

OmniSpirant Therapeutics Granted US Patent for Novel RNA Delivery and Regenerative Gene Therapy Platform

OmniSpirant Therapeutics announces a US patent grant for its "Extracellular Vesicles for Inhalation" technology with enhanced delivery properties.

GALWAY, GALWAY, IRELAND, August 16, 2024 /EINPresswire.com/ -- OmniSpirant Therapeutics Receives Notice of Grant for US Patent Claiming a First-in-Class Regenerative Gene Therapy Platform for RNA-based Treatments.

OmniSpirant Therapeutics, an Irish biotech at the forefront of RNA delivery and therapeutics based on their [regenerative gene therapy platform technology](#) - OmniSomes, today announced that the US Patent Office has issued a [Notice of Grant for a broad patent](#) – “Extracellular Vesicles for Inhalation” that covers the use of compositions in which surface engineered stem cell exosomes have a broadly defined cargo and surface engineering to enhance their delivery properties.



The news of the US grant which is valid through to 2041, follows the granting of this core IP in Japan, Russia, and Eurasia earlier this year, with further grants pending in all major global territories. There is a further US divisional application pending with claims directed to methods of treating a disease in a patient in need thereof, through administration of compositions comprising the aforementioned exosomes derived from bioengineered MSCs.

This technology represents a breakthrough in gene therapy, where the transformational potential of nucleic acid-based advanced therapeutics has been constrained by poor delivery to date. The challenges of overcoming major systemic barriers, targeting the right cells whilst avoiding immune reactions and harmful side effects with the ability to re-dose the gene transfer vectors are immense and highly complex.

The OmniSome solution piggybacks on nature's method of sending RNA from cell to cell as an exemplar RNA delivery platform with an additional unique capacity to regenerate and repair diseased damaged cells and tissues. The tumor-homing properties of OmniSomes are being leveraged by OmniSpirant's research team to deliver tumor suppressor RNA and protein-based therapeutic payloads with the potential to transform the treatment of a wide range of solid and liquid cancers.

"There is an almost infinite range of possible cargoes for these exosomes which have the potential to underpin transformational treatments for a wide range of diseases. Our expert team has demonstrated compelling biological proof of concept in harnessing this technology for an innovative gene therapy for cystic fibrosis (OS001) and more recently with our lead asset, OS003 a platform-based pan-cancer gene therapy" said Gerry McCauley MPharm, CEO of OmniSpirant Therapeutics. "These important recent patent grants will enable the company to build further protection around the platform, specific therapeutic uses, and methods of manufacture as we continue our path to the clinic".

About OmniSpirant Therapeutics:

OmniSpirant is an Irish biotech founded in 2016 by Mr. McCauley to develop first-in-class regenerative gene therapies. Their expert team based in their Galway research facility are developing first-in-class regenerative gene therapies for respiratory disease and cancer which will be the focus for clinical translation of the initial platform-based program.

The company also has plans to use this platform to develop treatments for lung diseases affecting hundreds of millions of people globally including cystic fibrosis, alpha-1 antitrypsin deficiency (AATD), acute respiratory distress syndrome (ARDS), chronic obstructive pulmonary disease (COPD) and idiopathic pulmonary fibrosis (IPF). The broad applications of the technology can be used to develop platform-based treatments for many other systemic diseases.

OmniSpirant, as a highly differentiated gene therapy and delivery company, offers a unique opportunity to capitalize on the rapid growth and immense potential of the emerging gene therapy market. With advanced delivery solutions, scalable manufacturing capabilities, strategic partnerships, and a highly experienced team, the company is positioned to revolutionize the field of genetic medicine and improve the lives of millions of patients worldwide.

Interested potential investors and partners are encouraged to contact Gerry McCauley (gmccauley@omnispirant.com) and Dr Vijay Raghavan, Head of Business Development (vraghavan@omnispirant.com) for details of the company's current investment round and platform-based partnering opportunities (<https://www.omnispirant.com/investors/>).

Gerry McCauley
OmniSpirant Limited
+353 89 987 5571
[email us here](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/736023029>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2024 Newsmatics Inc. All Right Reserved.