



## NGM Discloses Third Oncology Development Candidate, NGM438, a Novel Antagonist Antibody Inhibiting LAIR1 for the Treatment of Advanced Solid Tumors

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- LAIR1, through interactions with tumor-associated collagens, may form a stromal checkpoint that imposes signaling-based immune suppression and impedes anti-tumor immunity
- NGM plans to initiate first-in-human testing of NGM438 in 4Q21
- NGM featured NGM438 today at its first R&D Day, along with its diverse pipeline of drug candidates for liver and metabolic diseases, retinal diseases and cancer

SOUTH SAN FRANCISCO, Calif., Dec. 09, 2020 (GLOBE NEWSWIRE) -- NGM Biopharmaceuticals, Inc. (NGM) (Nasdaq: NGM), a biotechnology company focused on discovering and developing transformative therapeutics for patients, today disclosed its third oncology development candidate, NGM438, a novel antagonist antibody that inhibits Leukocyte-associated immunoglobulin-like receptor 1 (LAIR1). NGM438 was featured earlier today during NGM's first R&D Day. The event highlighted the company's diverse portfolio of therapeutic candidates for liver and metabolic disease, retinal diseases and cancer. All presentations from the R&D Day can be found in the Investors & Media section of NGM's website [here](#).

LAIR1 is a collagen-binding inhibitory receptor expressed on immune cells<sup>1-2</sup> that is implicated in immune suppression. LAIR1 and collagens are upregulated in multiple cancer types<sup>3-7</sup> where collagens are produced by activated stromal cells. These stromal-derived suppressive factors are associated with poor responses to checkpoint inhibitors. For such tumors, formation of the LAIR1-collagen complex may act as a stromal checkpoint to both physically exclude immune cells from the tumor and impose signaling-based immune suppression<sup>8-9</sup>. Consequently, inhibiting this stromal checkpoint represents a potentially promising new therapeutic strategy to treat cancer by promoting the remodeling of the tumor architecture that restricts T cell infiltration of the tumor cell mass and reversing immune suppression in the tumor microenvironment.

Designed to inhibit LAIR1 interactions with stromal-derived collagens, NGM438 has the potential to block this stromal checkpoint and restore anti-tumor immune responses. In preclinical studies, NGM438 demonstrated the ability to reprogram collagen-suppressed myeloid cells to a stimulatory phenotype, induce inflammatory cytokine production by myeloid and T cells, and relieve collagen-based suppression of T cell proliferation. Reinvigoration of collagen-suppressed immune cells may address a key resistance mechanism that limits responses to current immunotherapies.

"At NGM's inaugural R&D Day today, we were excited to showcase NGM's powerful in-house drug discovery engine. NGM438, a novel immunology candidate, is yet another example of our team's biology-driven approach and expertise in tailoring highly-specialized antibodies," said David J. Woodhouse, Ph.D., Chief Executive Officer at NGM. "NGM438, which inhibits LAIR1, and NGM707, our dual antagonist antibody that inhibits ILT2 and ILT4, are both examples of our strategy to broaden and deepen anti-tumor immune responses for patients through myeloid reprogramming by addressing key resistance mechanisms and reversing stromal and myeloid checkpoints."

NGM438 joins NGM707 as the second myeloid reprogramming product candidate in the NGM oncology portfolio. NGM707 is a novel dual antagonist antibody that inhibits Immunoglobulin-like transcript 2 (ILT2) and Immunoglobulin-like transcript 4 (ILT4). First-in-human testing for NGM707 is expected to begin in mid-2021. NGM's third oncology candidate is NGM120, a first-in-class antagonistic antibody that binds glial cell-derived neurotrophic factor receptor alpha-like (GFRAL) and inhibits growth differentiation factor 15 (GDF15) signaling. NGM120 is in an ongoing Phase 1a/1b trial in patients with cancer and cancer anorexia/cachexia syndrome (CACS).

NGM438, NGM707 and NGM120 were discovered by NGM under its [strategic collaboration with Merck](#).

### About NGM Biopharmaceuticals, Inc.

NGM is a biopharmaceutical company focused on discovering and developing novel therapeutics based on scientific understanding of key biological pathways underlying liver and metabolic diseases, retinal diseases and cancer. We leverage our biology-centric drug discovery approach to uncover novel mechanisms of action and generate proprietary insights that enable us to move rapidly into proof-of-concept studies and deliver potential first-in-class medicines to patients. At NGM, we aspire to operate one of the most productive research and development engines in the biopharmaceutical industry, with multiple programs in clinical development. Visit us at [www.ngmbio.com](http://www.ngmbio.com) for more information.

### Forward Looking Statements

Statements contained in this press release regarding matters that are not historical facts are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "may," "plans," "implicate," "potentially," "promising," "designed to," "potential," and similar expressions (as well as other words or expressions referencing future events, conditions or circumstances) are intended to identify forward-looking statements. These statements include those related to: the therapeutic potential, potential benefits and design of NGM438, including NGM438's potential to impede anti-tumor immunity by its inhibiting LAIR1; the planned first in-human testing of NGM438 and NGM707 and the anticipated timing thereof; implications of the potential therapeutic advantages of inhibiting a stromal checkpoint to both physically exclude immune cells from the tumor and impose signaling-based immune suppression; the potential for reinvigoration of collagen-suppressed immune cells to address a key resistance mechanism that limits responses to current immunotherapies; NGM's strategy to broaden and deepen anti-tumor immune responses for patients through myeloid reprogramming by addressing key resistance mechanisms and reversing stromal and myeloid checkpoints; and other statements that are not historical fact. Because such statements deal with future events and are based on NGM's current expectations, they are

subject to various risks and uncertainties, and actual results, performance or achievements of NGM could differ materially from those described in or implied by the statements in this press release. These forward-looking statements are subject to risks and uncertainties, including, without limitation, risks and uncertainties associated with the costly and time-consuming pharmaceutical product development process and the uncertainty of clinical success, including risks related to failure or delays in successfully initiating, enrolling or completing clinical studies; the risk that NGM's ongoing or future clinical studies in humans may show that NGM438, and/or NGM707 are not tolerable and effective treatments for cancer or that the effects of inhibiting LAIR1 interactions with stromal-derived collagens are otherwise different than anticipated; the ongoing COVID-19 pandemic, which has adversely affected, and could materially and adversely affect in the future, NGM's business and operations, including NGM's ability to timely supply, initiate, enroll and complete its ongoing and future clinical studies; the time-consuming and uncertain regulatory approval process; NGM's reliance on third-party manufacturers for NGM438 and NGM707 and its other product candidates; the sufficiency of NGM's cash, cash equivalents and short-term marketable securities and need for additional capital; and other risks and uncertainties affecting NGM and its development programs, as well as those discussed in the sections titled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in NGM's quarterly report on Form 10-Q for the quarter ended September 30, 2020 and future filings and reports that NGM makes from time to time with the United States Securities and Exchange Commission. Except as required by law, NGM assumes no obligation to update these forward-looking statements or to update the reasons if actual results differ materially from those anticipated in the forward-looking statements.

**Investor Contact:**

Alex Schwartz  
[ir@ngmbio.com](mailto:ir@ngmbio.com)

**Media Contact:**

Liz Melone  
[media@ngmbio.com](mailto:media@ngmbio.com)

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