NGM Bio Announces Initiation of Phase 1a/1b Clinical Study of NGM120 for the Potential Treatment of Cancer and Cancer Anorexia/Cachexia Syndrome (CACS)

February 11, 2020

--Study to evaluate potential of GDF15/GFRAL pathway inhibition to block tumor-associated weight loss and tumor growth--

--CACS, an uncontrolled wasting syndrome, is a common co-morbidity of cancer and associated with shortened survival--

--Two parallel cohorts designed to enroll patients with advanced solid tumors and metastatic pancreatic cancer, respectively--

SOUTH SAN FRANCISCO, Calif., Feb. 11, 2020 (GLOBE NEWSWIRE) -- NGM Biopharmaceuticals, Inc. (Nasdaq: NGM), a clinical stage biotechnology company focused on developing transformative therapeutics for patients, today announced the initiation of a Phase 1a/1b clinical study of 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, for the potential treatment of cancer and cancer anorexia/cachexia syndrome (CACS). CACS is the uncontrolled wasting of both skeletal muscle and fat that is a common co-morbidity of cancer and is associated with shortened survival in cancer patients. The initiation of this study followed the successful completion of a Phase 1 safety, tolerability and pharmacokinetics study of NGM120 in healthy adult subjects in 2019.

NGM scientists previously made several seminal discoveries related to the GDF15 pathway, including de-orphanizing its cognate receptor, GFRAL. NGM's preclinical research suggests the central role of the GDF15/GFRAL pathway in promoting tumor-associated appetite suppression and weight loss. In addition, GDF15 levels are elevated in numerous tumor types and, based on available scientific literature, increased serum GDF15 levels are associated with worse prognosis in prostate, colorectal, esophageal and ovarian cancers. In preclinical studies of NGM120, NGM has demonstrated that blocking the interaction between GFRAL and GDF15 is able to both reduce tumor-associated weight loss and slow tumor growth and could potentially provide a novel treatment for CACS and cancer.

"We are pleased to have initiated a Phase 1a/1b clinical study of NGM120. This study will provide insights into the drug candidate's anti-CACS and anti-cancer activity in patients with solid tumors, including pancreatic cancer," said Alex DePaoli, M.D., Senior Vice President, Chief Translational Officer at NGM. "Similar to the profile of our other pipeline candidates, NGM120 targets an area of important unmet need. We believe that the association between GDF15 and uncontrolled weight loss, and also with poor prognosis in many cancer patients, supports the application of NGM120 as a potential treatment for CACS and the underlying cancer."

Andrew E. Hendifar, MD, Medical Director, Pancreatic Cancer, and Assistant Professor, Medicine at Cedars-Sinai Medical Center, commented, "The presentation of CACS dramatically weakens an already compromised body and immune system and a patient's overall ability to fight cancer, which, in turn, leads to poor outcomes. A therapeutic that could effectively target and address a key biological driver of this syndrome would represent a significant advance for cancer patients. We look forward to enrolling patients in this study and seeing how NGM120's potential benefits translate in the clinical setting." Dr. Hendifar is serving as an advisor to NGM and is an investigator in the study.

Dr. DePaoli explained, "Blocking the hyper-metabolic state associated with cancer has the potential to impact survival in two ways – first, by preserving lean body mass through improving appetite and reducing the catabolism of lean mass or muscle mass which may enhance a patient's function and ability to fight cancer; and, second, through a direct action on the tumor."

About the NGM120 Phase 1a/1b Study

The Phase 1a/1b multi-site study will evaluate the safety, tolerability and pharmacokinetics of NGM120 as a monotherapy in patients with select advanced solid tumors (Cohort 1) and of NGM120 in combination with gemcitabine and Abraxane® in patients with metastatic pancreatic cancer (Cohort 2). Each cohort will consist of an open-label dose-escalation portion followed by a dose-expansion portion. Approximately 90 patients with elevated serum levels of GDF15 are expected to be enrolled in the concurrently run cohorts. Preliminary evidence of anti-tumor and anti-cachexia activity will be assessed by measuring tumor response rates, body mass and composition, patient reported outcomes and functional status.

For additional information about the study, please link here to visit the listing on clinicaltrials.gov.

About Cancer Anorexia/Cachexia Syndrome (CACS)

CACS is an uncontrolled wasting syndrome in cancer patients, and a common co-morbidity of the disease. CACS is associated with increased hospitalization and shortened survival compared to cancer patients who do not exhibit the syndrome. While CACS can occur in all types of cancer, particularly high incidence rates are observed in pancreatic, gastric, colorectal and esophageal cancers, as well as non-small cell lung cancer. Current therapeutics targeting CACS are primarily directed toward increasing appetite. However, there are limited approved treatments that address the muscle-wasting associated with CACS and no approved treatments that address the altered energy metabolism.

About NGM Biopharmaceuticals, Inc.

NGM is a clinical stage biopharmaceutical company focused on developing novel therapeutics based on scientific understanding of key biological pathways underlying cardio-metabolic, liver, oncologic and ophthalmic diseases. The company leverages its biology-centric drug discovery approach to uncover novel mechanisms of action and generate proprietary insights that enable it to move rapidly into proof-of-concept studies and deliver potential first-in-class medicines to patients. NGM aspires to operate one of the most productive research and development engines in the

biopharmaceutical industry, with multiple programs in clinical development. Visit 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 “believe,” “could,” “designed,” “look forward to,” “potential,” “suggests,” “will,” “would,” 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 design, timing, enrollment and potential results of NGM’s Phase 1a/1b clinical study of NGM120 for the potential treatment of CACS and the underlying cancer, the potential of NGM120 as a novel treatment for CACS and the underlying cancer, the potential therapeutic effects and benefits of NGM120 and the role of the GDF15/GFRAL pathway, as well as 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 forward-looking statements in this press release. These risks and uncertainties include, 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 enrolling or completing clinical studies and the risk that NGM’s clinical studies in humans may show that NGM120 is not a safe and effective treatment for CACS and the underlying cancer; NGM’s reliance on third-party manufactures for NGM120, and other risks and uncertainties affecting the NGM and its development programs, including those described under the caption “Risk Factors” in NGM’s quarterly report on Form 10-Q for the quarter ended September 30, 2019 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:

Sylvia Wheeler and Alex Santos
swheeler@wheelhouselsa.com
asantos@wheelhouselsa.com
ir@ngmbio.com

Media Contact:

Liz Melone
media@ngmbio.com