SENESCO TECHNOLOGIES INC Form 8-K April 15, 2008

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 15, 2008

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)).	
o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c)).	

Item 8.01 Other Events.

On April 15, 2008, Senesco Technologies, Inc. (the Company) announced further details of Dr. Raghavendra Mirmira s preclinical pancreatic islet cell research that was funded by the Company. Using a small interfering RNA (siRNA) against Senesco s Factor 5A technology, the data show what the Company believes to be a variety of promising results regarding delivery of the technology as well as islet function and protection.

The siRNA was delivered intraperitoneally, but was still shown to have significant penetration into isolated islets, meaning that difficult delivery directly into the islets may be avoided. Once delivered, the siRNA allowed treated islet cells to produce 30-40% more insulin than untreated cells. This increased insulin production was also seen in cells that were further stressed by the presence of pro-inflammatory cytokines. Additionally, the treated cells exhibited iNOS (inducible nitric oxide synthase) protein control, which is another indicator that the treated cells responded positively to inflammatory stress. iNOS regulates nitric oxide production, which is important for the immune response of certain classes of blood cells.

The data generated by Dr. Mirmira, currently the Eli Lilly Endowed Chair in Pediatric Diabetes in the Departments of Pediatrics, Medicine, and Cellular and Integrative Physiology at Indiana University School of Medicine, suggest that siRNA against Factor 5A may be a viable therapeutic target for preserving islet function under conditions of inflammation.

These data were presented at the Keystone Islet and Beta Cell Symposium from April 6-11 in Snowbird, Utah, and will be presented at the Upper Midwest Islet Club s Annual Meeting which will take place from April 30-May 2 at Vanderbilt University in Nashville, Tennessee.

The poster presentation of the data will be available at www.senesco.com.

On April 15, 2008, the Company issued a press release announcing the initiation of preclinical studies. A copy of this press release is furnished as Exhibit 99.1.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No. Description

99.1 Press Release of Senesco Technologies, Inc. dated April 15, 2008.

2

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 15, 2008 By: /s/ Bruce Galton

Name: Bruce Galton

Title: President and Chief Executive Officer