SENESCO TECHNOLOGIES 1	INC
Form S-1	

October 17, 2013

As filed with the Securities and Exchange Commission on October 17, 2013 Registration No. 333-

**UNITED STATES** 

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-1

REGISTRATION STATEMENT

**UNDER** 

THE SECURITIES ACT OF 1933

SENESCO TECHNOLOGIES, INC.

(Exact name of registrant as specified in its charter)

Delaware283484-1368850(State or other jurisdiction of incorporation or organization)(Primary Standard Industrial incorporation Code Number)(I.R.S. Employer Identification Number)

721 Route 202/206, Suite 130

(908) 864-4444
(Address, including zip code and telephone number, including area code, of registrant's principal executive office
Leslie J. Browne, Ph.D.
Chief Executive Officer
Senesco Technologies, Inc.
721 Route 202/206, Suite 130
Bridgewater, NJ 08807
(908) 864-4444
(Name, address, including zip code and telephone number, including area code, of agent for service)
Coning to
Copies to:
Joel Brooks
Chief Financial Officer
Senesco Technologies, Inc.
721 Route 202/206, Suite 130
Bridgewater, NJ 08807
(908) 864-4444

Emino Ragosa
Morgan, Lewis & Bockius LLP
502 Carnegie Center
Princeton, NJ 08540
(609) 919-6633
<b>Approximate date of commencement of proposed sale to the public:</b> As soon as practicable after the effective date of this Registration Statement.
If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box."
If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. "
If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the sam offering. "
If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the sam offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer " Accelerated filer " Non-accelerated filer " Smaller reporting company x (Do not check if a smaller reporting company)

#### CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price(1)		Amount of Registration Fee(2)	
Units, each unit consisting of [] shares of common stock, \$0.01 par value per share,	\$ 10,000,000	\$	1,288	
Common stock included in the Units	-		(3	)
Total	\$ 10,000,000	\$	1,288	(4)

- (1) Estimated solely for purpose of calculating registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended (the "Securities Act").
- (2) Calculated pursuant to Rule 457(o) under the Securities Act based on an estimate of the proposed maximum offering price.
- (3) No fee required pursuant to Rule 457(g).

The Registrant previously paid an aggregate amount of \$4,096 pursuant to Rule 457(o) under the Security Act in connection with a previous registration statement filed on July 17, 2013 and an amendment to such registration statement filed on September 20, 2013. The registration statement was declared effective on September 30, 2013. The registration fee was \$273, leaving a balance of \$3,823 on account.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is declared effective. This prospectus is not an offer to sell these securities and we are not soliciting offers to buy these securities in any jurisdiction where the offer or sale is not permitted.
Subject to Completion, dated October 17, 2013
Prospectus
SENESCO TECHNOLOGIES, INC.
Units, Each Consisting of
Shares of Common Stock
We are offering units, each unit consisting of shares of our common stock. Each unit will be sold at a negotiated offering price of per unit, resulting in aggregate gross proceeds to the company of \$10,000,000, before estimated expenses. The units will separate immediately and the common stock will be issued and will trade separately. Our common stock currently trades on the OTCQB Marketplace, operated by the OTC Markets Group, under the symbol "SNTI." The last reported sale price of our common stock on the OTCQB Marketplace on October 16 2013 was \$0.0345 per share.
Investing in our securities involves a high degree of risk. See "Risk Factors" beginning on page 5.
Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation

to the contrary is a criminal offense.

We expect to deliver the shares of common stock on or about , 2013.

The date of this prospectus is , 2013.

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We have not authorized anyone to provide you with information different from, or in addition to, that contained in this prospectus. If anyone provides you with different or inconsistent information, you should not rely on it. We are not making an offer to sell or seeking offers to buy these securities in any jurisdiction where, or to any person to whom, the offer or sale is not permitted. The information in this prospectus is accurate only as of its date regardless of the time of delivery of this prospectus or of any sale of our common shares. Our business, financial condition, results of operations and future growth prospects may have changed since those dates.

For investors outside the United States, we have not done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. You are required to inform yourselves about and to observe any restrictions relating to this offering and the distribution of this prospectus outside of the United States.

This prospectus includes estimates, statistics and other industry and market data that we obtained from industry publications, research, surveys and studies conducted by third parties and publicly available information. Such data involves a number of assumptions and limitations and contains projections and estimates of the future performance of the industries in which we operate that are subject to a high degree of uncertainty. This prospectus also includes data based on our own internal estimates. We caution you not to give undue weight to such projections, assumptions and estimates.

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## PROSPECTUS SUMMARY

This summary highlights information contained in other parts of this prospectus. Because it is only a summary, it does not contain all of the information that you should consider before investing in our securities and it is qualified in its entirety by, and should be read in conjunction with, the more detailed information appearing elsewhere in this prospectus. You should read the entire prospectus carefully, especially the section entitled "Risk Factors" and our consolidated financial statements and related notes, before deciding to buy our securities. Unless otherwise stated, all references to "us," "our," "we," "Senesco," the "Company" and similar designations refer to Senesco Technologies, Inc. and its subsidiary Senesco, Inc.

### Company Overview

Senesco Technologies, Inc., a Delaware corporation, is a development stage company. We do not expect to generate significant revenues for several years, during which time we will engage in significant research and development efforts. Our human therapeutic research program, which has consisted of clinical, pre-clinical in-vitro and in-vivo experiments designed to assess the role and method of action of the Factor 5A genes in human diseases, is performed by approximately seven third party researchers at our direction, at the University of Waterloo and other commercial research facilities. We have developed a therapeutic candidate, SNS01-T, for the potential treatment of multiple myeloma. We have also been granted orphan drug status for SNS01-T by the FDA for the potential treatment of multiple myeloma, diffuse large B-cell lymphoma, or DLBCL, and mantle cell lymphoma, or MCL. We initiated a Phase 1b/2a clinical study with SNS01-T for treatment of multiple myeloma in September 2011 and have expanded it to include treatment for DLBCL and MCL. We are currently sponsoring the study at Mayo Clinic in Rochester, MN, the University of Arkansas for Medical Sciences in Little Rock, the Mary Babb Randolph Cancer Center in Morgantown, WV, the John Theurer Cancer Center at Hackensack University Medical Center in Hackensack, NJ and the Seattle Cancer Care Alliance in Seattle, WA. We may consider other human diseases in order to determine the role of eIF5A and SNS01-T.

Additionally, we have nine active agricultural license agreements to develop and commercialize our technology in banana plants, corn, soy, cotton, rice, canola, trees, alfalfa, and turf grass. The licenses provide for upfront payments, milestone payments and royalty payments to us upon commercial introduction.

Consistent with our commercialization strategy, we may license our technology for human health applications or for additional crops, as the opportunities may arise, that may result in additional license fees, revenues from contract research and other related revenues. Successful future operations will depend on our and our partners' ability to transform our research and development activities into a commercially feasible technology.

#### **Risk Factors**

Our business is subject to a number of risks of which you should be aware before making an investment decision. These risks are described in more detail in the "Risk Factors" section of this prospectus immediately following this prospectus summary. These risks include the following:

We have not experienced positive cash flow from our operations, and the ability to achieve positive cash flow from operations will depend on increasing sales of our products, which may not be achievable.

Our business is subject to continuing regulatory compliance by the FDA and other authorities, which is costly and could result in negative effects on our business.

Failure to protect our intellectual property rights could result in costly and time consuming litigation and our loss of any potential competitive advantage.

The price of our common shares could be highly volatile due to a number of factors, which could lead to losses by investors and costly securities litigation.

### **Corporate Information**

We were incorporated under the laws of Delaware in 1999. Our principal executive offices are located at 721 Route 202/206, Suite 130, Bridgewater, NJ 08807 and our telephone number is (908) 864-4444. Our website address is <a href="https://www.senesco.com">www.senesco.com</a>. We have included our website address in this prospectus solely as an inactive textual reference. The information contained on, or that can be accessed through, our website is not part of this prospectus.

The Offering	
Common shares offered by us Common shares	shares
outstanding after this offering	shares
Use of proceeds	We estimate that the net proceeds to us from the sale of common shares in this offering will be approximately assuming a public offering price of per common share and after deducting estimated offering expenses payable by us. We intend to use the net proceeds from this offering to continue our product commercialization and marketing efforts, development of product pipeline, including product line extension, and for general working capital purposes. See "Use of Proceeds."
Current trading on OTCQB Marketplace	Our common shares currently trade on the OTCQB Marketplace under the symbol "SNTI."
Risk factors	You should read the "Risk Factors" section of this prospectus for a discussion of factors to consider carefully before deciding to invest in our common shares.
( 1 )	our common shares outstanding after this offering is based on 306,737,542 common shares f October 16, 2013, and excludes:
•	on shares issuable upon the exercise of options outstanding as of October 16, 2013 at a weighted rice of \$0.29 per share;
	on shares issuable upon the exercise of warrants outstanding as of October 16, 2013 at a weighted rice of \$0.34 per share;
·23,200,000 commo	on shares issuable upon the conversion of 580 shares of Series A Convertible Preferred Stock; and
1,103 additional co	ommon shares available for future issuance as of October 16, 2013 under our Senesco

Technologies, Inc. 2008 Stock Incentive Plan.

Unless otherwise indicated, all information in this prospectus assumes no exercise of the outstanding options and warrants or conversion of the outstanding Series A Convertible Preferred Stock described above.

### **Summary Consolidated Financial Data**

The summary financial data below as of and for the years ended June 30, 2013, 2012 and 2011 have been derived from our audited consolidated financial statements. Our audited consolidated financial statements as of June 30, 2013 and 2012 and for the fiscal years ended June 30, 2013, 2012 and 2011 are included elsewhere in this prospectus. Our audited consolidated financial statements as of June 30, 2011 are not included in this prospectus. You should read the summary financial data together with "Capitalization," "Management's Discussion and Analysis of Financial Condition" and "Results of Operations" and our financial statements and the related notes included elsewhere in this prospectus. Our historical results for any prior period are not necessarily indicative of results to be expected in any future period.

Fiscal Years ended June 30,			
Statement of operations data:	2013	2012	2011
•	(in thousands, except for the per share amount)		
Licensing Revenue	\$ -	\$ 200	\$ -
Operating expenses:			
Research and development	2,086	2,566	3,720
General and administrative	2,500	2,724	2,610
Write-off of patents abandoned	64	321	1,588
Total Operating Expenses	4,650	5,611	7,918
Loss from operations	(4,650	) (5,411	) (7,918 )
Total other non-operating income (expense)	(1,472	) 345	649
Net Loss	(6,122	) (5,066	) (7,269 )
Net loss available to common stockholders	\$ (6,985	) \$(6,692	) \$(9,907)
Weighted average basic and diluted common shares outstanding	136,638,419	85,703,291	69,332,447
Loss Per Common Share – basic and diluted	\$ (0.05	) \$ (0.08	) \$(0.14)

Years ended June 30,

Balance sheets data: 2013 2012 2011

(in thousands)

 Cash and Cash equivalents
 \$1,602
 \$2,001
 \$3,610

 Total assets
 \$7,098
 \$6,955
 \$8,597

 Total liabilities
 \$3,312
 \$3,502
 \$4,080

 Total stockholders' equity
 \$3,786
 \$3,453
 \$4,517

Years ended June 30,

Statements of cash flows data: 2013 2012 2011

(in thousands)

Net cash used for operating activities \$(3,903) \$(4,386) \$(5,391) Net cash used for investing activitie (529) (450) (686) Net cash provided by financing activities \$4,033 \$3,228 \$1,661

#### RISK FACTORS

Investing in our common shares involves a high degree of risk. Before you decide to invest in our securities, you should consider carefully the risks described below, as well as the other information contained in this prospectus. The risks described below are not the only ones facing us. Additional risks not presently known to us or that we currently deemed immaterial may also impair our business operations.

If any of the following risks actually occurs, our business, financial condition, results of operations and future growth prospects would likely be materially and adversely affected. In these circumstances, the market price of our common shares could decline, and you may lose all or part of your investment.

### **Risk Related To Company**

Recurring losses and negative cash flows from operations raise substantial doubt about our ability to continue as a going concern and we may not be able to continue as a going concern.

Our recurring losses from operations and negative cash flows from operations raise substantial doubt about our ability to continue as a going concern and as a result, our independent registered public accounting firm included an explanatory paragraph in its report on our consolidated financial statements for the fiscal year ended June 30, 2013 with respect to this uncertainty. Substantial doubt about our ability to continue as a going concern may create negative reactions to the price of the common shares of our stock and we may have a more difficult time obtaining financing.

We have prepared our financial statements on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities and commitments in the normal course of business. The financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or amounts of liabilities that might be necessary should we be unable to continue in existence.

We have a limited operating history and have incurred substantial losses and expect to incur future losses.

We are a development stage biotechnology company with a limited operating history and limited assets and capital. We have incurred losses each year since inception and had an accumulated deficit of \$74,425,835 at June 30, 2013. We have generated minimal revenues by licensing our technology for certain crops to companies willing to share in

our development costs. In addition, our technology may not be ready for commercialization for several years. We expect to continue to incur losses for the next several years because we anticipate that our expenditures on research and development and administrative activities will significantly exceed our revenues during that period. We cannot predict when, if ever, we will become profitable.

We will need additional capital to fund our operations until we are able to generate a profit.

Our operations to date have required significant cash expenditures. Our future capital requirements will depend on the results of our research and development activities, preclinical and clinical studies, and competitive and technological advances.

We will need to obtain more funding in the future through collaborations or other arrangements with research institutions and corporate partners, or public and private offerings of our securities, including debt or equity financing. We may not be able to obtain adequate funds for our operations from these sources when needed or on acceptable terms. Future collaborations or similar arrangements may require us to license valuable intellectual property to, or to share substantial economic benefits with, our collaborators. If we raise additional capital by issuing additional equity or securities convertible into equity, our stockholders may experience dilution and our share price may decline. Any debt financing may result in restrictions on our spending.

If we are unable to raise additional funds, we will need to do one or more of the following:

delay, scale-back or eliminate some or all of our research and product development programs; provide licenses to third parties to develop and commercialize products or technologies that we would otherwise seek to develop and commercialize ourselves;

seek strategic alliances or business combinations; attempt to sell our company; cease operations; or declare bankruptcy.

We believe that at the projected rate of spending we should have sufficient cash to maintain our present operations through March 2014. After giving effect to the net proceeds from this offering, we should have sufficient cash to maintain our present operations through .

We may be adversely affected by the current economic environment.

Our ability to obtain financing, invest in and grow our business, and meet our financial obligations depends on our operating and financial performance, which in turn is subject to numerous factors. In addition to factors specific to our business, prevailing economic conditions and financial, business and other factors beyond our control can also affect our business and ability to raise capital. We cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our business.

Materials necessary to manufacture some of our compounds currently under development may not be available on commercially reasonable terms, or at all, which may delay our development and commercialization of these compounds.

Some of the materials necessary for the manufacture of our compounds under development may, from time to time, be available either in limited quantities, or from a limited number of manufacturers, or both. Our contract manufacturers need to obtain these materials for our clinical trials and, potentially, for commercial distribution when and if we obtain marketing approval for these compounds. Suppliers may not sell us these materials at the time we need them or on commercially reasonable terms. If we are unable to obtain the materials needed to conduct our clinical trials, product testing and potential regulatory approval could be delayed, adversely affecting our ability to develop the product candidates. Similarly, if we are unable to obtain critical manufacturing materials after regulatory approval has been obtained for a product candidate, the commercial launch of that product candidate could be delayed or there could be a shortage in supply, which could materially affect our ability to generate revenues from that product candidate. If suppliers increase the price of manufacturing materials, the price for one or more of our products may increase, which may make our products less competitive in the marketplace. If it becomes necessary to change suppliers for any of these materials or if any of our suppliers experience a shutdown or disruption at the facilities used to produce these materials, due to technical, regulatory or other reasons, it could harm our ability to manufacture our products.

We depend on a single principal technology and, if our technology is not commercially successful, we will have no alternative source of revenue.

Our primary business is the development and licensing of technology to identify, isolate, characterize and promote or silence genes which control the death of cells in humans and plants. Our future revenue and profitability critically depend upon our ability, or our licensees' ability, to successfully develop apoptosis and senescence gene technology

and later license or market such technology. We have conducted experiments on certain crops with favorable results and have conducted certain preliminary cell-line and animal experiments, which have provided us with data upon which we have designed additional research programs. However, we cannot give any assurance that our technology will be commercially successful or economically viable for any crops or human therapeutic applications.

In addition, no assurance can be given that adverse consequences might not result from the use of our technology such as the development of negative effects on humans or plants or reduced benefits in terms of crop yield or protection. Our failure to obtain market acceptance of our technology or the failure of our current or potential licensees to successfully commercialize such technology would have a material adverse effect on our business.

We outsource all of our research and development activities and, if we are unsuccessful in maintaining our alliances with these third parties, our research and development efforts may be delayed or curtailed.

We rely on third parties to perform all of our research and development activities. Our research and development efforts take place at the University of Waterloo in Ontario, Canada, where our technology was discovered, at other commercial research facilities and with our commercial partners. At this time, we do not have the internal capabilities to perform our own research and development activities. Accordingly, the failure of third party research partners to perform under agreements entered into with us, or our failure to renew important research agreements with these third parties, may delay or curtail our research and development efforts.

We have significant future capital needs and may be unable to raise capital when needed, which could force us to delay or reduce our research and development efforts.

As of June 30, 2013, we had a cash balance of \$1,602,294 and working capital of \$309,572. Using our available reserves as of June 30, 2013 and the net proceeds of approximately \$1,505 from the common stock offering that closed on October 2, 2013, we believe that we can operate according to our current business plan through March 2014. After giving effect to the net proceeds from this offering, we should have sufficient cash to maintain our present operations through .

To date, we have generated minimal revenues and anticipate that our operating costs will exceed any revenues generated over the next several years. Therefore, we will be required to raise additional capital in the future in order to operate in accordance with our current business plan, and this funding may not be available on favorable terms, if at all. If we are unable to raise additional funds, we will need to do one or more of the following:

delay, scale back or eliminate some or all of our research and development programs; provide a license to third parties to develop and commercialize our technology that we would otherwise seek to develop and commercialize ourselves;

seek strategic alliances or business combinations; attempt to sell our company; cease operations; or declare bankruptcy.

In addition, in connection with any funding, if we need to issue more equity securities than our certificate of incorporation currently authorizes we will need stockholder approval. If stockholder approval is not obtained or if adequate funds are not available, we may be required to curtail operations significantly or to obtain funds through arrangements with collaborative partners or others that may require us to relinquish rights to certain of our technologies, product candidates, products or potential markets. Investors may experience dilution in their investment from future offerings of our common stock. For example, if we raise additional capital by issuing equity securities, such an issuance would reduce the percentage ownership of existing stockholders. In addition, assuming the exercise of all options and warrants outstanding and the conversion of the preferred stock into common stock, as of June 30, 2013, we had 113,332,828 shares of common stock authorized but unissued and unreserved, which may be issued from time to time by our board of directors. Furthermore, we may need to issue securities that have rights, preferences and privileges senior to our common stock. Failure to obtain financing on acceptable terms would have a material adverse effect on our liquidity.

Since our inception, we have financed all of our operations through equity and debt financings. Our future capital requirements depend on numerous factors, including:

the scope of our research and development;
our ability to attract business partners willing to share in our development costs;
our ability to successfully commercialize our technology;
competing technological and market developments;
our ability to enter into collaborative arrangements for the development, regulatory approval and commercialization of other products; and
the cost of filing, prosecuting, defending and enforcing patent claims and other intellectual property rights.

Our business depends upon our patents and proprietary rights and the enforcement of these rights. Our failure to obtain and maintain patent protection may increase competition and reduce demand for our technology.

As a result of the substantial length of time and expense associated with developing products and bringing them to the marketplace in the biotechnology and agricultural industries, obtaining and maintaining patent and trade secret protection for technologies, products and processes is of vital importance. Our success will depend in part on several factors, including, without limitation:

our ability to obtain patent protection for our technologies and processes;
our ability to preserve our trade secrets; and
our ability to operate without infringing the proprietary rights of other parties both in the United States and in foreign countries.

As of June 30, 2013, we have been issued twenty-eight (28) patents by the PTO and seventy-three (73) patents from foreign countries. We have also filed numerous patent applications for our technology in the United States and in several foreign countries, which technology is vital to our primary business, as well as several continuations in part on these patent applications. Our success depends in part upon the grant of patents from our pending patent applications.