



NEWS RELEASE

Coya Therapeutics Secures Option Agreement for Exclusive Worldwide Rights to Exosome Engineering Technology from Carnegie Mellon University

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- Proprietary technology generates Exosome Polymer Hybrids (EPHs) which allow for efficient and versatile method of customizing cargoes of Treg-derived exosomes using oligonucleotide tethers
- Delivering EPHs to sites of inflammation or epitopes that drive specific diseases, while delivering payloads, enables the next generation of selectively targeted and potent Treg-derived exosomes
- No genetic modification is required, thereby overcoming various CMC complexities, and reducing the risk of potential safety issues

HOUSTON, June 15, 2022 (GLOBE NEWSWIRE) — **Coya Therapeutics, Inc.** (Coya), a clinical-stage biotechnology company developing multiple first-in-class and best-in-class approaches that enhance regulatory T cells (Tregs) function in vivo, including autologous and allogeneic Treg-derived exosome therapeutics, and novel biologics, today announced the execution of an option agreement for exclusive worldwide rights to a novel and proprietary technology platform enabling exosome engineering from Carnegie Mellon University.

The exclusive option agreement involves the intellectual property rights to the research, development, and manufacturing of exosome-polymer hybrids (EPHs), a tether-based exosome functionalization strategy that enables Treg exosomes to be homed to proteins of interest, while delivering select payloads into those targeted cells.

“This collaboration with Carnegie Mellon University further solidifies Coya’s thought leadership in the global exosome therapeutics field, beyond Treg-derived exosomes alone,” stated Howard Berman, Ph.D., CEO of Coya Therapeutics. “Nanoengineering exosomes with such manufacturing efficiency to produce EPHs that can be



customized to any surface protein, delivering growth factors or drugs, while enhancing cellular uptake and bioactivity is the future of targeted therapies.”

Previously, most techniques to modify exosomes relied on complex molecular biology tools or degradation of exosomes innate functionality. EPHs overcome many of these limitations by creating a method that rapidly and efficiently modifies exosomes with a DNA-cholesterol tether. The technology leverages single stranded synthetic DNA with attached cholesterol, binding a complementary strand of DNA linked to a bioactive agent. As a result, a number of different types of cargos can be readily attached to the exosome surface while also tethering immune modulating cargoes inside the exosome.

“The next step of our development program will be to leverage EPHs to validate functional activity of our Treg-derived exosomes that home in and bind to high profile protein targets that drive specific disease processes. Additionally, these EPHs will be loaded with identified payloads to enhance efficacy,” stated Adrian Hepner, M.D., Ph.D., Chief Medical Officer of Coya Therapeutics.

Drs. Subha Das and Phil Campbell of Carnegie Mellon University added: “Targeted Treg exosome therapeutics that are directed to epitopes and proteins of interest, while delivering potent growth factors, drugs or other cargo, represent an innovative platform that is advantageous on many fronts relative to other CAR Treg directed platforms. We are excited and committed in joining this collaboration with Coya Therapeutics.”

About Coya Therapeutics, Inc.

Headquartered in Houston, TX, Coya Therapeutics, Inc. (Coya) is a clinical-stage biotechnology company developing first-in-class and best-in-class approaches utilizing adoptive regulatory T cells (Tregs) to target systemic and neuro inflammation. Coya has pioneered the ability to produce “Super Tregs” from a patient’s own dysfunctional Tregs. “Super Tregs” confer their properties through reproducible upregulated proteins in the expanded/post cryopreserved condition that allow for an off-the-shelf like approach for serial infusion. Coya is also developing first-in-class exosome therapies derived from “Super Tregs” for autologous and allogeneic applications, as well as a novel biologic that works to upregulate Treg function in vivo. Coya is focused on the advancement of disease modifying approaches to address the significant unmet medical needs of patients with ALS, FTD, Alzheimer’s, Systemic Lupus Erythematosus, Scleroderma, Hepatic Inflammation and Fibrosis, and other autoimmune diseases. For more information, please visit www.coyatherapeutics.com.

About Carnegie Mellon University

A private, global research university, Carnegie Mellon stands among the world’s most renowned educational institutions. Over the past 10 years, more than 400 startups linked to CMU have raised more than \$7 billion in

follow-on funding. Those investment numbers are especially high because of the sheer size of Pittsburgh's growing autonomous vehicles cluster – including Uber, Aurora, and Argo AI – all of which are here because of their strong ties to CMU.

CMU offers cutting-edge brain science, path-breaking performances, innovative startups, driverless cars, big data, big ambitions, Nobel and Turing prizes, hands-on learning, and a whole lot of robots. For more information, please visit <https://www.cmu.edu/>.

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