

ASX ANNOUNCEMENT

INVESTOR DECK – to be presented at the Share Café "Hidden Gems" Webinar

18 September 2020

Melbourne, Australia: Exosome medicine company Exopharm Limited (ASX:EX1) advises that it will be presenting the attached Investor Deck to the Share Café Hidden Gems webinar, Friday 18 September 12:30 EST. The webinar is open to the public but requires registration at https://exo.ph/Sep2020HiddenGems.

This presentation provides additional information about the PLEXOVAL II study and outlines Technology program progress and milestones.

This announcement has been approved by the Board for release to the ASX.

Company and Media Enquiries:

Join our mailing list to receive updates: http://exo.ph/ExoMails www.exopharm.com P: +61 (0)3 9111 0026

Rudi Michelson Monsoon Communications Tel: +61 (0)3 9620 3333 rudim@monsoon.com.au

ABOUT EXOPHARM

Exopharm Limited (ASX:EX1) is a clinical-stage Australian exosome medicine company developing naive exosome products for regenerative medicine and engineered exosomes for new precision medicines.

Exosomes (or EVs) are small particles naturally produced by cells, which deliver therapeutic 'cargoes' to other cells to reduce inflammation and promote regeneration. EVs are plentiful in our youth but decline with age. Recent research points to naïve EV medicines as a way to extend the number of healthy, functional years. EVs secreted by stem cells could be used instead of stem-cell therapy with equal or greater benefit, without the problems of stem-cell therapies.

Engineered EVs (EEVs) are the most significant emerging technology for precision medicine. By altering proteins on the surface of EVs and adding custom cargoes such as RNA and small molecules, EEVs hold promise in a variety of

untreatable diseases. This promise has led to a number of major development deals within the small community of EEV capable companies such as Exopharm.

While trillions of exosomes are produced by stem cells, the real challenge is to 'purify' them as drug products. Exopharm owns a purification technology called Ligand-based Exosome Affinity Purification (LEAP). LEAP technology and associated know-how places Exopharm at the forefront of this emerging field worldwide. Exopharm is at clinical stage with pending and current trials for wound healing, hearing loss and osteoporosis.

FORWARD LOOKING STATEMENTS

This announcement contains forward-looking statements which incorporate an element of uncertainty or risk, such as 'intends', 'may', 'could', 'believes', 'estimates', 'targets', 'aims', 'plans' or 'expects'. These statements are based on an evaluation of current corporate estimates, economic and operating conditions, as well as assumptions regarding future events. These events are, as at the date of this announcement, expected to take place, but there cannot be any guarantee that such events will occur as anticipated or at all given that many of the events are outside of Exopharm's control or subject to the success of the Development Program. Furthermore, the Company is subject to several risks as disclosed in the Prospectus dated 6 November 2018.

INHERENT RISKS OF INVESTMENT IN BIOTECHNOLOGY COMPANIES

There are a number of inherent risks associated with the development of biopharmaceutical products to a marketable stage. The lengthy clinical trial process is designed to assess the safety and efficacy of a drug prior to commercialisation and a significant proportion of drugs fail one or both of these criteria. Other risks include uncertainty of patent protection and proprietary rights, whether patent applications and issued patents will offer adequate protection to enable product development, the obtaining of necessary drug regulatory authority approvals and difficulties caused by the rapid advancements in technology. Companies such as Exopharm are dependent on the success of their research and development projects and on the ability to attract funding to support these activities. Investment in research and development projects cannot be assessed on the same fundamentals as trading and manufacturing enterprises. Therefore, investment in companies specialising in drug development must be regarded as highly speculative. Exopharm strongly recommends that professional investment advice be sought prior to such investments.



Shareholder Update

"Hidden Gems" 18 September 2020

Chris Baldwin



IMPORTANT INFORMATION



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Exopharm Ltd – Summary



Overview

- Exopharm is an Australian clinical stage biotechnology company with a rapidlydeveloping technology platform for turning exosomes into medicines
- 28 staff (currently) based in Melbourne, Victoria
- Publicly-traded on the ASX (ASX:EX1) (listed Dec 2018)

Financials (as of 15/09/2020)

- 119.34 million shares outstanding with a market capitalisation of ~ \$35 million
- Cash balance of > \$6 million (excludes R&D credit ~ \$2.1m; excludes Tranche 2 awaiting shareholder approval ~ \$4.3m)
- Quarterly burn rate (forward looking) of ~ \$2.1 million

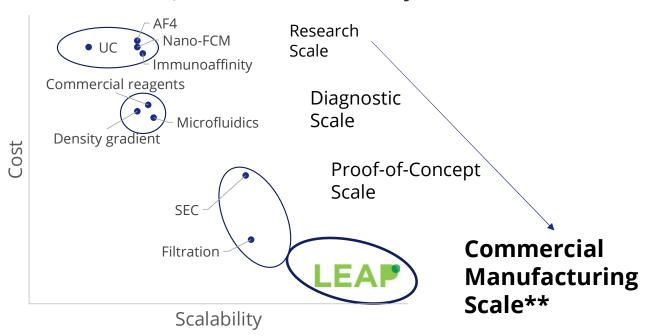
Priorities

- Leverage our unique access to exosomes to partner with established biopharmaceutical and cell therapy companies
- Advance novel products through early phase clinical development
- Accelerate the development of our exosome generation, manufacturing and characterization technologies

LEAP™ is the *Only* Commercial-scale EV Purification Technology



State of the Art, EV Purification as of June 2020*



* Adapted from https://doi.org/10.1016/j.tibtech.2020.05.012
Technologies and Standardization in Research on Extracellular Vesicles

Srujan Gandham,^{1,4} Xianyi Su [©], ^{2,4} Jacqueline Wood [©], ^{2,4} Angela L. Nocera, ¹ Sarath Chandra Alli, ^{2,3} Lara Milane, ¹ Alan Zimmerman [©], ² Mansoor Amiji, ¹ and Alexander R. Ivanov [©], ^{2,*}

Unlike all other alternatives, LEAP technology

- (i) is readily scaled up to over 1,000L scale,
- (ii) uses industry-standard equipment and processes
- (iii) uses low-cost, reusable consumables (from validated sterilization process)
- (iv) is a proprietary process that creates proprietary products

^{**} LEAP assessment from Exopharm, based on industrial use to date; LEAP Patents processing through National phases at present

Technology

Three Development Areas



Naïve EVs (NEVs)

- EVs from stem cells and blood donations
- Well-established safety profile from millions of transfusions and adult stem cells
- A replacement for stem cell therapies
- Potential to treat age-related degeneration





Engineered EVs (EEVs)

- EVs that deliver drugs, proteins and/or nucleic acids into specific cells
- Nearly unlimited potential to treat untreatable diseases
- Clear pathway to partnership deals



Production, purification, formulation, engineering

- LEAP technology provides unique, high volume process for proprietary EVs
- Leverage availability of EVs to broaden technology offerings in an emerging field



Technology Update



Optimizing and scaling processes, building out leadership

- Alison Mew (Centre for Biopharmaceutical Excellence, ex-CSL) to lead Process and Product Development work
- Gregor Lichtfuss (co-founder, COO) to develop facility plan and lead in-licensing efforts, IP extensions

Preparing for product sales, raw materials supplies

- Research-scale tools and quantities for establishment of standards, methodologies (LEAP, Exoria™)
- Collaborations to supply investigator-led clinical studies



Technology: Strategy and Progress



Strategy: More. Explore opportunities to license IP, sell products, and supply raw materials.

Progress:

Internal

- COGS-focused scale up of manufacturing
- Attracting expertise
- Developing facility plan

External

- Exploring sales to peers, researchers
- Continue partnering discussions for EV manufacture





= Achieved in CY 2020



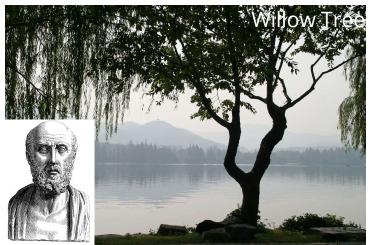
= Targeted for CY 2020



From Bark to Medicine



400 BC



Hippocrates



Natural source of salicin

1899







Manufacture of acetylsalicylic acid (aspirin)

Same active ingredient, different commercial outcome

- Once the active ingredient in willow bark was identified, Bayer discovered how to manufacture it
- Bayer's aspirin fuelled its growth into one of the world's greatest pharma companies

From Cells to Medicine



2000 AD

Mesenchymal stem cells regenerate tissue, so grow them and transplant them into patients



"Off-the-shelf" stem cells

2020's

MSC EVs are the active ingredient, with the potential to deliver a truly off-the-shelf treatment



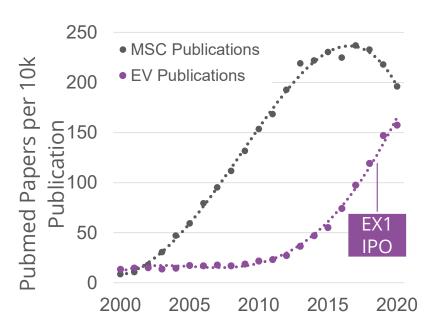
Potential EV Medicine

Same active ingredient, different commercial outcome

- Exopharm solved core manufacturing problem with LEAP
- Let adult stem cell clinical companies identify uses and resolve regulatory pathways
- Follow quickly with safer, more economical offering

Naïve EV's are the **Future of Regeneration**, Exopharm is the World Leader in NEVs





Naïve EVs (NEVs)

- Stem cell benefits, without the risks and costs
- Targeted to mobility and sensory indications (sight, osteoarthritis hearing, neural degeneration)

Exosome redux

news feature

Adult stem cell companies are pivoting their businesses to commercialize exosomes as therapeutics.

NATURE BIOTECHNOLOGY | VOL 37 | DECEMBER 2019 | 1395-1400 | www.nature.com/naturebiotechnology

December 2019

- **14** Exosome companies reviewed globally
- 5 Companies planning Clinical Trials with exosome medicines
- 1 excpharm

FIRST company to report human dosing (Jan 2020)

PLEXOVAL II: Update



"A Prospective, Randomised, **Double Blind, Placebo Controlled**, single dose, single site **phase I study to assess the safety and biological activity** of a Human non-autologous platelet derived **Extracellular Vesicle therapy** vs placebo on **wound healing** rate following skin punch biopsy in healthy volunteer adults" (Trial registration number CT-2020-CTN-01678-1)

Plexaris safety study using Lifeblood supplied platelets

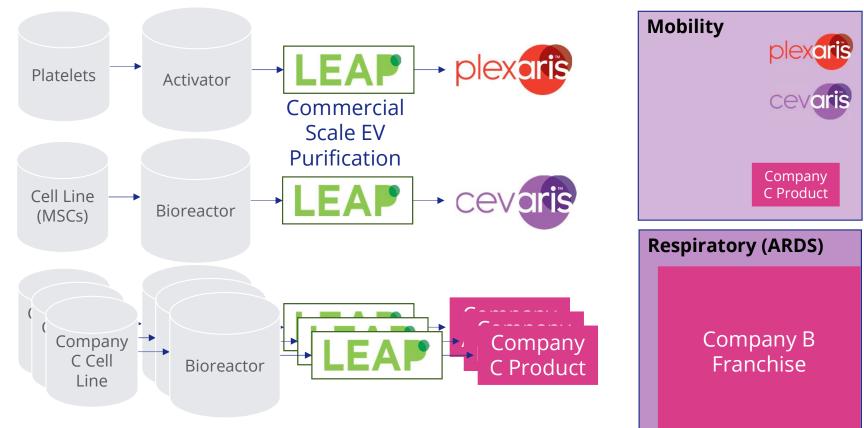
- 15 subjects
- Participant recruitment started, screening underway

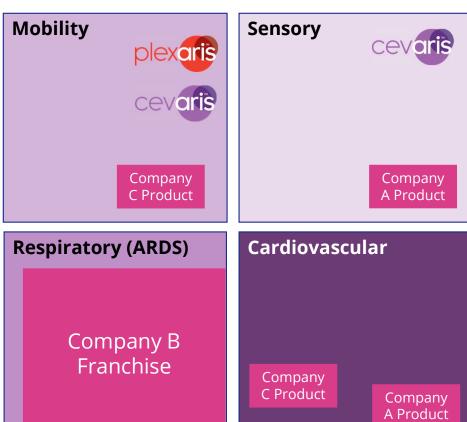
Target final dosing by Dec 2020



Naïve EV Factory/Regulatory Springboard







Disease Areas

Naïve EVs: Strategy and Progress



Strategy: Build manufacturing and regulatory stepping stones. When adult stem cell companies score wins, follow with more economical, safer offering

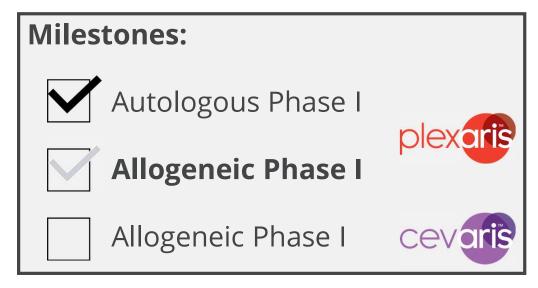
Progress:

Plexaris™ (EVs from platelets)

- Demonstrated manufacturing process for delivering safe EV treatments
- Demonstrating allogeneic safety

Cevaris™ (EVs from MSCs)

- Demonstrated efficacy in non-clinical work on sensory and mobility indications
- Preparing for Phase I study in humans





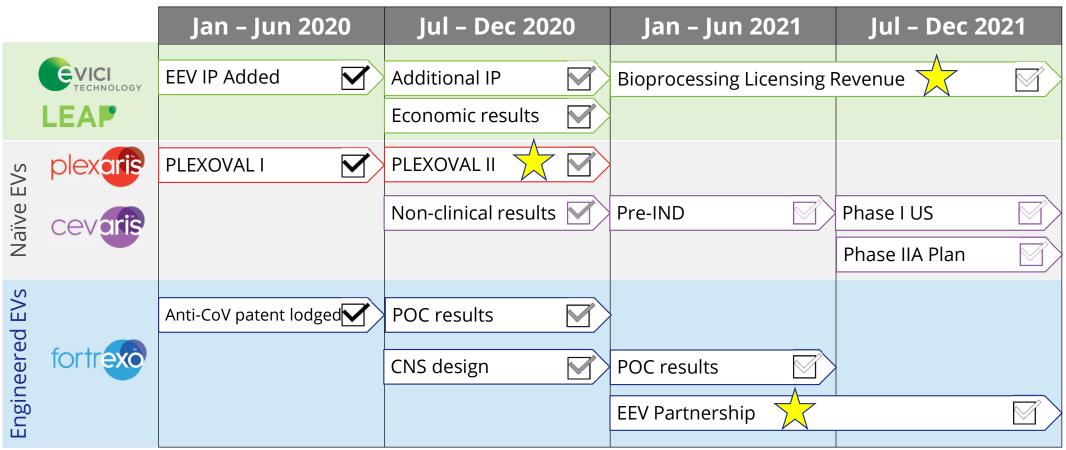
= Achieved in CY 2020



= Targeted for CY 2020

Exopharm has Clear Paths to Revenue: Milestones Toward Revenue

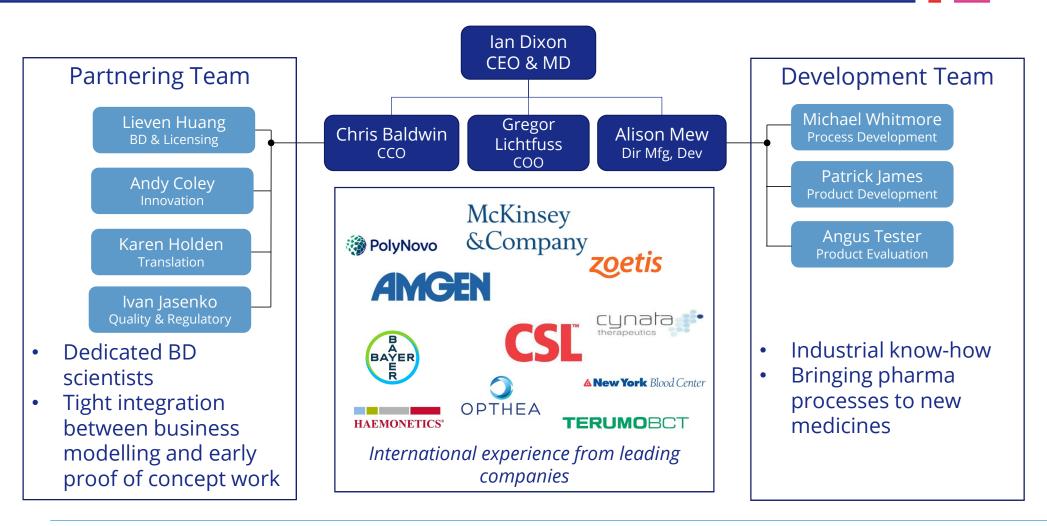






Our Team is Built to Succeed





What We Believe, What We Do



EV medicines will transform healthcare

Exopharm's leads world in the clinical development of Naïve EVs Engineered EV program offers high-value, near term pathway to revenue

Exopharm's team has the experience and capability to capture its opportunities

Exopharm Ltd. Refreshing Medicine, Today

Thank you

Dr Chris Baldwin

Chief Commercial Officer chris.baldwin@exopharm.com +61 450 290 280

www.exopharm.com