UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT
PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934

Date of report (Date of earliest event reported): August 13, 2009

NILE THERAPEUTICS, INC.

(Exact name of Registrant as Specified in its Charter)

Delaware	**001-34058**	**88-0363465**
(State or other jurisdiction of incorporation)	**(Commission File Number)**	**(I.R.S. Employer Identification No.)**

4 West 4th, Suite 400
San Mateo, CA 94402
(Address of Principal Executive Offices)

(415) 875-7880
(Registrant's telephone number, including area code)

115 Sansome Street, Suite 310
San Francisco, California 94104
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 2.02. Results of Operations and Financial Condition.

On August 13, 2009, Nile Therapeutics, Inc. issued a press release announcing its financial results for the second quarter ended June 30, 2009. A copy of this press release is furnished herewith as Exhibit 99.1. Pursuant to the rules and regulations of the Securities and Exchange Commission, such exhibit and the information set forth therein and in this Item 2.02 have been furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to liability under that section nor shall they be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such filing regardless of any general incorporation language.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits. The following exhibit is furnished herewith.

Exhibit No.	**Description**
99.1	Nile Therapeutics, Inc. press release dated August 13, 2009.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this report to be signed on its behalf by the undersigned, hereunto duly authorized.

NILE THERAPEUTICS, INC.

Date: August 17, 2009

By: /s/ Daron Evans
Daron Evans
Chief Financial Officer

EXHIBIT INDEX

Exhibit No.	Description
99.1	Nile Therapeutics, Inc. press release dated August 13, 2009.

Exhibit 99.1

PRESS RELEASE

August 13, 2009

Nile Therapeutics Reports 2009 Second Quarter Financial Results

SAN FRANCISCO, CA, August 13, 2009 -- Nile Therapeutics, Inc. (NASDAQ: NLTX), a company focused on the development of novel therapeutics for heart failure patients, today announced its second quarter financial results for 2009.

Financial Results

For the second quarter of 2009, Nile reported a net loss of approximately $2.5 million, or $0.10 per share, compared to a net loss of approximately $3.8 million, or $0.16 per share, during the second quarter of 2008. Weighted-average shares outstanding for the quarter were 24.1 million.

Net cash used in operating activities in the second quarter of 2009 was $1.8 million. As of June 30, 2009, Nile had cash and cash equivalents of approximately $1.8 million compared to approximately $5.5 million as of December 31, 2008.

Subsequent to the end of the second quarter of 2009, Nile completed a private placement of common stock and warrants to purchase additional stock for aggregate proceeds of approximately $3.4 million. The private placement closed on July 15, 2009.

Update on CD-NP

In August 2009, Nile completed dosing the first patient in a single-blind, placebo-controlled Phase 2 study designed to provide additional information on the safety and tolerability of CD-NP when infused for up to 72 hours in patients with acute heart failure and mild to moderate renal insufficiency. Additional endpoints will include assessments of CD-NP's ability to relieve symptoms of acute heart failure and its effects on biomarkers of heart failure and renal function. The study is expected to enroll approximately 30 to 40 patients in the United States, Germany and Israel and will evaluate up to 3 dosages of CD-NP.

Nile expects to announce interim results of the study later this year, with results from the full study available in 2010.

About Nile Therapeutics

Nile Therapeutics, Inc. is a clinical-stage biopharmaceutical company that develops innovative products for the treatment of cardiovascular disease and other areas of unmet medical needs. Nile is initially focusing its efforts on developing its lead compound, CD-NP, a novel rationally designed chimeric peptide in clinical studies for the treatment of heart failure, and CU-NP, a novel rationally designed natriuretic peptide. A key component of the company's strategy is to acquire the global rights to additional compounds to expand its portfolio. More information on Nile can be found at http://www.nilethera.com.

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Safe Harbor Paragraph for Forward-Looking Statements: This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that involve substantial risks and uncertainties. All statements, other than statements of historical facts, included in this press release regarding the timing, progress and anticipated results of the clinical development, regulatory processes, clinical trial timelines, anticipated benefits of CD-NP, Nile's strategy, future operations, outlook, milestones, the timing and success of Nile's product development, future financial position, future financial results, plans and objectives of management are forward-looking statements. Nile may not actually achieve these plans, intentions or expectations and Nile cautions investors not to place undue reliance on Nile's forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements Nile makes. Various important factors that could cause actual results or events to differ materially from the forward-looking statements that Nile makes include Nile's need to raise additional capital to fund its product development programs to completion, Nile's reliance on third-party researchers to develop its product candidates, and its lack of experience in developing and commercializing pharmaceutical products. Additional risks are described in greater detail in the reports Nile files with Securities and Exchange Commission, including those described under the caption "Risk Factors" in Item 1A of its Annual Report on Form 10-K for the year ended December 31, 2008 filed with the Securities and Exchange Commission on March 12, 2009 and amended on April 23*, 2009*. Nile is providing this information as of the date of this press release and does not undertake any obligation to update any forward-looking statements as a result of new information, future events or otherwise.

	Three months ended June 30,		Six months ended June 30,	
	2009	2008	2009	2008
Grant income	$ -	$ -	-	$ -
Operating expenses:				
Research and development	1,103,428	2,888,654	2,428,032	4,866,838
General and administrative	1,397,689	960,164	1,860,157	2,158,503
Total operating expenses	2,501,117	3,848,818	4,288,189	7,025,341
Loss from operations	(2,501,117)	(3,848,818)	(4,288,189)	(7,025,341)
Other income (expense):				
Interest income	5,886	82,848	20,573	232,284
Interest expense	-	-	-	(137)
Other expense	(4,859)	(11,131)	(11,282)	(42,844)
Total other income (expense)	1,027	71,717	9,291	189,303
	$ (2,500,090)	$ (3,777,101)	(4,278,898)	$ (6,836,038)
Basic and diluted loss per share	$ (0.10)	$ (0.16)	(0.18)	$ (0.28)
Weighted-average common shares outstanding	24,149,405	24,106,341	24,149,405	24,103,010

Summary Balance Sheet Data
(in thousands)

	June 30, 2009	December 31, 2008
Cash and cash equivalents	$ 1,770	$ 5,501
Total assets	$ 2,254	$ 6,435
Stockholders' equity	$ 1,814	$ 5,104