

Merck and NitroMed Advance First Nitric Oxide-Enhancing COX-2 Inhibitor Into Phase II Clinical Testing

BEDFORD, Mass. - (BUSINESS WIRE) - June 22, 2004 - NitroMed, Inc. (NASDAQ: NTMD) announced that Merck & Co., Inc. (NYSE:MRK) has advanced its lead nitric oxide-enhancing COX-2 inhibitor into Phase II clinical trials. NitroMed and Merck are engaged in a three year collaboration to develop proprietary nitric oxide COX-2 inhibitors to treat pain and inflammation and other conditions and diseases.

"This is an important step for NitroMed in advancing its nitric oxide technology and know-how to the next level of clinical development," said Michael D. Loberg, Ph.D., President and Chief Executive Officer, NitroMed. "We are very pleased to be partnering with Merck and recognize that this program has been steadily progressing because of their expertise and commitment."

In January 2003, NitroMed and Merck launched a three-year exclusive, worldwide licensing and research collaboration. To date, NitroMed has received \$24.2 million in payments and the research collaboration has achieved two milestones. In December 2003, NitroMed received a \$5 million milestone payment from Merck for advancing the lead compound into Phase I clinical testing. Under the research agreement, which can be extended beyond the initial three year term by mutual agreement of the parties, Merck has agreed to provide funding for scientists and equipment, an up-front fee, certain research-based milestone payments, and royalty payments upon successful product developments. Merck is responsible for worldwide clinical, regulatory and commercial activities. Under the agreement NitroMed could potentially receive up to \$350 million in research and development payments, assuming multiple products are developed for several major therapeutic areas.

About NitroMed, Inc.

NitroMed is an emerging pharmaceutical company that discovers, develops and seeks to commercialize proprietary pharmaceuticals based on the therapeutic benefits of the naturally occurring molecule nitric oxide. The Company uses its expertise in nitric oxide biology and chemistry in an effort to develop both novel drugs, as well as safer, more effective versions of existing drugs. Research and development efforts focus on major diseases that are characterized by a deficiency in nitric oxide, such as cardiovascular and inflammatory diseases. BiDil(R), the Company's lead product in development, is an orally administered nitric oxide-enhancing medicine being investigated for the treatment of heart failure in African Americans. A late-stage confirmatory trial targeted to enroll 1,100 patients is underway in more than 160 sites throughout the United States. The Association of Black Cardiologists is a joint sponsor of the study. Collaborative partnerships are a key element of the Company's business strategy. NitroMed has agreements with Merck to jointly develop nitric oxide COX-2 inhibitors and with Boston Scientific to jointly develop nitric oxide coated cardiovascular stents.

Forward Looking Statements

Any statements in this press release about future expectations, plans and prospects for the Company, as well as statements containing the words "believes," "anticipates," "plans," "expects," "will," and similar expressions, constitute forward-looking statements within the meaning of The Private Securities Litigation Reform

looking statements within the meaning of The Private Securities Litigation Reform Act of 1995. Actual results may differ materially from those indicated by such forward-looking statements as a result of various important factors, including risks relating to: difficulties or delays relating to obtaining required regulatory approvals to develop, market and sell BiDil(R) and the Company's other products under development; the Company's ability to successfully complete clinical trials of BiDil(R) and its other products under development; the Company's dependence on corporate collaborators to develop, conduct clinical trials of, manufacture, market and sell products based upon its technologies, including without limitations the Company's dependence on Merck to successfully complete clinical trials of nitric oxide-enhancing COX-2 inhibitors; the Company's ability to obtain or maintain intellectual property protection and required licenses for its technologies and products under development; the Company's ability to obtain the substantial additional funding required to conduct research and development, manufacturing, marketing and sales of its products under development; and other factors discussed in its Quarterly Report on Form 10-Q for the quarter ended March 31, 2004 and other filings that it periodically makes with the SEC. In addition, the forward-looking statements included in this press release represent the Company's views as of the date of this release. Subsequent events and developments may cause the Company's views to change. However, while the Company may elect to update these forward-looking statements at some point in the future, the Company specifically disclaims any obligation to do so. These forward-looking statements should not be relied upon as representing the Company's views as of any date subsequent to the date of this release.

CONTACT: NitroMed, Inc.
Kathleen O'Donnell, 781-685-9792

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"Safe Harbor" Statement under the Private Securities Litigation Reform Act of 1995: Statements in this press release regarding NitroMed, Inc.'s business which are not historical facts are "forward-looking statements" that involve risks and uncertainties. For a discussion of such risks and uncertainties, which could cause actual results to differ from those contained in the forward-looking statements, see "Risk Factors" in the Company's Annual Report or Form 10-K for the most recently ended fiscal year.