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):

November 18, 2009

StemCells, Inc.

(Exact name of registrant as specified in its charter)

Delaware

000-19871

(Commission

File Number)

(State or other jurisdiction of incorporation)

3155 Porter Drive, Palo Alto, California

(Address of principal executive offices)

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))

94-3078125

(I.R.S. Employer Identification No.)

94304

(Zip Code)

650.475.3100

Top of the Form

Item 8.01 Other Events.

On November 18, 2009, StemCells, Inc. provided an update on its NCL clinical program.

The full text of the press release is attached hereto as Exhibit 99.1.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit 99.1 Press Release of StemCells, Inc. dated November 18, 2009

SIGNATURES

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

November 19, 2009

StemCells, Inc.

By: /s/ Kenneth Stratton

Name: Kenneth Stratton Title: General Counsel Exhibit Index

Exhibit No.

Description

99.1

Press Release of StemCells, Inc. dated November 18, 2009

CONTACT:

Megan Meloni Investor Relations (650) 475-3100, ext. 105

STEMCELLS, INC. PROVIDES UPDATE ON NCL PROGRAM MEETING WITH FDA

PALO ALTO, Calif., November 18, 2009 – StemCells, Inc. (NASDAQ: STEM) today provided an update on the ongoing clinical development program of its proprietary HuCNS-SC[®] product candidate (purified human neural stem cells) for neuronal ceroid lipofuscinosis (NCL), often referred to as Batten disease.

On November 6, 2009, representatives of StemCells, Inc. met with the U.S. Food and Drug Administration (FDA) in Rockville, Maryland to review the results of the Company's recently completed Phase I trial in NCL and to discuss the Company's proposed clinical development plans. The Phase I trial was designed to assess safety, and focused on patients in the late stage of the disease. The discussions with the FDA centered on how the Company might construct a second study enrolling patients in less advanced stages of NCL to further expand the safety database and to assess whether earlier intervention might alter the course of the disease. The FDA acknowledged the Company's position that the risk-benefit profile shown by the Phase I data merits further clinical evaluation of HuCNS-SC cells in NCL, and the Company obtained constructive feedback and guidance with respect to additional clinical testing of the cells in this fatal disease.

"We had a productive meeting with the FDA," said Stephen Huhn, MD, FACS, FAAP, vice president and head of the Company's CNS Program. "We are encouraged that the agency acknowledges the positive safety profile of the cell dose, surgery, and immunosuppression in our Phase I trial, and that further study is merited. We anticipate that additional discussions with the agency in the coming months will help us define the appropriate next steps for this program."

The Company's Phase I trial of HuCNS-SC cells for NCL was completed in January 2009. StemCells has also announced plans to initiate at the University of California, San Francisco (UCSF) Children's Hospital a Phase I trial of its HuCNS-SC cells in Pelizaeus-Merzbacher Disease (PMD), a fatal myelination disorder that primarily affects young children. The human safety data that StemCells is accumulating for its HuCNS-SC cells through these clinical trials is expected to facilitate future clinical testing in other central nervous system disorders, including retinal degenerative diseases, such as age-related macular degeneration and retinitis pigmentosa, and spinal cord injury.

About Neuronal Ceroid Lipofuscinosis (Batten Disease)

Neuronal ceroid lipofuscinosis (NCL) is a fatal neurodegenerative disorder that afflicts infants and young children. The disorder, often referred to as Batten disease, is caused by genetic mutations, and children who inherit the defective gene are unable to produce enough of an enzyme that processes cellular waste substances that accumulate in a part of cells known as the lysosome. Without the enzyme,

the cellular waste builds up, and eventually the cells cannot function and die. Children with NCL appear healthy when born, but as their brain cells die, they begin to suffer seizures and progressively lose motor skills, sight and mental capacity. Eventually, they become blind, bedridden and unable to communicate or function independently. There currently is no cure for the disease. The infantile and late infantile forms of NCL are caused by different genetic mutations. As the names imply, the two forms begin to afflict patients at different stages of infancy, but both have similar disease progression and outcomes.

About HuCNS-SC Cells

StemCells' lead product candidate, HuCNS-SC cells, is a highly purified composition of human neural stem cells that are expanded and stored as banks of cells. The Company's preclinical research has shown that HuCNS-SC cells can be directly transplanted in the central nervous system. The transplanted cells are able to engraft, migrate, differentiate into neurons and glial cells, and possess the ability to survive for as long as one year with no sign of tumor formation or adverse effects. These findings show that HuCNS-SC cells, when transplanted, behave like normal stem cells, suggesting the possibility of a continual replenishment of normal human neural cells.

About StemCells, Inc.

StemCells, Inc. is focused on the development and commercialization of cell-based technologies. In its cellular medicine programs, StemCells is targeting diseases of the central nervous system and liver. StemCells' lead product candidate, HuCNS-SC cells (purified human neural stem cells), is in clinical development for the treatment of two fatal neurodegenerative disorders that primarily affect young children. StemCells also markets specialty cell culture media products under the brand SC Proven[®], and is developing its cell-based technologies for use in drug screening and drug development. The Company has exclusive rights to approximately 55 issued or allowed U.S. patents and approximately 200 granted or allowed non-U.S. patents. Further information about StemCells is available on its web site at www.stemcellsinc.com.

Apart from statements of historical fact, the text of this press release constitutes forward-looking statements within the meaning of the Securities Act of 1933, as amended, and the Securities Exchange Act of 1934, as amended, and is subject to the safe harbors created therein. These statements include, but are not limited to, statements regarding the safety, engraftment and long term survival of the HuCNS-SC cells, the success of the clinical trial, the Company's plans to pursue future clinical development of HuCNS-SC as a potential treatment for infantile and late infantile NCL, the potential for the Company's therapies to treat Batten disease and other serious neurodegenerative diseases, the future business operations of the Company, the prospects associated with conducting future clinical trials for NCL, the potential for its cell-based therapeutics to treat diseases or disorders, and its ability to conduct clinical trials as well as its research and product development efforts. These forward-looking statements speak only as of the date of this news release. The Company does not undertake to update any of these forward-looking statements or circumstances that occur after the date hereof. Such statements reflect management's current views and are based on certain assumptions that may or may not ultimately prove valid. The Company is subject, including the fact that additional trials will be required to confirm the safety and demonstrate the efficacy of the Company is HuCNS-SC cells for the treatment of Batten or any other disease; uncertainty as to whether the FDA or other applicable regulatory agencies will permit the Company to continue clinical testing in NCL, PMD or in future clinical trials of proposed therapies for other diseases or conditions given the novel and unproven nature of the Company's technologies; uncertainties

about the design of future clinical trials and whether the Company will receive the necessary support of a clinical trial site and its institutional review board to pursue future clinical trials in NCL, PMD or in proposed therapies for other diseases or conditions; uncertainties regarding the Company's ability to commercialize a therapeutic product and its ability to successfully compete with other products on the market; uncertainties regarding the Company's ability to obtain the increased capital resources needed to continue its current and planned research and development operations, including such operations of the company for non-therapeutic applications, and to conduct the research, preclinical development and clinical trials necessary for regulatory approvals; uncertainty as to whether HuCNS-SC and any products that may be generated in the future in the Company's cell-based programs will prove safe and clinically effective and not cause tumors or other adverse side effects; uncertainties regarding the Company's manufacturing capabilities given its increasing preclinical and clinical commitments; and the increased risks associated with commercializing future cell-based therapeutics, including the potential for product liability claims; and other factors that are described under the heading "Risk Factors" in the Company's Annual Report on Form 10-K for the year ended December 31, 2008, and in its subsequent reports on Form 10-Q and Form 8-K.