ASX Announcement

Melbourne, Australia, 13 October 2022

UPCOMING WEBINAR

- Webinar: Exosomes: Unleashing Genetic Medicine Potential

Genetic medicine and exosome-based drug-delivery company Exopharm Limited (ASX:EX1) releases notice of, and information to be covered in an upcoming webinar.

Title: Exosomes: Unleashing Genetic Medicine Potential
Time: 8:00 (Melbourne, Victoria, Australia), 14 October 2022
Registration: https://exo.ph/Exosomes-Unleashing-Genetic-Medicine-Potential

By the Managing Director – this release has been authorised by the Managing Director.

COMPANY AND MEDIA ENQUIRIES:

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

Ian Dixon
Managing Director
Tel: +61 418 561 907
ian.dixon@exopharm.com

ABOUT EXOPHARM

Exopharm (ASX:EX1) is a leader in advancing Genetic Medicines and other exosome-based medicines using exosomes or extracellular vesicles (EVs) as a chassis for improved and non-viral drug-delivery.
Exopharm (ASX:EX1) is pursuing a product pipeline-driven platform strategy. Exosomes can be loaded with a variety of active pharmaceutical ingredients (APIs) and can be targeted to selected cell-types and tissue types, improving the safety-profile of the APIs and providing better treatments. Exosomes can be used to deliver small molecule drugs, mRNA, DNA and other types of APIs.
Exosomes are an alternative means of drug-delivery inside the body, alongside technologies such as lipid nanoparticles (LNP), cell-penetrating peptides, viral vectors and liposomes.
Exopharm's exosome technologies solve important needs for the success of exosome medicines – **LEAP** manufacturing technology, **LOAD** API loading technologies and **EVPS** tropism technologies.
Exosome-based medicines could improve the treatment of many chronic or inherited medical conditions.
Exopharm is making its proprietary technologies available to pharmaceutical and biotechnology companies that want to harness exosome-delivery for their own products.
In addition, Exopharm is using its technology platform to enable its own product development programs - each aimed at delivering a transformative medicine for an unmet medical need.

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.

exopharm

Webinar:

Exosomes: Unleashing Genetic Medicine Potential

Thu 13 October 2022 – 17:00 (Boston) / 14:00 (San Francisco)

Fri 14 October 2022 – 08:00 (Melbourne)

Dr. Anna Cifuentes-Rius, Research Innovation Manager

Mr. David Oxley, President International

Ms. Mehak Bhola, Biotechnology Manager

Registration:
https://exo.ph/Exosomes-Unleashing-Genetic-Medicine-Potential

Legal disclaimer

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).

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.

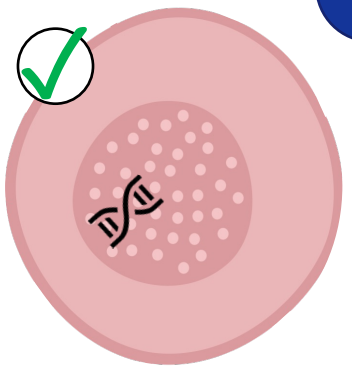
Professional advice: Recipients of this presentation should consider seeking appropriate professional financial, taxation and legal advice in reviewing the presentation and all other information with respect to Exopharm and evaluating its business, financial performance and operations.

Globally, genetic disorders remain a major challenge

Growing need for the development of functional cures

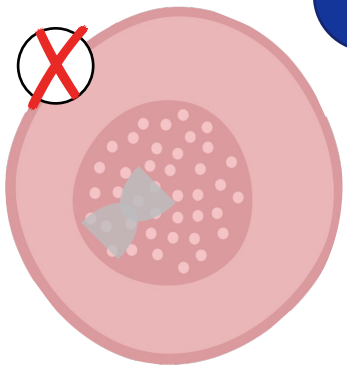
Global concern: >400 million patients are suffering from >7,000 genetic disorders worldwide

- The cause of these diseases is linked to abnormal genes (the instruction material in our cells)



1

Inside every cell in our body resides **biological machinery** that normally works to produce the right protein (gene product) in the right cells, at the right time, and in the right amount



2

Many genetic diseases occur when this **machinery is not working properly**, or the initial programming (DNA) is faulty

- Less than 5% of these diseases have an approved treatment
- The available treatments often target the symptoms rather than the cause

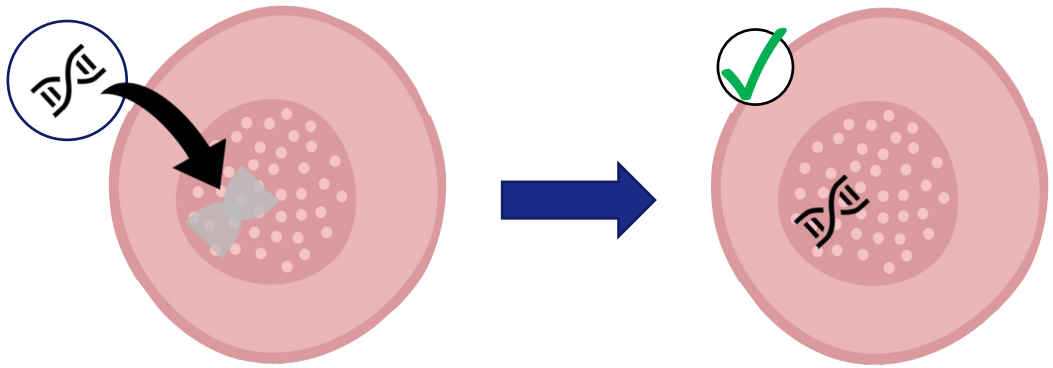
DNA = deoxyribonucleic acid

Genetic medicines: acting at the root of the cause

Potential to achieve functional cures

- Treatments that target these genetic defects are now emerging and fast gaining attention within the biotech and pharmaceutical industry and with regulatory bodies due to:

  - ✓ Promise to provide a functional cure by treating the 'cause' and not the symptoms
  - ✓ Potential to treat greater number of patients
  - ✓ Further improve the quality of life for patients



3

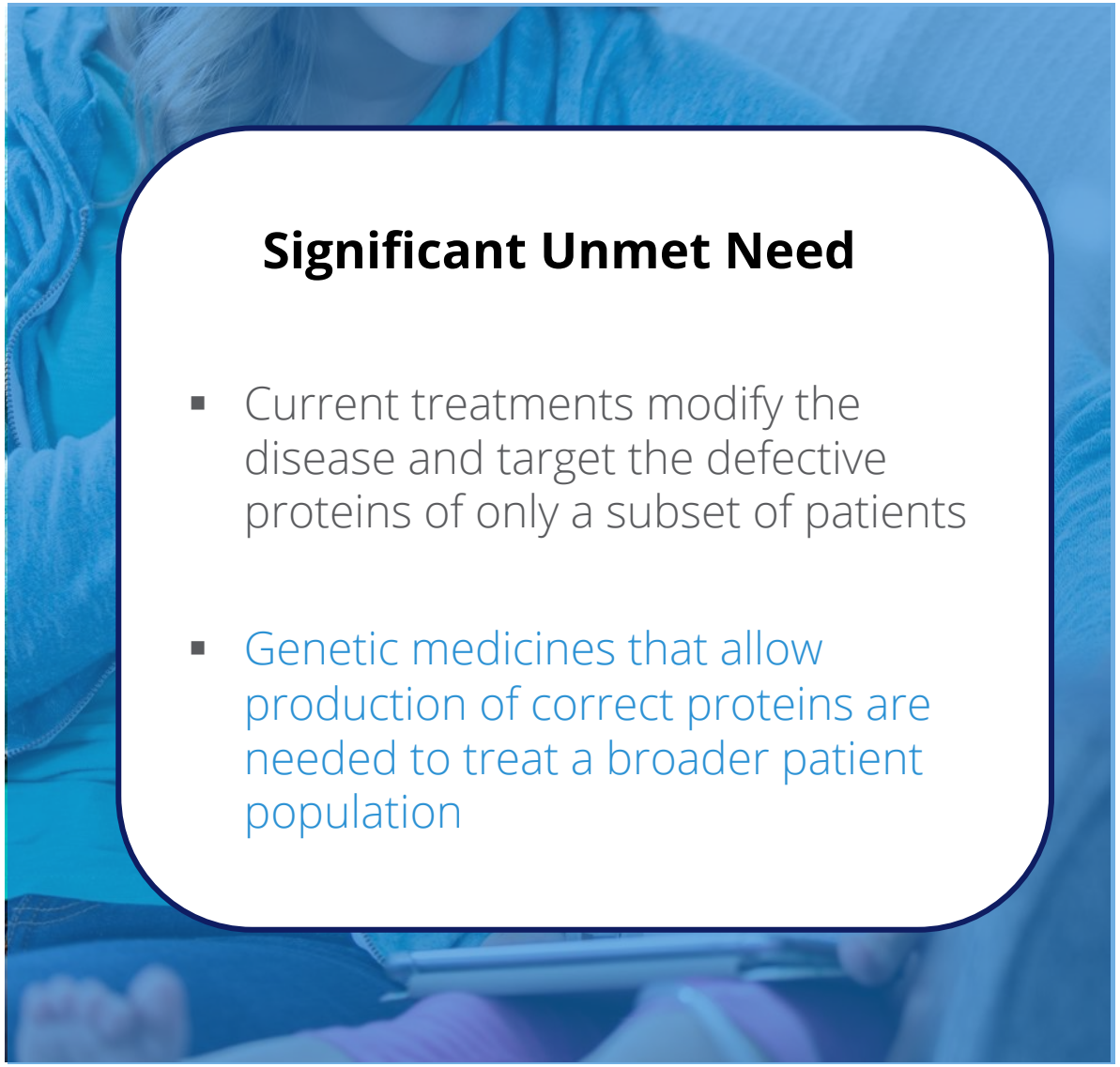
Genetic medicines can now alter how this biological machinery works inside the patient's cells and to **act at the root cause**

Example: Cystic fibrosis is a genetic disease with large unmet need

An ideal target where genetic medicines can make a transformation impact

Disease Burden

- Most common fatal inherited disease in U.S.
- Mucus accumulation in the lungs due to defects (mutations) in the CFTR gene, which leads to the production of a defective protein
- ~40,000 patients in U.S. 105,000+ worldwide
- ~900 new cases diagnosed annually
- Severely compromised quality of life
- 34.1 yrs median age at death in U.S. in 2020



Significant Unmet Need

- Current treatments modify the disease and target the defective proteins of only a subset of patients
- Genetic medicines that allow production of correct proteins are needed to treat a broader patient population

CFTR = cystic fibrosis transmembrane conductance regulator

How do these genetic technologies work

A mechanism of action, with functional cure potential

Expressing genes

DNA

mRNA

Protein and gene products

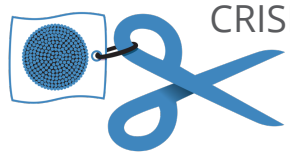
Silencing genes

siRNA and other non-coding

Protein and gene products

Editing genes

CRISPR



Protein and gene products

Genetic medicines can **target any gene in different ways**, which may fix many medical problems rather than just treating the symptoms

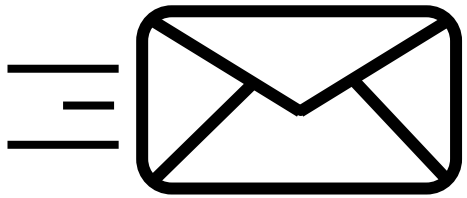
DNA = deoxyribonucleic acid; **mRNA** = messenger ribonucleic acid (RNA); **siRNA** = small interfering RNA;

CRISPR = clustered regularly interspaced short palindromic repeats

What challenges or barriers must be overcome

Enabling delivery to the right destination

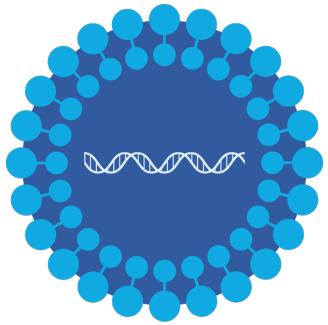
DNA and RNA ***cannot*** be administered 'naked' into the body – they need to be packaged and delivered to the right disease destination – like a letter needs an envelope.



An ideal delivery vehicle:

- ✓ **Protects** the genetic medicine from degradation
- ✓ **Delivers** the medicine to correct destination in the body and cells
- ✓ Is **non-toxic** and causes no serious adverse effects

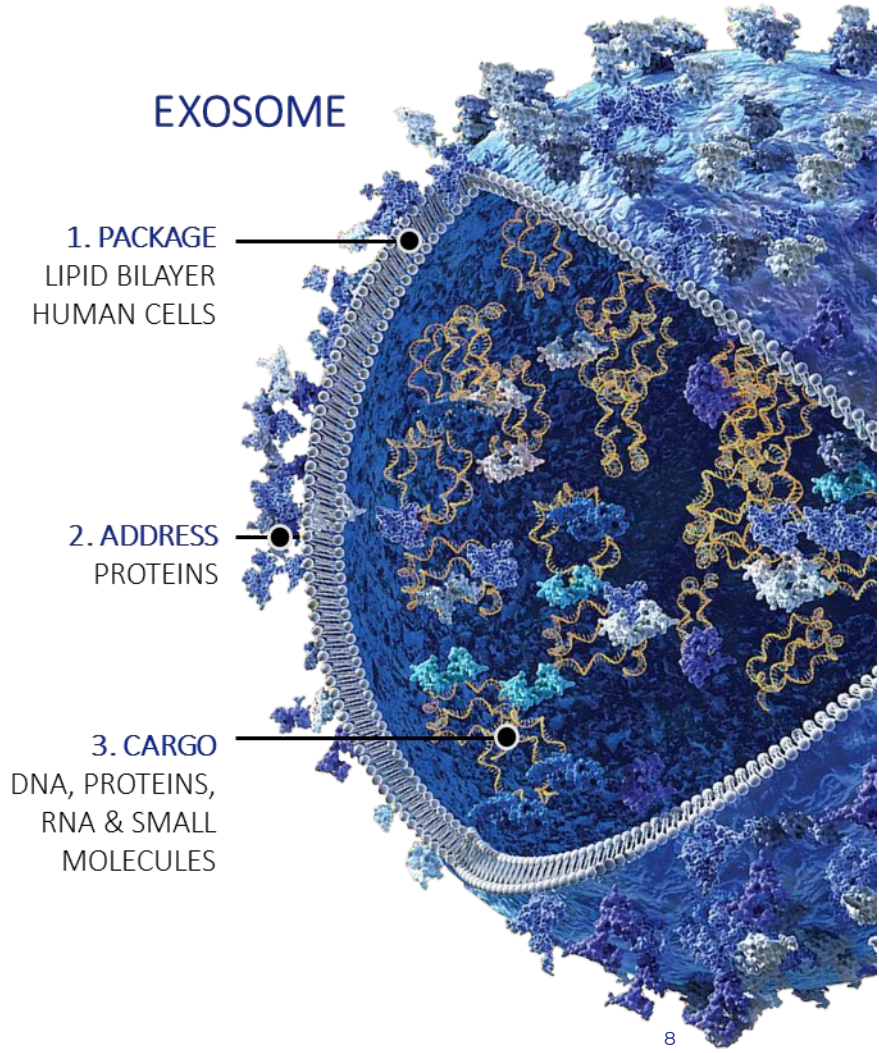
A compelling delivery vehicle, fast gaining attention are **extracellular vesicles (EVs)**, or exosomes



Extracellular vesicles (EVs), or exosome

Nature's drug delivery system

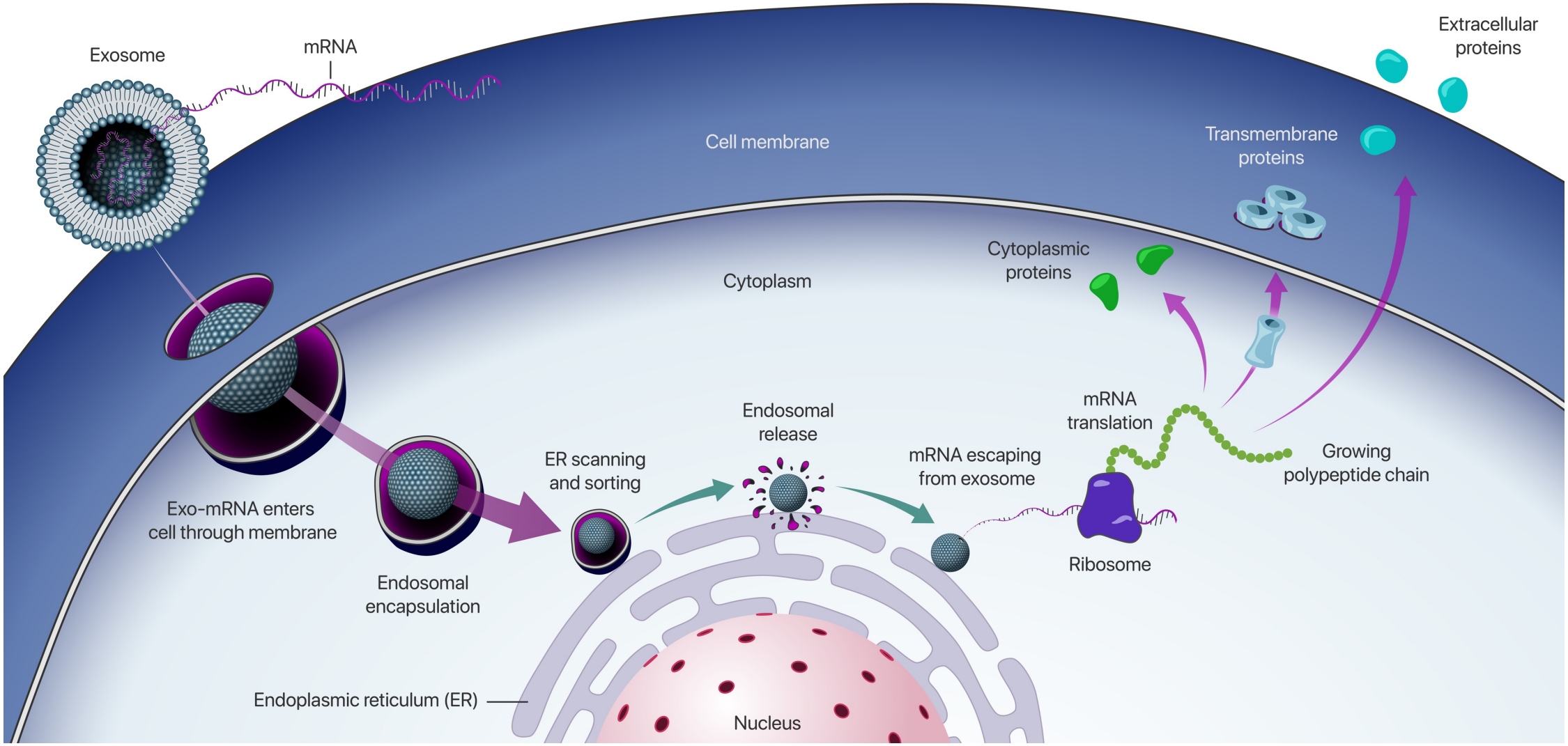
- Nanoparticles released by cells
- Natural mechanism of cell-to-cell signalling and bioactive cargo (drug) delivery
- Non-immunogenic (fully human)
- When harnessed from cells, display broad drug delivery utility (e.g. AAV, CRISPR, DNA, CD24, IL-12, mRNA)
- Can be engineered for selected cell delivery (tissue tropism)
- Compatible with normal drug supply chain – can be lyophilised and transported



EVs = extracellular vesicles; **DNA** = deoxyribonucleic acid; **CRISPR** = clustered regularly interspaced short palindromic repeats; **AAV** = adeno associated virus; **mRNA** = messenger ribonucleic acid

How does the exosome transport its drug cargo

Mechanism of delivery illustrated



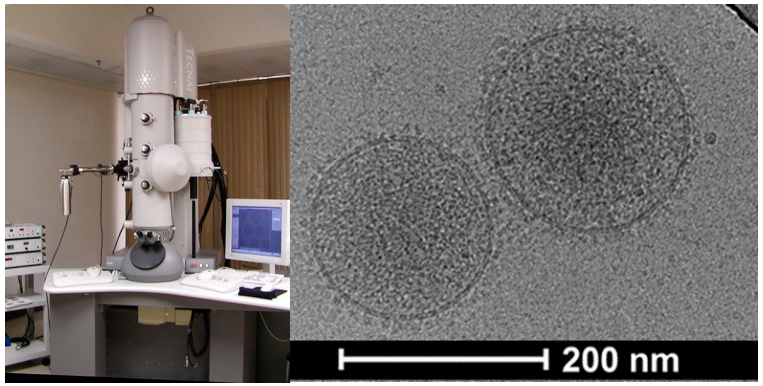
mRNA = messenger ribonucleic acid (RNA)

Exopharm (ASX:EX1)

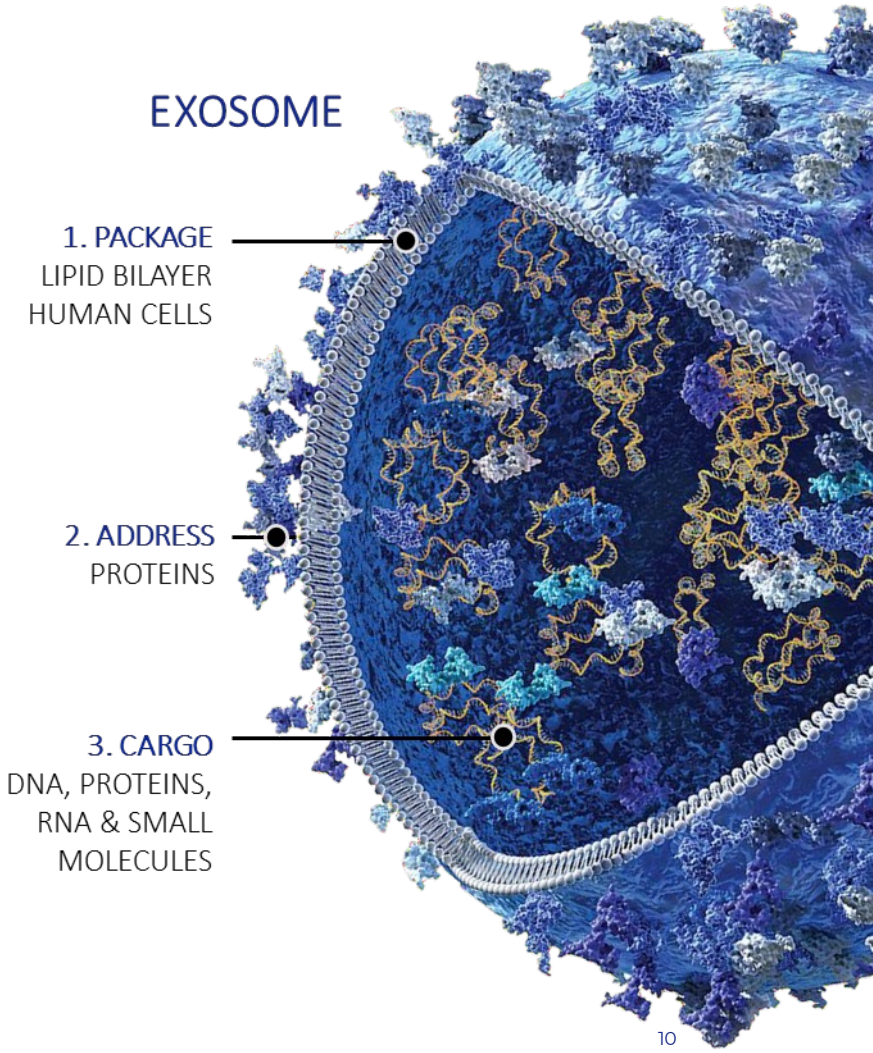
Enabling immune-silent, systemic delivery of genetic medicines in novel ways

Exopharm (ASX:EX1) is a leader in the use of exosomes or extracellular vesicles (EVs) to enable improved drug-delivery in the body.

Exopharm is now developing a new class of transformative medicines that will use EVs, nature's own drug delivery vehicles, to distribute drugs inside the body.



EVs as seen under a cryogenic electron microscope



EVs = extracellular vesicles (or exosomes), GM = genetic medicines

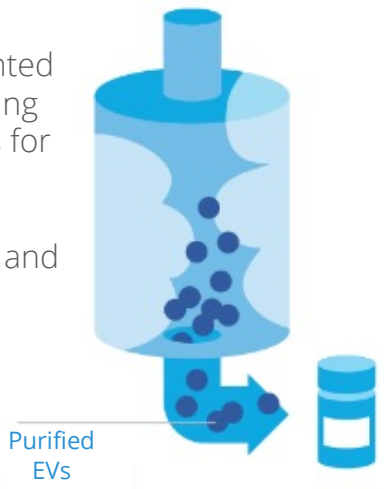
Exopharm technology platforms

Proprietary innovations that unleash genetic medicine development

Purification technology

LEAP

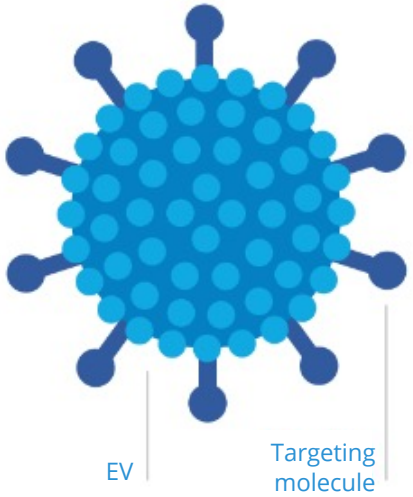
Exopharm's patented LEAP manufacturing technology allows for EVs to be readily purified at commercial scale and low cost



Tissue tropism technology

EVPS

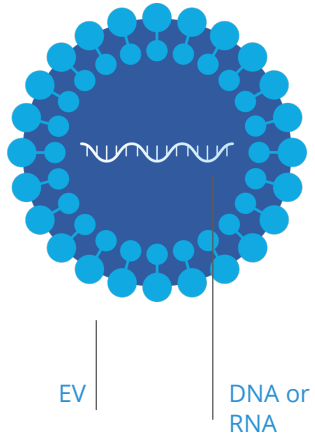
Exopharm's EVPS technology platform targets EVs to specific tissues



API loading technology

LOAD

With Exopharm's LOAD technology, EVs can be loaded with a variety of genetic medicine APIs, including DNA, mRNA, antisense oligonucleotides (ASOs), CRISPR gene editing constructs and more



API = active pharmaceutical ingredient; **DNA** = deoxyribonucleic acid; **mRNA** = messenger ribonucleic acid;
ASO = antisense oligonucleotides; **CRISPR** = clustered regularly interspaced short palindromic repeats

exopharm

delivering transformative medicines

Thank you for your time.

Any questions? Please add your questions in the Q/A chat box.

webinar@exopharm.com

@Exopharm

Exopharm Ltd

