

## ASX ANNOUNCEMENT

### Exopharm Gains US Patent for LEAP™ Commercial Exosome Production Technology

- The US Patent and Trademark Office has granted Exopharm patent US 11202805 *"Methods And Compositions For Purification Or Isolation Of Microvesicles And Exosomes"*
- LEAP™ enables large-scale, clinical grade commercial production of exosomes needed to underpin the emerging field of exosome medicines.
- With potential to become the industry standard, the US patent strengthens Exopharm's potential for large scale licencing agreements and near and long- term revenue.

**22 December 2021, Melbourne, Australia:** Exopharm Limited (ASX:EX1) has been granted US patent US 11202805 for its proprietary LEAP™ exosome purification technology. This patent positions Exopharm as a global leader in meeting the challenge of large-scale, commercial production of exosomes needed to enable leading-edge exosome medicines.

The latest research points to exosomes as a better and safer way to deliver modern medicines including mRNA vaccines that current use lipid nanoparticles<sup>1</sup>.

"This patent is potentially a game-changer for Exopharm. Securing a US patent for an important biotechnology manufacturing technology is major milestone and adds value to our company. Our LEAP™ technology has the capability to become the industry standard for exosome medicines, a field which is growing strongly and is attracting big companies," said Dr Dixon, founder and CEO of Exopharm and a co-inventor on the LEAP™ patent.

Exopharm is building financial value in two main streams:

- Its own product pipeline – for long-term value.
- Licensing and partnering – for early and on-going non-dilutive funding through technology deals

Exopharm's product pipeline seeks to maximise the value of selected exosome medicines to solve real medical problems in rare disease and population health areas. Exosome medicines hold promise in vaccines, gene therapy, next-generation cancer therapies and more.

"LEAP™ is one part of Exopharm's intellectual property and know-how. We are in discussions with potential partners who can use LEAP™ to make and commercialise their own exosome medicines for a range of diseases including global contract manufacturing organisations like

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<sup>1</sup> Exosome-mediated mRNA delivery in vivo is safe and can be used to induce SARS-CoV-2 immunity by Tsai et al 2021 <https://doi.org/10.1016/j.jbc.2021.101266>

Showa Denko<sup>2</sup>,” said Dr Chris Baldwin, Chief Commercial Officer and Deputy CEO of Exopharm.

“While partnering can deliver early revenue and help make exosome medicines mainstream, the long-term future for Exopharm is in developing our own modern exosome medicines,” said Dr Ian Dixon.

The LEAP™ patent has already been granted in Russia, and Exopharm continues to pursue this patent family in a further 10 key global jurisdictions.

Further information on LEAP™ is available on the Exopharm web site [www.exopharm.com](http://www.exopharm.com)

*This announcement has been authorised for release by the Managing Director.*

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**ABOUT EXOPHARM**

Exopharm Limited (ASX:EX1) is a clinical-stage biopharmaceutical company at the forefront of transformative medicines using exosomes, or extracellular vesicles (EVs), and is pursuing a pipeline-driven platform strategy.

Exosomes can be loaded with a variety of active pharmaceutical ingredients (APIs) and can be targeted to selected cell and tissue types (tropism) – improving the safety profile of the APIs and providing better treatments.

Exosome delivery of DNA and other gene therapies into the nucleus of the patient’s cells can improve treatment of inherited medical conditions.

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. The drug delivery industry is growing at a compound annual growth rate (CAGR) of 5% and is currently valued at about US\$175 billion (\$233 billion)<sup>3</sup>.

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<sup>2</sup> ASX Announcement 8<sup>th</sup> September 2021 Exopharm’s LEAP Technology Generates Second Commercial Collaboration [Announcements \(asx.com.au\)](http://www.asx.com.au/Announcements)

<sup>3</sup> Pharma Formulations 2021 Track 12: Novel Drug Delivery Systems  
<https://formulations.pharmaceuticalconferences.com/>

Exopharm's exosome technologies meet important needs for the success of exosome medicines – LEAP manufacturing technology, LOAD API loading and EVPS tropism.

Exopharm's suite of exosome technologies enables its own pipeline of exosome medicines – each aimed at delivering a transformative medicine for an unmet medical need.

Exopharm's intellectual property is also available under licences or partnerships to empower others to build their pipelines around the benefits of exosome medicines.

#### **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.