MDimune, pens FAF1 mRNA cancer drug deal with Kainos Medicine

SEONGDONG-GU, SEOUL, SOUTH KOREA, October 29, 2021 /EINPresswire.com/ -- MDimune Inc. and Kainos Medicine, Inc., has inked a collaboration pact and possible licensing deal with MDimune Inc. for disruptive cancer therapy development based on cell-derived vesicles (CDVs) like extracellular vesicles (EVs) loaded with Fas-associated Factor 1 (FAF1) expressing mRNA or protein.

(From the left) MDimune CEO's Shin-gyu Bae, and Kainos Medicine CEO's Gi-seop Lee

MDimune's BioDrone® Platform is based on proprietary technology to mass-produce CDVs from different types of cells. The company has registered the patents in five countries - South Korea, Japan, EU, China, and the US. CDVs retain similar physical and biochemical properties to exosomes which are known for their roles in intercellular information exchange. CDVs are versatile as they can adapt a variety of payloads ranging from small molecules to genetic cargos and can be mass-produced within short periods from a wider range of cell sources based on the proprietary production process.

Kainos Medicine has established proof of concept (PoC) in vitro and in vivo trials confirming FAF1-exosomes inhibiting the growth of various cancer cells. According to Kainos Medicine, FAF1 plays a critical role in inhibiting cell division of cancer cells and induces cell death, but also inhibits invasion/metastasis in cancers. The previously reported clinical data also exhibits a low expression level of FAF1 regardless of the tumor tissue type in patients.

MDimune's BioDrone® Platform is based on the proprietary technology to mass-produce CDVs from different types of cells. The company has registered the patents in five countries - South Korea, Japan, EU, China, and the US. CDVs retain similar physical and biochemical properties to exosomes which are known for their roles in intercellular information exchange. CDVs are versatile as they can adapt a variety of payloads ranging from small molecules to genetic cargos and can be mass-produced within short periods from a wider range of cell sources based on the

proprietary production process.

Kainos Medicine will join hands with MDimune to leverage a precise guided system that can switch on and control the FAF1 expression levels and further pursue strategies to deliver FAF1 in the form of mRNAs to prevent overexpression before reaching the target cells.

“FAF1-mRNA will attack the tumor cell-based on MDimune’s next-generation drug delivery system (DDS) platform.” Kainos Medicine CEO Ki-Sub Lee said in a statement. “We expect the synergies of both technologies will pave a new path for transformative cancer therapeutics development.”

“We are garnering best efforts to development mRNA therapeutics based on our BioDrone® Platform to provide innovative solutions for devastating rare disorders,” said Shingyu Bae, the CEO of MDimune. “We strive to provide better, yet safer alternatives to cancer patients through this collaboration with Kainos Medicine.”

Brin Choi
MDimune Inc.
jychoi@mdimune.com
