SENESCO TECHNOLOGIES INC
Form 8-K
February 04, 2009

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): **February 3, 2009**

Senesco Technologies, Inc.

(Exact Name of Registrant as Specified in Charter)

Delaware	**001-31326**	**84-1368850**
(State or Other Jurisdiction of Incorporation)	(Commission File Number)	(IRS Employer Identification No.)

303 George Street, Suite 420, New Brunswick, New Jersey	**08901**
(Address of Principal Executive Offices)	(Zip Code)

(732) 296-8400

(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 is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

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

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

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

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

Item 8.01 Other Events.

On February 3, 2009, Senesco Technologies, Inc. (the Company) announced results of efficacy, toxicological and dose-finding studies in mice for its potential multiple myeloma drug candidate, SNS-01.

SNS-01 is a nano-encapsulated combination therapy of Factor5A and an siRNA against Factor 5A. These studies, undertaken to determine the efficacy, maximum tolerated dose and the feasibility of long-term intravenous administration of SNS-01, were performed at the University of Waterloo, Ontario, Canada.

The Company s anti-myeloma efficacy study in severe combined immune-deficient mice with human multiple myeloma subcutaneous tumors tested SNS-01 dosages ranging from 0.15 mg/kg to 1.5 mg/kg. In these studies, mice treated with a dose of either 0.75 mg/kg or 1.5 mg/kg both showed a 91% reduction in tumor volume and a decrease in tumor weight of 87% and 95%, respectively. For mice that received smaller doses of either 0.38 mg/kg or 0.15 mg/kg, there was also a reduction in tumor volume (73% and 61%, respectively) and weight (74% and 36%, respectively). All of the treated mice, regardless of dose, survived.

This therapeutic dose range provided the basis for an 8-day maximum tolerated dose study in which normal mice received two intravenous doses of increasing amounts of SNS-01 (from 2.2 mg/kg to 3.7 mg/kg). Body weight, organ weight and serum levels of liver enzymes were used as clinical indices to assess toxicity. A dose between 2.2 mg/kg and 2.9 mg/kg was well tolerated with respect to these clinical indices, and the survival rate at 2.9 mg/kg was 80%. Those mice receiving above 2.9mg/kg of SNS-01 showed evidence of morbidity and up to 80% mortality. The 2.9 mg/kg threshold, twice the upper end of the therapeutic dose range, was therefore determined to be the maximum tolerated dose in mice.

The final study, a 9-week repeated dose study in normal mice, was designed to assess toxicity following long-term administration of twice-weekly therapeutic doses (1.5 mg/kg) of SNS-01. This study also included a group of mice that were dosed with a mouse-specific eIF5A siRNA to determine whether there were any toxic effects of suppressing eIF5A in mouse tissues. The change in mean body weight of the treated and untreated mice was exactly the same over the course of the study. In addition to the indices studied in the maximum tolerated dose experiment, hematology was monitored in this experiment. Over the course of six weeks, both the mean red blood cell count (9.8 for control mice, 9.6 for treated mice) and white blood cell count (7.5 for control mice, 7.2 for treated mice) remained consistent, further supporting the conclusion that SNS-01 was non-toxic in these studies. Histopathological analysis of the major organs was conducted by an independent pathologist and revealed no toxicity attributable to SNS-01.

It is the Company s goal to file an Investigational New Drug Application for SNS-01 before the end of calendar year 2009. The Company will need to conduct longitudinal toxicology studies and meet with the FDA during this process.

On February 3, 2009, the Company issued a press release announcing the results of efficacy, toxicological and dose-finding studies in mice for its potential multiple myeloma drug candidate, SNS-01. A copy of this press release is furnished as Exhibit 99.1.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.	Description
99.1	Press Release of Senesco Technologies, Inc. dated February 3, 2009.

SIGNATURE

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.

SENESCO TECHNOLOGIES, INC.

Dated: February 4, 2009

By: /s/ Bruce Galton
Name: Bruce Galton
Title: President and Chief Executive Officer