## 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): March 29, 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)

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)).

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 March 29, 2006, Senesco Technologies, Inc., a Delaware corporation (the "Company"), issued a press release to report that results from human cell line tests have shown that the Company's eukaryotic translation initiation Factor 5A1 ("Factor 5A1" or "eIF-5A1") gene technology reduces the amounts of p24 and IL-8 by approximately 50 percent in HIV-infected cells. The levels of p24, a core protein in HIV cells, and IL-8, a proinflammatory cytokine, rise proportionately with increased HIV replication making both of them standard indicators of HIV-1 infection.

Using a chronically HIV-1 infected human cell line, researchers in Dr. Leland Shapiro's lab at the University of Colorado at Denver and Health Sciences Center performed the studies for the Company. The HIV cell line was transfected with a small interfering RNA to eIF-5A1 and then levels of p24 or IL-8 were measured, in separate assays, 72 hours later. Reduced levels of p24 and IL-8 correlate to suppressed replication of HIV-1.

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.

99.1

Press Release of Senesco Technologies, Inc. dated March 29, 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.

Description

Dated: March 30, 2006

By: /s/ Bruce Galton

Name: Bruce Galton Title: President and Chief Executive Officer



### SENESCO

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 SHOWS REDUCTION OF TWO IMPORTANT INDICATORS OF HIV-1 REPLICATION IN HUMAN CELL LINE STUDIES

**NEW BRUNSWICK, N.J. (March 29, 2006) – Senesco Technologies, Inc.** ("Senesco" or the "Company") (AMEX: SNT) announced today that results from human cell line tests have shown that the Company's eukaryotic translation initiation Factor 5A1 ("Factor 5A1" or "eIF-5A1") gene technology reduces the amounts of p24 and IL-8 by approximately 50 percent in HIV-infected cells. The levels of p24, a core protein in HIV cells, and IL-8, a proinflammatory cytokine, rise proportionately with increased HIV replication making both of them standard indicators of HIV-1 infection.

Using a chronically HIV-1 infected human cell line, researchers in Dr. Leland Shapiro's lab at the University of Colorado at Denver and Health Sciences Center performed the studies for the Company. The HIV cell line was transfected with a small interfering RNA ("siRNA") to eIF-5A1 and then levels of p24 or IL-8 were measured, in separate assays, 72 hours later. Reduced levels of p24 and IL-8 correlate to suppressed replication of HIV-1.

"Although these results represent early stages of investigation, they are promising for two reasons. First, these proof-of-concept studies suggest that eIF-5A1 is a viable target for HIV drug discovery. Second, eIF-5A1 is a molecule made by the cell and not the virus. Therefore, the eIF-5A1 target does not mutate and an anti-HIV strategy using this target may not be hampered by resistance brought about by viral mutation," Shapiro said.

Bruce Galton, president and CEO of Senesco, commented, "We are very pleased with these initial data pertaining to suppressing viral replication in this HIV model. Viral replication is both an interesting and important new research area for the Company. These data reaffirm the

potential broad applicability of Factor 5A in a variety of diseases, adding to our preclinical data in cancer, inflammation and immune response."

#### 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.