# 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.

exopharm

# Shareholder Update

"Hidden Gems"
18 September 2020

Chris Baldwin

# IMPORTANT INFORMATION

**Purpose of presentation:** This presentation (including this document, any related video or oral presentation, any question and answer session and any written or oral material discussed or distributed in relation to this presentation) has been prepared by Exopharm Limited (ACN 163 765 991) (**Exopharm** or **Company**). This presentation is intended for sophisticated or professional investors (as those terms are defined in the *Corporations Act 2001* (Cth)), and their professional investment advisors and has been prepared for the sole purpose of providing general high-level information on Exopharm and its operations.

**Not an offer or solicitation:** This presentation is not investment advice nor an offer to subscribe for securities or otherwise invest in Exopharm, and it should not be relied upon to make any investment decision.

**Nature of presentation:** This presentation is not a prospectus, product disclosure statement or other investment disclosure document, and the level of disclosure in this presentation is less than such disclosure documents. This presentation does not purport to contain all of the information that a prospective investor may require to make an evaluation of Exopharm or its business activities and nothing in this presentation is, or is intended to be, a recommendation to invest in Exopharm. Exopharm does not purport to give financial or investment advice. No account has been taken of the objectives, financial situation or needs of any recipient of this presentation.

**Forward-looking statements:** This presentation may contain forward-looking statements which may be predictive in nature and incorporate an element of uncertainty or risk, such as 'intends', 'may', 'could', 'believes', 'estimates', 'targets' or 'expects'. These statements are based on an evaluation of current economic and operating conditions, as well as assumptions regarding future events. These events are, as at the date of this presentation, expected to take place, but there cannot be any guarantee that such will occur as anticipated, or at all, given that many of the events are outside Exopharm's control. The stated events may differ materially from results ultimately achieved. Accordingly, neither Exopharm nor any of its directors, employees, contractors or advisors make any warranty or assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this presentation will actually occur. Further, other than as required by law, Exopharm may not update or revise any forward-looking statement if events subsequently occur or information subsequently becomes available that affects the original forward-looking statement.

**Disclaimer:** Neither Exopharm nor its officers, employees, contractors or advisors give any warranty or make any representation (express or implied) as to the accuracy, reliability, relevance or completeness of the material contained in this presentation. Nothing contained in this presentation is, or may be relied upon as a promise, representation or warranty, whether as to the past or the future. Except for statutory liability which cannot be excluded, Exopharm, its officers, employees, contractors and advisors expressly disclaim any responsibility for the accuracy or completeness of the material contained in this presentation and exclude all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person as a consequence of any information in this presentation or any error or omission therefrom.

**Professional advice:** Recipients of this presentation should consider seeking appropriate professional financial, taxation and legal advice in reviewing the presentation and all other information with respect to Exopharm and evaluating its business, financial performance and operations.

**Confidentiality and copyright: While this is a non-confidential presentation, it still provides confidential and commercially sensitive information which is provided for the intended recipient only. Organisations or Persons viewing this presentation must not disclose the presentation or its contents to any third parties other than external consultants of the recipient for the purposes of obtaining a professional review, financial, taxation or legal advice, or as required by law or court order. Exopharm holds the copyright in this paper. Except as permitted under the *Copyright Act 1968* (Cth), this paper or any part thereof may not be reproduced without Exopharm's written permission.**

# Exopharm Ltd – Summary

## Overview

- Exopharm is an Australian clinical stage biotechnology company with a rapidly-developing 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)

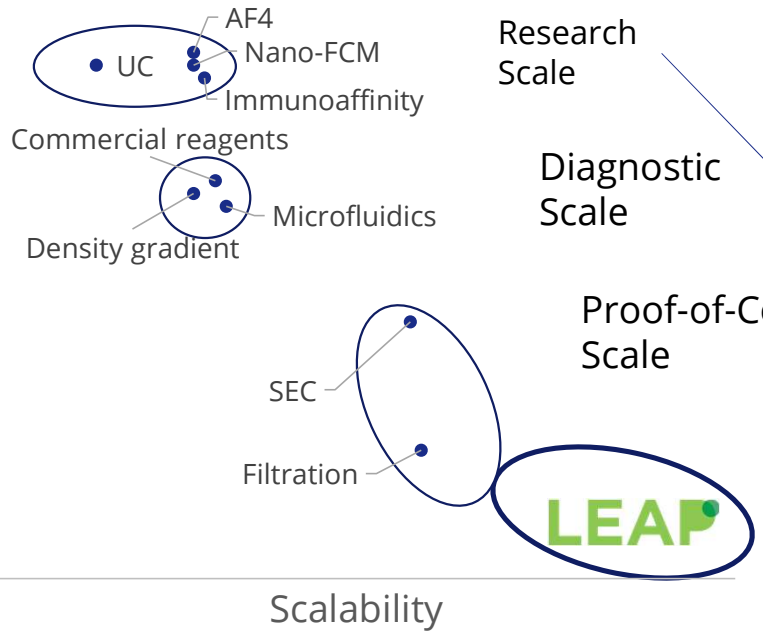
- 119.34 million shares outstanding with a market capitalisation of ~ $35 million
- Cash balance of > $6 million (excludes R&D credit ~ $2.1m; excludes Tranche 2 awaiting shareholder approval ~ $4.3m)
- Quarterly burn rate (forward looking) of ~ $2.1 million

## 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

# Three Development Areas

Therapeutic 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

plexaris™ cevaris™

## 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

fortrexo™

Technology

## 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

eVICI TECHNOLOGY

# 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

VICI TECHNOLOGY

# 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

**Milestones:**

- ☑ Manufacture all PLEXOVAL II material
- ☑ Add additional IP
- ☐ Early sales, supply agreements

LEAP

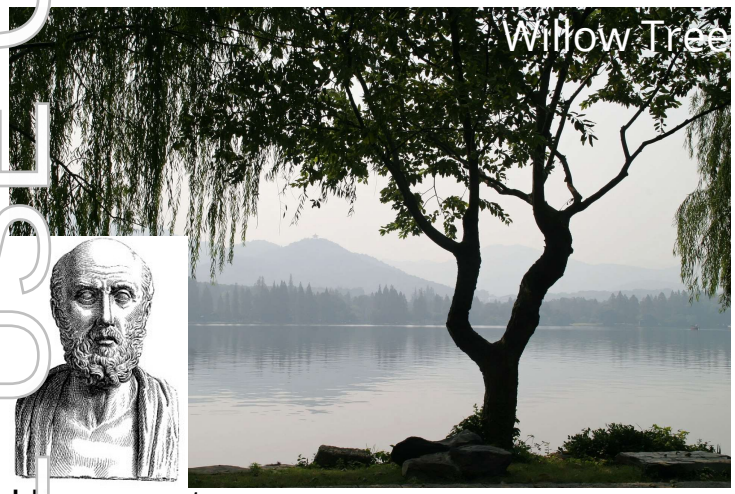
☑ = Achieved in CY 2020

☑ = Targeted for CY 2020

VICI TECHNOLOGY

# From Bark to Medicine

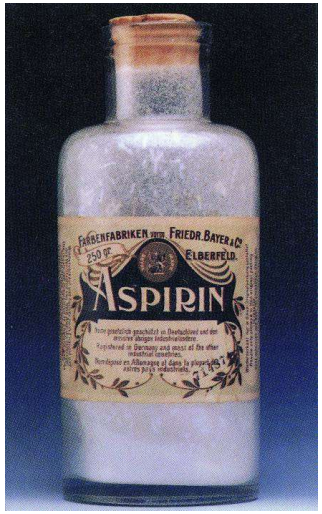
400 BC

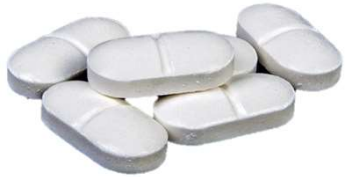



Hippocrates

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**

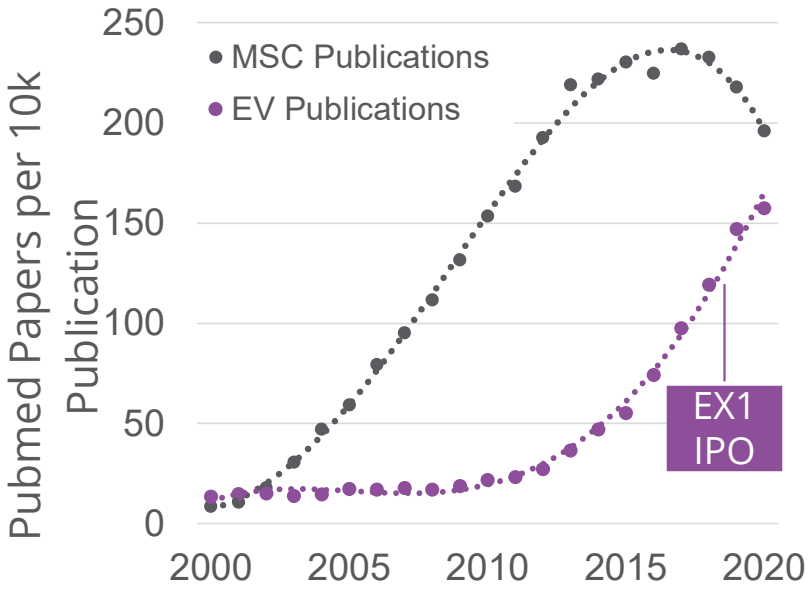
MSC EVs are the active ingredient, with the potential to deliver a truly off-the-shelf treatment

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)

news feature

### Exosome redux

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** exopharm FIRST company to report human dosing (Jan 2020)

# PLEXOVAL II: Update

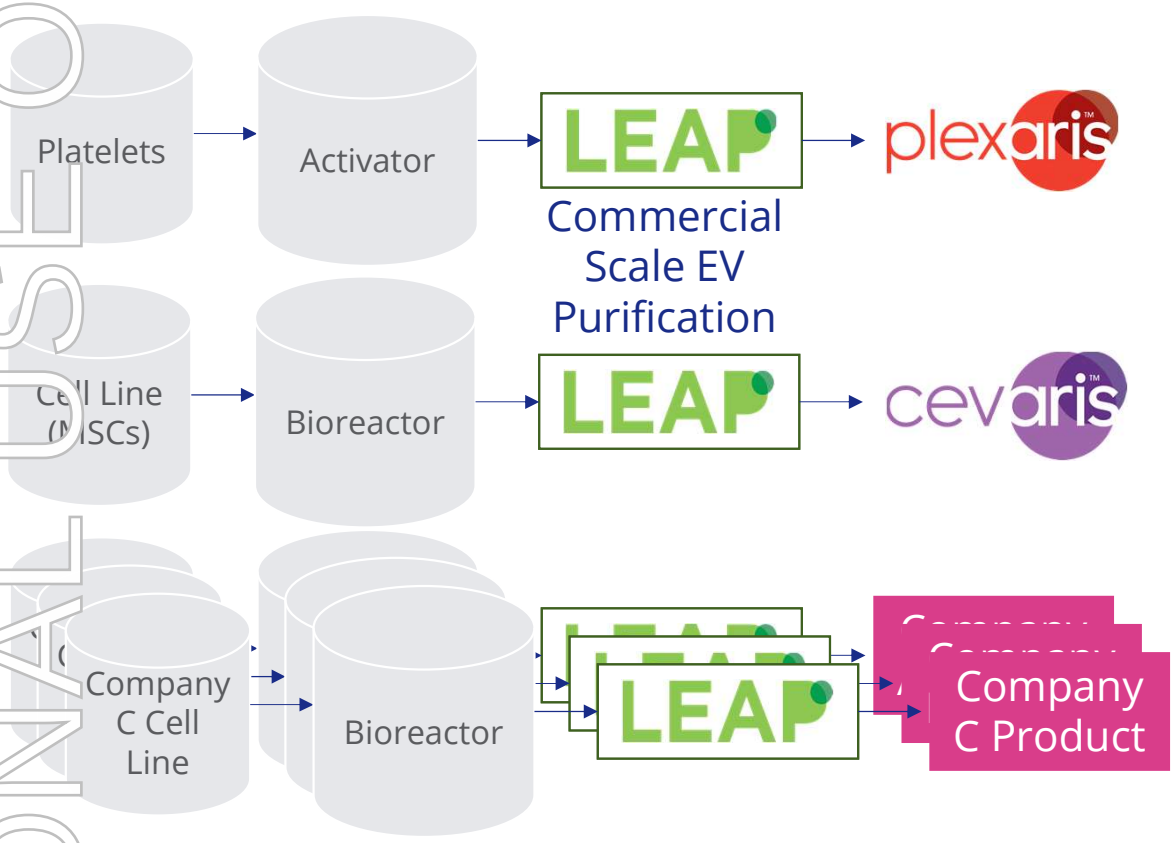
"A Prospective, Randomised, **Double Blind, Placebo Controlled**, single dose, single site **phase I study to assess the safety and biological activity** of a Human non-autologous platelet derived **Extracellular Vesicle therapy** vs placebo on **wound healing** rate following skin punch biopsy in healthy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

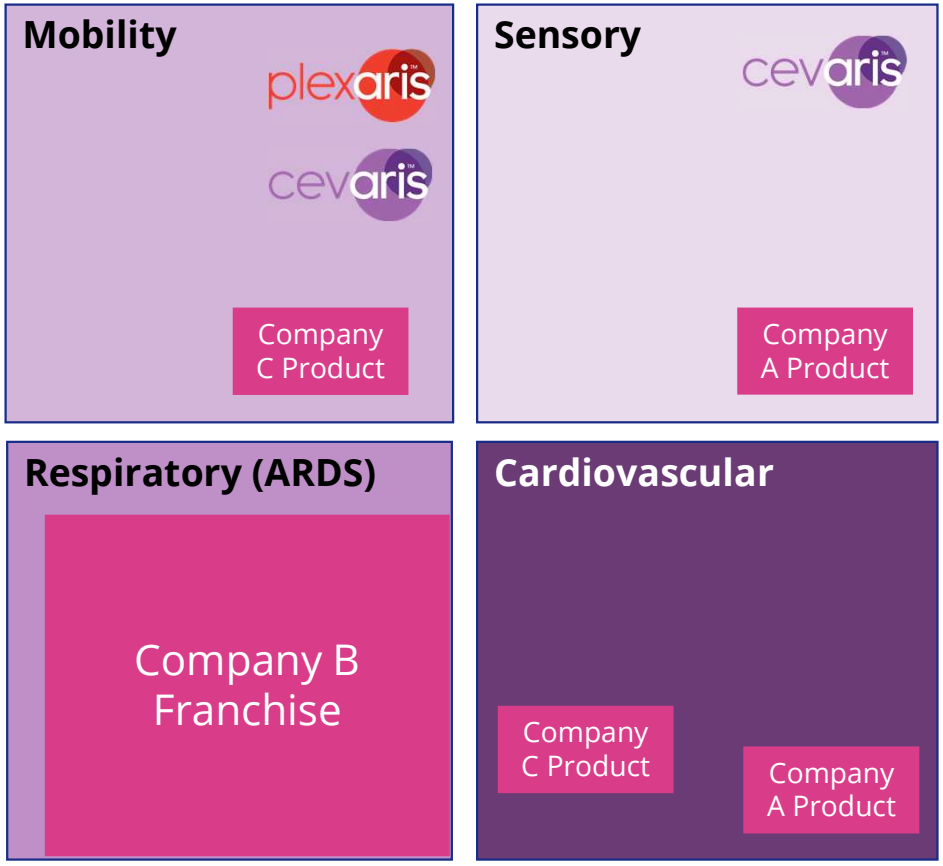
Plexaris safety study using Lifeblood supplied platelets

- 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

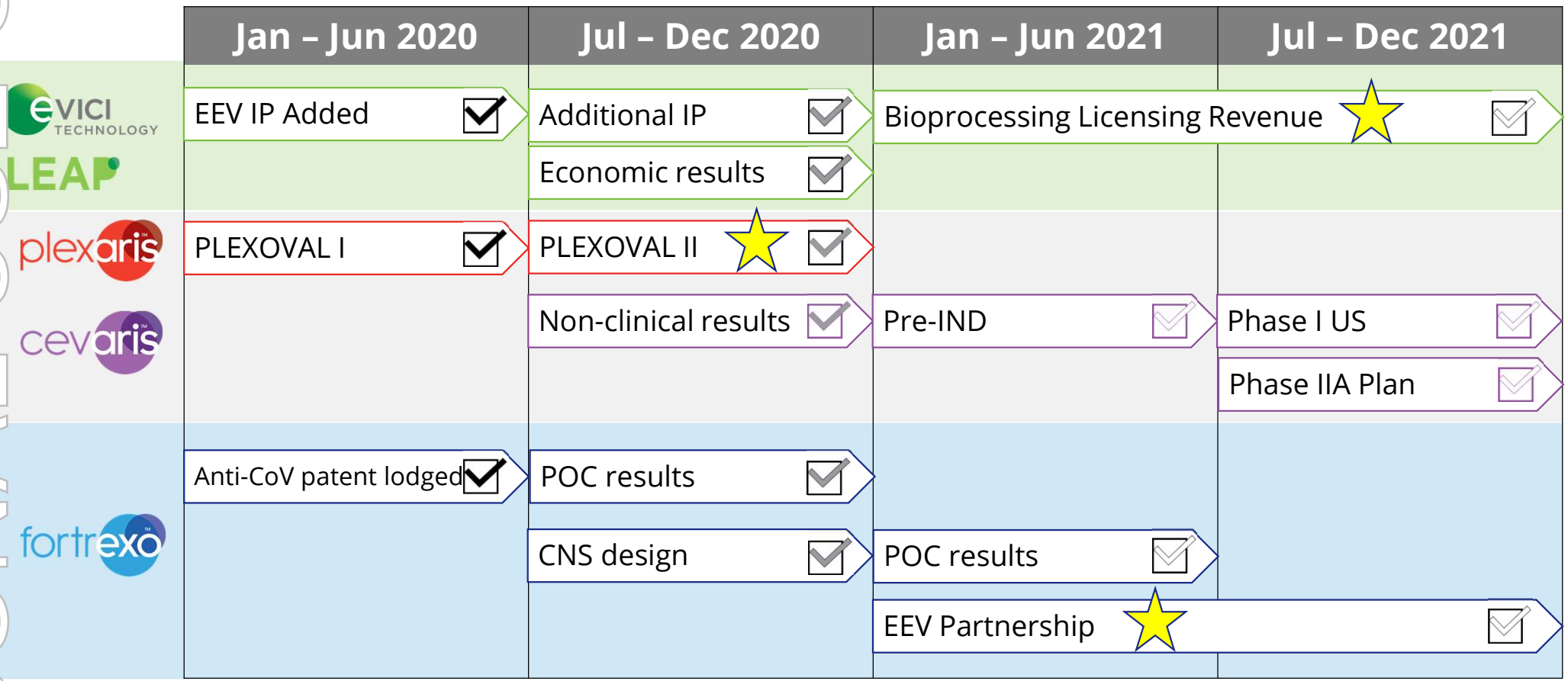
**Milestones:**

- ☑ Autologous Phase I — plexaris
- ☑ **Allogeneic Phase I**
- ☐ Allogeneic Phase I — cevaris

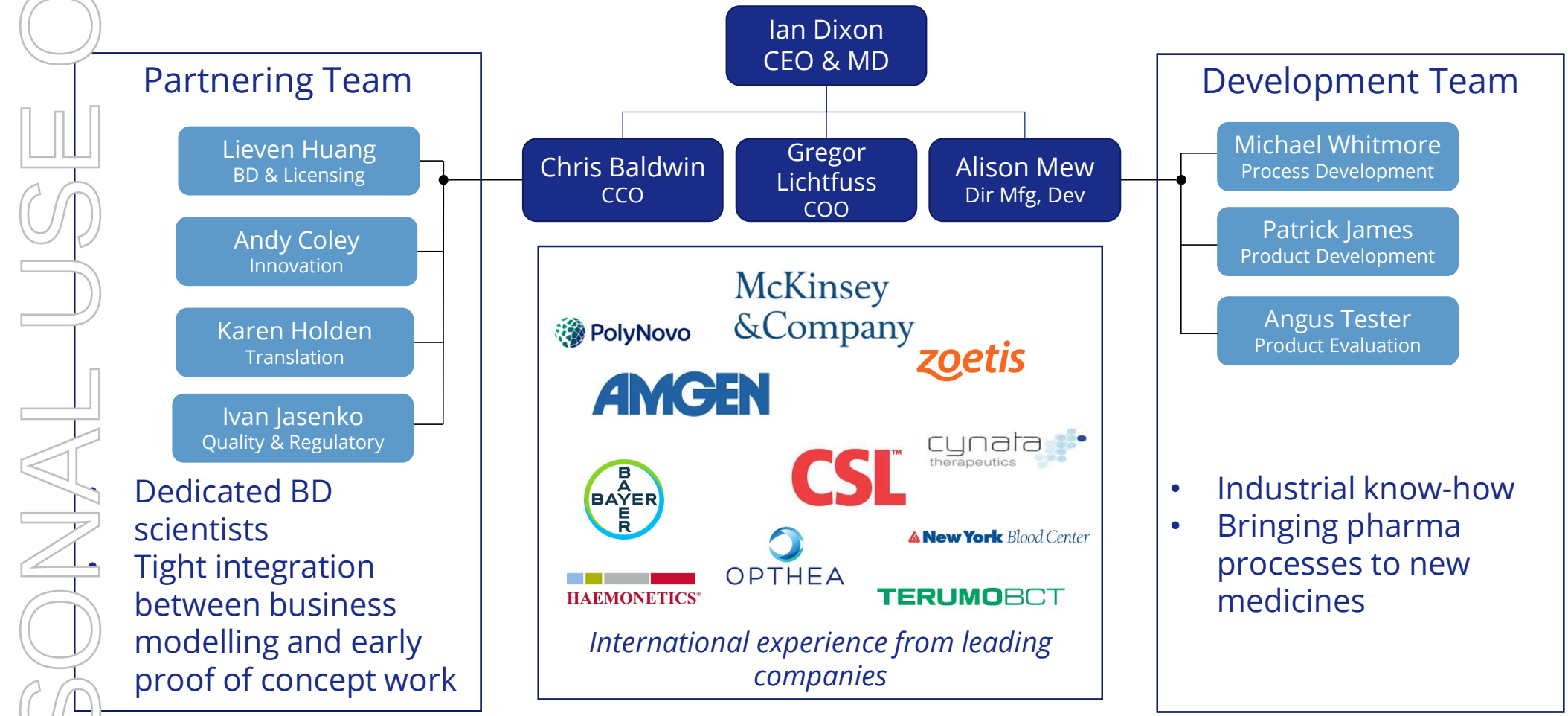
☑ = Achieved in CY 2020

☑ = Targeted for CY 2020

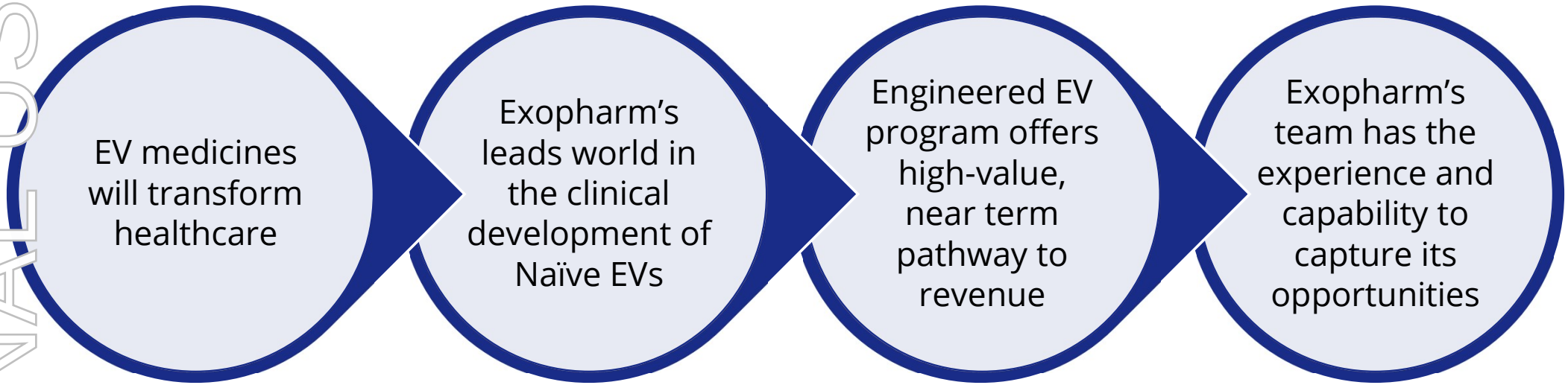
# Exopharm has Clear Paths to Revenue: Milestones Toward Revenue



# Our Team is Built to Succeed



# What We Believe, What We Do



# Exopharm Ltd.

*Refreshing Medicine, Today*

Thank you

**Dr Chris Baldwin**
Chief Commercial Officer
chris.baldwin@exopharm.com
+61 450 290 280

www.exopharm.com