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# MyMD Pharmaceuticals' Lead Compound MYMD-1 Shows Commonality in Comparative Study with FDA-Approved Anti-Inflammatory and Anti-Autoimmune Drugs Used for Arthritis, Colitis and Dermatitis

- *Study shows mechanisms of MYMD-1 deliver same outcomes as the market-leading drugs for JAK inhibition in blocking the genes that trigger inflammation and autoimmunity*
- *Global market for JAK inhibitors projected to exceed $300 billion by 2026 according to a report by 360 Market Updates*

BALTIMORE--(BUSINESS WIRE)-- MyMD Pharmaceuticals, Inc. (Nasdaq: MYMD) ("MyMD" or "the Company"), a clinical stage pharmaceutical company committed to extending healthy lifespan by focusing on developing two therapeutic platforms, today announced data from a comparative study conducted by Eurofins Discovery showing commonality between its lead clinical compound MYMD-1 and three FDA-approved JAK inhibitor drugs for the treatment of autoimmune and inflammatory diseases.

Janus Kinases (JAKs) are enzymes found in cells in the immune system that are critical for the cell signaling process. JAK inhibitors block the inflammatory signaling pathways, inhibiting the genes that trigger autoimmune processes.

"This new comparative data adds to the growing body of evidence demonstrating MYMD-1's efficacy in preventing and treating a range of inflammatory and autoimmune diseases," said Chris Chapman, M.D., President, Director and Chief Medical Officer of MyMD. "JAK inhibitor drugs alone represent an $11 billion global market today, growing to a $300 billion-plus global market by the end of 2026, according to data from 360 Market Updates. That is only a fraction of the total market for anti-inflammatory drugs. With only a few FDA-approved JAK inhibitors on the market today, there is ample opportunity for new related products to capture a significant share of this massive addressable market."

The FDA has issued Boxed Warnings for one of the marketed JAK inhibitor drugs used in the comparative study. The public was notified of serious side effects including an increased risk of blood clots in the lungs and death in rheumatoid arthritis patients taking a standard dose of the product.

Dr. Chapman noted, “The FDA safety alert was specific to the mechanisms of that particular drug alone, not to the safety profile of JAK inhibition as a treatment. There are many successful and effective treatments for autoimmune diseases on the market, and JAK inhibition is only one therapeutic strategy. As an inhibitor of two of the key drivers of chronic inflammation – JAKs and tumor necrosis factor-alpha (TNF-α) – we are confident that MYMD-1 will become a high value next generation immunometabolic regulator for autoimmune and age-related diseases.”

In addition to JAK inhibition, MYMD-1 has shown efficacy as a selective inhibitor of TNF-α, a driver of chronic inflammation. MYMD-1 has also been shown to be effective in traversing the blood-brain barrier, a differentiator that can increase the drug’s benefit to patients.

**About MyMD Pharmaceuticals, Inc.**

MyMD Pharmaceuticals, Inc. (Nasdaq: MYMD) is a clinical stage pharmaceutical company committed to extending healthy lifespan by focusing on developing two therapeutic platforms. MYMD-1 is a drug platform based on a clinical stage small molecule that regulates the immunometabolic system to control TNF-α and other pro-inflammatory cytokines. MYMD-1 is being developed to treat autoimmune diseases, including those currently treated with non-selective TNF-α blocking drugs, and aging and longevity. The Company’s second drug platform, Supera-CBD, is based on a novel (patent pending) synthetic derivative of cannabidiol (CBD) that targets numerous key receptors including CB2 and opioid receptors and inhibits monoamine oxidase. Supera-CBD is being developed to address the rapidly growing CBD market, that includes FDA approved drugs and CBD products not currently regulated as a drug. For more information, visit www.mymd.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 none of MyMD 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. Important factors that could cause actual results to differ materially from those indicated by such forward-looking statements include, without limitation: the timing of, and MyMD’s ability to, obtain and maintain regulatory approvals for clinical trials of MyMD’s pharmaceutical candidates; the timing and results of MyMD’s planned clinical trials for its pharmaceutical candidates; the amount of funds MyMD requires for its pharmaceutical candidates; increased levels of competition; changes in political, economic or regulatory conditions generally and in the markets in which MyMD operates; MyMD’s ability to retain and attract senior management and other key employees; MyMD’s ability to quickly and effectively respond to new technological developments; MyMD’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 MyMD’s proprietary rights; and the impact of the ongoing COVID-19 pandemic on MyMD’s results of operations, business plan and the global economy. A discussion of these and other factors with respect to MyMD is set forth in the Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2021, filed by MyMD on May 18, 2021. Forward-looking statements

speak only as of the date they are made and MyMD 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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