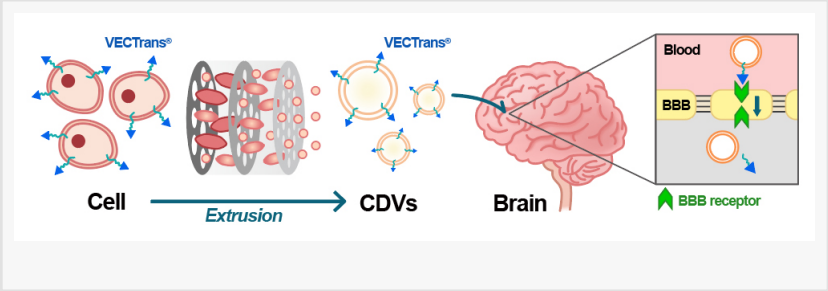
Vect-Horus and MDimune Collaborate to Develop a Novel Approach to CNS Drug Delivery Based on Cell-derived Vesicles



SEONGDONG-GU, SEOUL, SOUTH KOREA, September 6, 2021 /EINPresswire.com/ -- MDimune Inc. and Vect-Horus are please to announce today the signing of a Research Collaboration Agreement. MDimune is a South Korean biotech company dedicated to the development of an innovative drug delivery platform called BioDrone® using cell-derived vesicles ("CDVs"). Vect-Horus is a French biotech company that designs and develops vectors to facilitate the delivery of a variety of cargos including drugs or imaging agents into the brain and other tissues.

The research collaboration will be based on the surface functionnalization of MDimune's CDVs with Vect-Horus' vectors that target a receptor in the blood-brain barrier ("BBB"). The success of this research collaboration will pave a novel path towards effective drug delivery to the brain by addressing the current hurdles of therapeutics delivery across the BBB.

"We are proud to collaborate with MDimune and combine our innovative technology VECTrans® with their CDVs. Through this project we look forward to develop a new approach to deliver therapeutic drugs to the brain" says Alexandre Tokay, CEO of Vect-Horus.

Seung Wook Oh, Chief Scientific Officer of MDimune also added, "we are thrilled to launch this collaboration with Vect-Horus. Joining two innovative technologies will not only facilitate the entry of our CDVs into the brain, but also help overcome the most critical barrier in the CNS drug development."

About VECTrans®
Vect-Horus has developed its "VECTrans®" breakthrough technology platform with the objective of making the 'undruggable' druggable by overcoming challenges of the BBB, and more generally biological barriers. VECTrans® is based on the specific design and optimization of 'molecular vectors' that, once conjugated to a payload, enable its delivery to target cells in the body.

Specifically, the vectors developed by the Company target and take advantage of endogenous

cell-surface receptors naturally involved in “Receptor-Mediated Transport” (RMT). This targeted delivery approach combines the advantages of avoiding invasive administration routes, and is believed to be the most effective and safest physiological pathway for the transport of different cargos including CDVs across cellular barriers.

About BioDrone® Platform Technology

MDimune’s BioDrone® platform facilitates the production of CDVs from various cell sources through an extrusion method. CDVs are similar to exosomes in size, properties, and functions, but exhibit substantial advantages in yield that are more suitable for large-scale production. With its unique versatility to allow highly sophisticated engineering and various cargo loading, BioDrone® technology is emerging as a highly versatile and scalable drug delivery system. While the current project is aimed at enhancing payload delivery across the BBB, this technological advance will offer a new safe drug delivery option to address the current hurdles for delivering therapeutics to the central nervous system.

About Vect-Horus

Vect-Horus designs and develops vectors that facilitate targeting and delivery of therapeutic or imaging agents to organs, including the brain, and tumors. Vect-Horus combines these different agents to its vectors that specifically target various receptors, allowing these agents to cross natural barriers (including the blood-brain-barrier) which limit access of therapeutic or imaging agents to their targets. The proof of concept of the technology has already been established in animal models using different vectorized molecules.

Created in 2005, Vect-Horus is a spin-off of the Institute for Neurophysiopathology (INP, UMR7051, CNRS and Aix Marseille University), headed by Dr Michel Khrestchatisky, co-founder. To learn more about Vect-Horus, visit www.vect-horus.com. For more information about this press release, please contact Vect-Horus: contact@vect-horus.com

About MDimune Inc.

MDimune, a South Korean biotech company founded in 2015, has been committed to the development and implementation of state-of-the-art BioDrone® platform technology. BioDrone® is an innovative technology that relies on human-sourced, nanosized vesicles, obtained from various cells by using a proprietary extrusion method to achieve target-specific drug delivery. With superior productivity compared to exosomes, BioDrone® is emerging as a highly versatile and scalable delivery system to combat diverse debilitating human diseases, including cancer, neurodegeneration, and rare diseases.

MDimune is expanding its global network to harness effective tissue targeting strategies to achieve highly tissue-specific delivery of various cargos such as miRNA, siRNA, mRNA, and proteins. The company envisions applying this novel BioDrone® platform to address various needs of pharmaceutical clients who are looking for effective drug carriers.

Vect-Horus

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