
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, 2005**

Senesco Technologies, Inc.

(Exact Name of Registrant as Specified in Charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

001-31326
(Commission File Number)

84-1368850
(IRS Employer Identification No.)

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

08901
(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:

- ☐ 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)).
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Item 7.01. Regulation FD Disclosure.

On June 17, 2005, Senesco Technologies, Inc., a Delaware corporation (the "Company"), issued a press release to report the results of pre-clinical study comparing the Company's proprietary technology to two approved drugs. These drugs are dexamethasone, a glucocorticoid (catabolic steroid) reported to be stronger than prednisone, and Enbrel® (etanercept) made by Amgen Inc. Enbrel®, which has been approved for treatment of rheumatoid arthritis, psoriasis and other diseases, is a soluble tumor necrosis factor ("TNF") receptor which acts to reduce inflammation by binding TNF to make it inactive. TNF is a cytokine which are proteins produced by cells of the immune system as part of the body's defenses against infection and disease. Overproduction of certain cytokines can cause inflammation, swelling or damage to joints or organs.

In the Company's pre-clinical experiments, mice were injected with LPS to induce an inflammatory response. Blood was drawn from mice and levels of different cytokines were measured in groups of mice which received placebo control treatment and compared to levels in groups that received a single dose of either Senesco's siRNA against Factor 5A, dexamethasone or Enbrel®. In mice that received dexamethasone, TNF levels decreased approximately 90% from the TNF levels in the untreated mice and decreased approximately 75% in mice that received Senesco's siRNA. Three different cytokines were measured in mice that received Enbrel®. Interleukin 1-alpha decreased approximately 50% with Enbrel® treatment as compared to approximately 35% with Senesco's siRNA. Interleukin-6 decreased approximately 98% with Enbrel® as compared to approximately 82% with the siRNA and Interferon-gamma decreased approximately 93% with Enbrel® as compared to approximately 87% with Senesco's siRNA. Enbrel® is the registered trademark of Amgen, Inc.

The full text of the press release is attached to this current report on Form 8-K as Exhibit 99.1.

The information in this Form 8-K shall be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and this Form 8-K shall be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended (the "Securities Act") and the Exchange Act.

The information in the press release shall not be deemed “filed” for purposes of Section 18 of the Exchange Act or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act or the Exchange Act, except as expressly set forth by specific reference in such a filing.

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Item 9.01. Financial Statements and Exhibits.

(c) Exhibits.

<u>Exhibit No.</u>	<u>Description</u>
99.1	Press Release of Senesco Technologies, Inc. dated June 17, 2005.

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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: June 17, 2005

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

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PRESS RELEASE

S E N E S C O

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Senesco Technologies Reports Results of Pre-Clinical Cytokine Study Versus a Steroid and a TNF Inhibitor

NEW BRUNSWICK, N.J. (June 17, 2005) – Senesco Technologies, Inc. (“Senesco” or the “Company”) (AMEX: SNT) reported today the results of a series of mouse experiments which compared the Company’s proprietary Factor 5A technology to two approved drugs: dexamethasone and Enbrel® (etanercept). Dexamethasone is a glucocorticoid (catabolic steroid) reported to be stronger than prednisone, and Enbrel® (etanercept) made by Amgen Inc., which has been approved for treatment of rheumatoid arthritis, psoriasis and other diseases, is a soluble tumor necrosis factor (“TNF”) receptor which acts to reduce inflammation by binding TNF to make it inactive. TNF is a cytokine, which are proteins produced by cells of the immune system as part of the body’s defenses against infection and disease. Overproduction of certain cytokines can cause inflammation, swelling or damage to joints or organs.

In the Company’s pre-clinical experiments, mice were injected with LPS, an agent used to induce inflammatory response. Cytokine levels were then measured in the four experimental groups of mice: those that received a control treatment, those that received a single dose of Senesco’s Factor 5A siRNA, those that received a single dose of dexamethasone and those that received a single dose of Enbrel®. Relative to the control treatment, dexamethasone treated mice had TNF levels decrease approximately 90% Senesco siRNA treated mice had TNF levels decrease approximately 75%. Three different cytokines were measured in mice that received Enbrel®. Interleukin 1-alpha decreased approximately 50% with Enbrel® treatment as compared to approximately 35% with Senesco’s siRNA. Interleukin-6 decreased approximately 98% with Enbrel® as compared to approximately 82% with the Senesco siRNA and Interferon-gamma decreased approximately 93% with Enbrel® as compared to approximately 87% with Senesco’s siRNA.

Dr. Charles A. Dinarello, a member of Senesco’s Scientific Advisory Board and in whose laboratory at the University of Colorado Medical School these mouse studies were conducted, commented “Senesco’s siRNA decreased levels of several important inflammatory cytokines in

these animal tests to levels comparable to the decreases seen with the presently used doses of corticosteroids and anti-TNF therapies such as Remicade®, Humira® and Enbrel®.”

Bruce C. Galton, Senesco’s president and CEO stated “We continue to build in-vivo data on our technology’s role in cytokine production and control. Our ongoing pre-clinical research will seek to ascertain the most effective dosing regimens for Senesco’s siRNA. Such pre-clinical information is helpful so that inflammatory cytokine levels are controlled yet still allow for a proper response to infections.”

Enbrel® is the registered trademark of Amgen, Inc.

Remicade® is the registered trademark of Centocor, Inc.

Humira® is the registered trademark of Abbott Laboratories

About Senesco Technologies, Inc.

Senesco takes its name from the scientific term for the aging of plant cells: senescence. The Company has developed technology that regulates cell life. Delaying cell breakdown in plants extends freshness after harvesting, while increasing crop yields and resistance to environmental stress for flowers, fruits and vegetables. The Company believes that its technology can be used to develop superior strains of crops without any modification other than delaying natural plant senescence. Senesco has undertaken preclinical research in certain areas of human health.

Accelerating apoptosis may have applications to development of cancer treatments. Delaying apoptosis may have applications to certain diseases such as glaucoma, ischemia and arthritis, among others. Senesco partners with leading-edge companies and earns research and development fees for applying its technology to enhance its partners’ products. Senesco is headquartered in New Brunswick, New Jersey, and utilizes research laboratories at universities and research centers throughout North America.

Certain statements included in this press release are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Actual results could differ materially from such statements expressed or implied herein as a result of a variety of factors, including, but not limited to: the development of the Company’s gene technology; the success and the timing of the Company’s studies and preclinical trials; the approval of the Company’s patent applications; the successful implementation of the Company’s research and development programs and joint ventures; the success of the Company’s license agreements; the successful conversion of the Company’s letter of intent into a license agreement; the acceptance by the market of the Company’s products; competition and the timing of projects and trends in future operating performance, as well as other factors expressed from time to time in the Company’s periodic filings with the Securities and Exchange Commission (the “SEC”). As a result, this press release should be read in conjunction with the Company’s periodic filings with the SEC. The forward-looking statements contained herein are made only as of the date of this press release, and the Company undertakes no obligation to publicly update such forward-looking statements to reflect subsequent events or circumstances.

