BioMarin Completes Enrollment of Phase 2 Clinical Study of 6R-BH4 in Poorly Controlled Hypertension

Results Anticipated in the First Quarter of 2007

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BioMarin Pharmaceutical Inc. (Nasdaq and SWX: BMRN) announced today that it has completed enrollment of the Phase 2 clinical study of 6R-BH4 for the treatment of poorly controlled hypertension. The company remains on track to announce data from this study in the first quarter of 2007.

The Phase 2, multicenter, double-blind, placebo-controlled study, which was initiated in July 2006, is designed to evaluate the safety and efficacy of 6R-BH4 on blood pressure in patients with poorly controlled systemic hypertension. The study is being conducted at 26 sites in the United States and has enrolled 116 patients, of whom 55 have type 2 diabetes. Among other eligibility criteria, to participate in the study, patients must have elevated blood pressure while on at least two different medications for hypertension. Study patients will receive oral doses of 5 mg/kg of 6R-BH4 or a placebo twice daily for an eight-week period. The primary endpoint variable of the study is the change in systolic blood pressure (SBP) from baseline to Week 8. The primary endpoint analysis will compare the mean change in SBP between the 6R-BH4 and placebo groups. A secondary endpoint analysis will compare the mean change in diastolic blood pressure (DBP) between the 6R-BH4 and placebo groups.

About 6R-BH4

6R-BH4, commonly known as BH4 or tetrahydrobiopterin, is a naturally occurring enzyme cofactor that is required for numerous biochemical and physiologic processes, including the synthesis of nitric oxide (NO). NO has been shown to play a key protective role throughout the cardiovascular system and produces multiple positive effects, such as relaxing smooth muscle, reducing blood pressure, controlling inflammation and reducing platelet aggregation. Researchers have demonstrated that a deficiency of BH4 can disrupt NO synthesis, resulting in a loss of normal endothelial NO production. This loss of endothelial NO production, commonly referred to as endothelial dysfunction, has been associated with many cardiovascular diseases, including hypertension, diabetic vascular disease, peripheral arterial disease, coronary arterial disease and pulmonary hypertension, and has been shown to be a strong predictor of cardiovascular adverse

events in a number of clinical studies.

6R-BH4 is the same enzyme cofactor currently being evaluated in BioMarin's Phenoptin(TM) (sapropterin dihydrochloride) for phenylketonuria (PKU) program. In May 2005, BioMarin and Serono SA entered into a strategic partnership for the development and commercialization of 6R-BH4 for cardiovascular indications as well as Phenoptin and Phenylase(TM) (phenylalanine ammonia lyase) for the treatment of PKU.

About BioMarin

BioMarin develops and commercializes innovative biopharmaceuticals for serious diseases and medical conditions. The company's product portfolio is comprised of two approved products and multiple clinical and preclinical product candidates. Approved products include Naglazyme(R) (galsulfase) for mucopolysaccharidosis VI (MPS VI), a product wholly developed and commercialized by BioMarin, and Aldurazyme(R) (laronidase) for mucopolysaccharidosis I (MPS I), a product which BioMarin developed through a 50/50 joint venture with Genzyme Corporation. Investigational product candidates include Phenoptin(TM) (sapropterin dihydrochloride), a Phase 3 product candidate for the treatment of phenylketonuria (PKU), and 6R-BH4 for cardiovascular indications, which is currently in Phase 2 clinical development for the treatment of poorly controlled hypertension. For additional information, please visit www.BMRN.com. Information on BioMarin's website is not incorporated by reference into this press release.

Forward-Looking Statement

This press release contains forward-looking statements about the business prospects of BioMarin Pharmaceutical Inc., including, without limitation, statements about: the development of its product candidate 6R-BH4 for the treatment of poorly controlled hypertension and the expected effects of 6R-BH4 in poorly controlled hypertension and other indications and the expected timing of the results from the Phase 2 study in uncontrolled hypertension; and the development of Phenoptin for treatment of PKU. These forward-looking statements are predictions and involve risks and uncertainties such that actual results may differ materially from these statements. These risks and uncertainties include, among others: the results and timing of current and planned preclinical and clinical trials related to Phenoptin and 6R-BH4; and those factors detailed in BioMarin's filings with the Securities and Exchange Commission, including, without limitation, the factors contained under the caption "Risk Factors" in BioMarin's 2005 Annual Report on Form 10-K and the factors contained in BioMarin's reports on Forms 10-Q and 8-K. Stockholders are urged not to place undue reliance on forward-looking

statements, which speak only as of the date hereof. BioMarin is under no obligation, and expressly disclaims any obligation, to update or alter any forward-looking statements.

NOTE: Naglazyme(R) is a registered trademark of BioMarin Pharmaceutical Inc.

Aldurazyme(R) is a registered trademark of BioMarin/Genzyme LLC.

Investors
Joshua A. Grass
Senior Director, Business Development & Finance
BioMarin Pharmaceutical Inc.
415-506-6777

Media
Susan Ferris
Senior Manager, Corporate Communications
BioMarin Pharmaceutical Inc.
415-506-6701

SOURCE: BioMarin Pharmaceutical Inc.

CONTACT: investors, Joshua A. Grass, Senior Director, Business Development & Finance, +1-415-506-6777, or media, Susan Ferris, Senior Manager, Corporate Communications, +1-415-506-6701, both of BioMarin Pharmaceutical Inc.

Web site: http://www.bmrn.com/
