



Investor Presentation
January 30th, 2019

Disclaimer – Forward Looking Statements



This presentation contains forward-looking statements, which are made pursuant to the safe harbour provisions of the U.S. Securities Litigation Reform Act of 1995. Forward-looking statements involve known and unknown risks and uncertainties which could cause the Company's actual results to differ materially from those in the forward-looking statements. Such risks and uncertainties include, but are not limited to, the availability of funds and resources to pursue R&D activities, the successful and timely completion of clinical studies, the ability of the Company to take advantage of business opportunities in its specific industry, and uncertainties related to the regulatory process and general changes in economic conditions. Investors should consult the Company's ongoing filings which are available on SEDAR for additional information on risks and uncertainties relating to forward-looking statements. Investors are cautioned not to rely on these forward-looking statements nor does the Company undertake to update or revise any these forward-looking statements contained herein.

Objective

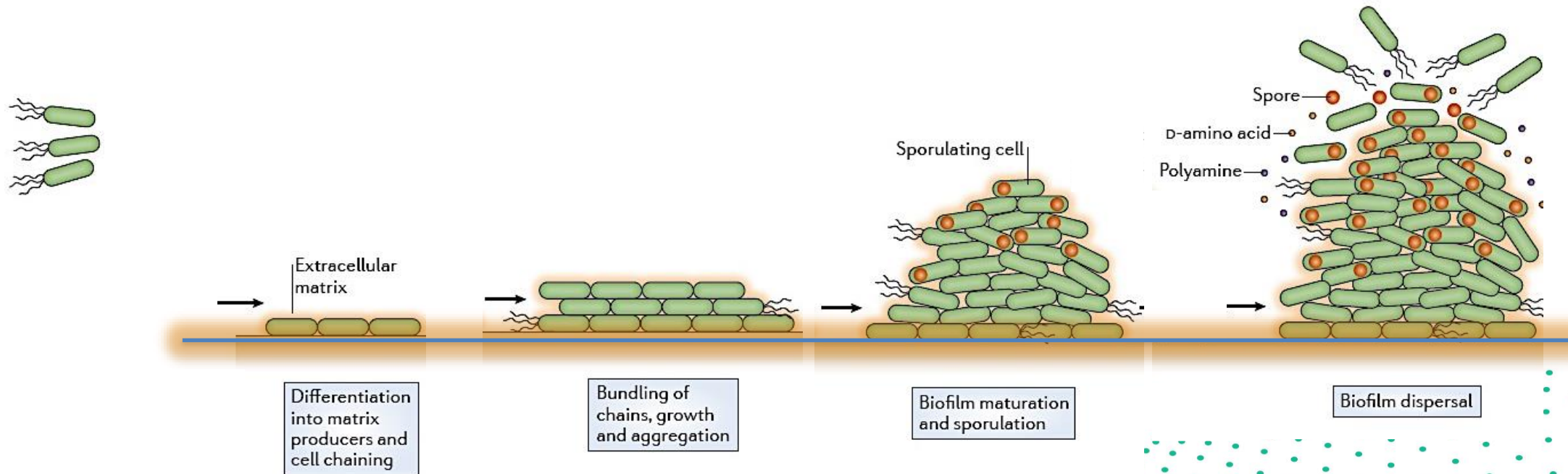
- Kane biotech has undergone a major turnaround in the past 140 days:
 - Relaunched our Animal health business
 - Created a scientific advisory board
 - Hired a world class CSO
 - Established clinical and regulatory roadmap for DispersinB technology platform
 - Wound care – “missing link”
 - Other high cost markets
- Summarize everything we have accomplished
- Update on our strategy and objectives going forward

A full-page background image with a blue color cast. It depicts a scientist in a laboratory setting, wearing a white lab coat, a surgical cap, a face mask, and safety goggles. The scientist is holding a test tube with a dark liquid inside. In the foreground, there is a rack of many small, clear vials. To the left, a round-bottom flask containing a clear liquid sits on a surface, with other laboratory glassware visible in the background.

Kane Biotech is a Canadian biotechnology company engaged in the discovery, development and commercialization of technologies that prevent and disperse microbial biofilms.

Biofilms

- Biofilms are formed when bacteria and/or fungi adhere to surfaces and excrete a glue-like substance that acts as an anchor providing protection from the environment.
- Biofilm formation can make bacteria up to 1000 times more resistant to antibiotics, antimicrobial agents, disinfectants and the host immune system.



Biofilm Related Problem Areas

- **Wound Care – Most expensive area of care in human health**
 - The wound care market is expected to reach USD 22.01 Billion by 2022 ¹
 - Drivers
 - Growing prevalence of diabetes
 - Rapid growth in the geriatric population
 - Developments and innovations in wound care products
 - Increasing funding for wound care research
 - Awareness programs for wound care treatment and management
- **Bovine Mastitis – Most expensive area of care in Animal Health**
 - \$2 billion per year in the U.S. alone, annual costs worldwide estimated at \$35 billion
 - Mastitis treatment market estimated at USD 1.8 billion a year
 - Current treatment options limited to antibiotics

1. <https://www.marketsandmarkets.com/Market-Reports/wound-care-market-371.html>

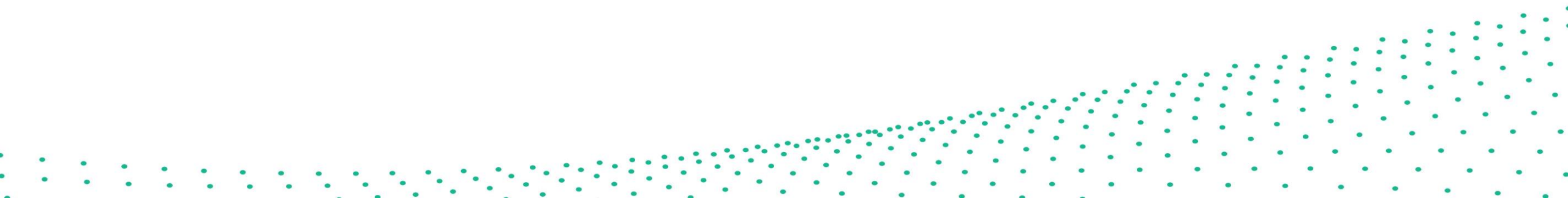
2. 2016 Cornell IGEM study, 2015 Science Daily News Release, Mileutis.com

Overview

- Biofilms are a very expensive problem in a wide variety of industries
 - Human Health
 - Animal Health
 - Industrial
 - Agricultural
- In most cases, there exists no obvious solution to biofilm problems today. Existing solutions are:
 - Ineffective
 - Heavily reliant on antibiotics
 - Costly
 - Toxic
- There currently is no clear frontrunner in the prevention and dispersion of Biofilms. Most research is done in universities or small underfunded biotech companies.
- Kane has the scientific know-how, the technologies, the leadership and the financial partners to take a strong leadership position in biofilms.

Kane Biotech

2015 - STRATEGY



Proof of Concept

- Kane Biotech had 75 patents with applications in various industries
- Decided to focus on Coactive+ for Pet Dental Care for a proof of concept
- The objective was to demonstrate that Kane has the capacity to:
 - Turn its intellectual property into a full line of products
 - License and/or commercialize these products
 - Generate positive cash flows from these products
- Raise funds
- Expand into Human Health

Outcome

- JDA with Nestle Purina – Pet Oral Care
 - Forced Kane to take legal action to protect our IP
- Licensing Agreement with Dechra
 - Sales were struggling

KANE BIOTECH TURNAROUND

Team

- Change of CEO - September 10th 2018
 - Marc Edwards, MBA named new CEO of Kane Biotech
 - Previously on the board since 2016
- Creation of a Scientific Advisory Board – September 24th 2018
 - Rivka Gluck
 - Robert Huizinga
 - Gordon Guay
- Named Gordon Guay PhD - Chief Scientific Officer of Kane Biotech
 - 25 years - Research Fellow at Proctor and Gamble
 - Lead scientist within a range of different P&G business : Oral-B, Gillette, Olay, Right Guard, CoverGirl, Max Factor and Duracell
 - 11 international awards for new products developed

Manufacturing

- Outsourced Manufacturing
 - Provided Kane with the ability to scale sales
 - Preserved strong margins
 - Eliminated \$250,000 in recurring fixed costs
- Updating our Quality Management Systems

Veterinary Market

- Re-engaged Dechra – Veterinary Market Licensing Partner
 - Working on expanding Vetrudent product line (chews, rawhide, toothpaste and powder). Want Dechra to “own” the dental care space in veterinary practices
 - Establishing clear roadmap leading to milestone payments
 - Launch of Dispersin B for Canine Otitis - \$500,000 USD
 - Achieve VOHC accreditation - \$500,000 USD
 - Strong interest in our pipeline
- Developing geographical market expansion strategy

Pet Specialty Market

- **Objective: Become the market leader in the Pet Oral Care category**
 - Area that is currently being neglected by industry leaders
 - Significantly increases the potential value of licensing agreement
- **Launched 4 new products**
 - Dental chew, dental rawhide, dental wipe & a powder version of our water additive
- **Accelerated sales growth on Amazon**
- **1st major sale: \$440,000 order from major North American Retailer**
 - Re-order announced today



Nestle Purina Litigation

- **Current Status**

- Nestle has filed a motion to dismiss which is standard practice; We're waiting for the judge to rule but fully expect the case to proceed. Once the judge rules against the motion to dismiss (assuming that he does) we will move into the discovery phase. This is where we will see just how badly Nestle has treated Kane.

- **Going Forward**

- Kane believes it will be possible to finance this litigation through specialized investment funds
 - Expensive
 - Removes all pressure on cash flow
 - De-risks suit for Kane

Animal Health Going Forward

- **Coactive +**
 - Continue to expand pet oral care product line – Most complete pet oral care product line
 - Veterinary market – Dechra
 - Pet specialty/Online - bluestem brand
 - Launch pet skin care line
 - Veterinary market – License
 - Pet specialty/Online – opportunity to be the most complete pet skin care line (no clear front runner)
- **Dispersin B**
 - Canine otitis
 - Collaboration with University of PEI
 - Bovine mastitis
 - Collaboration with Université de Montréal
 - Wound care
 - Commercialisation of our human wound care hydro gel

HUMAN HEALTH

Strategy

- Complete scientific review with Kane R&D team in Winnipeg
 - October 1st to 3rd 2018 – in Winnipeg
- Outcome: Identified DispersinB Wound Hydro Gel as the best route forward
 - Nothing else like it - Industry benchmark
 - Strong IP protection
 - Currently exists no good solution to treat chronic wounds
- Renewed agreement with Rutgers

Dispersin B

- Unique as it has no antimicrobial or antibiotic effect, dissolves the glue that holds the biofilm together
 - Significantly improving the efficacy of antimicrobials and antibiotics in wounds
- Missing link in Wound Care
 - Has the potential to significantly improve current treatments
 - Efficacious on a significant number of bacterial pathogens
 - Synergistic with a significant number of antimicrobials and antibiotics
 - Very safe and stable enzyme
- Nothing else like it - Industry benchmark

Key Pillar: DispersinB®

One of the best characterized polysaccharides in biofilm is poly-β-1, 6-N-acetylglucosamine (PNAG/PGA) which plays a key role in maintaining the structural integrity and stability

TECHNOLOGY	PRODUCT	ACTIVE INGREDIENTS	FUNCTION	EFFECT ON BACTERIA	EFFECT ON USER	APPLICATION
DispersinB® enzyme	DispersinB® otic drops DispersinB® wound spray	DispersinB® a naturally occurring enzyme produced by a periodontal disease associated oral bacterium, <i>Aggregatibacter actinomycetemcomitans</i> .	DispersinB® specifically cleaves the glycosidic linkages of poly-β-1, 6-N-acetylglucosamine (PNAG),	Growth of biofilm is inhibited and pre-existing biofilms are dispersed.	The ability to treat chronic infections in both humans/ animals that are due to the presence of hard to remove biofilm.	Chronic otic infection Wound care Skin care

DispersinB[®] Efficacy and Synergy in Biofilms

DispersinB[®] In Vitro Efficacy

Actinobacillus actinomycetemcomitans
 Staphylococcus epidermidis
 A. pleuropneumoniae
 Acinetobacter sp.
 S. aureus
 E. coli
 Staphylococcus saprophyticus
 Acinetobacter baumannii
 Bordetella species
 Burkholderia cepacia complex
 Food associated Staphylococci
 Y. pestis
 P. fluorescens
 Staphylococcus pseudintermedius (MRSP)
 Coagulase negative staphylococci CoNS 42
 Vancomycin resistant enterococci (VRE) 143

DispersinB[®] Antimicrobial Compatibility

Cefamandole nafate (0.05-0.1 ug/ml)
 Chlorhexidine (0.2ug/ml)
 Ciprofloxacin (200ug/ml)
 5 Fluorouracil (100-250ug/ml)
 BisEDT (0.5mM)
 Triclosan (1.25-0.325 ug/ml)
 Sodium usnate
 5FU (10mg/ml)
 Silver Alginate II
 Salicylic acid 1-2 mg/ml
 Tobramycin (5 ug/ml)
 Gentamicin (25-100 ug/ml)
 Teicoplanin (10mg/ml)

Preclinical Safety studies conducted on DispersinB + Triclosan wound gel

Study	Critical question to answer	Pass
13 Week Biocompatibility and Toxicity In Rabbit Dermal (Abraded) Application	Biocompatibility and toxicity	✓
Cytotoxicity assay for liquids using L-929 mouse fibroblast cells	Toxicity	✓
In Vitro Mouse Lymphoma Assay	Genotoxicity	✓
In Vivo Mouse Micronuclease Assay	Genotoxicity	✓
Bacterial Mutagenicity test-Ames Assay (mutations in bacteria)	Mutagenicity	✓
Primary Skin Irritation	Irritation	✓
Iso Guines Pig Maximization Sensitization Test	Sensitization	✓

In vitro safety studies conducted by others

Study	Author	Pass
In vitro Cytotoxicity of DispersinB to human larynx carcinoma (HEp-2) ATCC CCL-23 cells	(Donelli et al 2007)	✓
In vitro Cytotoxicity of DispersinB to Human oral mucosal keratinocyte cell line OKF6/TERT-1, Mouse fibroblast cell line NIH/3T3, Human buccal epithelial cell line TW2.6:	Kaplan	✓
In vitro attachment of human osteoblast cell to DispersinB containing polymeric matrix	(Svetlana <i>et al</i> 2012)	✓

In vivo efficacy studies conducted by Kane R&D and others

Study	Author	Results
Rabbit model of <i>S. aureus</i> infection	(Darouiche et al 2009)	3.3% of Subcutaneous implantation of DispersinB+triclosan treated catheters and 96.7% uncoated control catheters became colonized with <i>S. aureus</i>
Sheep model pRB1 of <i>S. aureus</i> infection	(Serrera et al. 2007)	Port locks containing 40µg/ml DispersinB and 10mg/ml Teicoplanin, Teicoplanin alone, and no-treatment was tested. DispersinB reduced catheter colonization by <i>S. aureus</i> by 50% and DispersinB did not cause any adverse effect on animals
Chronic wound mouse model of MRSA infection	(Gawande et al 2014)	Surgical excision wound infected with <i>S. aureus</i> was treated with Acticoat™ alone or a combination of Acticoat & DispersinB® wound spray and Acticoat™. The bacterial load was compared between different groups two days after treatment. Combination treatment showed 3 log ₁₀ reduction of bacterial load

Life Cycle Extension

- Bandages and gauzes
- Dissolving wound dressing films
- Pre-surgical wash
- Skin cleanser – acne and other bacterial skin conditions

FINANCING

Financing

- Currently evaluating financing structure options
 - Objective to raise \$5 to 7\$ million CAD
- Western Economic Diversification Canada
 - Submitted a \$7.7 million project
 - Loan up to 50% of project - Interest free loan, delayed reimbursement
- DOD - MTEC
 - \$3.75M USD grant submitted
 - Reviewed & obtained favorable preliminary rating
- Warrants
 - \$6M
- Nestle Purina Lawsuit
 - \$300,000 legal fee financing

Summary

- Kane biotech has undergone a major turnaround in the past 140 days:
 - Relaunched our Animal health business
 - Created a scientific advisory board
 - Hired a world class CSO
 - Clinical and regulatory roadmap for DispersinB technology platform
 - Wound care – “missing link”
 - Other high cost markets
- Summarize key points of what we have accomplished
- Update on our strategy going forward

A full-page background image with a blue color cast. It depicts a scientist in a laboratory setting, wearing a white lab coat, a surgical cap, a face mask, and safety goggles. The scientist is holding a test tube with a dark liquid inside. In the foreground, there is a rack of many small, clear vials. To the left, a round-bottom flask containing a clear liquid sits on a surface, with other laboratory glassware visible in the background.

Kane Biotech is a Canadian biotechnology company engaged in the discovery, development and commercialization of technologies that prevent and disperse microbial biofilms.