NEWS RELEASE

Coya Therapeutics Announces Publication of GLP-1/LD IL-2 Combination Biologic (COYA 303) Demonstrating Synergistic Enhancement of Regulatory T Cell Function and Protection Against Treg Apoptosis (Cell Death)

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COYA 303 is an investigational biologic combination of COYA 301, Coya's low-dose interleukin 2 (LD IL-2) and a GLP-1 receptor agonist (GLP-1RA), designed to deliver a multi-targeted immunomodulatory therapeutic in autoimmune and neurodegenerative diseases

COYA 303 produced a statistically significantly higher Treg suppressive effect on pro-inflammatory myeloid cells and enhanced Treg survival in in vitro human immune cells, compared to the individual components - LD IL-2 and GLP-1RA

HOUSTON--(BUSINESS WIRE)-- **Coya Therapeutics, Inc.** (NASDAQ: COYA) ("Coya" or the "Company"), a clinical-stage biotechnology company developing biologics intended to enhance regulatory T cell (Treg) function, today announced publication of the results of a study designed to evaluate the effects of COYA 303 (LD IL-2 and GLP-1RA), Coya's investigational biologic combination to suppress pro-inflammatory myeloid cells, enhance Treg suppressive function, and modulate T cell proliferation, in an in vitro system of human immune cells obtained from healthy donors. The research was conducted at the Houston Methodist Research Institute and was led by Dr. Aaron Thome and Dr. Stan Appel. The research article has been published in the Journal NeuroImmune Pharmacology and Therapeutics and can be accessed **here**.

Dr. Arun Swaminathan, Coya's Chief Executive Officer, stated, "We believe COYA 303 could offer a differentiated and synergistic approach to addressing multiple conditions, including in neurodegenerative conditions such as Alzheimer's Disease, in which GLP-1 RAs have recently shown promise. We believe the potential of this proprietary combination could lead to value-creating opportunities and may open up a new avenue of research within the GLP-1RA drug class."

LD IL-2 preferentially binds the IL-2 receptor alpha, which is predominantly expressed on Tregs to enhance their anti-inflammatory suppressive function. Treg dysfunction has been well documented in several autoimmune and neurodegenerative diseases characterized by persistent inflammation. GLP-1RAs also exhibit several immune-modulating effects, with myeloid cells and regulatory subsets, such as Tregs, expressing a large concentration of GLP-1 receptors. Although increased Treg numbers and enhanced suppressive function are seen with LD IL-2 treatment, their longevity and suppressive function can be limited by the effects of pronounced and sustained inflammatory environments. Therefore, a combination therapy approach that dampens the inflammatory microenvironment while enhancing Treg survival and function may provide synergistic anti-inflammatory therapeutic effects.

Dr. Fred Grossman, Coya's Chief Medical Officer commented, "We believe the encouraging results of this study provide support for our multi-targeted combination approach as a potentially viable treatment option for serious and life-threatening conditions of high unmet need driven by chronic inflammation and Treg dysfunction, for which currently available treatments provide limited benefits."

Summary of Study Results

Following pro-inflammatory activation of myeloid cells co-cultured with Tregs, the addition of COYA 301 (LD IL-2) alone enhanced Treg suppressive function by 15%. Similarly, when GLP-1RA alone was added to the system, Treg suppressive function increased by 20%. In contrast, when COYA 303 was added to the cell system a statistically significant increase in Treg suppressive function of 42% ($p < 0.001$) was observed, when compared to the increase observed with each of the single agents.

Consistent with these results, treatment with COYA 303 promoted Treg survival by modulating the apoptotic pathway. COYA 303 significantly reduced BAX transcript levels during prolonged incubation ($p < 0.01$). These findings suggest a direct effect of COYA 303 supporting Treg survival through the inhibition of Treg apoptosis.

These data show that the combination approach of COYA 303 enhances Treg suppressive function in highly inflammatory microenvironments, while also promoting Treg survival by preventing apoptosis.

Additional details and results of the research study can be found **here**.

About Coya Therapeutics, Inc.

Headquartered in Houston, TX, Coya Therapeutics, Inc. (Nasdaq: COYA) is a clinical-stage biotechnology company developing proprietary treatments focused on the biology and potential therapeutic advantages of regulatory T cells ("Tregs") to target systemic inflammation and neuroinflammation. Dysfunctional Tregs underlie numerous conditions, including neurodegenerative, metabolic, and autoimmune diseases, and this cellular dysfunction may lead to sustained inflammation and oxidative stress resulting in lack of homeostasis of the immune system.

Coya's investigational product candidate pipeline leverages multiple therapeutic modalities aimed at restoring the anti-inflammatory and immunomodulatory functions of Tregs. Coya's therapeutic platforms include Treg-enhancing biologics, Treg-derived exosomes, and autologous Treg cell therapy.

For more information about Coya, please visit **www.coyatherapeutics.com**

Forward-Looking Statements

This press release contains "forward-looking" statements that are based on our management's beliefs and assumptions and on information currently available to management. Forward-looking statements include all statements other than statements of historical fact contained in this presentation, including information concerning our current and future financial performance, business plans and objectives, current and future clinical and preclinical development activities, timing and success of our ongoing and planned clinical trials and related data, the timing of announcements, updates and results of our clinical trials and related data, our ability to obtain and maintain regulatory approval, the potential therapeutic benefits and economic value of our product candidates, competitive position, industry environment and potential market opportunities. The words "believe," "may," "will," "estimate," "continue," "anticipate," "intend," "expect," and similar expressions are intended to identify forward-looking statements.

Forward-looking statements are subject to known and unknown risks, uncertainties, assumptions and other factors including, but not limited to, those related to risks associated with the success, cost and timing of our product candidate development activities and ongoing and planned clinical trials; our plans to develop and commercialize targeted therapeutics; the progress of patient enrollment and dosing in our preclinical or clinical trials; the ability of our product candidates to achieve applicable endpoints in the clinical trials; the safety profile of our product candidates; the potential for data from our clinical trials to support a marketing application, as well as the timing of these events; our ability to obtain funding for our operations; development and commercialization of our product candidates; the timing of and our ability to obtain and maintain regulatory approvals; the rate and degree of market acceptance and clinical utility of our product candidates; the size and growth potential of the markets for our

product candidates, and our ability to serve those markets; our commercialization, marketing and manufacturing capabilities and strategy; future agreements with third parties in connection with the commercialization of our product candidates; our expectations regarding our ability to obtain and maintain intellectual property protection; our dependence on third party manufacturers; the success of competing therapies or products that are or may become available; our ability to attract and retain key scientific or management personnel; our ability to identify additional product candidates with significant commercial potential consistent with our commercial objectives; ; and our estimates regarding expenses, future revenue, capital requirements and needs for additional financing.

We have based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, business strategy, short-term and long-term business operations and objectives, and financial needs. Moreover, we operate in a very competitive and rapidly changing environment, and new risks may emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed herein may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements. Although our management believes that the expectations reflected in our forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances described in the forward-looking statements will be achieved or occur. We undertake no obligation to publicly update any forward-looking statements, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise.

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