Sementis AGM
November 2019

CEO Presentation

Disclaimer

We believe that the information in this presentation is correct and any opinions and conclusions are reasonably held or made, based on the information available at the time of its compilation, but no representation or warranty, either expressed or implied, is made or provided as to accuracy, reliability or completeness of any statement made in this presentation.

Sementis does not accept any liability for any loss or damage arising out of the use of all or any part of this presentation.

This presentation has been prepared without taking into account the objectives, financial situation or needs of any particular individual.

The distribution of this presentation outside Australia may be restricted by law, and any person who resides out of Australia and who obtains a copy of this document should seek advice on, and observe, any such restriction.

This document does not constitute an offer or invitation in any place where, or to any person to whom, it would not be lawful to make such an offer or invitation and no action has been taken that may be necessary to permit an investment in Sementis in any jurisdiction outside Australia.

FORWARD LOOKING STATEMENTS

This presentation may include predictions, estimates or other information that might be considered forward-looking. These forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from what is suggested here.

No representation is made that any forward-looking statement will in fact occur. You are cautioned not to place undue reliance on these forward-looking statements when evaluating this presentation, which reflect our opinions only as of the date of this presentation.

Sementis does not undertake any obligation to publicly update forward-looking statements to reflect subsequent events or circumstances.

There are many risks for Sementis, many of which involve factors that cannot be controlled by board of Sementis. Sementis cannot provide any assurance that any known or unknown risks will not adversely affect its business or financial position in the future.

Management Team

Dr Paul Howley: ***Co-founder, Inventor of SCV technology, CEO and Chief Scientific Officer***
Scientific background in the field of molecular virology & vaccinology. Inventor of the SCV vaccine delivery technology and of a number of vaccines in development.

Peter Wulff: ***Board Director, VP, Business Development & IPR***
Ex CEO of Bavarian Nordic, brings to Sementis business development experience and expertise in the Biotech and vaccine industry.

Mei Cockerall: ***Financial Controller***
CPA. Previous experience in Biotech: Virax Holdings Ltd.

Board of Directors

Maurice O'Shannassy: *Non-executive Chairman*
25yrs experience in the financial services industry. Currently holds a number of Directorships in a variety of industries and not for profit organizations.

Dr Paul Howley: *Co-founder, Inventor of SCV technology, CEO and Chief Scientific Officer*
Scientific background in the field of molecular virology & vaccinology. Inventor of the SCV vaccine delivery technology and of a number of vaccines in development.

Peter Wulff: *Board Director, VP, Business Development & IPR*
Ex CEO of Bavarian Nordic, brings to Sementis business development experience and expertise in the Biotech and vaccine industry.

Dr Glen Burgess, MB, BS, FRACS: *Non-Executive Director*
Otolaryngologist , Head and Neck surgeon. Principal of Southern ENT, and Director of Monash Health, Snoring and Sleep Apnoea Clinic. Lecturer (adj) at Monash University Dpt of Surgery.

Michael Hickinbotham, BEc, LLB(Hons): *Non-Executive Director*
Managing Director of the Hickinbotham Group – the largest property development group in South Australia.

Martyn Evans, BSc, GdipBA: Non-Executive Director
Former member of State and Federal Parliament and held the office of South Australian Minister for Health of Federal Shadow Minister of Science.

Corporate Structure

Shares on Issue: 1.4 Billion

Number of shareholders: 60

Shareholdings:
1st Major Share Holder – 48%
2nd Major Share Holder – 26%
3rd Major Share Holder – 7.5%
4th Major Share Holder – 7%

Debt Obligations: None (no loans or Convertible Notes on issue)
Infrastructure: None (no rents or leases)

I**n-licensing**: ThermoFisher CHO cell line

- one-off single license covers Infectious diseases and therapeutics
  - No licensing maintenance fees
  - No royalty out-reach

SCV-chikungunya/Zika vaccine clinical development

Manufacturing:

GMP SCV cell substrate manufacture and biosafety testing:

- Master Cell Bank: manufactured by CSIRO (Melbourne) and biosafety tested by Sartorius (UK)
- Working Cell Bank: manufactured by CSIRO (Melbourne) and biosafety tested by Sartorius (UK)

GMP SCV1002 (CHIK/ZIKA vaccine)

- Master vaccine seed: manufactured by CSIRO (Melbourne) and biosafety tested by Sartorius (UK)
- Working vaccine seed: manufactured by CSIRO (Melbourne) and biosafety tested by Sartorius (UK)
- Clinical batch: still in process development, expected to start GMP manufacturing in sometime in Q1 of 2020

Toxicology:

As soon as the clinical batch has be manufactured by CSIRO, toxicology will commence in parallel with biosafety testing. Toxicology will take 6 months and expected to be completed Q3 2020

Clinical Trial:

- 16 volunteer open labelled safety and immunogenicity study
- Clinical trial will be carried out by CMAX in Adelaide and managed by CNS in Brisbane.
- Expected to start when toxicology study has been completed and regulatory approval has been granted
- Expected to start clinical trial Q3 or Q4 of 2020
- Clinical trial will conclude H1 of 2021

SCV-Peanut Hypoallergy vaccine clinical development

Manufacturing:

GMP SCV-PHAV (Peanut hypoallergy vaccine)

- Master vaccine seed: expected to manufacture Q2 2020 by CSIRO manufactured by CSIRO (Melbourne). Biosafety testing will be done by Sartorius (UK)
- Working vaccine seed: expected to manufacture Q2 2020 by CSIRO manufactured by CSIRO (Melbourne). Biosafety testing will be done by Sartorius (UK)
- Clinical batch: expected to manufacture Q2 2020 by CSIRO manufactured by CSIRO (Melbourne). Biosafety testing will be done by Sartorius (UK)

Toxicology:

- Expected to start Q3 2020 and be completed by Q4 2020 or Q1 2021

Clinical Trial:

- ~70-80 volunteer Phase 1/2a double blinded placebo controlled
- Clinical trial will be carried out by CMAX in Adelaide and managed by CNS in Brisbane.
- Expected to start when toxicology study has been completed and regulatory approval has been granted
- Expected to start clinical trial Q2 or Q3 of 2021
- Clinical trial will conclude end of 2021 or start of 2022

SCV-universal influenza A & B vaccine

Vaccine Construction and proof of concept studies:

- Vaccine construction on-going – expect to finish mid 2020
- Protection studies in mice – expect to finish by end of 2021
- Protection study against highly pathogenic avian influenza A (H5N1) in ferrits - by the end of 2020

Manufacturing: GMP SCV-UniFluAB (universal influenza A & B vaccine)

- Master vaccine seed: expected to manufacture H2 2020 or H1 2021 by CSIRO manufactured by CSIRO (Melbourne). Biosafety testing will be done by Sartorius (UK)
- Working vaccine seed: expected to manufacture H2 2020 or H1 2021 by CSIRO manufactured by CSIRO (Melbourne). Biosafety testing will be done by Sartorius (UK)
- Clinical batch: expected to manufacture H2 2020 or H1 2021 by CSIRO manufactured by CSIRO (Melbourne). Biosafety testing will be done by Sartorius (UK)

Toxicology:

- Expected to start after manufacturing of clinical batch - H2 2020 or H1 2021.
- Toxicology will take 6 months to complete

Clinical Trial:

- Phase 1 clinical trial is planned for 2022
- ~120 volunteer study, double-blinded Placebo controlled safety and immunogenicity study
- Testing three doses of vaccine Low, mid, high doses)

Business Opportunities

Technology Evaluation Agreement with undisclosed Big Pharma:

Big Pharmaceutical Company Evaluating Sementis' SCV Technology

- Sementis to construct a test vaccine
- Sementis to carry out stability experiments
- BigPharma – vaccinology experiments in mice
- BigPharma – Monkey Vaccination study to test protection against target disease causing agent
- 18 Month evaluation study (started September 2018)
- Next Step – partnership agreement

Up date:

- Experiment vaccine constructed and tested for genetic stability
- First immunogenicity study in mice completed
- Preparing for a second immunogenicity study in NHP – expected to start H1 2020

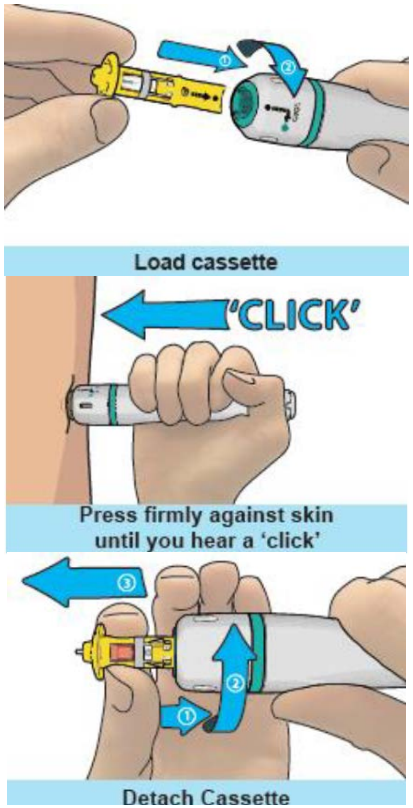
- Extension of evaluation to testing an SCV-Ebola vaccine – drawing work plan and contract expention. Possible income of ~$700,000 for vaccine construction and evaluation testing (still to be negotiated)

Business Opportunities

Technology Evaluation Agreement with Enesi Pharma:

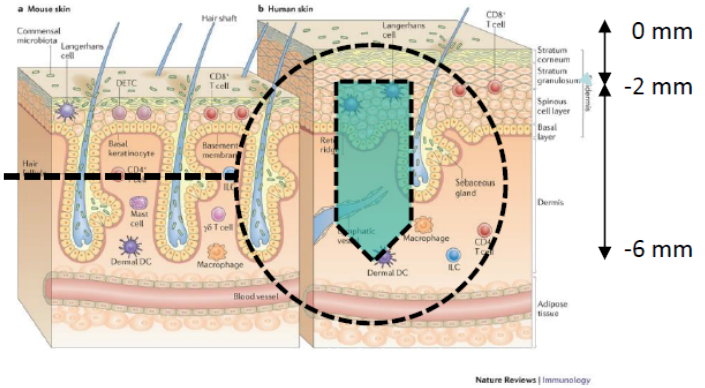
Sementis Evaluating Enesi Pharma ImplaVax Technology

- Implavax Technology – Needle-free thermo-stable vaccine delivery technology
- Sementis to carry out immunogenicity studies in mice with respect to infectious disease vaccines and allergy vaccine
- Enesi – to carry out vaccine stability studies



Universal Vaccine Implant (UVI)

- unit solid dose
- needle free, syringe free
- stored safely inside cassette until delivery
- eliminates need for point-of care reconstitution with diluent
- eliminates needle-stick-injury and sharps disposal challenge
- unit dose delivery assured – each time every time
- enhanced stability
- reduces / eliminates cold chain



Business Opps

InProTher – HIV vaccine development

- Danish Company with HIV vaccine development background
- Evaluation only agreement (MTA) in place
- Sementis to construct SCV vaccine with InProTher proprietary HIV antigen
- InProTher to test vaccine efficacy in HIV preclinical models

- Contractual agreement still on-going

Intellectual Property

The Company has filed the following:

Peanut Allergy vaccine antigen design

PCT filing March 2014
International Application Number: PCT/AU2014/000286
International Publication Number: WO 2014/138824A1
National phase examinations: US, EU, ZA, CN, KR, MY, CA, HK,
Granted: NZ, SG, RU, AU, IL, JP

SCV Production Cell Line

PCT filing November 2014
International Application Number: PCT/AU2014/050330
International Publication Number: WO 2015/061858
National phase examinations: NZ, US, CN, IL, MY, JP, CA, IN
Granted: SG, ZA, RU, EU, AU, HK, KR

Chikungunya & Zika virus multivalent Vaccine

PCT filing August 2017
International Application Number: PCT/AU2017/050879
National phase examinations: AR AU BR CA CL CN EPO HK ID IL IN JP KR MX MY NZ RU SG TH TW US VE VN ZA

Laboratories and collaborations

University of South Australia (UniSA)
Scientific work carried out in the Experimental Therapeutic Laboratories (ETL) headed and run by Assoc. Prof. John Hayball

Lab staff:
- 4 PhD scientists
- 2 Research assistants

UniSA/ETL ensures:
- Laboratory facilities to accommodate scientist and access to service facilities, eg, animal house, sequencing, pathology
- OH&S compliant (Assoc. Prof. Hayball's responsibility)
- HR management of staff (employment contracts, monthly salary payments etc)
- OGTR compliant (Assoc. Prof. Hayball's responsibility)

Note:
- Staff are official employees of UniSA but contracted to work on Sementis projects only
- Sementis manages and directs the scientific work through Paul Howley (UniSA Adjunct Senior Research Fellow)

Laboratories at University of South Australia (UniSA)

Laboratories at University of South Australia (UniSA)

UniSA team working on the Sementis projects