
**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): **May 12, 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:

- ☐ 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 8.01. Other Events.

On May 12, 2006, Senesco Technologies, Inc., a Delaware corporation (the "Company"), issued a press release to report the results of a study in which mice pre-treated with Senesco's small interfering RNA ("siRNA") against the Company's eukaryotic translation initiation Factor 5A-1 ("Factor 5A-1" or "eIF5A-1") and challenged with LPS had significantly reduced blood levels of multiple pro-inflammatory cytokines.

The Company announced that its Factor 5A-1 gene technology reduced inflammation and inhibited apoptosis in mouse experiments conducted by W. Michael Scheld, M.D., at the University of Virginia School of Medicine.

In these experiments, mice were pre-treated with Senesco's siRNA against Factor 5A-1 and then challenged with LPS, which causes a classic systemic inflammatory response. The Factor 5A-1 pre-treated mice had significantly reduced blood levels of multiple pro-inflammatory cytokines, including TNF-a and interleukins 1, 2, 6, 12, MIP-1a, and IFN-g. Also of interest was that the cytokine IL-10, a down-regulator of pro-inflammatory cytokines, was unaffected by Factor 5A-1, further enforcing that Factor 5A-1 selectively recruits mRNAs for apoptosis and inflammation.

These data, in conjunction with the Company's previously reported data (the Company's press release April 29, 2005) in which siRNA-treated mice had increased survival rates in the presence of lethal doses of LPS, indicate that siRNA to Factor 5A-1 protects against premature cell death caused by inflammation. Further, the previously mentioned survival data was presented at an Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC) meeting where it was selected for an award in the category of therapeutics. The award given to the LPS survival abstract was one of only six out of approximately 2,700 abstracts submitted for consideration.

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

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: May 15, 2006

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