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 22, 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 March 22, 2006, Senesco Technologies, Inc., a Delaware corporation (the "Company"), issued a press release to report the results of a preclinical animal study on the survivability of islets isolated for transplantation.

The Company announced today that a preclinical animal study has shown that the Company's proprietary Factor 5A gene technology increases the survivability of islets isolated for transplantation. Islets are the insulin producing cells located in the mammalian pancreas.

Diabetes is a growing health problem in the developed world, with daily insulin injections being a common primary treatment. The transplantation of the insulin-producing islets from donors has progressed during the past five years. Most promising is the fact that patients whose condition is difficult to control with insulin have a rapid return to normal blood glucose upon islet transplantation. Unfortunately, islet transplantation typically requires cells from two donors and a large number of islets die during harvest due to isolation methods requiring digestive enzymes.

Dr. Eli C. Lewis, working in the laboratory of Dr. Charles Dinarello at the University of Colorado, investigated the role of the Company's eIF-5A1 (otherwise referred to as "Factor 5A") gene technology during the process of islet isolation for transplantation using a well-established mouse model. The team used a small interfering RNA ("siRNA") that downregulates expression of eIF-5A1, which the Company has shown reduces cell death in a variety of models. The researchers observed a significant increase in the survival of insulin-producing islets when mice received an infusion of the siRNA to eIF-51A compared to a control siRNA. In a concurrent study, the investigators showed that death of islets resulting from exposure to IL-1beta and interferon-gamma was also significantly reduced, meaning more viable islets remained.

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 March 22, 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: March 24, 2006

By: /s/ Bruce Galton

Name:Bruce GaltonTitle:President and Chief Executive Officer

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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 INCREASES PANCREATIC ISLET CELL SURVIVABILITY IN ANIMAL STUDY

NEW BRUNSWICK, N.J. (March 22, 2006) – Senesco Technologies, Inc. ("Senesco" or the "Company") (AMEX: SNT) announced today that a preclinical animal study has shown that the Company's proprietary gene technology increases the survivability of islets isolated for transplantation. Islets are the insulin producing cells located in the mammalian pancreas.

Diabetes is a growing health problem in the developed world, with daily insulin injections being a common primary treatment. The transplantation of the insulin-producing islets from donors has progressed during the past five years. Most promising is the fact that patients whose condition is difficult to control with insulin have a rapid return to normal blood glucose upon islet transplantation. Unfortunately, islet transplantation typically requires cells from two donors and a large number of islets die during harvest due to isolation methods requiring digestive enzymes.

Dr. Eli C. Lewis, working in the laboratory of Dr. Charles Dinarello at the University of Colorado, investigated the role of the Company's eIF-5A1 (otherwise referred to as "Factor 5A") gene technology during the process of islet isolation for transplantation using a well-established mouse model. The team used a small interfering RNA ("siRNA") that downregulates expression of eIF-5A1, which the Company has shown reduces cell death in a variety of models. The researchers observed a significant increase in the survival of insulin-producing islets when mice received an infusion of the siRNA to eIF-51A compared to a control siRNA. In a concurrent study, the investigators showed that death of islets resulting from exposure to IL-1beta and interferon-gamma was also significantly reduced, meaning more viable islets remained.

Dr. Dinarello, a member of the Company's Scientific Advisory Board, said of the results, "The implications of these results for human islets transplantation are important since this siRNA can yield more viable (live) islets while increasing the number of transplantations that can be

performed. Presently, one of the major drawbacks of islet transplantation is the low number of live islets that can be obtained for transplantation. The promise of this novel approach will be welcome to the field."

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, New Jersey.

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.