# 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): April 27, 2006

# 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)

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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 7.01. Regulation FD Disclosure.

On April 27, 2006, Senesco Technologies, Inc., a Delaware corporation (the "Company"), issued a press release to report the results of a study in which mice injected with tumor-forming B16F0 melanoma cancer cells were treated with Senesco's proprietary eIF-5A (otherwise referred to as "Factor 5A").

The Company announced today the results of a study conducted in Dr. John Thompson's laboratory at the University of Waterloo in Ontario, Canada, in which mice injected with tumor-forming B16F0 melanoma cancer cells were treated with Senesco's proprietary eIF-5A. Tumors of adequate size formed in approximately nine days at which time treatment was initiated. Two control groups of nine mice each received placebo treatments and a test group of ten mice received Factor 5A, intratumorally, every other day. The median survival of the control mice was 7 days post-treatment, whereas, the mice that received Factor 5A treatment had a median survival of 25 days post-treatment (P< 0.001). The enhanced survival time of the Factor 5A-treated mice equates to 3.5 fold or a 250% increase compared to the control mice. Two of the Factor 5A- treated mice are still alive with one mouse in apparent complete remission. None of the control mice survived.

In addition to this enhancement of survival, the tumors in the treated mice remained smaller and grew more slowly than those in the control mice.

Future studies may focus on optimizing delivery of Factor 5A to tumors to determine if there would be an enhancement of treatment.

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.

## Item 9.01. Financial Statements and Exhibits.

(c) Exhibits.	
Exhibit No.	Description
99.1	Press Release of Senesco Technologies, Inc. dated April 27, 2006.
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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: April 27, 2006

By: /s/ Bruce Galton

Name: Bruce Galton Title: President and Chief Executive Officer



Company Contact: Senesco Technologies, Inc. Bruce Galton Chief Executive Officer (bgalton@senesco.com) (732) 296-8400 **Investor Relations Contacts**:

Lippert/Heilshorn & Associates Kim Sutton Golodetz (kgolodetz@lhai.com) Anne Marie Fields (afields@lhai.com) 212-838-3777

## SENESCO'S TECHNOLOGY INHIBITS TUMOR DEVELOPMENT AND INCREASES LONGEVITY IN MOUSE CANCER MODEL

**NEW BRUNSWICK, N.J. (April 27, 2006) – Senesco Technologies, Inc.** ("Senesco" or the "Company") (AMEX: SNT) announced today the results of a study conducted in Dr. John Thompson's laboratory at the University of Waterloo in Ontario, Canada, in which mice injected with tumor-forming B16F0 melanoma cancer cells were treated with Senesco's proprietary gene, eIF-5A ("Factor 5A"). Tumors of adequate size formed in approximately nine days at which time treatment was initiated. Two control groups of nine mice each received placebo treatments and a test group of ten mice received Factor 5A, intratumorally, every other day. The median survival of the control mice was 7 days post-treatment, whereas, the mice that received Factor 5A treatment had a median survival of 25 days post-treatment (P< 0.001). The enhanced survival time of the Factor 5A-treated mice equates to 3.5 fold or a 250% increase compared to the control mice. Two of the Factor 5A- treated mice are still alive with one mouse in apparent complete remission. None of the control mice survived.

In addition to this enhancement of survival, the tumors in the treated mice remained smaller and grew more slowly than those in the control mice.

Dr. Thompson, the Company's Executive Vice President of Research and Development, commented, "These data build upon our previous preclinical cancer studies and provide more

evidence for Factor 5A as an anti-cancer agent. It is very heartening to see reduced tumor growth rates in the treated mice."

Future studies may focus on optimizing delivery of Factor 5A to tumors to determine if there would be an enhancement of treatment.

#### About Senesco Technologies, Inc.

Senesco has initiated preclinical research to trigger or delay cell death in mammals (apoptosis) to determine if its technology is applicable in human medicine. Accelerating apoptosis may have applications to the development of cancer treatments. Delaying apoptosis may have applications to certain diseases such as glaucoma, ischemia and arthritis, among others. Senesco takes its name from the scientific term for the aging of plant cells: senescence. The Company has developed technology that regulates the onset of cell death. Delaying cell breakdown in plants extends freshness after harvesting, while increasing crop yields, plant size and resistance to environmental stress for flowers, fruits and vegetables. In addition to its human health research programs, 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 partnered with leading-edge companies engaged in agricultural biotechnology and earns research and development fees for applying its gene-regulating platform technology to enhance its partners' products. Senesco is headquartered in New Brunswick, N.J.

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 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 acceptance by the market of the Company's products; success of the Company's preliminary studies and preclinical research; 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.