entitled "DispersinB® the missing link in wound care — Clinical evaluation of DispersinB® to treat biofilm mediated antimicrobial resistance in non-healing chronic wound," received the U.S. Department of Defense's ("DoD") Medical Technology Enterprise Consortium Research Project Award ("MTEC Award"). The MTEC Award will provide approximately \$2.7 million USD in non-dilutive funding for the continued clinical development of the Company's DispersinB® to treat biofilm-mediated antimicrobial resistance in non-healing chronic wounds. This is a significant award for Kane Biotech, because of both its value and validation of the Company's wound care technology. Kane Biotech believes this award underscores the importance of eliminating biofilms to address non-healing, chronic wounds.

The Company is collaborating with external consultants in order to pursue the optimal regulatory path for this technology that will mitigate the risk for future partners and increase the value of a licensing agreement. Although the Company had previously planned to seek regulatory approval for its DispersinB® human wound care hydrogel as a medical device under the 510(k) pathway, the



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Company is currently reviewing other strategies based on market analysis provided by its consultants as well as preliminary feedback recently received from the FDA. The Company is now evaluating a number of pathways in order to determine the appropriate regulatory route that will ultimately be more beneficial by allowing for biofilm claims and a more appropriate price point. Kane is also conducting this review to better leverage the approximately \$7 million in remaining WD and DoD non-dilutive funding that is available for this program.

Other products in investigation or early development stage include the following:

- coactive+<sup>TM</sup> Hydrogel for use in chronic wounds
- coactive+<sup>TM</sup> Surgical hydrogel for use in surgical and acute wounds
- DispersinB Gel for Prosthetic Joint Infection

These products are discussed further in the Kane Biotech Technologies section.

In the Human Health Over-The-Counter (OTC) division, Kane has also developed a scalp detoxifier, shampoo and shampoo bar using its patented coactiv+™ technology. The products are formulated to break down bacterial and fungal biofilms as well as the accumulation of precipitated shampoo films, helping to support the reduction of skin irritation and other symptoms associated with chronic skin conditions. The detoxifier recently passed a Human Repeat Insult Patch Test (HRIPT) safety test allowing us to add the claims "Dermatologically tested" and "Safe for skin" to our packaging. After an overwhelmingly positive response from an initial consumer trial recently conducted in Canada, an extensive Phase 2 consumer trial anticipated to reach more than 4,500 participants, was launched in early Q4 2020 in both Canada and the United States. Kane will officially launch the products under the DermaKB Biofilm brand on our own eCommerce site by late-Q4 2020. Funding from the Government of Canada's CanExport SMEs program has been secured to support some of the marketing costs associated with the U.S. launch.

Building upon Kane Biotech's success in Animal and Human Health sectors, management will focus some resources towards developing solutions for the Industrial and Agricultural sectors. The Company believes that its patented technologies can be applied with minimal outlay to provide several solutions in these new markets. These new markets will allow Kane Biotech to reach new customers and address multiple unmet needs.

Targeted Kane Biotech milestones and objectives for the remainder of 2020 include the following:

- Build the foundation to accelerate bluestem<sup>™</sup> Animal Health product and royalty revenues lead by new STEM Animal Health CEO Kevin Cole
- Work toward the achievement of the international standard of canine oral care efficacy
- Identify commercialization partner for Human Health Wound Care division
- Launch a consumer product test in the US of Kane's new OTC shampoo and realize first commercial product sale on new webstore under the DermaKB<sup>TM</sup> brand
- Grow the Kane Biotech team with talented people in Human Health, Animal Health and R&D
- Continue to protect Kane Biotech's intellectual property and expand patent coverage
- Execute with cost-control and continue to optimize operating expenses

The Kane Biotech team is looking forward to fully executing the many exciting initiatives that are underway. The Company will continue to focus on product development, international market expansion and cost-effective execution. The entire team is dedicated to achieving the above-mentioned milestones and to building a foundation for long-term, sustainable growth.

#### KANE BIOTECH TECHNOLOGIES

## coactiv+™

Coactiv+™ is a patented biofilm destabilizing formula with continuous activity.

The global companion pet oral care market was estimated to be \$1.5 billion USD in 2017 and is projected to grow to \$2.2 billion USD by 2022. This growth is largely driven by increasing pet ownership and premiumization as pet owners continue to be more aware of and willing to spend more on their pets' health. Rising disposable income and westernization in developing nations is further driving the global pet oral care products market. 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



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grows, this causes tartar build-up, gum infection (gingivitis) and periodontitis. By the time they are three years old, it is estimated that approximately 80% of dogs and 70% of cats develop some sort of periodontal disease.

Following Health Canada approval, the Company introduced its companion pet oral care products containing its coactiv+™ technology in Canada in 2015 under the StrixNB™ and bluestem™ brands. Health Canada approvals are in place for oral care liquid water additives, a water additive powder formulation, an oral spray formulation and a toothpaste. Kane Biotech pursued a strategy to license out its intellectual property on a broader scale which led to the Company's StrixNB™ technology and trademarks being part of the Dechra Agreement. Dechra introduced its Vetradent™ oral care brand into the U.S. and Canadian veterinary channel in 2017. Water additive powder and dental wipe products were added to the Vetradent™ product family in 2018. A dental rawhide chew was introduced in 2019 as well as an expansion of the Vetradent™ toothpaste line throughout the U.S. market. Also in 2019, the Dechra Agreement was extended to South America and sales of Vetradent™ products in South America are expected to commence in 2021. In conjunction with Dechra, additional formulations are in development to expand the complete oral health program of pet oral care products for veterinary clinics and dog and cat parents.

In the Specialty Pet Trade, Kane's technology is now being commercialized by STEM as a result of the bluestem™ brand of products transfer from Kane to STEM. The bluestem™ products are sold in approximately 2,000 pet specialty retail stores in the US and Canada as well as on Amazon.com (U.S.) and Amazon.ca (Canada). In addition, STEM will evaluate opportunities for global expansion. Currently, distribution agreements have been completed in Taiwan and South Korea. STEM will continue to focus on accelerating growth of the bluestem™ oral care portfolio according to its market and channel priorities.

In the first quarter of 2020, the Kane Biotech launched silkstem™ anti-itch shampoo for dogs and cats, which contains its coactiv+™ technology, via the online Kickstarter crowdfunding platform. This new anti-biofilm formulation soothes irritation, itching, redness and dryness associated with common companion pet skin conditions. It is the first and only pet shampoo on the market in an aerosol can, making it significantly easier to apply than other pet shampoos. STEM Animal Health will evaluate the market potential and will develop launch plans to maximize the potential of silkstem™ in 2021.

In the Human Health Wound Care division, Kane is in the early development stage of two products:

- coactiv+™ Hydrogel: A product for chronic wounds that will be dispensed in a 3-ounce tube to maximize reimbursement and be competitive in the wound clinic and home care setting. The product can be applied by the patient or caregiver and sourced through a medical product supplier.
- coactiv+™ Surgical Hydrogel: A product for surgical and acute wounds and provided in a single use container for
  application in the hospital setting. The product can be applied to all types of surgical wounds and can be used
  prophylactically on post-surgical incisions as well. Although the initial target for this application is the hospital, the
  outpatient setting is also a potential market.

The key ingredients of coactive+™ are Generally Recognized As Safe (GRAS) by the FDA and have been purposefully selected to provide support throughout the entire wound healing cascade.

The combination of metal ion sequestering and pH lowering activity of coactive+ provide an environment for effective biofilm destabilization and inhibition. In addition, this activity has been shown to reduce overactive proteolytic function within wounds. Elevated levels of proteases are associated with chronic wounds and are known to cause tissue damage, inflammation, and delayed healing.

The major advantages of these coactive+™ hydrogel products are as follows:

- Continuous bacterial static, antifungal and biofilm destabilizing, and inhibition activity
- Buffering agent to lower and maintain favorable pH conducive for wound healing
- Help reduce metalloprotease and elastase activity in chronic wounds
- Biocompatible and non-toxic
- · Prophylactic treatment for acute wounds at risk for infection, such as surgical incisions, pin sites and burns
- Patent protected

In the Human Health OTC division, Kane launched a consumer products test in Canada in late 2019 to evaluate the efficacy of its new human shampoo containing its coactiv+™ technology on symptoms associated with atopic dermatitis, seborrheic dermatitis (also known as eczema) and dandruff. More than 800 shampoo samples were sent to individuals across Canada. Based on a consumer product test questionnaire, 82% of individuals reported an overall improvement in their condition, with a reduction of dandruff, irritation, redness and itchiness symptoms.

With such an overwhelming response to this test, Kane launched a similar consumer products test on a much larger scale in the U.S.



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as well as Canada in early Q4 2020. The Company will offer the Shampoo as well as a Scalp Detoxifier and Shampoo Bars via online direct-to-consumer sales in both countries beginning late Q4 2020. Kane has secured funding from the Government of Canada's CanExport SMEs program to support some of the marketing costs associated with the U.S. launch.

## 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 health applications, the develop of products using DispersinB® technology is planned for use in canine otic (ear) infections. Additional DispersinB® products are in planning and development.

With respect to human applications, in 2019, 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 the remainder of 2020 and in 2021, efforts will continue to be focused on the development of a human wound care hydrogel containing DispersinB® and on securing a commercialization partner and pursuing the optimal regulatory path that will ultimately lead to the commercialization of this technology.

Kane is currently investigating the opportunity of using DispersinB® Gel for Prosthetic Joint Infection (PJI). PJI's have been identified as one of the most serious complications of joint replacement surgery with bacterial biofilm on the prostheses being identified as one of the key problems in treatment.

PJI's are one of the most serious complications of joint replacement surgery. Conservative estimates are that approximately 1–2% of all prostheses will become infected over the life of the implant. The financial burden of treating these infections is staggering. It is estimated that they will cost the US healthcare system \$1.62 billion in 2020. In addition, patients have significant morbidity and mortality as a direct result of our current medical and surgical management to treat these infections.

PJIs are hard to treat because of bacterial biofilms on the prostheses. Unfortunately, conventional antibiotics have limited ability to cure biofilm infections. This is in part due to the almost dormant metabolic activity of bacteria in biofilms and the architecture of biofilms. The concentrations of conventional antibiotics needed to have activity to bacteria in biofilms can be up to 1000 times higher than the same bacteria in a planktonic state. Therefore, new antimicrobial therapies are needed to treat PJI's that focus on disrupting biofilms. Current trials using Bacteriophage are showing positive results.

#### **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.

Kane Biotech has not been actively focused on this technology over the past few years due to the Company's focus of financial and human resources on StrixNB<sup>TM</sup> 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, as a result, Kane Biotech fully intends to continue its pursuit of the commercialization of this technology in the future.

## INTELLECTUAL PROPERTY

Patent #	Title	<b>Jurisdiction</b>
2,452,032	Synergistic Antimicrobial Compositions and Methods of Inhibiting Biofilm Formation	Canada
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
EP1906736	Antimicrobial Compositions for Inhibiting Growth and Proliferation of Microbial Biofilms	Europe
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
CA2511103	Compositions and Methods for Enzymatic Detachment of Bacterial and Fungal Biofilms	Canada
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

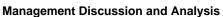


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555378	Compositions and Methods for Enzymatic Detachment of Bacterial and Fungal Biofilms	New Zealand
2,003,284,385	Compositions and Methods for Enzymatic Detachment of Bacterial and Fungal Biofilms	Australia
7,833,523	Compositions and Methods for 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	11.77
0.700.004	Compositions and uses thereof	United States
2,720,301	Dispersin B, 5-Fluorouracil, Deoxyribonuclease I and ProteinaseK-Based Antibiofilm	
EB0000400	Compositions and uses thereof	Canada
EP2283130	Dispersin B, 5-Fluorouracil, Deoxyribonuclease I and ProteinaseK-Based Antibiofilm	_
EB0000400	Compositions and uses thereof	Europe
EP2283130	Dispersin B, 5-Fluorouracil, Deoxyribonuclease I and ProteinaseK-Based Antibiofilm	11. % 112
	Compositions and uses thereof	United Kingdom
EP2283130	Dispersin B, 5-Fluorouracil, Deoxyribonuclease I and ProteinaseK-Based Antibiofilm	
	Compositions and uses thereof	Germany
EP2283130	Dispersin B, 5-Fluorouracil, Deoxyribonuclease I and ProteinaseK-Based Antibiofilm	_
	Compositions and uses thereof	France
8,753,692	Biofilm-Removing Antimicrobial Compositions and uses thereof	United States
2,750,340	Biofilm-Removing Antimicrobial Compositions and uses thereof	Canada
5,752,051	Biofilm-Removing Antimicrobial Compositions and uses thereof	Japan
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
2,773,369	Compositions and Methods for Treatment and Prevention of Oral Diseases	Europe
2,773,369	Compositions and Methods for Treatment and Prevention of Oral Diseases	United Kingdom
2,773,369	Compositions and Methods for Treatment and Prevention of Oral Diseases	Germany
2,773,369	Compositions and Methods for Treatment and Prevention of Oral Diseases	Germany
6,038,167	Compositions and Methods for Treatment and Prevention of Oral Diseases	Japan
624,850	Compositions and Methods for Treatment and Prevention of Oral Diseases	New Zealand
HK120416	Compositions and Methods for Treatment and Prevention of Oral Diseases	Hong Kong
9,980,497	Compositions and Methods for Treatment and Prevention of Wound Infections	United States
6,401,720	Compositions and Methods for Treatment and Prevention of Wound Infections	Japan
1,0357,470	Compositions and Methods for Treatment and Prevention of Wound Infections	United States

The Company has 42 issued patents and 10 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. The Company's success may, in part, depend on operating without such infringement.

Trademark	<u>Jurisdiction</u>
DispersinB®	Canada
'	United States
	Europe
	United Kingdom
bluestem™	Canada
	United States
bluestem®	Europe
coactiv+®	Canada
coactiv+ <sup>TM</sup>	United States





Europe goldstem™ Canada **United States** Europe silkstem<sup>TM</sup> Canada **United States** Europe DermaKB<sup>TM</sup> Canada **United States** Europe DermaKB Biofilm™ Canada **United States** Europe  $Aledex^{TM}$ Canada **United States** Europe  $StrixNB^{TM}$ Canada **United States** Europe

## SUMMARY OF KANE BIOTECH PRESS RELEASES SINCE JANUARY 1, 2020

On November 5, 2020, Kane Biotech announced that it had entered into a one-year credit agreement with Pivot Financial Inc. for a non-revolving term loan in the aggregate amount of \$1,480,000. The Credit Facility shall be used by Kane Biotech for: (i) funding research and development relating to eligible government reimbursable expenditures; (ii) expenses related to STEM Animal Health Inc; and (iii) general working capital purposes.

On October 28, 2020, the Kane Biotech announced the launch of a larger consumer product test to further prove the efficacy of the Company's shampoo on dermatitis and dandruff began on October 14, 2020. This large-scale, multi-product test will focus on US consumers and has a similar design to the consumer trial that was launched earlier in the year in Canada.

On October 13, 2020, the Company announced that Kevin Cole will assume the role of President and CEO of STEM Animal Health Inc, a subsidiary created from the recently formed joint venture with UK-based international veterinary products company, Animalcare Group PLC. In this new role Kevin, will focus on building STEM into a globally recognized name in biofilm-targeting technology with an emphasis on developing sales channels and penetrating the growing pet care sector, utilizing STEM's expanding product lines.

On September 28, 2020, Kane Biotech Inc. announced that it has entered into an agreement with UK-based veterinary products company, Animalcare Group PLC under which the parties formed STEM Animal Health Inc., a company dedicated to treating biofilm-related ailments in animals. Animalcare is to invest \$5 million consisting of \$3 million to acquire a one-third equity stake in STEM and \$2 million for the rights to commercialize products in global veterinary markets outside of the Americas.

On September 23, 2020, the Company announced that it had entered into an agreement with Harbor Access LLC, an investor relations advisory firm with offices in Canada and the United States. Harbor Access is to provide external Investor Relations services to Kane Biotech in addition to investor outreach throughout North America and Europe.

On September 9, 2020, the Company announced that it would be featured in a live webinar hosted by Ben Haynor, CFA, Managing Director, Healthcare Research at Alliance Global Partners, on September 15, 2020.

On August 20, 2020, Kane Biotech announced that it had granted an aggregate of 2,310,555 stock options to certain directors, officers, employees and consultants of the company in accordance with the Company's stock option plan.

On August 12, 2020, the Company announced that Gregory Schultz, Ph.D., had been appointed as a Scientific Advisor. Dr. Schultz is the Director of the Institute for Wound Research and Professor of Obstetrics and Gynecology at the University of Florida.



## **Management Discussion and Analysis**

On June 24, 2020, Kane Biotech announced that it had been approved for up to \$54,750 in funding from the Government of Canada's CanExport SMEs program. Kane will use this funding to support the marketing costs associated with the U.S. launch of its Human Health anti-biofilm shampoo as well as to support international growth of its Animal Health business.

On June 18, 2020, the Company announced that, further to its press releases of January 17, 2019 and December 4, 2019, its proposal entitled "DispersinB® the missing link in wound care – Clinical evaluation of DispersinB® to treat biofilm mediated antimicrobial resistance in non-healing chronic wound," had received the U.S. Department of Defense's ("DoD") Medical Technology Enterprise Consortium Research Project Award ("MTEC Award"). The MTEC Award will provide approximately \$2.7 million USD in non-dilutive funding for the continued clinical development of the Company's DispersinB® to treat biofilm-mediated antimicrobial resistance in non-healing chronic wounds.

On May 19, 2020, Kane Biotech announced that, effective May 19, 2020, shares of the Corporation have been reapproved for and will recommence trading on the OTCQB Venture Market, operated by OTC Markets Group. Since February 4, 2019, shares of Kane Biotech have been trading under the Pink® Open Market. With the upgrade to the OTCQB Venture Market, the shares will continue to trade under the ticker symbol "KNBIF".

On May 14, 2020, the Company announced that it has further 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 further extending the expiry thereof from July 17, 2020 to January 17, 2022 for the 33,404,997 Warrants issued pursuant to the Initial Closing (the "Initial Closing Warrants") and from August 17, 2020 to February 17, 2022 for the 1,100,000 Warrants issued pursuant to the Final Closing (the "Final Closing Warrants"). The Corporation previously extended the expiry of the Initial Closing Warrants and the Final Closing Warrants on November 12, 2018 for an additional 18 months term.

On May 12, 2020, Kane Biotech announced positive results from a consumer product test evaluating the efficacy of its shampoo on dermatitis and dandruff. The shampoo consists of coactiv+<sup>TM</sup>, a patented anti-biofilm formulation, and contains ingredients approved as safe for human use.

On May 7, 2020, Kane Biotech provided an update on the actions the Company has taken in response to the global COVID-19 pandemic.

On March 2, 2020, the Company announced that it granted an aggregate of 3,650,000 stock options to certain directors, officers, employees and consultants of the Company in accordance with the Company's stock option plan.

On February 26, 2020, Kane Biotech announced the launch of its silkstem™ anti-itch shampoo at the Global Pet Expo in Orlando, Florida.

On February 24, 2020, the Company announced that it closed the second and final tranche of its offering, previously announced on December 4, 2019, and issued 7,081,862 units of the Company at a price of \$0.14 per unit to raise gross proceeds of \$991,461. Each whole warrant entitles the holder thereof to purchase one additional common share at an exercise price of \$0.18 per common share until February 24, 2022. The Company issued a total of 24,999,999 units for aggregate gross proceeds of \$3,500,000 pursuant to the offering.

On February 20, 2020, Kane Biotech announced that it had appointed Jean Gauvin, DVM, as its Chief Veterinary Officer.

On January 27, 2020, the Company announced that it has retained Independent Trading Group, Inc. to provide market-making services.

## **OUTLOOK**

The strategic direction of the Company remains centered on developing and commercializing solutions to biofilm-related problems in the Animal and Human Health markets. To advance these programs and establish the Company as a key player, management expects Kane Biotech to continue incurring operating losses for the foreseeable future. Given the nature of its business and the developmental phase that Kane Biotech is currently in, research expenditures are expected to be higher in 2020 than in 2019. General and administrative expenses in 2020 will be tempered by a combination of spending reductions and the Company's use of Canadian Government economic relief measures associated with the COVID-19 pandemic. Revenues in 2020, although impacted by the COVID-19 pandemic, are expected to be at a similar level as 2019. The Company is committed to creating revenue growth and operating with strict cost controls while developing its new technologies and products.

## KANE

## KANE BIOTECH INC.

#### **Management Discussion and Analysis**

The Company's funding of future operations is primarily dependent upon its ability to: a) negotiate collaboration or licence royalty agreements with upfront and subsequent milestone payments, b) generate product sales, and c) obtain research grant funding and/or secure additional funds. While the Company is striving to achieve funding through all three of the above-mentioned alternatives, there is no assurance that such sources will be available or obtained on favourable terms. 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 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 tightly 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 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:

	Q3-2020	Q2-2020	Q1-2020	Q4-2019	Q3-2019	Q2-2019	Q1-2019	Q4-2018
	\$	\$	\$	\$	\$	\$	\$	\$
License	16,768	16,768	16,768	16,767	16,768	16,768	16,768	16,769
Royalty	34,062	19,037	47,912	32,645	34,709	28,109	33,993	12,355
Sales of goods and services	309,773	231,688	391,459	514,725	235,361	176,413	570,495	128,034
Total Revenue	360,603	267,493	456,139	564,138	286,838	221,290	621,256	157,158
Cost of Sales	231,447	151,923	276,723	363,905	170,516	138,782	410,408	86,390
Gross Profit	129,156	115,570	179,416	200,233	116,322	82,508	210,848	70,768
Operating Expenses	1,247,140	711,448	1,624,152	1,421,945	912,058	1,035,983	830,123	783,550
Income (loss) for the Qtr	(1,030,948)	(505,397)	(1,363,836)	(1,156,695)	(821,554)	1,675,462	(657,393)	(622,497)
Income (loss) per share	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)	0.02	(0.01)	(0.01)

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.

License revenue relates to the recognition of revenue associated with the initial payment of \$500,000 USD the Company received upon signing its exclusive license and distribution agreement with Dechra in March 2017. This initial payment has been recorded in the financial statements as deferred license revenue and is being recognized as license revenue on a straight-line basis over the 10-year life of the agreement.

Overall, quarter over quarter royalty revenues have been trending higher although Q2 2020 royalties were significantly impacted by lower customer demand in the veterinary channel as a result of the COVID-19 pandemic. The expansion of Dechra's product line in late 2019, namely rawhide chews in Canada and the United States and its toothpaste line into the United States, bodes well for future royalty growth. Sales of Dechra's existing products continues to grow, and their products are expected to launch in



#### **Management Discussion and Analysis**

Brazil in mid-2021 as the Company continues to demonstrate the safety and efficacy of the product line.

Sales of goods and services, although impacted by the COVID-19 pandemic in 2020, have trended higher as a result of increases in all of the following revenue categories: Product sales to large pet retail chains, international sales, online sales and Dechra contract services revenue, In addition, an expanded line of bluestem™ products is contributing to ongoing revenue growth.

Gross profit as a percentage of sales has been consistent since Q4 2018. As of 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 revenue growth. The trend toward larger customer orders and overall higher sales volumes have resulted in improved shipping and warehousing efficiencies contributing to improved margins and it is expected that the continuation of that trend will improve margins further in future quarters.

Operating expenses can vary significantly from quarter to quarter due primarily to fluctuations in research expenditures and bluestem<sup>TM</sup> sales and marketing costs. Q1 2018 and the first two quarters in 2019 include significant legal expenses pertaining to a lawsuit which were not incurred in subsequent quarters. Q3 2018 includes separation costs relating to the departure of the Company's former President and CEO. Q4 2019 and the first two quarters of 2020 includes higher contract research and compensation-related costs than earlier quarters as the Company escalated its work on its DispersinB® human wound care hydrogel project. Q3 2020 includes significant legal expenses pertaining to the Animalcare agreement which was finalized during the period.

## **RESULTS OF OPERATIONS**

#### Revenue

Revenue consists of License and Royalty revenue from its licensing agreement with Dechra, product sales from the Company's bluestem<sup>TM</sup> brand 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 September 30, 2020 and 2019 is summarized in the table below:

Three Months ended September 30,	2020	2019	Change	% Change
License	\$ 16,768 \$	16,768 \$	-	0.0%
Royalty	34,062	34,709	(647)	-1.9%
Sales of goods and services	309,773	235,361	74,412	31.6%
Total Revenue	\$ 360,603 \$	286,838 \$	73,765	25.7%

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.

Royalty revenue consists of royalties received from Dechra on their sales of Vetradent<sup>™</sup> products in the North American veterinary market. In the three months ended September 30, 2020, royalty payments received from Dechra decreased by 2% to \$34,062 compared to \$34,709 in the three months ended September 30, 2019. In the current quarter, royalties were significantly impacted by lower customer demand in the veterinary channel as a result of the COVID-19 pandemic but have recovered significantly from reported royalties in Q2 2020.

Revenue from product sales in the three months ended September 30, 2020 was \$286,934, an increase of 48% compared to \$194,483 in the three months ended September 30, 2020 due mainly to higher online sales and a larger customer base in the current period.

Services revenue consists of contract manufacturing and quality control services related to the Company's relationship with Dechra. In the three months ended September 30, 2020, services revenue was \$22,839, a decrease of 44% compared to \$40,878 for the three months ended September 30, 2019. This decrease is due to a lower demand from Dechra for contract manufacturing services in the current period.

The Company's revenue by category for the nine months ended September 30, 2020 and 2019 is summarized in the table below:



**Management Discussion and Analysis** 

Nine Months ended September 30,	2020	2019	Change	% Change
License	\$ 50,305	\$ 50,305	\$ (0)	0.0%
Royalty	101,011	96,811	4,200	4.3%
Sales of goods and services	932,920	982,269	(49,349)	-5.0%
Total Revenue	\$ 1,084,236	\$ 1,129,385	\$ (45,149)	-4.0%

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.

Royalty revenue consists of royalties received from Dechra on their sales of Vetradent<sup>TM</sup> products in the North American veterinary market. In the nine months ended September 30, 2020, royalty payments received from Dechra increased by 4% to \$101,011 compared to \$96,811 in the nine months ended September 30, 2019 as Dechra continues to roll out its expanded Vetradent<sup>TM</sup> product line to its North American veterinarian customer base. However, lower customer demand in the veterinary channel as a result of the COVID-19 pandemic impacted royalties received in Q2 2020.

Revenue from product sales in the nine months ended September 30, 2020 was \$758,898, a decrease of 9% compared to \$831,328 in the nine months ended September 30, 2019 due mainly to the Company delivering on its largest purchase order for bluestem products in its history from a large North American pet retailer in the comparative period partially offset by higher online sales and a larger customer base in the current period.

Services revenue consists of contract manufacturing and quality control services related to the Company's relationship with Dechra. In the nine months ended September 30, 2020, services revenue was \$174,022, an increase of 15% compared to \$150,941 for the nine months ended September 30, 2019. This increase is due mainly to contract manufacturing services revenue from Dechra's rawhide chews product which was shipped to Dechra in the current period but not yet introduced in the comparative period partially offset by a higher demand from Dechra for other contract manufacturing services in the comparative period.

## **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 such as consulting, legal, audit, and investor relations.

The changes in general and administration expenditures by category for the three months ended September 30, 2020 and 2019 are reflected in the following table:

Three Months ended September 30,	2020	2019	Change	% Change
Compensation related costs	\$ 528,976 \$	395,539 \$	133,437	33.7%
Business development costs	134,781	173,613	(38,831)	-22.4%
Legal costs	196,846	66,007	130,840	198.2%
Other administration costs	49,467	37,080	12,386	33.4%
Government Assistance	(40,761)	-	(40,761)	100.0%
General and adminstration expenses	\$ 869,309 \$	672,239 \$	197,071	29.3%

Higher compensation related costs in the three months ended September 30, 2020 compared to the three months ended September 30, 2019 are primarily due to higher salaries resulting from an increase in staff as well as higher consulting and short and long-term incentive expenses in the current period partially offset by financial assistance received from the CEWS program in the current period.

Lower business development costs in the three months ended September 30, 2020 compared to the three months ended September 30, 2019 are primarily due to lower travel and trade show expenses in the current period resulting from the COVID-19 pandemic.



## **Management Discussion and Analysis**

Higher legal costs in the three months ended September 30, 2020 compared to the three months ended September 30, 2019 are primarily due to legal costs incurred in the current period related to the Animalcare agreement partially offset by legal costs related to the Nestle lawsuit incurred in the prior period.

Higher other administration costs in the three months ended September 30, 2020 compared to the three months ended September 30, 2019 are primarily due to higher general office expenditures in the current period related to an increase in general and administration staff.

Government assistance recorded in the current period is related to grants received from the NRC IRAP covering certain supply chain, quality control and quality assurance expenditures.

The changes in general and administration expenditures by category for the nine months ended September 30, 2020 and 2019 are reflected in the following table:

Nine Months ended September 30,	2020	2019	Change	% Change
Compensation related costs	\$ 1,561,706 \$	930,164 \$	631,542	67.9%
Business development costs	674,214	585,473	88,741	15.2%
Legal costs	305,588	318,169	(12,581)	-4.0%
Other administration costs	155,129	109,895	45,234	41.2%
Government Assistance	(177,768)	-	(177,768)	100.0%
General and adminstration expenses	\$ 2,518,869 \$	1,943,701 \$	575,168	29.6%

Higher compensation related costs in the nine months ended September 30, 2020 compared to the nine months ended September 30, 2019 are primarily due to higher salaries resulting from an increase in staff as well as higher consulting and short and long-term incentive expenses in the current period partially offset by financial assistance received from the CEWS program in the current period.

Higher business development costs in the nine months ended September 30, 2020 compared to the nine months ended September 30, 2019 are primarily due to higher investor relations and consulting expenses in the current period.

Lower legal costs in the nine months ended September 30, 2020 compared to the nine months ended September 30, 2019 are primarily due to higher general legal costs and legal expenditures related to the Nestle lawsuit in the prior period partially offset by legal costs related to the Company's private placement and the Animalcare agreement in the current period.

Higher other administration costs in the nine months ended September 30, 2020 compared to the nine months ended September 30, 2019 are primarily due to higher general office expenditures in the current period related to an increase in general and administration staff.

Government assistance recorded in the current period is related to grants received from the NRC IRAP covering certain supply chain, quality control and quality assurance expenditures as well as from the Can Export SMEs program covering certain costs incurred related to the international growth of the Company's Animal Health business.

#### **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 September 30, 2020 and 2019 are reflected in the following table:



**Management Discussion and Analysis** 

Three Months ended September 30,	2020	2019	Change	% Change
Compensation related costs	\$ 103,190 \$	116,917 \$	(13,727)	-11.7%
Contract research and scientific consulting	187,339	52,850	134,488	254.5%
Patent related costs and other intangibles expensed	34,506	16,246	18,260	112.4%
Other research costs	45,487	60,808	(15,320)	-25.2%
Government assistance	7,309	(7,002)	14,311	-204.4%
Research expenses	\$ 377,831 \$	239,819 \$	138,012	57.5%

Lower compensation related costs in the three months ended September 30, 2020 compared to the three months ended September 30, 2019 are due primarily to financial assistance received from the CEWS program and the reclassification of an employee's salary expense to stock-based compensation expense in the current period partially offset by an increase in staff and higher long-term compensation expense in the current period.

Higher contract research and scientific consulting costs in the three months ended September 30, 2020 compared to the three months ended September 30, 2019 are due primarily to increased research, consulting and project management expenditures related to the Company's DispersinB® human wound care program in the current period.

Higher patent related costs and other intangibles expensed in the three months ended September 30, 2020 compared to the three months ended September 30, 2019 are due mainly to higher patent legal expenses in the current period.

Lower other research costs in the three months ended September 30, 2020 compared to the three months ended September 30, 2019 are due primarily to lower research consumables costs in the current period.

Lower government assistance recorded for the three months ended September 30, 2020 compared to the three months ended September 30, 2019 is due to an exchange rate difference on accrued versus realized government assistance recorded for the DoD MTEC Award in the current period.

The changes in research and development expenses by category for the nine months ended September 30, 2020 and 2019 are reflected in the following table:

Nine Months ended September 30,	2020	2019	Change	% Change
Compensation related costs	\$ 400,182 \$	363,233 \$	36,949	10.2%
Contract research and scientific consulting	700,092	182,469	517,622	283.7%
Patent related costs and other intangibles expensed	99,648	158,987	(59,339)	-37.3%
Other research costs	171,995	151,635	20,360	13.4%
Government assistance	(308,046)	(21,862)	(286,184)	1309.0%
Research expenses	\$ 1,063,871 \$	834,462 \$	229,408	27.5%

Higher compensation related costs in the three months ended September 30, 2020 compared to the three months ended September 30, 2019 are due primarily to an increase in staff and higher long-term compensation expense in the current period partially offset by financial assistance received from the CEWS program and the reclassification of an employee's salary expense to stock-based compensation expense in the current period.

Higher contract research and scientific consulting costs in the nine months ended September 30, 2020 compared to the nine months ended September 30, 2019 are due primarily to increased research, consulting and project management expenditures related to the Company's DispersinB® human wound care program in the current period.

Lower patent related costs and other intangibles expensed in the nine months ended September 30, 2020 compared to the nine months ended September 30, 2019 are due mainly to lower patent legal expenses and patent write-off expense in the current period.

Higher other research costs in the nine months ended September 30, 2020 compared to the nine months ended September 30, 2019 are due primarily to higher research consumables costs in the current period.



## **Management Discussion and Analysis**

Higher government assistance recorded for the nine months ended September 30, 2020 compared to the nine months ended September 30, 2019 is due primarily to government assistance recorded for the DoD MTEC Award in the current period.

#### **Finance Costs (Income)**

The change in finance costs (income) for the three months ended September 30, 2020 and 2019 are reflected in the following table:

Three Months ended September 30,	2020	2019	Change
Finance income	\$ (288)	\$ (9)	\$ (279)
Finance expense	13,825	24,429	(10,604)
Fair value adjustment - government loan	(101,328)	-	(101,328)
Foreign exchange loss, net	755	1,398	(643)
Net finance costs (income)	\$ (87,036)	\$ 25,818	\$ (112,854)

Lower finance expense in the three months ended September 30, 2020 compared to the three months ended September 30, 2019 is due to primarily to the recognition of interest expense on both the short-term loan and related party cash advances that were outstanding in the comparative period.

The fair value adjustment – government loan recovery recorded in the current period is a fair value adjustment related to the interest-free repayable contributions received from Western Economic Diversification Canada during the current period.

The change in finance costs (income) for the nine months ended September 30, 2020 and 2019 are reflected in the following table:

Nine Months ended September 30,	2020	2019	Change
Finance income	\$ (1,414) \$	(44) \$	(1,370)
Finance expense	26,868	111,885	(85,017)
Fair value adjustment - government loan	(285,843)	-	(285,843)
Foreign exchange loss, net	1,973	(8,242)	10,215
Net finance costs (income)	\$ (258,416) \$	103,599 \$	(362,015)

Lower finance expense in the nine months ended September 30, 2020 compared to the nine months ended September 30, 2019 is due to primarily to the recognition of interest expense on both the short-term loan and related party cash advances that were outstanding in the comparative period.

The fair value adjustment – government loan recovery recorded in the current period is a fair value adjustment related to the interest-free repayable contributions received from Western Economic Diversification Canada during the current period.

## Income (loss) and Comprehensive Income (loss)

The income (loss) and comprehensive income (loss) for the three and nine months ended September 30, 2020 and 2019 are reflected in the following tables:

Three Months ended September 30,		2020	2019	Change		
Loss and comprehensive loss Basic and diluted loss per share	\$ \$	(1,030,948) (0.01)	•	(821,554) (0.01)		(209,394) 0.00



**Management Discussion and Analysis** 

Nine Months ended September 30,	ne Months ended September 30,		2020			Change		
Income (loss) and comprehensive income (loss)	\$	(2,900,181)	Ċ	196,516	Ţ	(3,096,697)		
Basic and diluted income (loss) per share	\$	(0.03)	\$	0.00	\$	(0.03)		

#### 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 September 30, 2020, the Company had cash of \$1,272,305 compared with \$341,330 at September 30, 2019.

#### Cash provided by (used in) operating activities

Cash used in operating activities for the three months ended September 30, 2020 was \$(251,004) compared to \$(935,598) for the three months ended September 30, 2019. The decrease in cash used in operating activities is due primarily to a net decrease in non-cash working capital during the current period compared to a net increase in non-cash working capital in the comparative period.

Cash used in operating activities for the nine months ended September 30, 2020 was \$(2,117,272) compared to cash generated from operating activities of \$96,291 for the nine months ended September 30, 2019. The increase in cash used in operating activities is due primarily to proceeds received from a lawsuit settlement in the comparative period partially offset by a decrease in non-cash working capital during the current period.

## Cash provided by (used in) financing activities

Cash provided by financing activities for the three months ended September 30, 2020 was \$1,299,399 compared to cash used in financing activities of \$(24,759) for the three months ended September 30, 2019. This difference is due mainly to cash received from Animalcare's equity payment and a long-term government loan during the current period.

Cash provided by financing activities for the nine months ended September 30, 2020 was \$2,661,882 compared to \$225,241 for the nine months ended September 30, 2019. This increase is due mainly to cash received from Animalare's equity payment as well as cash received from the second and final tranche of a private placement offering and a long-term government loan during the current period.

## Cash used in investing activities

Cash used in investing activities during the three months ended September 30, 2020 was \$15,075 compared to \$27,853 in the three months ended September 30, 2019. The decrease in cash used in investing activities is due to decreases in capitalized equipment and patent-related expenditures in the current period.

Cash used in investing activities during the nine months ended September 30, 2020 was \$106,433 compared to \$55,626 in the nine months ended September 30, 2019. The increase in cash used in investing activities is due to increases in capitalized equipment and patent-related expenditures 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 2020. 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.



#### **Management Discussion and Analysis**

## Shares, options, and warrants

	November 25, 2020	September 30, 2020	December 31, 2019
Common shares issued and outstanding	108,613,535	108,613,535	101,531,673
Options outstanding	9,534,555	9,534,555	3,949,000
Warrants outstanding	47,174,389	47,174,389	43,499,813

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

#### **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		5-7		
		1 year		years		years		years		Total
Lease agreements	\$	12,252	\$	82,745	\$	-	\$	-	\$	94,997
Accounts payable and accrued liabilities		1,714,174		-		-		-		1,714,174
Due to related party		21,841		-		-		-		21,841
Long-term government loans repayable		-		130,080		400,322		400,322		930,724
	\$	1,748,267	\$	212,825	\$	400,322	\$	400,322	\$	2,761,736
Licence maintenance fees (USD)	\$	10,000	\$	20,000	\$	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.



## **Management Discussion and Analysis**

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 ("ICF), 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.

#### 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:

#### Revenue recognition

The Company's accounting policy over revenue recognition may be found in Note 3(a) in the Company's financial statements.

The Company has consistently applied accounting policies in accordance with IFRS 15 Revenue from Contracts with Customers ("IFRS 15") to all periods presented in these financial statements. These policies are as follows:

Non-refundable payments received at the time of executing a license agreement are recognized when the Company satisfies a performance obligation by transferring control of a promised good or service to a customer. The Company concluded that license fees that are paid up front represent a material right to use over the duration of the contract term and as such the Company recognises upfront consideration received as a contract liability (i.e. deferred license revenue) in its statement of financial position. License revenue related to these non-refundable payments is recognized on a straight-line basis over the life of the license agreement.

Revenue associated with license agreement milestones is recognized when it is highly probable that the performance obligation is met and the risk of reversal of revenue recognition is remote.

Royalty income earned from a license agreement is recognized when contractually earned.

Revenue from the sales of goods and services, net of discounts, is recognized when control of those goods has been transferred to the customer or the performance obligation on services is met.

#### 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



## **Management Discussion and Analysis**

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 loss and comprehensive loss.

## Stock-based compensation

The Company's accounting policy over stock-based compensation may be found in Notes 3(i)(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.

#### **RISKS AND UNCERTAINTY**

Kane Biotech operates in a highly competitive environment that involves significant risks and uncertainties, some of which are outside of the Company's control. The Company is subject to risks both inherent and not inherent to the biotechnology industry, including:

## Risks Related to the Company's Financial Condition

- The Company has not derived sufficient revenues to date from the commercial sale of its antibiofilm technology and
  products to offset its costs. In light of the length of time and expense associated with bringing new products through
  commercialization, obtaining regulatory approval and bringing products to market, operating losses are expected to
  continue.
- The Company has relied upon equity financing to support operations and will continue to need significant amounts of additional capital that may not be available to the Company on favourable terms and may be dilutive.
- The Company has relied upon non-dilutive government funding to support some of its research and development programs and other operations. This funding is contingent upon certain deliverables being fulfilled as mandated by the government agencies.
- The Company may fail to obtain additional financing and be unable to fund operations and commercialize its product candidates.

The Company intends to raise additional financing, as required, through research, partnering and licensing arrangements, the exercise of warrants and options, equity financing and government funding. However, there can be no assurance that these financing efforts will be successful or that the Company will continue to be able to meet ongoing cash requirements. It is possible that financing will not be available or, if available, may not be on favourable terms. The availability of financing will be affected by the results of scientific and clinical research, the ability to obtain regulatory approvals, market acceptance of the Company's products, the state of the capital markets generally (with particular reference to pharmaceutical, biotechnology and medical companies), the status of strategic alliance agreements, available government funding and other relevant commercial



considerations.



#### Risks Related to the Company's Financial Management

The Company is subject to ongoing foreign exchange, interest rate, credit and liquidity risks. The management of these risks is described in Note 21 of the Company's audited financial statements for the year ended December 31, 2019.

#### Risks Related to the Company's Business and Operations

- The Company is in various stages of development of its technologies and products and is dependent on the successful commercialization of its technologies and products to prevent and remove microbial biofilms. Delays may cause the Company to incur additional costs which could adversely affect the Company's liquidity and financial results.
- The Company's business is subject to significant government regulation and failure to achieve regulatory approval of its products would negatively affect the business.
- The Company can rely on contract manufacturers as part of its product development strategy, and it would be negatively
  affected if it is not able to maintain these relationships and/or the contract manufacturers failed to maintain appropriate
  quality levels.
- Even if product candidates receive all of the required regulatory approvals, there is no guarantee of market acceptance or commercialization of the resulting product candidates, which will be determined by the Company's sales, marketing and distribution capabilities and the positioning and competitiveness of its products compared with any alternatives.
- The Company's industry is characterized by rapid change and a failure by the Company to react to these changes could
  have a material adverse effect on its business.
- If the Company fails to hire or retain needed personnel, the implementation of its business plan could slow and future growth could suffer.

## **Risks Relating to the Intellectual Property**

- Failure to protect intellectual property, or infringement on the intellectual property rights of others, may impede the Company's ability to operate freely.
- The Company is dependent on strategic partners, including contract research organizations, as part of its product development strategy, and it would be negatively affected if it is not able to initiate or maintain these relationships.

Kane Biotech views patents and other means of intellectual property protection as essential to the Company's core business by protecting the Company's proprietary technology from infringement by competitors. To that end, patents will continue to be filed by the Company to ensure the highest level of protection possible is obtained for its products and technologies. The Company requires all employees, consultants, and parties to collaborative research agreements to execute confidentiality agreements upon the commencement of employment, consulting relationships or a collaboration with the Company. These agreements require that all information developed or made known during the course of the engagement with the Company is to be kept confidential. The Company also maintains agreements with scientific staff and all parties contracted in a scientific capacity, providing that all inventions resulting from work performed for Kane Biotech, using its property, or relating to its business and conceived or completed during the period covered by the agreement are the exclusive property of the Company.

## Risks Relating to the Company's Common Shares

- The Company has not paid and does not intend to pay any cash dividends on its common shares and therefore, its shareholders may not be able to receive a return on their shares unless they sell them.
- The market price and trading volume of the Company's common shares may be volatile. In addition, variations in future earnings estimates by securities analysts and the market prices of the securities of the Company's competitors may also lead to fluctuations in the trading price of the common shares.

# KANE

## KANE BIOTECH INC.

## **Management Discussion and Analysis**

• The significant costs that the Company will incur as a result of being a public company in Canada could adversely affect its business.

To date, no dividends have been declared or paid on the common shares, and it is not expected that dividends will be declared or paid in the immediate or foreseeable future. The policy of the Board of Directors of the Company is to reinvest all available funds in operations. The Board of Directors may reassess this policy from time to time. Any decision to pay dividends on the common shares of Kane Biotech will be made by the Board of Directors based on the assessment of, among other factors, earnings, capital requirements and the operating and financial condition of the Company.