

MAIA Biotechnology Granted European Patent for Next Generation Telomere-Targeting Agents for Cancer Therapy

Cancer-fighting immunosuppressive agents shown to disrupt telomeres and suspend growth of cancer cells

CHICAGO , Aug. 13, 2025 (GLOBE NEWSWIRE) -- MAIA Biotechnology, Inc. (NYSE American: MAIA) ("MAIA", the "Company"), a clinical-stage biopharmaceutical company focused on developing targeted immunotherapies for cancer, today announced that the European Patent Office has decided to grant a patent broadly covering a portfolio of ateganosine-based analogues for telomere-targeting anticancer therapy and methods of using ateganosine (THIO) alone or before administration of checkpoint inhibitors (CPIs). The patent, titled "Mercaptopurine Ribonucleoside Analogues for Altering Telomerase Mediated Telomere," was invented by MAIA's Chief Scientific Officer Sergei M. Gryaznov, PhD and Scientific Advisory Board member Jerry W. Shay, PhD.

"Mercaptopurine nucleoside analogues are cancer-fighting immunosuppressive agents that disrupt the structure and function of telomeres and reduce immune system activity, interfering with the growth of cancer cells and causing programmed cancer cell death. As an important extension of MAIA's innovative cancer treatment platform, these new compounds are key next-generation telomere-targeting agents with potentially improved specificity towards cancer cells relative to normal cells and with potentially increased anticancer activity," said Dr. Gryaznov.

"The new IP is expected to further secure and expand the value of our first-in-class telomere-targeting compounds across the European scientific community," added MAIA Chairman and CEO Vlad Vitoc, M.D.

MAIA's global patent and patent-pending estate covers several areas including telomerase mediated telomere altering compounds and treatment of therapy-resistant cancers. Further, ateganosine's immunogenic treatment strategy, which focuses on sequential combination with checkpoint inhibitors, has been filed worldwide. MAIA's IP portfolio for ateganosine currently comprises 10 issued patents worldwide including Europe (validated in 19 countries) along with 24 pending patent applications.

About Ateganosine

Ateganosine (THIO, 6-thio-dG or 6-thio-2'-deoxyguanosine) is a first-in-class investigational telomere-targeting agent currently in clinical development to evaluate its activity in non-small cell lung cancer (NSCLC). Telomeres, along with the enzyme telomerase, play a fundamental role in the survival of cancer cells and their resistance to current therapies. The

modified nucleotide 6-thio-2'-deoxyguanosine induces telomerase-dependent telomeric DNA modification, DNA damage responses, and selective cancer cell death. Ateganosine-damaged telomeric fragments accumulate in cytosolic micronuclei and activates both innate (cGAS/STING) and adaptive (T-cell) immune responses. The sequential treatment of ateganosine followed by PD-(L)1 inhibitors resulted in profound and persistent tumor regression in advanced, in vivo cancer models by induction of cancer type—specific immune memory. Ateganosine is presently developed as a second or later 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 targeted therapy, immuno-oncology company focused on the development and commercialization of potential first-in-class drugs with novel mechanisms of action that are intended to meaningfully improve and extend the lives of people with cancer. Our lead program is ateganosine (THIO), a potential first-in-class cancer telomere targeting agent in clinical development for the treatment of NSCLC patients with telomerase-positive cancer cells. For more information, please visit www.maiabiotech.com.

Forward Looking Statements

MAIA cautions that all statements, other than statements of historical facts contained in this press release, are forward-looking statements. Forward-looking statements are subject to known and unknown risks, uncertainties, and other factors that may cause our or our industry's actual results, levels or activity, performance or achievements to be materially different from those anticipated by such statements. The use of words such as "may," "might," "will," "should," "could," "expect," "plan," "anticipate," "believe," "estimate," "project," "intend," "future," "potential," or "continue," and other similar expressions are intended to identify forward looking statements. However, the absence of these words does not mean that statements are not forward-looking. For example, all statements we make regarding (i) the initiation, timing, cost, progress and results of our preclinical and clinical studies and our research and development programs, (ii) our ability to advance product candidates into, and successfully complete, clinical studies, (iii) the timing or likelihood of regulatory filings and approvals, (iv) our ability to develop, manufacture and commercialize our product candidates and to improve the manufacturing process, (v) the rate and degree of market acceptance of our product candidates, (vi) the size and growth potential of the markets for our product candidates and our ability to serve those markets, and (vii) our expectations regarding our ability to obtain and maintain intellectual property protection for our product candidates, are forward looking. All forward-looking statements are based on current estimates, assumptions and expectations by our management that, although we believe to be reasonable, are inherently uncertain. Any forward-looking statement expressing an expectation or belief as to future events is expressed in good faith and believed to be reasonable at the time such forward-looking statement is made. However, these statements are not guarantees of future events and are subject to risks and uncertainties and other factors beyond our control that may cause actual results to differ materially from those expressed in any forward-looking statement. Any forward-looking statement speaks only as of the date on which it was made. We undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise, except as required by law. In this release, unless the context requires otherwise, "MAIA," "Company," "we," "our,"

and "us" refers to MAIA Biotechnology, Inc. and its subsidiaries.

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