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MAIA Biotechnology Advances New Telomere-Targeting Molecule Program

- *Progressing next generation of telomere-targeting candidates through proof of concept studies with promising anti-cancer activity*
- *Filed provisional new composition of matter patent during fourth quarter 2022*

CHICAGO--(BUSINESS WIRE)-- MAIA Biotechnology, Inc. (NYSE American: [MAIA](#)) announced today the advancement of its Telomere-Targeting Molecule Program (“Project T3”). MAIA is designing and evaluating multiple telomere-targeting compounds designed to modify the telomeric structure through the cancer cell - intrinsic telomerase activity - and thus cause the death of these cells. The studies, conducted in vitro in multiple cancer cell lines and in vivo in several pre-clinical cancer models, demonstrated the intended mechanism of action and high-level anti-cancer activity for these new molecules. The compounds belong to a new chemical class of molecules called telomere targeting *divalent dinucleotides*.

MAIA has nominated one lead new molecular entity candidate (designated as MAIA-2021-20) and one back-up new molecular entity candidate (MAIA-2022-12) for further advancement into preclinical GLP-toxicity and other studies, and may advance one of these candidates into human clinical trials upon completion of the required preclinical evaluations. MAIA also has filed a broad provisional patent application covering the composition of matter for the new telomere-targeting molecules in the fourth quarter of 2022.

“The discovery and preclinical advancement of these new telomere-targeting compounds represent the beginning of a significant new chapter for MAIA,” said Sergei Gryaznov, Ph.D., MAIA Chief Scientific Officer. “We have generated highly encouraging data in vitro and in vivo in several different tumor models showing impressive single-agent activity for the new compounds, as well as in combination with immune checkpoint inhibitors. The observed anti-cancer activity is quite remarkable, often leading to complete tumor eliminations in *in vivo* models. We are working diligently to advance these candidates toward clinical development.”

“Project T3 is a major step forward as we are generating novel direct telomere-altering compounds,” said MAIA Chairman and Chief Executive Officer Vlad Vitoc, M.D. “We are advancing multiple compounds through comprehensive preclinical development as potential follow-on candidates to our lead therapeutic candidate, THIO, which is currently being evaluated in a Phase 2 trial (THIO-101 trial) in patients with Non-Small Cell Lung Cancer. We look forward to announcing further developments of MAIA’s proprietary new molecular entity candidates in 2023 and beyond.”

At the XXIV International Round Table on Nucleosides, Nucleotides, and Nucleic Acids in

Stockholm in August 2022, MAIA presented an overview of its promising [THIO drug discovery platform](#) for generating potential anti-cancer agents. The presentation demonstrated the importance of cancer cell telomeric DNA structural and functional integrity, as well as therapeutically attractive opportunity to induce stress, increase innate sensing and adaptive anti-tumor immunity via “cancer cell self-produced” chemical modification of telomeres.

About THIO

THIO (6-thio-dG or 6-thio-2'-deoxyguanosine) is a telomere-targeting agent currently in clinical development to evaluate its activity in non-small cell lung cancer (NSCLC), in sequential administration with LIBTAYO® (cemiplimab) an anti-PD1 therapy, developed and commercialized by Regeneron. Telomeres play a fundamental role in the survival of cancer cells and their resistance to current therapies. THIO is being developed as a second or higher line of treatment for NSCLC for patients that have progressed beyond the standard-of-care regimen of existing checkpoint inhibitors.

About MAIA Biotechnology, Inc.

MAIA is a clinical-stage biopharmaceutical company developing targeted immunotherapies for cancer. The Company's lead program is THIO, a potential first-in-class cancer telomere targeting agent in clinical development for the treatment of patients with telomerase-positive cancers. For more information, please visit www.maiabiotech.com.

Forward Looking Statements

This press release includes forward-looking statements including, but not limited to, statements related to the closing of the offering and the expected use of proceeds, development of drug candidates, our operations and business strategy, our expected financial results, and corporate updates. The forward-looking statements contained in this press release are based on management's current expectations and are subject to substantial risks, uncertainty and changes in circumstances. Actual results may differ materially from those expressed by these expectations due to risks and uncertainties, including, among others, those related to our ability to obtain additional capital on favorable terms to us, or at all, including, without limitation, to fund our current and future preclinical studies and clinical trials and the success, timing and cost of our drug development program and our ongoing or future preclinical studies and clinical trials, including, without limitation, the possibility of unfavorable new clinical and preclinical data and additional analyses of existing data, that the risks that prior clinical and preclinical results may not be replicated, and risks associated with the current coronavirus pandemic. Forward-looking statements speak only as of the date of this press release, and we undertake no obligation to review or update any forward-looking statement except as may be required by applicable law.

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