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): June 17, 2008

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.)**

115 Sansome Street, Suite 310
San Francisco, California 94104
(Address of Principal Executive Offices)

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

Not Applicable
(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 1.01. Entry Into a Material Definitive Agreement.

On June 17, 2008, Nile Therapeutics, Inc., a Delaware corporation, or Nile, entered into a Technology License Agreement, or the Agreement, with Mayo Foundation for Medical Education and Research, a Minnesota charitable corporation, or Mayo. Under the terms of the Agreement, Mayo granted to Nile a worldwide, exclusive license for the rights to commercially develop CU-NP for all therapeutic indications. Nile also has the rights to improvements to CU-NP and know-how that arise out of the laboratory of Dr. John Burnett and Dr. Candace Lee, the inventors of CU-NP, until June 16, 2011.

Nile agreed to expend reasonable amounts to conduct a research and commercial development program to commercialize a product developed from the patent, to pursue diligently worldwide regulatory approval of a product, and to commence marketing within six months following regulatory approval of the product in the United States. To the extent Nile enters into sublicensing agreements relating to CU-NP, Nile agreed that any sublicense agreement will be at least as favorable to Mayo for the protection of their rights and the limitation of their liability exposure as the terms of the Agreement, that such sublicense would contain all rights and obligations due to Mayo under this Agreement, and to name Mayo as a third party beneficiary to the sublicense. Nile will be responsible for each sub-licensee's adherence to the terms of the Agreement and a breach of a sub-license agreement by a sub-licensee will constitute a breach by Nile.

Under the terms of the Agreement, Nile made an up-front cash payment to Mayo. Additionally, Mayo will receive performance-based cash payments upon successful completion of clinical and regulatory milestones relating to CU-NP, including a milestone payment due in connection with the initiation of the first Phase II clinical trial of a product. Additional milestone payments will occur upon other events. Pursuant to the Agreement, Nile must also pay Mayo an annual maintenance fee and a percentage of net sales of licensed products. Nile is also responsible for all applicable taxes based on the product, use of the patents or the import of products.

In addition to the cash payments described above, Nile has also agreed to issue certain amounts and types of equity to Mayo. Initially, Nile has agreed to issue a number of shares of Nile's Common Stock having a fair market value as June 13, 2008 equal to $250,000 based on a 20-day volume-weighted average price. The shares issued to Mayo are not subject to anti-dilution protection and, like all of Nile's shares of Common Stock, will be diluted over time if Nile issues additional shares. Additionally, Dr. Burnett has applied for funding through Mayo's Discovery-Translation Program. In the event Dr. Burnett is awarded funding through this program, and the funding is used for the development of a product based on the patents, Nile has agreed to grant to Mayo a equivalent dollar value in stock warrants to purchase Nile's Common Stock. The number of warrants will be calculated using the Black-Scholes option-pricing model. The warrants will include a cashless exercise provision with language to be negotiated in good faith between the parties.

Nile must report royalties to Mayo and Mayo retains certain audit rights to review records pertaining to these royalties. Nile has also agreed to indemnify Mayo and retain a certain level of insurance for this purpose. Mayo has the sole right to decide on which patents to obtain an extension.

The foregoing is a summary of the material terms of the Agreement and does not purport to be complete. You should read the complete Agreement, which shall be attached as an exhibit to Nile's Quarterly Report on Form 10-Q for the quarter ended June 30, 2008. Nile will seek confidential treatment for certain terms of the Agreement at the time of filing such Quarterly Report.

Item 8.01. Other Events.

On June 18, 2008, Nile issued a press release in connection with the Agreement with Mayo. A copy of the press release is furnished as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated by reference herein.

Item 9.01. Financial Statements and Exhibits

(d) Exhibits.

Exhibit No.	Description
99.1	Press Release of Nile Therapeutics, Inc. dated June 18, 2008.

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.

Date: June 23, 2008

NILE THERAPEUTICS, INC.

By: /s/ Peter M. Strumph
Name: Peter M. Strumph
Title: Chief Executive Officer

EXHIBIT INDEX

Exhibit No.	Description
99.1	Press Release of Nile Therapeutics, Inc. dated June 18, 2008.

EXHIBIT 99.1

June 18, 2008

Nile Therapeutics Completes License Agreement for CU-NP, a Rationally Designed Natriuretic Peptide

SAN FRANCISCO, June 18 /PRNewswire-FirstCall/ — Nile Therapeutics, Inc. (Nasdaq: NLTX - News), today announced that it has entered into a worldwide, exclusive license agreement with Mayo Clinic ("Mayo") for the rights to commercially develop CU-NP, a rationally designed natriuretic peptide that consists of amino acid chains identical to those produced by the human body, specifically the ring structure of C-type Natriuretic Peptide (CNP) and the N- and C-termini of Urodilatin (URO).

CU-NP was designed by researchers at Mayo to combine the favorable hemodynamic venodilating effects of CNP generated via NPR-B receptor agonism, with the beneficial renal effects of URO generated via NPR-A receptor agonism.

At the American Heart Association conference in November 2007, Candace Lee, M.D. and John Burnett, M.D. from Mayo presented data from a study of CU- NP in vivo. CU-NP was shown to increase natriuresis, diuresis, and glomerular filtration rate (GFR) in a dose dependent manner; and to decrease cardiac filling pressure, and inhibit the renin-angiotensin system without inducing significant hypotension.

"We are extremely excited to add CU-NP to our pipeline," said Peter Strumph, Chief Executive Officer of Nile. "With the two peptide assets, CD-NP and CU-NP, we believe Nile has the potential to develop best-in-class natriuretic peptides for multiple cardiovascular and renal indications."

Pursuant to the terms of the license agreement, Nile will pay development milestones and royalties based on sales of the licensed product.

CU-NP is currently in preclinical development.

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 need. 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; 2NTX-99, a small molecule, pre-clinical, anti-atherothrombotic agent with nitric oxide donating properties; 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 www.nilethera.com.

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 our strategy, future operations, outlook, milestones, the success of Nile's product development, future financial position, future financial results, plans and objectives of management are forward-looking statements. We may not actually achieve these plans, intentions or expectations and Nile cautions investors not to place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. Various important factors that could cause actual results or events to differ materially from the forward-looking statements that we make are described in greater detail in the reports we file with Securities and Exchange Commission, including the "Risk Factors" section in Item 1 of the Form 10-KSB we filed with the Securities and Exchange Commission on March 27, 2008. 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.