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# TNF Pharmaceuticals and Renova Health Utilize AI to Accelerate Drug Development

**Machine learning technology used to identify patients for studies of muscle mass preservation during GLP-1 treatment**

BALTIMORE--(BUSINESS WIRE)-- TNF Pharmaceuticals, Inc. (Nasdaq: TNFA) (“TNF” or the “Company”), a clinical stage biopharmaceutical company committed to developing novel therapies for autoimmune and inflammatory conditions, and Renova Health announce the application of AI and machine learning technologies to identify high-risk patient groups that may benefit the most from interventions that preserve lean muscle mass during GLP-1 treatment for diabetes, weight loss, and chronic weight management. In keeping with FDA’s recent draft Guidance on using Artificial Intelligence, the TNF-Renova partnership is analyzing data from 30,000 patients to identify high-risk patients. TNF plans to use these data to optimize appropriate patient recruitment, accelerating isomyosamine drug development.

“Our collaboration partner, Renova Health has used its AI and machine learning technology platform to analyze and identify optimal patient pools and study sites, enabling a swift and efficient progression of our study series over the coming months,” said Mitchell Glass, M.D., President and Chief Medical Officer of TNF Pharmaceuticals. “This technology has allowed us to look at the constellation of underlying conditions, symptoms, acute events, and medications being taken across thousands of patients to identify specific patient subsets for which isomyosamine treatment may be most beneficial.”

Renova Health’s proprietary AI and machine learning technology—including a cutting-edge natural language processing (NLP) and large language model (LLM) platform—offers key benefits to TNF Pharmaceuticals including the ability to quickly review thousands of patient records to identify a target population that may benefit from isomyosamine. This target population consists of patients who have underlying chronic diseases, such as diabetes, COPD, chronic kidney disease, or sarcopenia/frailty, have suffered an acute medical event associated with inflammation (such as a fall or bone fracture), and are taking GLP-1 medications.

“We are thrilled to collaborate with TNF Pharmaceuticals to advance precision medicine through our cutting-edge NLP, LLM, and AI platform,” said David Jacobs, CEO of Renova Health. “Our technology transcends traditional big data analytics by creating highly specific patient personas, identifying optimal cohorts for isomyosamine based on underlying conditions, acute events, and medication profiles. Furthermore, our platform uncovers the nuanced impact of individual physician practices—such as varying diagnosis codes for GLP-1 prescriptions, like BMI versus diabetes—which can significantly influence cohort selection and study outcomes. This unparalleled precision enables TNF Pharmaceuticals to target patients who stand to benefit most, accelerating study timelines and enhancing therapeutic

impact.”

### **About Renova Health**

Renova Health partners with large clinic practices, hospital systems, and accountable care organizations to help deliver better patient outcomes at a lower cost. The key to Renova Health’s success is its highly skilled, caring, and passionate Personal Health Advocates that create and nurture a personal, trusting relationship with patients that helps to uncover deeper insights and ultimately leads to superior healthcare outcomes. For more information, visit [www.renovahealth.care](http://www.renovahealth.care).

### **About Isomyosamine**

Isomyosamine is a novel plant alkaloid small molecule shown to regulate the immuno-metabolic system through the modulation of numerous pro-inflammatory cytokines including TNF-alpha (TNF- $\alpha$ ), an immune cell signaling protein and inflammatory cytokine responsible for inducing and maintaining the inflammatory process. TNF- $\alpha$  is located upstream of a cascade of molecular signals that induces inflammation and helps activate the process of aging. Many in vivo and in vitro studies have shown that TNF- $\alpha$  plays a causative role in the pathogenesis of various age-related diseases.

### **About TNF Pharmaceuticals, Inc.**

TNF Pharmaceuticals, Inc. (Nasdaq: TNFA), a clinical stage pharmaceutical company committed to extending healthy lifespan, is focused on developing two novel therapeutic platforms that treat the causes of disease rather than only addressing the symptoms. Isomyosamine is a drug platform based on a clinical stage small molecule that regulates the immune system to control TNF- $\alpha$ , which drives chronic inflammation, and other pro-inflammatory cell signaling cytokines. Isomyosamine is being developed to treat diseases and disorders marked by acute or chronic inflammation. The Company’s second drug platform, Supera-CBD, is being developed to treat chronic pain, addiction and epilepsy. Supera-CBD is a novel synthetic derivative of cannabidiol (CBD) and is being developed to address and improve upon the rapidly growing CBD market, which includes both FDA approved drugs and CBD products not currently regulated as drugs. For more information, visit [www.tnfpharma.com](http://www.tnfpharma.com).

### **Cautionary Statement Regarding Forward-Looking Statements**

This press release may contain forward-looking statements. These forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause actual results, performance or achievements to be materially different from any expected future results, performance, or achievements. Forward-looking statements speak only as of the date they are made and neither the Company nor its affiliates assume any duty to update forward-looking statements. Words such as “anticipate,” “believe,” “could,” “estimate,” “expect,” “may,” “plan,” “will,” “would” and other similar expressions are intended to identify these forward-looking statements. Examples of such statements include, but are not limited to, statements regarding the Company’s goals and expectations related to TNF-Renova partnership. Important factors that could cause actual results to differ materially from those indicated by such forward-looking statements include, without limitation: the Company’s ability to maintain compliance with the Nasdaq Stock Market’s listing standards;

the timing of, and the Company's ability to, obtain and maintain regulatory approvals for clinical trials of the Company's pharmaceutical candidates; the timing and results of the Company's planned clinical trials for its pharmaceutical candidates; the amount of funds the Company requires for its pharmaceutical candidates; increased levels of competition; changes in political, economic or regulatory conditions generally and in the markets in which the Company operates; the Company's ability to retain and attract senior management and other key employees; the Company's ability to quickly and effectively respond to new technological developments; and the Company's ability to protect its trade secrets or other proprietary rights, operate without infringing upon the proprietary rights of others and prevent others from infringing on the Company's proprietary rights. A discussion of these and other factors with respect to the Company is set forth in the Company's Annual Report on Form 10-K for the year ended December 31, 2024, filed by the Company on April 11, 2025, and subsequent reports that the Company files with the Securities and Exchange Commission. Forward-looking statements speak only as of the date they are made, and the Company disclaims any intention or obligation to revise any forward-looking statements, whether as a result of new information, future events or otherwise.

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**Investor Contact:**

Robert Schatz

(646) 421-9523

[rschatz@tnfpharma.com](mailto:rschatz@tnfpharma.com)

[www.tnfpharma.com](http://www.tnfpharma.com)

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