Filed by Akers Biosciences, Inc.
Pursuant to Rule 425 of the Securities Act of 1933
and deemed filed pursuant to Rule 14a-12
of the Securities Exchange Act of 1934
Subject Company: MyMD Pharmaceuticals, Inc.
Commission File No.: 001-36268

Akers' Proposed Merger Partner MyMD Pharmaceuticals Announces Plans to Initiate COVID-19 Inflammatory Depression Trial

BALTIMORE, April 13, 2021 – Akers Biosciences, Inc. (NASDAQ: AKER), today announced that its proposed merger partner MyMD Pharmaceuticals, Inc. ("MyMD"), a clinical stage pharmaceutical company committed to extending health lifespan and treating immune mediated illnesses, has reached an agreement with a major medical school to conduct a Phase 2 clinical trial to investigate the effectiveness of MYMD-1 to treat immune mediated depression in patients affected with COVID-19. MYMD believes that this investigator-initiated study is the first of its kind and addresses a significant unmet medical need.

In a finding published in JAMA Network Open on 3/12/21, it was found that 52% of individuals who had COVID-19 had an associated moderate to severe Major Depressive Disorder. Currently there are no studies—to date or currently—to investigate therapeutic approaches to treat COVID-19 associated depression that MYMD is aware of, making this MYMD-1 study a potential landmark undertaking to address a critical global unmet need.

The study is designed to analyze the pro-inflammatory cytokines associated with the "cytokine storm," with the Phase 2 trial planned to begin in Q2, under a contract research agreement. The COVID-19 depression trial is expected to be followed by studies at a major medical school on the therapeutic potential of MYMD-1 in patients with multiple sclerosis, including its effects on depression and disease progression. MyMD-1 is believed to be the first drug being developed to treat age related diseases and aging itself.

"COVID-19 associated depression is just the beginning," said Chris Chapman, M.D., President and Chief Medical Officer of MyMD Pharmaceuticals. "After confirming, in successful preclinical studies over the past few years, that MYMD-1 can slow aging and treat age-related illnesses where the immune system has gone awry, we are excited to be moving into the clinical development phases of this promising novel therapeutic. Because inflammation is often the culprit for a myriad of diseases, additional studies that are planned will include the application of MYMD-1 to treat autoimmune diseases such as Multiple Sclerosis, delay age-related effects such as muscle loss and frailty, and prevent the adverse effects of space travel among Astronauts."

About MyMD Pharmaceuticals, Inc.

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. SUPERA-CBD is a drug platform 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.

No Offer or Solicitation

This communication shall not constitute an offer to sell or the solicitation of an offer to sell or the solicitation of an offer to buy any securities, nor shall there be any sale of securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. No public offer of securities shall be made except by means of a prospectus meeting the requirements of Section 10 of the Securities Act of 1933, as amended.

Important Additional Information for Investors and Stockholders

In connection with the proposed transaction between Akers and MyMD, Akers has filed with the SEC a registration statement on Form S-4 that includes a proxy statement and prospectus of Akers. The registration statement was declared effective by the SEC on March 23, 2021, and the proxy statement of Akers and prospectus was mailed to the stockholders of Akers on or about March 24, 2021. Akers may also file other relevant documents with the SEC regarding the proposed transaction. AKERS URGES INVESTORS AND STOCKHOLDERS TO READ THE DEFINITIVE PROXY STATEMENT/PROSPECTUS AND OTHER RELEVANT DOCUMENTS FILED OR THAT WILL BE FILED WITH THE SEC CAREFULLY AND IN THEIR ENTIRETY BECAUSE THEY CONTAIN OR WILL CONTAIN IMPORTANT INFORMATION ABOUT AKERS, THE PROPOSED TRANSACTION AND RELATED MATTERS. Investors and shareholders may obtain free copies of the proxy statement, prospectus and other documents filed by Akers with the SEC through the website maintained by the SEC at www.sec.gov. In addition, investors and shareholders may obtain free copies of the proxy statement, prospectus and other documents filed by Akers with the SEC by contacting Investor Relations by mail at Akers Biosciences, Inc., Attn: Investor Relations, 1185 Avenue of the Americas, 3rd Floor, New York, New York USA 10036. Investors and stockholders are urged to read the proxy statement, prospectus and the other relevant materials before making any voting or investment decision with respect to the proposed transaction.

Participants in the Solicitation

Akers and MyMD, and each of their respective directors and executive officers and certain of their other members of management and employees, may be deemed to be participants in the solicitation of proxies in connection with the proposed transaction. Information about Akers' directors and executive officers is included in Akers' Annual Report on Form 10-K for the year ended December 31, 2020, filed with the SEC on March 1, 2021. Additional information regarding these persons and their interests in the transaction is included in the definitive proxy statement/prospectus referred to above. These documents can be obtained free of charge from the sources indicated above.

Cautionary Statement Regarding Forward-Looking Statements

Certain statements contained in this communication regarding matters that are not historical facts are forward-looking statements within the meaning of Section 21E of the Securities and Exchange Act of 1934, as amended, and the Private Securities Litigation Reform Act of 1995, known as the PSLRA. These include statements regarding management's intentions, plans, beliefs, expectations or forecasts for the future, and, therefore, you are cautioned not to place undue reliance on them. No forward-looking statement can be guaranteed, and actual results may differ materially from those projected. Akers and MyMD undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise, except to the extent required by law. We use words such as "anticipates," "plans," "expects," "projects," "future," "intends," "may," "will," "should," "could," "estimates," "predicts," "potential," "continue," "guidance," and similar expressions to identify these forward-looking statements that are intended to be covered by the safe-harbor provisions of the PSLRA. Such forward-looking statements are based on our expectations and involve risks and uncertainties; consequently, actual results may differ materially from those expressed or implied in the statements due to a number of factors, including, but not limited to, risks relating to the completion of the merger, including the need for stockholder approval and the satisfaction of closing conditions; the cash balances of the combined company following the closing of the merger; the ability of Akers to remain listed on the Nasdaq Capital Market in connection with the merger; and expected merger-related cash outlays, including the timing and amount of those outlays. Risks and uncertainties related to MyMD that may cause actual results to differ materially from those

expressed or implied in any forward-looking statement include, but are not limited to: 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.

New factors emerge from time to time and it is not possible for us to predict all such factors, nor can we assess the impact of each such factor on the 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. These risks, as well as other risks associated with the combination, are more fully discussed in the definitive proxy statement/prospectus referred to above. Additional risks and uncertainties are identified and discussed in the "Risk Factors" section of Akers' Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and other documents filed from time to time with the SEC. Forward-looking statements included in this release are based on information available to Akers and MyMD as of the date of this release. Neither Akers nor MyMD undertakes any obligation to update such forward-looking statements to reflect events or circumstances after the date of this release.

Investor Contact:

Brett Mass 646-536-7331 brett@haydenir.com www.haydenir.com

Media Contact:

Will Johnson 201-465-8019 MYMD@antennagroup.com www.antennagroup.com