

Managements' Discussion and Analysis  
(Expressed in Canadian Dollars)

## **KANE BIOTECH INC.**

Years ended December 31, 2013 and 2012

# KANE BIOTECH INC.

## Management's Discussion and Analysis

The following management's discussion and analysis ("MD&A") covers information up to April 3, 2014 and should be read in conjunction with the annual audited financial statements for the year ended December 31, 2013. 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](http://www.sedar.com) and on the Company's website at [www.kanebiotech.com](http://www.kanebiotech.com).

### OVERVIEW

Kane Biotech Inc. ("Kane" or the "Company") is a biotechnology company engaged in the development and commercialization of products that prevent and remove microbial biofilms. Biofilms develop when bacteria and other microorganisms form a protective matrix that acts as a shield against attack. When in a biofilm, bacteria become highly resistant to antibiotics, antimicrobials, biocides and host immune responses. This resiliency contributes to numerous human health problems such as wound care, recurrent urinary tract infections, medical device associated infections and tooth decay. According to the National Institutes of Health (NIH), USA, biofilms are estimated to be responsible for 80% of all human bacterial infections and cost industry, governments and hospitals in the billions of dollars each year. As such, there is significant interest in safe and effective products that can combat the biofilm problem.

Kane has a portfolio of products and intellectual property acquired from leading research institutions and the Company's own biofilm research expertise. These products that prevent and remove microbial biofilms, among other uses, have been developed from the Company's ability to screen for factors affecting biofilm formation.

Strix NB™, DispersinB®, Aledex® and Kane® are registered trademarks of Kane Biotech Inc. All Rights Reserved 2013

The Company is listed on the TSX Venture Exchange under the symbol "KNE"

### Corporate Update

The Company has been focusing its resources and capital primarily on the companion animal oral care market segment. The primary objective is to test market and launch the StrixNB concentrated drinking water additive in the Manitoba market, test market entry messages and tactics and develop additional formulations to offer a portfolio of products. As opportunities arise and resources permit, the product is being introduced into other provinces. The company is also actively executing its licensing strategy to license out its intellectual property on a broader scale to industry market leaders. In addition the Company has developed a number of new antibiofilm-antimicrobial (non-antibiotic) wound care formulations for the veterinary and human wound care markets.

On April 2, 2014 Kane Biotech Inc. announced the appointment of Dr. Sarah Prichard, M.D. FRCP(C) to its board of directors. Dr. Prichard has served as global Vice President of R&D, Renal Medical and Therapeutic Area Leader, Baxter Healthcare from 2005–2014. Prior to this role, she was on faculty at McGill University from 1979-2005. Dr. Prichard received her MD from Queens University and trained in Internal Medicine and Nephrology at McGill University. While at McGill, she served as Associate Dean of Medicine, Chief of Service for the Department of Medicine, Senior Physician and Director of Peritoneal Dialysis at the Royal Victoria Hospital. She was the President of the Canadian Society of Nephrology (1997–2000) and President of the International Society of Peritoneal Dialysis (2001–2004). During her academic career, she published extensively in the area of dialysis, lectured around the globe and received the Osler Award for teaching. Sarah has also played leadership roles as a member of the Board of Queens University, Chair of the Board of St. Mary's Hospital Center in Montreal and a member of the Governing Council of CIHR (Canadian Institute of Health Research).

On March 26, 2014 Kane Biotech Inc. announced the Health Canada's LRVHP approval for StrixNB Water Additive Powder Formulation. The Company has received Notification Number "NN.BQ16" from the Interim Notification Program for Low Risk Veterinary Health Products (LRVHP) for the new StrixNB oral care application in Canada. With the issuance of this notification number, the Company has cleared the final requirements for StrixNB Oral Care Powder to enter the companion animal market in Canada. The new StrixNB Oral Care Powder will be available in a 300g container that is ideal for dog breeders and multi-pet households and a single serving sachet ideal for on the go pet owners.

**KANE BIOTECH INC.****Management's Discussion and Analysis**

On March 11, 2014 Kane Biotech Inc. announced the results of an in vitro efficacy study demonstrating that StrixNB oral care product is effective against cat bite wound infection associated bacteria. The Company tested its unique StrixNB pet oral care formulation against these pathogens and it was very effective resulting in up to 100% killing of test organisms. Cats on StrixNB as part of their oral care treatment may help to reduce the impact of cat bite wound infections.

On February 4, 2014 Kane Biotech announced that it had received a total of \$397,500 from the exercising of 2,650,000 warrants at \$.15 per share from warrant holders.

On January 7, 2014 Kane Biotech announced it has received Notification Number "NN.XZ5M" from the Interim Notification Program for Low Risk Veterinary Health Products (LRVHP) for the Company's first dermatological formulation (under the brand name DispersinB). DispersinB Topical Spray is a unique antibiofilm-antimicrobial and non-antibiotic formulation that can be applied to the skin and coat of dogs and horses. Atopic dermatitis is a genetically predisposed inflammatory and pruritic allergic skin disease. It is associated with environmental allergens including dust mites, pollens, mold spores, dander insects and microbial infections as well as cutaneous barrier defects. It is estimated that 10 to 15% of dogs are affected by atopic dermatitis. Recent research indicates the presence of staphylococci and Malassezia biofilm in atopic dermatitis lesions. DispersinB Topical Spray is effective on Methicillin-Resistant Staphylococcus pseudintermedius (MRSP) and Malassezia pachydermatis growth and biofilm formation. In humans, atopic dermatitis is also known as atopic eczema an inflammatory, relapsing and pruritic or itchy skin disorder.

On December 18, 2013 Kane Biotech Inc. announced it closed its previously announced non-brokered private placement offering (the "Offering") of a single unit (the "Unit") comprised of a \$500,000 2 year 10% convertible redeemable unsecured note (the "Note") and 4,000,000 share purchase warrants ("Warrants") for gross proceeds of \$500,000.

The Note has a term of two years from the date of issuance and bears interest at a rate of 10% per annum. The Note is redeemable at any time at the option of the Corporation at an amount equal to the face value of the Note, plus all accrued and unpaid interest, subject to the right of the Note holder to convert the Note into common shares of the Corporation ("Common Shares") prior to the date of redemption. The Corporation may elect to pay the interest on the Note or the redemption price of the Note in Common Shares, in lieu of cash, at the market price of the Common Shares on such interest payment date or redemption date, subject to the approval of the TSX Venture Exchange. The Note may be converted at the option of the Note holder into Common Shares at a price of \$0.15 per Common Share at any time until maturity of the Note. Each Warrant entitles the holder thereof to purchase one Common Share at a price of \$0.095 for a period of two years. The completion of the Offering has not increased Mr. Renaud's ownership of Common Shares of the Corporation. However, if Mr. Renaud were to convert the entire amount of the Note into Common Shares and exercise all of the Warrants issued to him, he would increase the number of Common Shares held by him from 2,877,715 (approximately 3.63% of the issued and outstanding Common Shares) to 10,211,048 (approximately 11.81% of the issued and outstanding Common Shares). The net proceeds of the Offering will be used for the Corporation's research and development program and for working capital purposes.

On December 17, 2013 the Company entered into an option agreement with a global health care company who has been assessing some of Kane Biotech's antibiofilm and antimicrobial technologies for use in the animal health market. Under the terms of the agreement, the health care company will now complete their due diligence surrounding Kane's technology with an option to obtain an exclusive, worldwide license to develop, commercialize and market certain oral care and wound care.

On December 6, 2013 Kane Biotech announced that it amended the terms of its 18,035,000 share purchase warrants issued on December 14, 2012 by extending the expiry thereof from December 14, 2013 to January 31, 2014.

On November 6, 2013 Kane Biotech announced the receipt of Health Canada's approval for Low Risk Veterinary Health Products for its new StrixNB product that can be sprayed directly on the teeth and tongue of the animal or can be applied to treats and dental chews to assist in dental and oral hygiene. The oral spray is the second product in the Company's companion animal oral care portfolio and is complementary to currently sold StrixNB Oral Care Water Additive.

On June 6, 2013 Philip Renaud (Chairman), Dr. Arvind Joshi, Gordon Froehlich and Richard Cherney were elected as directors of the company. All four individuals were current members of the board of directors of Kane Biotech Inc. and had let their names stand for re-election at the Annual and Special Meeting of shareholders.

On May 22, 2013 Kane Biotech officially launched its StrixNB™ pet oral care product to the BC market at Market Hill Animal Hospital in Vancouver. This is one in a series of events designed to raise awareness of this Canadian innovation. Through Pacific Veterinary Sales, the company has been introducing StrixNB™ to veterinarians across BC, Alberta and Saskatchewan.

# KANE BIOTECH INC.

## Management's Discussion and Analysis

On April 4, 2013 Kane Biotech reported that in a recently completed dog efficacy field study, StrixNB™ was very effective against halitosis (bad breath). The field study was designed to evaluate the effect of StrixNB™ on bad breath in dogs over a period of 21 days. Five Sheltie dogs ranging in age from 2 years to 14 years were used in the study and had varying degrees of bad breath from slight odour to very strong odour. The Volatile Sulfur Compounds (VSC) measurements were taken 8 times between Day 0 and Day 21 of the study. Dogs with the highest VSC measurements (very strong odour) showed the greatest reduction in bad breath. After 21 days of the study the results showed a reduction of 71% to 82% in dogs with strong odour. The remaining dogs that had no or slight odour also showed VSC reductions but the percentage was lower as the base line was normal.

On April 3, 2013 Kane Biotech announced that the DispersinB-Gentamicin combination wound gel spray passed the primary skin irritation tests. The purpose of the skin irritation test was to determine the dermal irritation potential of topical DispersinB-Gentamicin wound gel spray as required by the FDA for biocompatibility. The biocompatibility study was conducted on the combination of DispersinB antibiofilm enzyme and the broad-spectrum antibiotic Gentamicin.

On March 18, 2013 the Company announced it has appointed Pacific Veterinary Sales of Abbotsford, B.C. as a distribution partner for the upcoming StrixNB™ pet oral care product launch in Western Canada. Pacific Veterinary Sales has a direct relationship with veterinarians through an established and dedicated sales team that focuses on veterinarians in Western Canada and will warehouse, distribute and sell StrixNB™ to the veterinary market.

On February 21, 2013 Kane Biotech reported a successful launch of its marketing field test in Manitoba for StrixNB™, its new pet oral care product. Many veterinarians are now recommending StrixNB™ to their clients as an important part of a regular pet oral care program. The response to the marketing field test was very positive with 84% of the veterinary clinics in Manitoba signing up for the Company's promotional campaign that coincided with February's Pet Oral Care month.

On February 7, 2013 Kane Biotech announced it has granted an aggregate of 2,740,000 stock options at an exercise price of \$.14 per common share to directors, management, employees and consultants of the Company. In accordance with securities regulatory requirements, any shares issued pursuant to the exercise of such options will be subject to resale restriction for a period of four months from the date of grant.

## Intellectual Property

Patent #	Title	Jurisdiction
2,452,032	Synergistic Antimicrobial Compositions and Methods of Inhibiting Biofilm Formation	Canada
6,923,962	Signal Peptides, Nucleic Acid Molecules and Methods for Treatment of Caries	United States
7,144,992	Synergistic Antimicrobial Compositions and Methods for Reducing Biofilm Formation	United States
7,294,497	Compositions and Methods for Enzymatic Detachment of Bacterial and Fungal Biofilms	United States
7,314,857	Synergistic Antimicrobial Compositions and Methods of Inhibiting Biofilm Formation	United States
7,597,895	Signal Peptides, Nucleic Acid Molecules and Methods for Treatment of Caries	United States
7,833,523	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
564904	Antimicrobial Compositions for Inhibiting Growth and Proliferation of Microbial Biofilms	New Zealand
7,989,604	Compositions and Methods for Enzymatic Detachment of Bacterial and Fungal Biofilms	United States
ZL 200680024157.1	Compositions for Inhibiting Growth and Proliferation of Microbial Biofilm on Medical Devices	China
4932731	Signal Peptides, Nucleic Acid Molecules and Methods for Treatment of Caries	Japan
4999842	Antimicrobial Compositions for Inhibiting Growth and Proliferation of Microbial Biofilms	Japan
2,006,265,707	Antimicrobial Compositions for Inhibiting Growth and Proliferation of Microbial Biofilms	Australia
5073169	Compositions and Methods for Enzymatic Detachment of Bacterial and Fungal Biofilms	Japan
2,332,733	Signal Peptides, Nucleic Acid Molecules and Methods for Treatment of Caries	Canada
8,580,551	Dispersin B Polypeptides and uses thereof	United States
8,617,542	Dispersin B, 5-Fluorouracil, Deoxyribonuclease I and ProteinaseK-Based Antibiofilm Compositions and uses thereof	United States

# KANE BIOTECH INC.

## Management's Discussion and Analysis

The Company has 20 issued and 26 pending patents. Successful development of products to prevent and remove microbial biofilms may be dependent upon the ability to obtain these patents; however, there is no guarantee they 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.

<b>Trademark</b>	<b>Jurisdiction</b>
Kane®	United States
DispersinB®	Canada
	United States
	Europe
StrixNB™	United States
Aledex®	United States

### Research and Development

#### DispersinB® Technology

The Company's trademark for the wound care market is DispersinB®. The current global market for wound care management technology is estimated at US \$4.5 billion per year. The company has a number of DispersinB® formulations in development including formulations with antibiotics and the antibiofilm enzyme  $\beta$ -N-Acetylglucosaminidase (hereinafter "Enzyme"). In addition, the Company has developed new antibiofilm-antimicrobial (non-antibiotic) formulations for both the veterinary and human markets.

New wound care formulations developed include antibiofilm-antimicrobial (non-antibiotic) products for chronic ear infections (Otitis) for veterinary use and a topical spray for atopic dermatitis-associated infections for veterinary use, which recently received Health Canada's Interim Notification Program for Low Risk Veterinary Health Products (LRVHP) approval. In addition, a skin care formulation for human skin infections such as atopic dermatitis (eczema)-associated infections and a medicated shampoo for human and animals is in development.

The Company has previously developed the antibiofilm Enzyme in combination with Gentamycin and formulated an Enzyme-Gentamycin wound gel spray containing a thermo reversible gelling agent that makes the liquid spray become a gel when applied at body temperature. Gentamycin is an FDA approved broad-spectrum antibiotic and is used in currently marketed wound care products. This wound spray is developed for both human and veterinary applications.

The Company successfully completed the contract with the United States Army Dental and Trauma Research Detachment (USADTRD) to develop an antibiofilm-antimicrobial wound gel formulation that includes its antibiofilm Enzyme and the US Army's antimicrobial peptide. The wound gel reduced over 95% of biofilm-embedded wound associated bacteria as compared to the commercial wound gel which showed only a 50% reduction. The superior performance is due to synergy between the antibiofilm Enzyme and the antimicrobial peptide. This wound gel is intended for treating combat wound associated infections.

#### Aledex® Technology

The Company's trademark for the medical device coating market is Aledex®. Kane has both in vitro and in vivo data that demonstrates the product's ability to inhibit the activity of numerous catheter associated pathogens, and protect against urinary catheter related infections. Approximately 30 million urethral catheters are sold in North America annually and indwelling urinary catheters are used in approximately 15% to 25% of short term care patients and all patients in intensive care units. Additionally, in the US alone, more than 150 million intravascular catheters are used and over 5 million central venous lines are inserted. This results in about 250,000 catheter related infections each year. Kane has also demonstrated the antimicrobial and antibiofilm activity of Aledex® combination against dental plaque and oral bacteria associated with periodontal disease.

# KANE BIOTECH INC.

## Management's Discussion and Analysis

### Strix NB™ Technology

The Company's trademark for the oral care market is StrixNB™. The pet oral care market in the US is estimated at \$450 million per year and dental disease is the number one oral disease in dogs and cats and over 95% of all dogs and cats will have dental disease. Bacteria in the mouth cavity form plaque and as the plaque builds up, bacteria cause tartar build-up, gum infection (gingivitis) and periodontitis.

The Company introduced its first StrixNB™ oral care product (a concentrated drinking water additive) into the Manitoba market and has also recently received Health Canada's Low Risk Veterinary Health Products approval for an oral care spray formulation and a water additive powder formulation. In addition a number of new formulations are in development including a toothpaste, oral foam, oral gel, chew and a super concentrate liquid. These formulations are being developed to offer a portfolio of pet oral care products for consumers. The Company has also appointed distributors for expanding sales into other provinces as capital and resources permit. The Company is also pursuing its licensing strategy to license out the Company's intellectual property on a broader scale.

The Company has both the *in vitro* and *in vivo* efficacy data to show that the product is effective against bacteria associated with dental plaque, tartar build-up and periodontal diseases. The Company has completed a number of studies for the pet oral care market indicating that the formulation has effects on growth as well as plaque formation. Also, it is superior to tested commercially available products and is palatable and acceptable to dogs.

The Company has demonstrated the efficacy of StrixNB™ against Halitosis (bad breath)-associated oral bacteria such as *Porphyromonas gingivalis*, *Fusobacterium nucleatum* and *Prevotella intermedia*

The Company participated in a collaborative NSERC-Engage Grant Program funded study with Dr. Caroline Hoemann (Professor, Ecole Polytechnique, Montreal) to confirm the osteogenic activity of CSP and CSP-P15 fusion peptide (synthetic and recombinant) using bone marrow stem cells in an *in vitro* system. The study demonstrated the osteogenic (bone regenerating) activity of the Company's CSP technology based fusion polypeptide. The CSP-based fusion polypeptide promoted significantly better cell adhesion, proliferation and osteogenic activity than CSP alone and a known osteogenic peptide (control) tested in this study.

### KBI Disinfectant Technology

The Therapeutic Products Directorate of Health Canada issued a Drug Identification Number or DIN (02374463) for the ready-to-use (RTU) formulation of KBI Antibacterial Disinfectant. The DIN provides approval to manufacture and market KBI Antibacterial Disinfectant for the Canadian market.

The Company submitted a supplemental DIN (Drug Identification Number) application on "KBI Antibacterial Disinfectant concentrate" to Health Canada for review and approval.

The Company has a number of Material Transfer Agreements in place with universities and research institutions to conduct third party research with its technology. In addition, the Company has Confidential Disclosure Agreements in place with a number of companies in the Medical Device, Wound Care, Hard Surface Disinfectant and Oral Care markets. Discussions that take place under these Confidential Disclosure Agreements allow for confidential dialogue and direction on the best design of Kane's research activities. The Company views guidance from market leaders and potential partners as an important external validation of the market potential for its products.

### OUTLOOK

The strategic direction of the Company is centered on developing solutions to biofilm related problems. In order to advance these programs, management expects Kane to continue incurring operating losses. Based on current projections and strategic plans, total expenses are expected to be similar in fiscal 2014 as compared to fiscal 2013.

The Company anticipates that it will execute an equity offering in 2014 but in the interim has taken measures to conserve cash and has substantially reduced the overall use of capital. With these measures the Company believes its cash resources will be sufficient to support the Company's activities through 2014.

# KANE BIOTECH INC.

## Management's Discussion and Analysis

The Company's future operations are completely dependent upon its ability to generate product sales, negotiate collaboration or licence agreements with upfront payments, obtain research grant funding, or other strategic alternatives, and/or secure additional funds. While the Company is striving to achieve the above plans, there is no assurance that such sources of funds will be available or obtained on favourable terms. If the Company cannot generate product sales, negotiate collaboration or licence agreements with upfront payments, obtain research grant funding, or if it cannot secure additional financing on terms that would be acceptable to it, the Company 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 these 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) to the accompanying financial statements.

## RISKS AND UNCERTAINTY

The Company 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 inherent in the biotechnology industry, including:

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

- The Company has not derived significant revenues to date from the commercial sale of its antibiofilm products. 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 on 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 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, and through equity financing. 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, and other relevant commercial considerations.

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

- The Company is in various stages of development of products and is dependent on the successful commercialization of 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 relies 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

# KANE BIOTECH INC.

## Management's Discussion and Analysis

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 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, using Kane's property, or relating to Kane's 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.
- 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 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.



# KANE BIOTECH INC.

## Management's Discussion and Analysis

### SELECTED ANNUAL FINANCIAL INFORMATION

The following is selected financial information about the Company, for its 2013, 2012 and 2011 fiscal years:

Years ended December 31,	2013	2012	2011
Revenue	\$ 159,945	\$ -	\$ -
Research expenses	(525,898)	(686,286)	(586,194)
General and administrative expenses	(1,084,665)	(777,616)	(649,053)
Investment income	10,935	12,801	20,188
Loss and comprehensive loss for the year	(1,447,365)	(1,459,495)	(1,221,149)
Loss per share	(0.02)	(0.02)	(0.02)
Total assets	1,883,509	2,524,800	2,470,808
Total liabilities	600,311	176,726	92,725
Deficit	(11,393,194)	(9,945,829)	(8,486,334)
Total capital stock, warrants, convertible note option and contributed surplus	12,676,392	12,293,903	10,864,417

### SELECTED QUARTERLY FINANCIAL INFORMATION

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

	Q4-2013	Q3-2013	Q2-2013	Q1-2013	Q4-2012	Q3-2012	Q2-2012	Q1-2012
Investment income	(1,445)	2,441	4,152	5,787	\$ 350	\$ 2,666	\$ 4,073	\$ 5,712
Loss for the period	(126,139)	(330,773)	(325,970)	(664,483)	(416,425)	(390,747)	(348,131)	(304,192)
Loss per share	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(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 quarterly losses relate primarily to the execution of research programs, the commercialization of its research and general and administrative expenses such as professional fees, investor relations, and stock-based compensation. The operations of the Company are not subject to any material seasonality or cyclical factors.

### RESULTS OF OPERATIONS

#### Revenue

Revenue consists of licensing option income. The Company has entered into an option agreement with a global health care company. Under the terms of the agreement, the health care company will now complete their due diligence surrounding Kane's antibiofilm and antimicrobial technologies with an option to obtain an exclusive, worldwide license to develop, commercialize and market certain oral care and wound care technologies in the global animal health market.

# KANE BIOTECH INC.

Management's Discussion and Analysis

Year ended December 31,	2013	2012	Increase (decrease)
Licensing option revenue	\$ 159,945	\$ -	\$ 159,945
Revenue	\$ 159,945	\$ -	159,945

## Research

Research expenditures include costs associated with the Company's research programs, the major portion of which are salaries paid to research staff, laboratory rent, consumables, and consulting. 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 expenditures for the years ended December 31, 2013 and 2012 are reflected in the following table:

Year ended December 31,	2013	2012	Increase (decrease)
Compensation related costs			
Wages, consulting fees and benefits	\$ 348,218	\$ 326,769	\$ 21,449
Stock compensation related costs	51,511	49,842	1,669
Consumables	51,200	49,062	2,138
Contract research and scientific consulting	15,182	127,740	(112,558)
License fees	10,156	9,917	239
Laboratory rent and occupancy costs	75,265	78,736	(3,471)
Other research costs	84,266	167,672	(83,406)
Less: Government assistance and lab work recoveries	(109,900)	(123,452)	13,552
Research	\$ 525,898	\$ 686,286	(160,388)

Research expenditures for year ended December 31, 2013 were lower as compared to 2012. This decrease can be attributed to the following factors:

- Compensation related costs are higher, as compared to the prior year, as direct payroll expenses increased due to cost of living and merit increases in 2013.
- The decrease in contract research and scientific consulting is primarily due to the change from the development of the regulatory pathway for wound care, canine clinical study and disinfectant product testing to the test marketing of the products for commercialization.
- Other research costs include derecognition expense related to intellectual property. In the period, the Company recorded derecognition expenses of \$58,702 (2012 - \$141,177) for intellectual property no longer pursued.
- The decrease in government assistance and lab work cost recoveries is primarily due to a decrease in eligible government assistance offset, in part, by StrixNB test market sales.

The Company expects increased levels of research expenditures for the year if additional funding is obtained.

# KANE BIOTECH INC.

## Management's Discussion and Analysis

### General and Administration

General and administration expenses include those costs not directly related to research activities. This includes expenses associated with management services, commercialization activities and professional fees such as legal, audit and investor and public relations.

The changes in general and administration expenditures for years ended December 31, 2013 and 2012 are reflected in the following table:

Year ended December 31,	2013	2012	Increase (decrease)
Compensation related costs			
Wages, consulting fees and benefits	\$ 469,693	\$ 428,950	\$ 40,743
Stock compensation related costs	221,733	35,475	186,258
Business development costs	254,144	187,869	66,275
Other administration costs	139,095	125,322	13,773
<b>General and Administration</b>	<b>\$ 1,084,665</b>	<b>\$ 777,616</b>	<b>\$ 307,049</b>

The net increase in costs for the years ended December 31, 2013 as compared to 2012 can be attributed to the following factors:

- Wages, consulting fees, and benefits are higher, as compared to the prior period, due mainly to the addition of a business development associate to commercialize the company's products.
- Stock compensation related costs increased from 2012 to 2013 due to the 2013 grant of stock options to directors, management, employees and consultants.
- During the year, efforts continued in the pursuit of potential commercialization partnerships and financing arrangements. Business development costs have increased primarily due to increased marketing costs for the commercialization of StrixNB™.
- The increase in other administration costs is primarily due to additional office space in 2013 and legal costs.

### Finance Income (Costs)

The change in investment income for the years ended December 31, 2013 and 2012 are reflected in the following table:

Year ended December 31,	2013	2012	Increase (decrease)
Finance income	\$ 10,935	\$ 12,801	\$ (1,866)
Finance expense	(4,093)	(4,985)	(892)
Foreign exchange loss, net	(2,366)	(3,544)	(1,178)

# KANE BIOTECH INC.

## Management's Discussion and Analysis

### Loss and comprehensive loss for the year

The loss and comprehensive loss for the years ended December 31, 2013 and 2012 is reflected in the following table:

Year ended December 31,	2013	2012	Increase (decrease)
Loss and comprehensive loss for the period	\$ (1,447,365)	\$ (1,459,495)	\$ (12,130)
Loss per share	\$ (0.02)	\$ (0.02)	\$ 0.00

The Company's loss decreased compared to the prior period. This decrease primarily resulted from the receipt of licensing option revenue offset by the 2013 grant of stock options and increased product commercialization related expenses. The Company expects to incur a loss in the year as it continues its research and commercialization programs.

### LIQUIDITY AND CAPITAL RESOURCES

Since inception, the Company has financed its operations from public and private sales of equity, the exercise of warrants and stock options, investment income on funds available for investment and government grants and tax credits. As at December 31, 2013, the Company had cash totaling \$634,442 compared with \$1,415,015 at the previous year-end.

#### Cash used in operating activities

Cash used in operating activities totaled \$1,166,443 for the year ended December 31, 2013, compared to \$1,155,292 for the same period in fiscal 2012 as a result of an increase in actual cash outflows from ongoing research programs, general, administrative and commercialization activities net of non-cash items such as stock-based compensation, depreciation, and the write-down of patents and offset by deferral of payments and changes in other accrual accounts.

#### Cash from financing activities

For the year ended December 31, 2013, net proceeds of \$481,750 were received on the issuance of a convertible note. Additionally cash receipts of \$37,528 were received from the exercise of warrants.

#### Cash used in investing activities

Cash used in investing activities totaled \$133,409 for the year ended December 31, 2013. This amount represents patent costs and the acquisition of property and equipment. In the previous fiscal period, cash used in investing activities, for patent costs and acquisition of property and equipment totaled \$93,247.

### Shares, options, and warrants

	April 3, 2014	December 31, 2013	December 31, 2012
Common shares issued and outstanding	81,750,329	79,100,329	78,631,229
Incentive Options outstanding	5,947,500	6,287,500	4,222,500
Warrants outstanding	4,000,000	22,035,000	38,876,128

A summary of the Company's capital stock may be found in Note 10 of the accompanying financial statements.

# KANE BIOTECH INC.

## Management's Discussion and Analysis

The Company's management will consider financing alternatives and may seek to raise additional funds for operations from current stockholders and other potential investors. This disclosure is not an offer to sell, nor a solicitation of an offer to buy the Company's securities. If the Company should pursue such financing, there would be no assurance that funding would be available or obtained on favourable terms.

As disclosed in note 2 to the accompanying financial statements there is substantial doubt about the use of the going concern assumption. The financial statements do not reflect adjustments in the carrying values of the Company's assets and liabilities, expenses, and the balance sheet classifications used, that would be necessary if the going concern assumption were not appropriate. Such adjustments could be material.

### CONTRACTUAL OBLIGATIONS

The Company periodically enters into long-term contractual agreements for the lease of laboratory 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 1 year	2-3 years	4-5 years	Total
Facility lease agreements	\$ 72,008	\$ 23,583	\$ -	\$ 95,591
Accounts payable and accrued liabilities	187,063	-	-	187,063
Investor relations service agreement	3,750			
Licence maintenance fees	10,000	20,000	20,000	50,000
	\$ 272,821	\$ 43,583	\$ 20,000	\$ 332,654

### 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.

### RELATED PARTY TRANSACTIONS

During the year ended December 31, 2013, a Director purchased a convertible note for gross proceeds of \$500,000. The Director received \$15,000 for the related issue costs on the transaction. The Company also paid \$19,123 (December 31, 2012 - \$3,486) for services to a legal firm in which a Director is a partner.

### OFF-BALANCE SHEET ARRANGEMENTS

Other than as described above, the Company does not have any off-balance sheet arrangements.

# KANE BIOTECH INC.

## Management's Discussion and Analysis

### 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. During the period the Company made no material changes to its systems of internal controls over financial reporting.

As a venture 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.

### 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 balance sheet 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(d)(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 GAAP, and the future benefits could be regarded as being reasonably certain. Related tax credits are accounted for as a reduction to research and development expenditures on the condition that the Company is reasonably certain that these credits will materialize.

#### Patents and trademarks

The Company's accounting policy over patents and trademarks may be found in Notes 3(d)(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 with regard to 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.

# KANE BIOTECH INC.

## Management's Discussion and Analysis

### Technology licenses

The Company's accounting policy over technology licences may be found in Notes 3(d)(iii) in the Company's financial statements. Technology license costs are initially recorded based on the fair value of the consideration paid. They are amortized over their expected useful lives commencing in the period in which the licence becomes available for use, which is no later than when the related product is launched commercially and sales of the licensed products are first earned. The carrying amounts of technology license costs do not necessarily reflect present or future fair values and the ultimate amount recoverable will be dependent upon the successful development and commercialization of products based on these rights. Technology licences are reviewed for impairment on an ongoing basis whenever events or changes in circumstances indicate that the carrying amount may not be recoverable, and are subject to an annual impairment test until commercialization of the related product.

### Stock-based compensation

The Company's accounting policy over stock-based compensation may be found in Notes 3(f)(ii) and 6(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 of the Company's significant accounting policies and estimates may be found in Note 3 to the financial statements.

### FORWARD-LOOKING STATEMENTS

This Management's Discussion and Analysis contains forward-looking statements which may not be based on historical fact, including without limitation statements containing the words "believes," "may," "plan," "will," "estimate," "continue," "anticipates," "intends," "expects," and 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.

## **KANE BIOTECH INC.**

### **Management's Discussion and Analysis**

Management cautions you 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. You should also carefully consider the matters discussed under "Risk Factors" in this MD&A. 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.