CEL SCI CORP
Form 10-K
December 19, 2018

FORM 10-K
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
(Mark One)

(X) ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended September 30, 2018.

OR

( ) TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____.

Commission file number 1-11889

CEL-SCI CORPORATION
(Exact name of registrant as specified in its charter)

COLORADO	84-0916344
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

Vienna Virginia	22182
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: (703) 506-9460
Securities registered pursuant to Section 12(b) of the Act: None
Securities registered pursuant to Section 12(g) of the Act:

Common Stock, $.01 par value
Series S Warrants
(Title of Class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. [ ]

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. [ ]

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes [X] No [ ]

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes [X] No [ ]

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [X]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an “emerging growth company”. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer	Accelerated filer
Non-accelerated filer	Smaller reporting company
	Emerging Growth Company

If an emerging growth company, indicate by checkmark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. [ ]

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act): Yes [ ] No [X]

The aggregate market value of the voting stock held by non-affiliates of the Registrant, based upon the closing sale price of the registrant’s common stock on March 31, 2018, as quoted on the NYSE American, was $22,293,400.

As of December 11, 2018, the Registrant had 28,388,453 issued and outstanding shares of common stock.

Documents Incorporated by Reference: None

PART I

ITEM 1. BUSINESS

CEL-SCI Corporation (CEL-SCI) is focused on finding the best way to activate the immune system to fight cancer and infectious diseases. Its lead investigational therapy Multikine® (Leukocyte Interleukin, Injection) is currently in a pivotal Phase 3 clinical trial involving head and neck cancer, for which CEL-SCI has received Orphan Drug Status from the U.S. FDA. The study was fully enrolled with 928 patients in September 2016. Currently CEL-SCI is waiting for the occurrence of 298 events (deaths) in the two main groups to determine final results. If the primary endpoint of this global study is achieved, the results will be used to support applications to regulatory agencies around the world for worldwide commercial marketing approvals as a first line cancer therapy.

CEL-SCI's immune therapy, Multikine, is being used in a different way than immune therapy is usually used. It is given before any other therapy has been administered because that is when the immune system is thought to be strongest. It is also administered locally to treat tumors or infections. For example, in the Phase 3 clinical trial, Multikine is given locally at the site of the tumor as a first line treatment before surgery, radiation and/or chemotherapy. The goal is to help the intact immune system kill the micro metastases that usually cause recurrence of the cancer. In short, CEL-SCI believes that local administration and administration before weakening of the immune system by chemotherapy and radiation will result in higher efficacy with less or no toxicity.

CEL-SCI is also investigating a different peptide-based immunotherapy as a vaccine for Rheumatoid Arthritis using its LEAPS technology platform. CEL-SCI was awarded a Phase 2 Small Business Innovation Research (SBIR) grant in the amount of $1.5 million from the National Institutes of Health (NIH) in September 2017. This grant will provide funding to allow CEL-SCI to advance its first LEAPS product candidate, CEL-4000, towards an Investigational New Drug (IND) application.

CEL-SCI was formed as a Colorado corporation in 1983. CEL-SCI's principal office is located at 8229 Boone Boulevard, Suite 802, Vienna, VA 22182. CEL-SCI's telephone number is 703-506-9460 and its website is www.cel-sci.com. CEL-SCI does not incorporate the information on its website into this report, and you should not consider it part of this report.

CEL-SCI makes its electronic filings with the Securities and Exchange Commission (SEC), including its annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to these reports available on its website free of charge as soon as practicable after they are filed or furnished to the SEC.

CEL-SCI'S PRODUCTS

CEL-SCI is dedicated to research and development directed at improving the treatment of cancer and other diseases by using the immune system, the body's natural defense system. CEL-SCI is currently focused on the development of the following product candidates and technologies:

1)
Multikine, an investigational immunotherapy under development for the potential treatment of certain head and neck cancers;

2)
L.E.A.P.S. (Ligand Epitope Antigen Presentation System) technology, or LEAPS, with two investigational therapies, LEAPS-H1N1-DC, a product candidate under development for the potential treatment of pandemic influenza in hospitalized patients, and CEL-2000 and CEL-4000, vaccine product candidates under development for the potential treatment of rheumatoid arthritis.

MULTIKINE

CEL-SCI's lead investigational therapy, Multikine, is currently being developed as a potential therapeutic agent directed at using the immune system to produce an anti-tumor immune response. Data from Phase 1 and Phase 2 clinical trials suggest that Multikine may help the immune system "see" the tumor and then attack it, enabling the body's own anti-tumor immune response to fight the tumor. Multikine is the trademark that CEL-SCI has registered for this investigational therapy, and this proprietary name is subject to review by the U.S. Food and Drug Administration, or FDA, in connection with CEL-SCI's future anticipated regulatory submission for approval. Multikine has not been licensed or approved for sale, barter or exchange by the FDA or any other regulatory agency, such as the European Medicine Agency, or EMA. Neither has its safety or efficacy been established for any use.

Multikine is an immunotherapy product candidate comprised of a patented defined mixture of 14 human natural cytokines and is manufactured in a proprietary manner in CEL-SCI's manufacturing facility. CEL-SCI spent over 10 years and more than $80 million developing and validating the manufacturing process for Multikine. The pro-inflammatory cytokine mixture includes interleukins, interferons, chemokines and colony-stimulating factors, which contain elements of the body's natural mix of defenses against cancer.

Multikine is designed to be used in a different way than immune therapy is generally being used. Generally, immunotherapy is given to patients who have already failed other treatments of such as surgery, radiation and/or chemotherapy and most of the time it is administered systemically. Multikine on the other hand is administered locally to treat tumors and their microenvironment before any other therapy has been administered because it is believed that is the time when the immune system is thought to be most amenable to activation against the tumor. For example, in the Phase 3 clinical trial, Multikine was injected locally at the site of the tumor and near the adjacent draining lymph nodes as a first line of treatment before surgery, radiation and/or chemotherapy because that is when the immune system is thought to be strongest. The goal is to help the intact immune system recognize and kill the tumor micro metastases that usually cause recurrence of the cancer.

In short, CEL-SCI believes that the local administration and administration of Multikine and its administration before weakening of the immune system by chemotherapy and radiation will result in better anti-tumor response than if Multikine were administered as a second- or later-line therapy. In clinical studies of Multikine, administration of the investigational therapy to head and neck cancer patients has demonstrated the potential for lesser or no appreciable toxicity.

Source: Adapted from Timar et al., Journal of Clinical Oncology 23(15) May 20, 2005

The first indication CEL-SCI is pursuing for its investigational drug product candidate Multikine is an indication for the neoadjuvant therapy in patients with squamous cell carcinoma of the head and neck, or SCCHN (hereafter also referred to as advanced primary head and neck cancer).

SCCHN is a type of head and neck cancer, and CEL-SCI believes that, in the aggregate, there is a large, unmet medical need among head and neck cancer patients. CEL-SCI believes the last FDA approval of a therapy indicated for the treatment of advanced primary head and neck cancer was over 50 years ago. In the aggregate, head and neck cancer represents about 6% of the world’s cancer cases, with approximately over 650,000 patients diagnosed worldwide each year, and about 60,000 patients diagnosed annually in the United States. Multikine investigational immunotherapy was granted Orphan Drug designation for neoadjuvant therapy in patients with SCCHN by the FDA in the United States.

The current Phase 3 study for Multikine was designed with the objective that, if the study endpoint, which is an improvement in overall survival of the subjects treated with the Multikine treatment regimen plus the current standard of care (SOC) as compared to subjects treated with the current SOC only, is satisfied, the study results are expected to be used to support applications that CEL-SCI plans to submit to regulatory agencies in order to seek commercial marketing approvals for Multikine in major markets around the world. This assessment can only be made when a certain number of deaths have occurred in these two main comparator groups of the study.

The primary endpoint for the protocol for this Phase 3 head and neck cancer study required that a 10% increase in overall survival be obtained in the Multikine group which also is administered CIZ (CIZ = low dose (non-chemotherapeutic) of cyclophosphamide, indomethacin and Zinc-multivitamins) all of which are thought to enhance Multikine activity), plus Standard of Care (Surgery + Radiotherapy or Chemoradiotherapy) arm of the study over the Control comparator (Standard of Care alone) arm. As the study was designed, the final determination of whether this endpoint had been successfully reached could only be determined when 298 events (deaths) had occurred in the combined comparator arms of the study.

Nine hundred twenty-eight (928) newly diagnosed head and neck cancer patients have been enrolled in this Phase 3 cancer study and all the patients who have completed treatment continue to be followed for protocol-specific outcomes in accordance with the Study Protocol. The last patient was enrolled in the study in September 2016. Approximately 135 patients were enrolled in the study from 2011 to 2013, about 195 were enrolled in 2014, about 340 in 2015, and about 260 in 2016. The study protocol assumed an overall survival rate of about 55% at 3 years for the SOC treatment group alone. At this point in the study the 928 patients enrolled in the study are being followed-up as required by the study protocol.

This trial is currently primarily under the management of two clinical research organizations, or CROs: ICON Inc., or ICON, and Ergomed Clinical Research Limited, or Ergomed.

Since CEL-SCI launched its Phase 3 clinical trial for Multikine, CEL-SCI has incurred expenses of approximately $50.6 million as of September 30, 2018 on direct costs for the Phase 3 clinical trial. CEL-SCI estimates it will incur additional expenses of approximately $8.4 million for the remainder of the Phase 3 clinical trial. It should be noted that this estimate is based only on the information currently available in CEL-SCI’s contracts with the Clinical Research Organizations responsible for managing the Phase 3 clinical trial and does not include other related costs, e.g., the manufacturing of the drug. This number may be affected by the rate and speed of death accumulation in the study, foreign currency exchange rates, and many other factors, some of which cannot be foreseen today. It is therefore possible that the cost of the Phase 3 clinical trial will be higher than currently estimated.

Ultimately, the decision as to whether CEL-SCI’s drug product candidate is safe and effective can only be made by the FDA and/or by other regulatory authorities based upon an assessment of all of the data from an entire drug development program submitted as part of an application for marketing approval. As detailed elsewhere in this report the current Phase 3 clinical study for CEL-SCI’s investigational drug may or may not be able to be used as the pivotal study supporting a marketing application in the United States, and, if not, at least one entirely new Phase 3 pivotal study would need to be conducted to support a marketing application in the United States.

Development Agreements for Multikine

In August 2008, CEL-SCI signed an agreement with Teva Pharmaceutical Industries Ltd., or Teva, that gives Teva the exclusive right and license to market, distribute and sell Multikine in Israel and Turkey for treatment of head and neck cancer, if approved. The agreement terminates on a country-by-country basis 10 years after the product launch in each country or upon a material breach or upon bankruptcy of either party. The agreement will automatically extend for additional two year terms unless either party gives notice of its intent not to extend the agreement. If CEL-SCI develops Multikine for other oncology indications and Teva indicates a desire to participate, the parties have agreed to negotiate in good faith with respect to Teva’s participation and contribution in future clinical trials.

Teva has agreed to use all reasonable efforts to obtain regulatory approval to market and sell Multikine in its territory at its own cost and expense. Pursuant to the agreement, it is CEL-SCI’s responsibility to supply Multikine and Teva’s responsibility to sell Multikine, if approved. Net sales will be divided 50/50 between the two parties. Teva also initially agreed to fund certain activities relating to the conduct of a clinical trial in Israel as part of the global Phase 3

trial for Multikine. In January 2012, pursuant to an assignment and assumption agreement between CEL-SCI, Teva and GCP Clinical Studies Ltd., or GCP, Teva transferred all of its rights and obligations concerning the Phase III trial in Israel to GCP. GCP is now operating the Phase 3 trial in Israel pursuant to a service agreement with CEL-SCI.

In July 2011, Serbia and Croatia were added to Teva's territory, pursuant to a joinder agreement between CEL-SCI and PLIVA Hrvatska d.o.o., or PLIVA, an affiliate of Teva's, subject to similar terms as described above.

In consideration for the rights granted by CEL-SCI to PLIVA under the joinder agreement, CEL-SCI will be paid by PLIVA (in U.S. dollars):

$100,000 upon EMA grant of Marketing Authorization for Multikine;

$50,000 upon Croatia's grant of reimbursement status for Multikine in Croatia; and

$50,000 upon Serbia's grant of reimbursement status for Multikine in Serbia.

In November 2000, CEL-SCI signed an agreement with Orient Europharma Co., Ltd., or Orient Europharma, of Taiwan, which agreement was amended in October 2008 and again in June 2010. Pursuant to this agreement, as amended, Orient Europharma has the exclusive marketing and distribution rights to Multikine, if approved, for head and neck cancer, naso-pharyngeal cancer and potentially cervical cancer indications in Taiwan, Singapore, Malaysia, Hong Kong, the Philippines, South Korea, Australia and New Zealand. CEL-SCI has granted Orient Europharma the first right of negotiation with respect to Thailand and China.

The agreement requires Orient Europharma to fund 10% of the cost of the clinical trials needed to obtain marketing approvals in these countries for head and neck cancer, naso-pharyngeal cancer and potentially cervical cancer. Orient Europharma has set up clinical centers for the Phase 3 trial in Taiwan, Malaysia, the Philippines and Thailand and has made further financial contributions towards the cost of the Phase 3 clinical trial.

If Multikine is approved for sale, Orient Europharma will purchase Multikine from CEL-SCI for 35% of the gross selling price in each country. Orient Europharma is obligated to use the same diligent efforts to develop, register, market, sell and distribute Multikine in its territory as with its own products or other licensed products.

The agreement will terminate on a country-by-country basis 15 years after the product approval for Multikine in each country, at which point the agreement will be automatically extended for successive two year periods, unless either party gives notice of its intent not to extend the agreement. The agreement may also be terminated upon bankruptcy of either party or material misrepresentations that are not cured within 60 days. If the agreement ends before the 15 year term through no fault of either party, CEL-SCI will reimburse Orient Europharma for a prorated part of Orient Europhorma's costs towards the clinical trials of Multikine. If Orient Europharma fails to make certain minimum purchases of Multikine during the term of the agreement, Orient Europhorma's rights to the territory will become non-exclusive.

CEL-SCI has a licensing agreement with Byron Biopharma LLC, or Byron, under which CEL-SCI granted Byron an exclusive license to market and distribute Multikine in the Republic of South Africa, if approved. This license will terminate 20 years after marketing approval in South Africa or after bankruptcy or uncured material breach. After the 20-year period has expired, the agreement will be automatically extended for successive two year periods, unless either party gives notice of its intent not to extend the agreement.

Pursuant to the agreement, Byron will be responsible for registering Multikine in South Africa. If Multikine is approved for sale in South Africa, CEL-SCI will be responsible for manufacturing the product, while Byron will be responsible for sales in South Africa. Sales revenues will be divided between CEL-SCI and Byron. CEL-SCI will be paid fifty (50%) percent of the net sales of Multikine.

LEAPS

CEL-SCI's patented T-cell Modulation Process, referred to as LEAPS (Ligand Epitope Antigen Presentation System), uses "heteroconjugates" to direct the body to choose a specific immune response. LEAPS is designed to stimulate the human immune system to more effectively fight bacterial, viral and parasitic infections as well as autoimmune, allergies, transplantation rejection and cancer, when it cannot do so on its own. Administered like a vaccine, LEAPS combines T-cell binding ligands with small, disease associated, peptide antigens and may provide a new method to treat and prevent certain diseases.

The ability to generate a specific immune response is important because many diseases are often not combated effectively due to the body's selection of the "inappropriate" immune response. The capability to specifically reprogram an immune response may offer a more effective approach than existing vaccines and drugs in attacking an underlying disease.

On September 19, 2017, CEL-SCI announced that it had been awarded a Phase 2 Small Business Innovation Research (SBIR) grant in the amount of $1.5 million from the National Institute of Arthritis Muscoskeletal and Skin Diseases, which is part of the National Institutes of Health (NIH). This grant will provide funding to allow CEL-SCI to advance its first LEAPS product candidate, CEL-4000, towards an Investigational New Drug (IND) application, by funding GMP manufacturing, IND enabling studies, and additional mechanism of action studies. The work is being conducted at CEL-SCI's research laboratory and Rush University Medical Center in Chicago, Illinois in the laboratories of Tibor

Glant, MD, Ph.D., The Jorge O. Galante Professor of Orthopedic Surgery and Katalin Mikecz, MD, Ph.D. Professor of Orthopedic Surgery & Biochemistry. The grant was awarded based on published data described below by Dr. Glant's team in collaboration with CEL-SCI showing that the administration of a proprietary peptide using CEL-SCI's LEAPS technology prevented the development, and lessened the severity, including inflammation, of experimental proteoglycan induced arthritis (PGIA or GIA) when it was administered after the disease was induced in animals.

In July 2014, CEL-SCI announced that it has been awarded a Phase 1 Small Business Innovation Research (SBIR) grant in the amount of $225,000 from the National Institute of Arthritis Muscoskeletal and Skin Diseases, which is part of the National Institutes of Health. The grant funded the development of CEL-SCI’s LEAPS technology as a potential treatment for rheumatoid arthritis, an autoimmune disease of the joints. The work was conducted at Rush University Medical Center in Chicago, Illinois in the laboratories of Tibor Glant, MD, Ph.D., Katalin Mikecz, MD, Ph.D., and Allison Finnegan, Ph.D. Professor of Medicine.

With the support of the SBIR grant, CEL-SCI is developing two new drug candidates, CEL-2000 and CEL-4000, as potential rheumatoid arthritis therapeutic vaccines. The data from animal studies using the CEL-2000 treatment vaccine demonstrated that it could be used as an effective treatment against rheumatoid arthritis with fewer administrations than those required by other anti-rheumatoid arthritis treatments currently on the market for arthritic conditions associated with the Th17 signature cytokine TNF- . The data for CEL-4000 indicates it could be effective against rheumatoid arthritis cases where a Th1 signature cytokine (IFN-c) is dominant. CEL-2000 and CEL-4000 have the potential to be a more disease-specific therapy, significantly less expensive, act at an earlier step in the disease process than current therapies and may be useful in patients not responding to existing rheumatoid arthritis therapies. CEL-SCI believes this represents a large unmet medical need in the rheumatoid arthritis market.

In February 2017 and November 2016, CEL-SCI announced new preclinical data that demonstrate its investigational new drug candidate CEL-4000 has the potential for use as a therapeutic vaccine to treat rheumatoid arthritis. This efficacy study was supported in part by the SBIR Phase I Grant and was conducted in collaboration with Drs. Katalin Mikecz and Tibor Glant, and their research team at Rush University Medical Center in Chicago, IL.

In March 2015, CEL-SCI and its collaborators published a review article on vaccine therapies for rheumatoid arthritis based in part on work supported by the SBIR grant. The article is entitled “Rheumatoid arthritis vaccine therapies: perspectives and lessons from therapeutic Ligand Epitope Antigen Presentation System vaccines for models of rheumatoid arthritis” and was published in Expert Review of Vaccines 1 - 18 and can be found online at http://www.ncbi.nlm.nih.gov/pubmed/25787143.

In August 2012, Dr. Zimmerman, CEL-SCI’s Senior Vice President of Research, Cellular Immunology, gave a Keynote presentation at the OMICS 2nd International Conference on Vaccines and Vaccinations in Chicago. This presentation showed how the LEAPS peptides administered altered only select cytokines specific for each disease model, thereby improving the status of the test animals and even preventing death and morbidity. These results support the growing body of evidence that provides for its mode of action by a common format in these unrelated conditions by regulation of Th1 (e.g., IL12 and IFN-c) and their action on reducing TNF- and other inflammatory cytokines as well as regulation of antibodies to these disease associated antigens. This was also illustrated by a schematic model showing how these pathways interact and result in the overall effect of protection and regulation of cytokines in a beneficial manner.

Using the LEAPS technology, CEL-SCI has created a potential peptide treatment for H1N1 (swine flu) hospitalized patients. This LEAPS flu treatment is designed to focus on the conserved, non-changing epitopes of the different strains of Type A Influenza viruses (H1N1, H5N1, H3N1, etc.), including “swine”, “avian or bird”, and “Spanish Influenza”, in order to minimize the chance of viral “escape by mutations” from immune recognition. Therefore one should think of this treatment not really as an H1N1 treatment, but as a potential pandemic flu treatment. CEL-SCI’s LEAPS flu treatment contains epitopes known to be associated with immune protection against influenza in animal models.

In May 2011 NIAID scientists presented data at the Keystone Conference on “Pathogenesis of Influenza: Virus-Host Interactions” in Hong Kong, China, showing the positive results of efficacy studies in mice of LEAPS H1N1 activated dendritic cells (DCs) to treat the H1N1 virus. Scientists at the NIAID found that H1N1-infected mice treated with LEAPS-H1N1 DCs showed a survival advantage over mice treated with control DCs. The work was performed in collaboration with scientists led by Kanta Subbarao, M.D., Chief of the Emerging Respiratory Diseases Section in NIAID’s Division of Intramural Research, part of the National Institutes of Health, USA.

In July 2013, CEL-SCI announced the publication of the results of influenza studies by researchers from the NIAID in the Journal of Clinical Investigation (www.jci.org/articles/view/67550). The studies described in the publication show that when CEL-SCI’s investigational J-LEAPS Influenza Virus treatments were used “in vitro” to activate DCs, these activated DCs, when injected into influenza infected mice, arrested the progression of lethal influenza virus infection in these mice. The work was performed in the laboratory of Dr. Subbarao.

Even though the various LEAPS vaccine candidates have not yet been given to humans, they have been tested in vitro with human cells. They have induced similar cytokine responses that were seen in these animal models, which may indicate that the LEAPS technology might translate to humans. The LEAPS candidates have demonstrated protection against lethal herpes simplex virus (HSV1) and H1N1 influenza infection, as a prophylactic or therapeutic agent in animals. They have also shown some level of efficacy in animals in two autoimmune conditions, curtailing and sometimes preventing disease progression in arthritis and myocarditis animal models. CEL-SCI’s belief is that the LEAPS technology may be a significant alternative to the vaccines currently available on the market for these diseases.

None of the LEAPS investigational products have been approved for sale, barter or exchange by the FDA or any other regulatory agency for any use to treat disease in animals or humans. The safety or efficacy of these products has not been established for any use. Lastly, no definitive conclusions can be drawn from the early-phase, preclinical-trials data involving these investigational products. Before obtaining marketing approval from the FDA in the United States,

and by comparable agencies in most foreign countries, these product candidates must undergo rigorous preclinical and clinical testing which is costly and time consuming and subject to unanticipated delays. There can be no assurance that these approvals will be granted.

INTELLECTUAL PROPERTY

Patents and other proprietary rights are essential to CEL-SCI's business. CEL-SCI files patent applications to protect its technologies, inventions and improvements to its inventions that CEL-SCI considers important to the development of its business. CEL-SCI'S intellectual property portfolio covers its proprietary technologies, including Multikine and LEAPS, by multiple issued patents and pending patent applications in the United States and in key foreign markets.

Multikine is protected by a U.S. patent, which is a composition-of-matter patent issued in May 2005 that, in its current format, expires in 2023. Additional composition-of-matter patents for Multikine have been issued in Germany (issued in June 2011 and currently set to expire in 2025), China (issued in May 2011 and currently set to expire in 2024), Japan (issued in November 2012 and currently set to expire in 2025), and three in Europe (issued in September 2015, May 2016 and October 4, 2017, currently set to expire in 2025 and 2026). In September 2017 CEL-SCI announced that the European Patent Office has issued a new patent to CEL-SCI for Multikine. Patent # EP 1 879 618 B1, titled "A Method for Modulating HLA Class II Tumor Cell Surface Expression With A Cytokine Mixture," addresses Multikine's mechanism of action to make tumors more visible to the immune system. This new patent is important because, along with the other Multikine issued patents, it addresses how Multikine enables the immune system to recognize and attack the tumor. One way tumor cells evade the immune system is by expressing human leukocyte antigens (HLA) on the tumor cell surface, thus appearing as 'self' to the immune cells and therefore the tumor cells are not attacked. It is important to note that the tumors of the Multikine-treated responders in CEL-SCI's prior Phase 2 studies had no HLA Class II expressed on the cell surface following Multikine treatment as compared to controls.

This points to Multikine's ability to modulate HLA expression on the tumor cell surface, thereby allowing the immune system to recognize and attack the tumor.

In addition to the patents that offer certain protections for Multikine, the method of manufacture for Multikine, a complex biological product, is held by CEL-SCI as a trade secret.

LEAPS is protected by patents in the United States issued in February 2006, April 2007, and August 2007. The LEAPS patents, which expire in 2021, 2022 and 2021, respectively, include overlapping claims, with composition of both matter (new chemical entity), process and methods-of-use, to maximize and extend the coverage in their current format. In October 2017, a patent was issued in Europe for LEAPS, which expires in 2029.

CEL-SCI has six patent applications pending in the United States and one in Europe for LEAPS, which, if issued, would extend protection through 2034, subject to any potential patent term extensions. One pending U.S. application is a joint application with Northeast Ohio Medical University ("Neoucom"). If granted, CEL-SCI will share the ability to use the patent, unless CEL-SCI licenses the rights to the patent application and any ensuing patent from Neoucom.

As of December 19, 2018, there were no contested proceedings and/or third party claims with respect to CEL-SCI's patents or patent applications.

MANUFACTURING FACILITY

Before starting the Phase 3 clinical trial, for reasons related to regulatory considerations, CEL-SCI needed to build a dedicated manufacturing facility to produce Multikine. This facility has been completed and validated, and has produced multiple clinical lots for the Phase 3 clinical trial. The facility has also passed review by a European Union Qualified Person on several occasions.

CEL-SCI's lease on the manufacturing facility expires on October 31, 2028. CEL-SCI completed validation of its new manufacturing facility in January 2010. The state-of-the-art facility is being used to manufacture Multikine for CEL-SCI's Phase 3 clinical trial and to market Multikine for commercial sale, if Multikine is approved by the FDA. In addition to using this facility to manufacture Multikine, CEL-SCI, only if the facility is not being used for Multikine, may offer the use of the facility as a service to pharmaceutical companies and others, particularly those that need to "fill and finish" their drugs in a cold environment (4 degrees Celsius, or approximately 39 degrees Fahrenheit). Fill and finish is the process of filling injectable drugs in a sterile manner and is a key part of the manufacturing process for many medicines. However, priority will always be given to Multikine as management considers the Multikine supply to the clinical studies and preparation for a final marketing approval to be more important than offering fill and finish services. See Item 2 of this report for more information concerning the terms of this lease.

ITEM 1B. RISK FACTORS

The risks described below could adversely affect the price of CEL-SCI's common stock.

Risks Related to CEL-SCI

CEL-SCI has incurred significant losses since inception, and CEL-SCI anticipates that it will continue to incur significant losses for the foreseeable future and may never achieve or maintain profitability.

CEL-SCI has a history of net losses, expects to incur substantial losses and have negative operating cash flow for the foreseeable future, and may never achieve or maintain profitability. Since the date of its formation and through September 30, 2018, CEL-SCI incurred net losses of approximately $332 million. CEL-SCI has relied principally upon the proceeds from the public and private sales of its securities to finance its activities to date. To date, CEL-SCI has not commercialized any products or generated any revenue from the sale of products, and CEL-SCI does not expect to generate any product revenue for the foreseeable future. CEL-SCI does not know whether or when it will generate product revenue or become profitable.

CEL-SCI is heavily dependent on the success of Multikine which is under clinical development. CEL-SCI cannot be certain that Multikine will receive regulatory approval or be successfully commercialized even if CEL-SCI receives regulatory approval. Multikine is the only product candidate in late-stage clinical development, and CEL-SCI's business currently depends heavily on its successful development, regulatory approval and commercialization. CEL-SCI has no drug products for sale currently and may never be able to develop approved and marketable drug products.

Even if CEL-SCI succeeds in developing and commercializing one or more of its product candidates, CEL-SCI expects to continue to incur significant operating and capital expenditures as CEL-SCI:

continues to undertake preclinical development and clinical trials for product candidates;

seeks regulatory approvals for product candidates; and

implements additional internal systems and infrastructure.

To become and remain profitable, CEL-SCI must succeed in developing and commercializing product candidates which must generate significant revenue. This will require CEL-SCI to be successful in a range of challenging activities, including completing preclinical testing and clinical trials of its product candidates, discovering or acquiring additional product candidates, obtaining regulatory approval for these product candidates and manufacturing, marketing and selling any products for which CEL-SCI may obtain regulatory approval. CEL-SCI is only in the preliminary stages of most of these activities. CEL-SCI may never succeed in these activities and, even if CEL-SCI does, may never generate revenue that is significant enough to achieve profitability.

Even if CEL-SCI does achieve profitability, it may not be able to sustain or increase profitability on a quarterly or annual basis. The failure to become and remain profitable could depress the value of CEL-SCI and could impair its ability to raise capital, expand its business, maintain research and development efforts, diversify product offerings or even continue in operation. A decline in the value of CEL-SCI could cause its stockholders to lose all or part of their investment.

Our financial statements include an explanatory paragraph that expresses substantial doubt about our ability to continue as a going concern, indicating the possibility that we may not be able to operate in the future.

Primarily as a result of our losses incurred to date, our expected continued future losses, and limited cash balances, we have included an explanatory paragraph in our financial statements expressing substantial doubt about our ability to continue as a going concern. We have included such an explanatory paragraph on numerous occasions in the preceding years. Our ability to continue as a going concern is contingent upon, among other factors, the sale of the shares of our common stock or obtaining alternate financing.

Our Independent Registered Public Accountants have included in their report on our financial statements a paragraph stating that we may be unable to continue as a going concern.

As a result of our recurring losses from operations, our independent registered public accounting firm, BDO USA, LLP, has issued a report in connection with their audit of our financial statements for the year ended September 30, 2018, that included an explanatory paragraph referring to our recurring losses from operations and expressing substantial doubt in our ability to continue as a going concern without additional capital becoming available. The doubt about our ability to continue as a going concern could have an adverse impact on our ability to execute our business plan, result in the reluctance on the part of certain suppliers to do business with us, or adversely affect our ability to raise additional debt or equity capital.

CEL-SCI will require substantial additional capital to remain in operation. A failure to obtain this necessary capital when needed could force CEL-SCI to delay, limit, reduce or terminate the product candidates' development or commercialization efforts.

As of September 30, 2018, CEL-SCI had cash and cash equivalents of approximately $10.3 million. CEL-SCI believes that it will continue to expend substantial resources for the foreseeable future developing Multikine, LEAPS and any other product candidates or technologies that it may develop or acquire. These expenditures will include costs associated with research and development, potentially obtaining regulatory approvals and having the products manufactured, as well as marketing and selling products approved for sale, if any. In addition, other unanticipated costs may arise. Because the outcome of the current and anticipated clinical trials is highly uncertain, CEL-SCI cannot reasonably estimate the actual amounts necessary to successfully complete the development and commercialization of the product candidates.

CEL-SCI's future capital requirements depend on many factors, including:

the rate of progress of, results of and cost of completing Phase 3 clinical development of Multikine for the treatment of certain head and neck cancers;

the results of the applications to and meetings with the FDA, the EMA and other regulatory authorities and the consequential effect on operating costs;

assuming favorable Phase 3 clinical results, the cost, timing and outcome of the efforts to obtain marketing approval for Multikine in the United States, Europe and in other jurisdictions, including the preparation and filing of regulatory submissions for Multikine with the FDA, the EMA and other regulatory authorities;

the scope, progress, results and costs of additional preclinical, clinical, or other studies for additional indications for Multikine, LEAPS and other product candidates and technologies that CEL-SCI may develop or acquire;

the timing of, and the costs involved in, obtaining regulatory approvals for LEAPS if clinical studies are successful;

the cost and timing of future commercialization activities for the products, if any of the product candidates are approved for marketing, including product manufacturing, marketing, sales and distribution costs;

the revenue, if any, received from commercial sales of the product candidates for which CEL-SCI receives marketing approval;

the cost of having the product candidates manufactured for clinical trials and in preparation for commercialization;

the ability to establish and maintain strategic collaborations, licensing or other arrangements and the financial terms of such agreements;

the costs involved in preparing, filing and prosecuting patent applications and maintaining, defending and enforcing its intellectual property rights, including litigation costs, and the outcome of such litigation; and

the extent to which CEL-SCI acquires or in-licenses other products or technologies.

Based on the current operating plan, and absent any future financings or strategic partnerships, CEL-SCI believes that its existing cash and cash equivalents and investments will be sufficient to fund its projected operating expenses and capital expenditure requirements into the second half of fiscal year 2019. However, CEL-SCI's operating plan may change as a result of many factors currently unknown to CEL-SCI, and CEL-SCI may need additional funds sooner than planned. Additional funds may not be available when CEL-SCI needs them on terms that are acceptable to CEL-SCI, or at all. If adequate funds are not available to CEL-SCI on a timely basis, CEL-SCI may be required to delay, limit, reduce or terminate preclinical studies, clinical trials or other development activities for Multikine, LEAPS, or any other product candidates or technologies that CEL-SCI develops or acquires, or delay, limit, reduce or terminate its sales and marketing capabilities or other activities that may be necessary to commercialize its product candidates. Due to recurring losses from operations and future liquidity needs, there is substantial doubt about CEL-SCI's ability to continue as a going concern without additional capital becoming available. The doubt about CEL-SCI's ability to continue as a going concern could have an adverse impact on CEL-SCI's ability to execute its business plan, result in the reluctance on the part of certain suppliers to do business with CEL-SCI, or adversely affect CEL-SCI's ability to raise additional debt or equity capital.

The costs of the product candidates development and clinical trials are difficult to estimate and will be very high for many years, preventing CEL-SCI from making a profit for the foreseeable future, if ever.

Clinical and other studies necessary to obtain approval of a new drug can be time consuming and costly, especially in the United States, but also in foreign countries. The estimates of the costs associated with future clinical trials and research may be substantially lower than what CEL-SCI actually experiences. It is impossible to predict what CEL-SCI will face in the development of a product candidate, such as Multikine. The purpose of clinical trials is to provide both CEL-SCI and regulatory authorities with safety and efficacy data in humans. It is relatively common to revise a trial or add subjects to a trial in progress. The difficult and often complex steps necessary to obtain regulatory approval, especially that of the FDA and the EMA, involve significant costs and may require several years to complete. CEL-SCI expects that it will need substantial additional financing over an extended period of time in order to fund the costs of future clinical trials, related research, and general and administrative expenses.

The extent of the clinical trials and research programs are primarily based upon the amount of capital available to CEL-SCI and the extent to which CEL-SCI receives regulatory approvals for clinical trials. CEL-SCI has established estimates of the future costs of the Phase 3 clinical trial for Multikine, but, as explained above, the estimates may not prove correct.

An adverse determination in any future legal proceedings could have a material adverse effect on CEL-SCI.

CEL-SCI may be the target of claims asserting violations of securities fraud and derivative actions, or other litigation or arbitration proceedings in the future. Any future litigation could result in substantial costs and divert management's attention and resources. These legal proceedings may result in large judgments or settlements against CEL-SCI, any of which could have a material adverse effect on its business, operating results, financial condition and liquidity.

Compliance with changing regulations concerning corporate governance and public disclosure may result in additional expenses.

Changing laws, regulations and standards relating to corporate governance and public disclosure may create uncertainty regarding compliance matters. New or changed laws, regulations and standards are subject to varying interpretations in many cases. As a result, their application in practice may evolve over time. CEL-SCI is committed to maintaining high standards of corporate governance and public disclosure. Complying with evolving interpretations of new or changing legal requirements may cause CEL-SCI to incur higher costs as CEL-SCI revises current practices, policies and procedures, and may divert management time and attention from potential revenue-generating

activities to compliance matters. If the efforts to comply with new or changed laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to practice, CEL-SCI's reputation may also be harmed. Further, CEL-SCI's board members, chief executive officer, and other executive officers could face an increased risk of personal liability in connection with the performance of their duties. As a result, CEL-SCI may have difficulty attracting and retaining qualified board members and executive officers, which could harm its business.

CEL-SCI has not established a definite plan for the marketing of Multikine, if approved.

CEL-SCI has not established a definitive plan for marketing nor has CEL-SCI established a price structure for any of its product candidates, if approved. However, CEL-SCI intends, if it is in a position to do so, to sell Multikine itself in certain markets where it is approved, and or to enter into written marketing agreements with various third parties with established sales forces in such markets. The sales forces in turn would, CEL-SCI believes, focus on selling Multikine to targeted cancer centers, physicians and clinics involved in the treatment of head and neck cancer. CEL-SCI has already licensed future sales of Multikine, if approved, to three companies: Teva Pharmaceutical Industries Ltd. in Israel, Turkey, Serbia and Croatia; Orient Europharma in Taiwan, Singapore, Hong Kong, Malaysia, South Korea, the Philippines, Australia and New Zealand; and Byron BioPharma, LLC in South Africa.

CEL-SCI believes that these companies will have the resources to market Multikine appropriately in their respective territories, if approved, but there is no guarantee that they will. There is no assurance that CEL-SCI will be able to find qualified third-party partners to market its products in other areas, on terms that are favorable to CEL-SCI, or at all.

CEL-SCI may encounter problems, delays and additional expenses in developing marketing plans with third parties. In addition, even if Multikine, if approved, is cost-effective and demonstrated to increase overall patient survival, CEL-SCI may experience other limitations involving the proposed sale of Multikine, such as uncertainty of third-party coverage and reimbursement. There is no assurance that CEL-SCI can successfully market Multikine, if approved, or any other product candidates it may develop.

CEL-SCI hopes to expand its clinical development capabilities in the future, and any difficulties hiring or retaining key personnel or managing this growth could disrupt its operations.

CEL-SCI is highly dependent on the principal members of its management and development staff. If the Phase 3 Multikine clinical trial is successful, CEL-SCI expects to expand its clinical development and manufacturing capabilities, which will involve hiring additional employees. Future growth will require CEL-SCI to continue to implement and improve its managerial, operational and financial systems and continue to retain, recruit and train additional qualified personnel, which may impose a strain on its administrative and its operational infrastructure. The competition for qualified personnel in the biopharmaceutical field is intense. CEL-SCI is highly dependent on its ability to attract, retain and motivate highly qualified management and specialized personnel required for clinical development. Due to limited resources, CEL-SCI may not be able to manage effectively the expansion of its operations or recruit and train additional qualified personnel. If CEL-SCI is unable to retain key personnel or manage its future growth effectively, CEL-SCI may not be able to implement its business plan.

If product liability or patient injury lawsuits are brought against CEL-SCI, CEL-SCI may incur substantial liabilities and may be required to limit clinical testing or future commercialization of Multikine or its other product candidates.

CEL-SCI faces an inherent risk of product liability as a result of the clinical testing of Multikine and other product candidates, and will face an even greater risk if CEL-SCI commercializes any of its product candidates. For example, CEL-SCI may be sued if its Multikine or LEAPS product candidates, or any other future product candidates, allegedly cause injury or are found to be otherwise unsuitable during clinical testing, manufacturing or, if approved, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product candidate, negligence, strict liability and a breach of warranties. Claims could also be asserted under state consumer protection acts.

Furthermore, Multikine is made, in part, from components of human blood. There are inherent risks associated with products that involve human blood such as possible contamination with viruses, including hepatitis or HIV. Any possible contamination could cause injuries to patients who receive contaminated Multikine, or could require CEL-SCI to destroy batches of Multikine, thereby subjecting CEL-SCI to possible financial losses, lawsuits and harm to its business.

If CEL-SCI cannot successfully defend itself against product liability claims, CEL-SCI may incur substantial liabilities or be required to limit or cease the clinical testing or commercialization of its product candidates, if approved. Even a successful defense would require significant financial and management resources. Regardless of the merits or eventual outcome, liability claims may result in:

decreased demand for Multikine or other product candidates, if approved;

injury to CEL-SCI's reputation;

withdrawal of existing, or failure to enroll additional, clinical trial participants;

costs to defend any related litigation;

a diversion of management's time and resources;

substantial monetary awards to trial participants or patients;

product candidate recalls, withdrawals or labeling, marketing or promotional restrictions;

loss of revenue;

inability to commercialize Multikine or other product candidates; and

a decline in the price of CEL-SCI's common stock.

Although CEL-SCI has product liability insurance for Multikine in the amount of $5.0 million, the successful prosecution of a product liability case against CEL-SCI could have a materially adverse effect upon its business if the amount of any judgment exceeds the insurance coverage. Any claim that may be brought against CEL-SCI could result in a court judgment or settlement in an amount that is not covered, in whole or in part, by CEL-SCI's insurance or that is in excess of the limits of the insurance coverage. CEL-SCI's insurance policies also have various exclusions, and CEL-SCI may be subject to a claim for which CEL-SCI has no coverage. CEL-SCI may have to pay any amounts awarded by a court or negotiated in a settlement that exceed the coverage limitations or that are not covered by its insurance, and CEL-SCI may not have, or be able to obtain, sufficient capital to pay such amounts. CEL-SCI commenced the Phase 3 clinical trial for Multikine in December 2010. Although no claims have been brought to date, participants in the clinical trials could bring civil actions against CEL-SCI for any unanticipated harmful effects allegedly arising from the use of Multikine or any other product candidate that CEL-SCI may attempt to develop.

CEL-SCI's commercial success depends, in part, upon attaining significant market acceptance of its product candidates, if approved, among physicians, patients, healthcare payors and major operators of cancer clinics.

Even if CEL-SCI obtains regulatory approval for its product candidates, any resulting product may not gain market acceptance among physicians, healthcare payors, patients and the medical community, which are critical to commercial success. Market acceptance of any product candidate for which CEL-SCI receives approval depends on a number of factors, including:

the efficacy and safety as demonstrated in clinical trials;

the timing of market introduction of such product candidate as well as competitive products;

the clinical indications for which the drug is approved;

the approval, availability, market acceptance and reimbursement for the companion diagnostic;

acceptance by physicians, major operators of cancer clinics and patients of the drug as a safe and effective treatment;

the potential and perceived advantages of such product candidate over alternative treatments, especially with respect to patient subsets that are targeted with such product candidate;

the safety of such product candidate seen in a broader patient group, including its use outside the approved indications;

the cost of treatment in relation to alternative treatments;

the availability of adequate reimbursement and pricing by third-party payors and government authorities;

relative convenience and ease of administration;

the prevalence and severity of adverse side effects; and

the effectiveness of sales and marketing efforts.

If CEL-SCI's product candidates are approved but fail to achieve an adequate level of acceptance by physicians, healthcare payors and patients, CEL-SCI will not be able to generate significant revenues, and CEL-SCI may not become or remain profitable.

Risks Related to Government Approvals

CEL-SCI's product candidates must undergo rigorous preclinical and clinical testing and regulatory approvals, which could be costly and time-consuming and subject CEL-SCI to unanticipated delays or prevent CEL-SCI from marketing any products.

CEL-SCI's product candidates are subject to premarket approval from the FDA in the United States, the EMA in the European Union, and by comparable agencies in most foreign countries before they can be sold. Before obtaining marketing approval, these product candidates must undergo costly and time consuming preclinical and clinical testing which could subject CEL-SCI to unanticipated delays and may prevent CEL-SCI from marketing the product candidates. There can be no assurance that such approvals will be granted on a timely basis, if at all.

Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. The results of preclinical studies and early clinical trials of the product candidates may not be predictive of the results of later-stage clinical trials. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier trials. CEL-SCI's current and future clinical trials may not be successful.

Although CEL-SCI is no longer treating patients and simply following the patients per the protocol of the Phase 3 clinical trial for Multikine, CEL-SCI may experience delays in the clinical trials and CEL-SCI does not know whether the clinical trials will need to be redesigned. Clinical trials can be delayed for a variety of reasons, including delays related to:

the availability of financial resources needed to commence and complete the planned trials;

obtaining regulatory approval to commence a trial;

reaching agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;

obtaining Institutional Review Board, or IRB, approval at each clinical trial site;

recruiting suitable patients to participate in a trial;

having patients complete a trial or return for post-treatment follow-up;

clinical trial sites deviating from trial protocol or dropping out of a trial;

adding new clinical trial sites; or

manufacturing sufficient quantities of the product candidate for use in clinical trials.

Patient enrollment, a significant factor in the timing of clinical trials, is affected by many factors including the competence of the CRO running the study, size and nature of the patient population, the proximity of patients to clinical sites, the eligibility criteria for the trial, the design of the clinical trial, competing clinical trials and clinicians' and patients perceptions as to the potential advantages of the drug being studied in relation to other available therapies, including any new drugs that may be approved for the indications CEL-SCI is investigating. Furthermore, CEL-SCI relies on CROs and clinical trial sites to ensure the proper and timely conduct of the clinical trials and while CEL-SCI has agreements governing their committed activities, CEL-SCI has limited influence over their actual performance.

It remains possible that the regulatory authorities could determine that one Phase 3 study is not sufficient to support a marketing application in the United States. Under this circumstance, at least one entirely new Phase 3 clinical trial would need to be conducted to support a marketing application in the United States. If there is a need to conduct an additional Phase 3 clinical trial, any such requirement would have significant and severe material consequences for CEL-SCI and could impact CEL-SCI's ability to continue as a going concern.

CEL-SCI could also encounter significant delays and/or need to terminate a development program for a product candidate if physicians encounter unresolved ethical issues associated with enrolling patients in clinical trials of the product candidates while existing treatments have established safety and efficacy profiles. Further, a clinical trial may be suspended or terminated by CEL-SCI, one or more of the IRBs for the institutions in which such trials are being conducted, by CEL-SCI upon a final recommendation by the Independent Data Monitoring Committee, or IDMC, with which CEL-SCI agrees for such trial, or by FDA or other regulatory authorities due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or the clinical protocols, as a result of inspection of the clinical trial operations or trial site(s) by FDA or other regulatory authorities, the imposition of a clinical hold or partial clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a product candidate, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial. The occurrence of any one or more of these events would have significant and severe material consequences for CEL-SCI and could impact CEL-SCI's ability to continue as a going concern.

If CEL-SCI experiences termination of, or delays in the completion of, any clinical trial of its product candidates, the commercial prospects for the product candidates will be harmed, and the ability to generate product revenues will be delayed. In addition, any delays in completing the clinical trials will increase the costs, slow the product development and approval process and jeopardize the ability to commence product sales and generate revenues. Any of these occurrences may harm CEL-SCI's business, prospects, financial condition and results of operations significantly. Many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to a delay or the denial of regulatory approval for the product candidates.

CEL-SCI cannot be certain when or under what conditions it will undertake future clinical trials. A variety of issues may delay the Phase 3 clinical trial for Multikine. Early trials for the other product candidates, or the plans for later trials, may not satisfy the requirements of regulatory authorities, such as the FDA. CEL-SCI may fail to find subjects willing to enroll in the trials. CEL-SCI manufactures Multikine in its manufacturing facility, but relies on third-party vendors to manage the trial process and other activities, and these vendors may fail to meet appropriate standards. Accordingly, the clinical trials relating to the product candidates may not be completed on schedule, the FDA or foreign regulatory agencies may order CEL-SCI to stop or modify research, or these agencies may not ultimately approve any of the product candidates for commercial sale. Varying interpretations of the data obtained from pre-clinical and clinical testing could delay, limit or prevent regulatory approval of the product candidates. The data collected from the clinical trials may not be sufficient to support regulatory approval of the various product candidates, including Multikine. The failure to adequately demonstrate the safety and efficacy of any of the product candidates would delay or prevent regulatory approval of the product candidates in the United States, which could prevent CEL-SCI from achieving profitability. Although CEL-SCI had positive results in the Phase 2 trials for Multikine, those results were for a very small sample set, and CEL-SCI will not know how Multikine will perform in a larger set of subjects until CEL-SCI is well into, or completes, the Phase 3 clinical trial.

The development and testing of product candidates and the process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process or after approval, may subject an applicant to administrative or judicial sanctions. FDA sanctions could include, among other actions, refusal to approve pending

applications, withdrawal of an approval, a clinical hold, termination of the Phase 3 study, warning letters, product recalls or withdrawals from the market, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement or civil or criminal penalties. Any agency or judicial enforcement action could have a material adverse effect on CEL-SCI.

The requirements governing the conduct of clinical trials, manufacturing and marketing of the product candidates, including Multikine, outside the United States vary from country to country. Foreign approvals may take longer to obtain than FDA approvals and can require, among other things, additional testing and different trial designs. Foreign regulatory approval processes include all of the risks associated with the FDA approval process. Some of those agencies also must approve prices for products approved for marketing. Approval of a product by the FDA or the EMA does not ensure approval of the same product by the health authorities of other countries. In addition, changes in regulatory requirements for product approval in any country during the clinical trial process and regulatory agency review of each submitted new application may cause delays or rejections.

CEL-SCI has only limited experience in filing and pursuing applications necessary to gain regulatory approvals. The lack of experience may impede its ability to obtain timely approvals from regulatory agencies, if at all. CEL-SCI will not be able to commercialize Multikine and other product candidates until CEL-SCI has obtained regulatory approval. In addition, regulatory authorities may also limit the types of patients to which CEL-SCI or its third-party partners may market Multikine or the other product candidates. Any failure to obtain or any delay in obtaining required regulatory approvals may adversely affect CEL-SCI's or its third-party partners' ability to successfully market the product candidates.

Even if CEL-SCI obtains regulatory approval for its investigational products, CEL-SCI will be subject to stringent, ongoing government regulation.

If CEL-SCI's investigational products receive regulatory approval, either in the United States or internationally, those products will be subject to limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval, and may contain requirements for potentially costly post-marketing testing, including Phase 4 clinical trials, and surveillance of the safety and efficacy of the investigational products. CEL-SCI will continue to be subject to extensive regulatory requirements. These regulations are wide-ranging and govern, among other things:

product design, development and manufacture;

product application and use

adverse drug experience;

product advertising and promotion;

product manufacturing, including good manufacturing practices

record keeping requirements;

registration and listing of the establishments and products with the FDA, EMA and other state and national agencies;

product storage and shipping;

drug sampling and distribution requirements;

electronic record and signature requirements; and

labeling changes or modifications.

16

CEL-SCI and any of its third-party manufacturers or suppliers must continually adhere to federal regulations setting forth requirements, known as current Good Manufacturing Practices, or cGMPs, and their foreign equivalents, which are enforced by the FDA, the EMA and other national regulatory bodies through their facilities inspection programs. If the facilities, or the facilities of the contract manufacturers or suppliers, cannot pass a pre-approval plant inspection or fail such inspections in the future, the FDA, EMA or other national regulators will not approve the marketing applications for the product candidates, or may withdraw any prior approval. In complying with cGMP and foreign regulatory requirements, CEL-SCI and any of its potential third-party manufacturers or suppliers will be obligated to expend time, money and effort in production, record-keeping and quality control to ensure that the product candidates meet applicable specifications and other requirements.

If CEL-SCI does not comply with regulatory requirements at any stage, whether before or after marketing approval is obtained, CEL-SCI may be subject to, among other things, license suspension or revocation, criminal prosecution, seizure, injunction, fines, be forced to remove a product from the market or experience other adverse consequences, including restrictions or delays in obtaining regulatory marketing approval for such products or for other product candidates for which CEL-SCI seeks approval. This could materially harm CEL-SCI's financial results, reputation and stock price. Additionally, CEL-SCI may not be able to obtain the labeling claims necessary or desirable for product promotion. If CEL-SCI or other parties identify adverse effects after any of the products are on the market, or if manufacturing problems occur, regulatory approval may be suspended or withdrawn. CEL-SCI may be required to reformulate products, conduct additional clinical trials, make changes in product labeling or indications of use, or submit additional marketing applications to support any changes. If CEL-SCI encounters any of the foregoing problems, its business and results of operations will be harmed and the market price of its common stock may decline.

The FDA and other governmental authorities' policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of CEL-SCI's product candidates. If CEL-SCI is slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if CEL-SCI is not able to maintain regulatory compliance, CEL-SCI may lose any marketing approval that it may have obtained, which would adversely affect its business, prospects and ability to achieve or sustain profitability. CEL-SCI cannot predict the extent of adverse government regulations which might arise from future legislative or administrative action. Without government approval, CEL-SCI will be unable to sell any of its product candidates.

CEL-SCI's product candidates may cause undesirable side effects or have other properties that could delay or prevent their regulatory approval, limit the commercial profile of an approved label, or result in significant negative consequences following marketing approval, if any.

Undesirable side effects caused by its product candidates could cause CEL-SCI or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or other comparable foreign authorities. Results of the clinical trials could reveal a high and unacceptable severity and/or prevalence of these or other side effects. In such an event, the trials could be suspended or terminated and the FDA or comparable foreign regulatory authorities could order CEL-SCI to cease further development of, or deny approval of, the product candidates for any or all targeted indications. The drug-related side effects could affect patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims. Any of these occurrences may harm CEL-SCI's business, financial condition and prospects significantly.

Additionally, if one or more of the product candidates receives marketing approval, and CEL-SCI or others later identify undesirable side effects caused by such products, a number of potentially significant negative consequences could result, including:

regulatory authorities may withdraw approvals of such product;

regulatory authorities may require additional warnings on the label;

CEL-SCI may be required to create a medication guide outlining the risks of such side effects for distribution to patients;

CEL-SCI could be sued and held liable for harm caused to patients; and

CEL-SCI's reputation may suffer.

Any of these events could prevent CEL-SCI from achieving or maintaining market acceptance of a particular product candidate, if approved, and could significantly harm its business, results of operations and prospects.

CEL-SCI relies on third parties to conduct its preclinical and clinical trials. If these third parties do not successfully carry out their contractual duties and meet regulatory requirements, or meet expected deadlines, CEL-SCI may not be able to obtain regulatory approval for or commercialize the product candidates and its business could be substantially harmed.

CEL-SCI has relied upon and plans to continue to rely upon third-party CROs to prepare for, conduct, monitor and manage data for its ongoing preclinical and clinical programs. CEL-SCI relies on these parties for all aspects of the execution of its preclinical studies and clinical trials, and although CEL-SCI diligently oversees and carefully manages the CROs, CEL-SCI directly controls only certain aspects of their activities and relies upon them to provide timely, complete, and accurate reports on the conduct of the studies. Although such third parties provide support and represent CEL-SCI for regulatory purposes in the context of the clinical trials, ultimately CEL-SCI is responsible for ensuring that each of the studies is conducted in accordance with the applicable protocol, legal, regulatory, and scientific standards, and the reliance on the CROs does not relieve CEL-SCI of its regulatory responsibilities. CEL-SCI and the CROs acting on CEL-SCI's behalf, as well as principal investigators and trial sites, are required to comply with Good Clinical Practice, or GCP, and other applicable requirements, which are implemented through regulations and guidelines enforced by the FDA, the Competent Authorities of the Member States of the European Economic Area, or EEA, and comparable foreign regulatory authorities for all of the products in clinical development. Regulatory authorities enforce these GCPs through periodic inspections of trial sponsors, principal investigators, and trial sites. If CEL-SCI or any of the CROs fail to comply with applicable GCPs or other applicable regulations, the clinical data generated in the clinical trials may be determined to be unreliable and CEL-SCI may therefore need to enroll additional subjects in the clinical trials, or the FDA, EMA or comparable foreign regulatory authorities may require CEL-SCI to perform an additional clinical trial or trials before approving the marketing applications. Moreover, if CEL-SCI or any of the CROs, principal investigators, or trial sites, fail to comply with applicable regulatory and GCP requirements, CEL-SCI, the CROs, principal investigators, or trial sites may be subject to enforcement actions, such as fines, warning letters, untitled letters, clinical holds, civil or criminal penalties, and/or injunctions. CEL-SCI cannot assure you that upon inspection by a given regulatory authority, such regulatory authority will determine that any of the clinical trials comply with GCP regulations. In addition, the clinical trials must be conducted with product produced under GMP regulations. The failure to comply with these regulations may require CEL-SCI to delay or repeat clinical trials, which would delay the regulatory approval process.

If any of the relationships with the third-party CROs terminate, CEL-SCI may not be able to enter into arrangements with alternative CROs or to do so on commercially reasonable terms. In addition, the CROs are not CEL-SCI's employees, and except for remedies available to CEL-SCI under the agreements with such CROs, CEL-SCI cannot control whether or not they devote sufficient time and resources to the on-going clinical, nonclinical and preclinical programs. If CROs do not successfully fulfill their regulatory obligations, carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to the clinical protocols, regulatory requirements or for other reasons, the clinical trials may be extended, delayed or terminated, and CEL-SCI may not be able to obtain regulatory approval for, or successfully commercialize, the product candidates. As a result, CEL-SCI's results of operations and the commercial prospects for the product candidates would be harmed, the costs could increase and the ability to generate revenues could be delayed.

Switching or adding additional CROs involves additional cost and requires management time and focus. In addition, there is a natural transition period when a new CRO commences work. As a result, delays may occur, which can materially impact CEL-SCI's ability to meet the desired clinical development timelines. Though CEL-SCI diligently oversees and carefully manages its relationships with the CROs, there can be no assurance that CEL-SCI will not encounter similar challenges or delays in clinical development in the future or that these delays or challenges will not have a material adverse impact on CEL-SCI's business, financial condition and prospects.

CEL-SCI has obtained orphan drug designation from the FDA for Multikine for neoadjuvant, or primary, therapy in patients with squamous cell carcinoma of the head and neck, but CEL-SCI may be unable to maintain the benefits associated with orphan drug designation, including the potential for market exclusivity.

Under the Orphan Drug Act, the FDA may grant orphan drug designation to a drug or biologic intended to treat a rare disease or condition, which is defined as one occurring in a patient population of fewer than 200,000 in the United States, or a patient population greater than 200,000 in the United States where there is no reasonable expectation that the cost of developing the drug or biologic will be recovered from sales in the United States. In the United States, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages and user-fee waivers. In addition, if a product that has orphan drug designation subsequently receives the first FDA approval for the disease for which it has such designation, the product is entitled to orphan drug exclusivity, which means that the FDA may not approve any other applications, including a full Biologics License Application, or BLA, to market the same biologic for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity or where the manufacturer is unable to assure sufficient product quantity.

Even though CEL-SCI has received orphan drug designation for Multikine for the treatment of squamous cell carcinoma of the head and neck, CEL-SCI may not be the first to obtain marketing approval of a product for the orphan-designated indication due to the uncertainties associated with developing pharmaceutical products. In addition, exclusive marketing rights in the United States may be limited if CEL-SCI seeks approval for an indication broader than the orphan-designated indication, or may be lost if the FDA later determines that the request for designation was materially defective or if CEL-SCI is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition. Further, even if CEL-SCI obtains orphan drug exclusivity for a product candidate, that exclusivity may not effectively protect the product candidate from competition because different drugs with different active moieties can be approved for the same condition. Even after an orphan product is approved, the FDA can subsequently approve another drug with the same active moiety for the same condition if the FDA concludes that the later drug is safer, more effective, or makes a major contribution to patient care. Orphan drug designation neither shortens the development time or regulatory review time of a drug nor gives the drug any advantage in the regulatory review or approval process.

The current and future relationships with healthcare professionals, principal investigators, consultants, potential customers and third-party payors in the United States and elsewhere may be subject, directly or indirectly, to applicable healthcare laws and regulations.

Healthcare providers, physicians and third-party payors in the United States and elsewhere will play a primary role in the recommendation and prescription of any drug candidates for which CEL-SCI obtains marketing approval. The current and future arrangements with healthcare professionals, principal investigators, consultants, potential customers and third-party payors may expose CEL-SCI to broadly applicable healthcare laws, including, without limitation:

the federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, lease, order or recommendation of, any good, facility, item or service, for which payment may be made, in whole or in part, under federal and state healthcare programs such as Medicare and Medicaid. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it to have committed a violation. In addition, the Affordable Care Act provides that the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act;

federal civil and criminal false claims laws, including the federal False Claims Act, which impose criminal and civil penalties, including civil whistleblower actions, against individuals or entities for, among other things, knowingly presenting, or causing to be presented, to the federal government, including the Medicare and Medicaid programs, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;

the civil monetary penalties statute, which imposes penalties against any person or entity who, among other things, is determined to have presented or caused to be presented a claim to a federal health program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent;

the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created new federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payor (e.g., public or private), knowingly and willfully embezzling or stealing from a health care benefit program, willfully obstructing a criminal investigation of a healthcare offense and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false statements in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare matters. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it to have committed a violation;

HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, and their respective implementing regulations, which impose obligations on covered entities, including healthcare providers, health plans, and healthcare clearinghouses, as well as their respective business associates that create, receive, maintain or transmit individually identifiable health information for or on behalf of a covered entity, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;

the federal Physician Payments Sunshine Act and its implementing regulations, which imposed annual reporting requirements for certain manufacturers of drugs, devices, biologicals and medical supplies for payments and “transfers of value” provided to physicians and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members; and

analogous state and foreign laws, such as state anti-kickback and false claims laws, which may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry’s voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government or otherwise restrict payments that may be made to healthcare providers; state and foreign laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures; and state and foreign laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Efforts to ensure that the future business arrangements with third parties will comply with applicable healthcare laws and regulations may involve substantial costs. It is possible that governmental authorities will conclude that the business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws. If CEL-SCI's operations are found to be in violation of any of these laws or any other governmental regulations, CEL-SCI may be subject to significant civil, criminal and administrative penalties, including, without limitation, damages, fines, imprisonment, exclusion from participation in government healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of the operations, all of which could significantly harm CEL-SCI's business. If any of the physicians or other healthcare providers or entities with whom CEL-SCI expects to do business, including current and future collaborators, are found not to be in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from participation in government healthcare programs, which could also adversely affect CEL-SCI's business.

Failure to obtain or maintain adequate coverage and reimbursement for the product candidates, if approved, could limit the ability to market those products and decrease CEL-SCI's ability to generate revenue.

Sales of CEL-SCI's product candidates will depend substantially, both domestically and abroad, on the extent to which the costs of the product candidates will be paid by health maintenance, managed care, pharmacy benefit, and similar healthcare management organizations, or reimbursed by government authorities, private health insurers and other third-party payors. CEL-SCI anticipates that government authorities and other third-party payors will continue efforts to contain healthcare costs by limiting the coverage and reimbursement levels for new drugs. If coverage and reimbursement are not available, or are available only to limited levels, CEL-SCI may not be able to successfully commercialize its product candidates. Even if coverage is provided, the approved reimbursement amount may not be high enough to allow CEL-SCI to establish or maintain pricing sufficient to realize a return on its investment. It is difficult to predict at this time what third-party payors will decide with respect to the coverage and reimbursement for CEL-SCI's product candidates.

Healthcare legislative reform measures may have a material adverse effect on CEL-SCI's business and results of operations.

In the United States, there have been and continue to be a number of legislative initiatives to contain healthcare costs that may result in more limited coverage or downward pressure on the price CEL-SCI may otherwise receive for its product candidates. For example, in March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or collectively, the Affordable Care Act, was passed, which substantially changes the way health care is financed by both governmental and private insurers, and significantly impacts the U.S. pharmaceutical industry. The Affordable Care Act, among other things, addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected, increased the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program and extended the rebate program to individuals enrolled in Medicaid managed care organizations, established annual fees and taxes on manufacturers of certain branded prescription drugs, and established the Center for Medicare and Medicaid Innovation with broad authority to test and implement new payment models under Medicare and Medicaid, which are designed to reduce expenditures while preserving and enhancing quality of care.

In addition, other legislative changes have been proposed and adopted in the United States since the Affordable Care Act was enacted. On August 2, 2011, the Budget Control Act of 2011 among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers of 2% per fiscal year, which went into effect in April 2013 and, due to

subsequent legislative amendments to the statute, will remain in effect through 2024 unless additional Congressional action is taken. On January 2, 2013, former President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, further reduced Medicare payments to several providers, including hospitals, imaging centers and cancer treatment centers. On April 16, 2015, former President Obama signed into law the Medicare Access and CHIP Reauthorization Act of 2015, or MACRA. Among other things, MACRA creates incentives for physicians to participate in alternative payment models under Medicare that emphasize quality and value in place of the traditional, volume-based fee-for-service program. CEL-SCI expects that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for its product candidates or additional pricing pressures.

Foreign governments often impose strict price controls, which may adversely affect CEL-SCI's future profitability.

CEL-SCI intends to seek approval to market Multikine in both the United States and foreign jurisdictions. If CEL-SCI obtains approval in one or more foreign jurisdictions, CEL-SCI will be subject to rules and regulations in those jurisdictions relating to Multikine. In some foreign countries, particularly in the European Union, prescription drug pricing is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a drug candidate. Coverage and reimbursement decisions in one foreign jurisdiction may impact decisions in other countries. To obtain reimbursement or pricing approval in some countries, CEL-SCI may be required to conduct clinical trials that demonstrate the product candidate is more effective than current treatments and that compare the cost-effectiveness of Multikine to other available therapies. If reimbursement of Multikine is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, CEL-SCI may be unable to achieve or sustain profitability.

Risks Related to Intellectual Property

CEL-SCI may not be able to achieve or maintain a competitive position, and other technological developments may result in its proprietary technologies becoming uneconomical or obsolete.

CEL-SCI is involved in a biomedical field that is undergoing rapid and significant technological change. The pace of change continues to accelerate. The successful development of product candidates from the compounds, compositions and processes, through research financed by CEL-SCI, or as a result of possible third-party licensing arrangements with pharmaceutical or other companies, is not assured. CEL-SCI may fail to apply for patents on important technologies or product candidates in a timely fashion, or at all.

Many companies are working on drugs designed to cure or treat cancer or cure and treat viruses, such as HPV or H1N1. Many of these companies have financial, research and development, and marketing resources, which are much greater than CEL-SCI's, and are capable of providing significant long-term competition either by establishing in-house research groups or by forming collaborative ventures with other entities. In addition, smaller companies and non-profit institutions are active in research relating to cancer and infectious diseases. The future market share of Multikine or the other product candidates, if approved, will be reduced or eliminated if the competitors develop and obtain approval for products that are safer or more effective than CEL-SCI'S product candidates. Moreover, the patent positions of pharmaceutical companies are highly uncertain and involve complex legal and factual questions for which important legal principles are often evolving and remain unresolved. As a result, the validity and enforceability of patents cannot be predicted with certainty. In addition, CEL-SCI does not know whether:

CEL-SCI was the first to make the inventions covered by each of its issued patents and pending patent applications;

CEL-SCI was the first to file patent applications for these inventions;

others will independently develop similar or alternative technologies or duplicate any of the technologies;

any of the pending patent applications will result in issued patents;

any of the patents will be valid or enforceable;

any patents issued to CEL-SCI or its collaboration partners will provide CEL-SCI with any competitive advantages, or will be challenged by third parties;

CEL-SCI will be able to develop additional proprietary technologies that are patentable;

the U.S. government will exercise any of its statutory rights to CEL-SCI's intellectual property that was developed with government funding; or

its business may infringe the patents or other proprietary rights of others.

CEL-SCI's patents might not protect its technology from competitors, in which case CEL-SCI may not have any advantage over competitors in selling any products that CEL-SCI may develop.

CEL-SCI's commercial success will depend in part on its ability to obtain additional patents and protect its existing patent position, as well as its ability to maintain adequate intellectual property protection for the technologies, product candidates, and any future products in the United States and other countries. If CEL-SCI does not adequately protect its technology, product candidates and future products, competitors may be able to use or practice them and erode or negate any competitive advantage CEL-SCI may have, which could harm CEL-SCI's business and its ability to achieve profitability. The laws of some foreign countries do not protect the proprietary rights to the same extent or in the same manner as U.S. laws, and CEL-SCI may encounter significant problems in protecting and defending its proprietary rights in these countries. CEL-SCI will be able to protect its proprietary rights from unauthorized use by third parties only to the extent that its proprietary technologies, product candidates and any future products are covered by valid and enforceable patents or are effectively maintained as trade secrets.

Certain aspects of CEL-SCI's technologies are covered by U.S. and foreign patents. In addition, CEL-SCI has a number of new patent applications pending. There is no assurance that the applications still pending or which may be filed in the future will result in the issuance of any patents. Furthermore, there is no assurance as to the breadth and degree of protection any issued patents might afford CEL-SCI. Disputes may arise between CEL-SCI and others as to the scope and validity of these or other patents. Any defense of the patents could prove costly and time consuming and there can be no assurance that CEL-SCI will be in a position, or will deem it advisable, to carry on such a defense.

A suit for patent infringement could result in increasing costs, delaying or halting development, or even forcing CEL-SCI to abandon a product candidate. Other private and public concerns, including universities, may have filed applications for, may have been issued, or may obtain additional patents and other proprietary rights to technology potentially useful or necessary to CEL-SCI. CEL-SCI is not currently aware of any such patents, but the scope and validity of such patents, if any, and the cost and availability of such rights are impossible to predict.

Much of CEL-SCI's intellectual property is protected as trade secrets or confidential know-how, not as a patent.

CEL-SCI considers proprietary trade secrets and/or confidential and unpatented know-how to be important to its business. Much of the intellectual property pertains to CEL-SCI'S manufacturing system, certain aspects of which may not be suitable for patent filings and must be protected as trade secrets and/or confidential know-how. This type of information must be protected diligently by CEL-SCI to protect its disclosure to competitors, since legal protections after disclosure may be minimal or non-existent. Accordingly, much of the value of this intellectual property is dependent upon the ability of CEL-SCI to keep its trade secrets and know-how confidential.

To protect this type of information against disclosure or appropriation by competitors, CEL-SCI's policy is to require its employees, consultants, contractors and advisors to enter into confidentiality agreements with CEL-SCI. However, current or former employees, consultants, contractors and advisers may unintentionally or willfully disclose the confidential information to competitors, and confidentiality agreements may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. Enforcing a claim that a third party obtained illegally, and is using, trade secrets and/or confidential know-how is expensive, time consuming and unpredictable. The enforceability of confidentiality agreements may vary from jurisdiction to jurisdiction.

In addition, in some cases a regulator considering the application for product candidate approval may require the disclosure of some or all of the proprietary information. In such a case, CEL-SCI must decide whether to disclose the information or forego approval in a particular country. If CEL-SCI is unable to market its product candidates in key countries, CEL-SCI's opportunities and value may suffer.

Failure to obtain or maintain trade secrets and/or confidential know-how trade protection could adversely affect CEL-SCI'S competitive position. Moreover, competitors may independently develop substantially equivalent proprietary information and may even apply for patent protection in respect of the same. If successful in obtaining such patent protection, competitors could limit the use of such trade secrets and/or confidential know-how.

CEL-SCI may be subject to claims challenging the inventorship or ownership of its patents and other intellectual property.

CEL-SCI may also be subject to claims that former employees, collaborators or other third parties have an ownership interest in its patents or other intellectual property. CEL-SCI may be subject to ownership disputes in the future arising, for example, from conflicting obligations of consultants or others who are involved in developing the product candidates. Litigation may be necessary to defend against these and other claims challenging inventorship or ownership. If CEL-SCI fails in defending any such claims, in addition to paying monetary damages, CEL-SCI may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, valuable intellectual property. Such an outcome could have a material adverse effect on its business. Even if CEL-SCI is successful in defending against such claims, litigation could result in substantial costs and be a distraction to CEL-SCI's management and employees.

Risks Related to CEL-SCI's common stock

You may experience future dilution as a result of future equity offerings or other equity issuances.

CEL-SCI expects that significant additional capital will be needed in the future to continue its planned operations. To raise additional capital, CEL-SCI may in the future offer additional shares of its common stock or other securities convertible into or exchangeable for its common stock. To the extent CEL-SCI raises additional capital by issuing equity securities, CEL-SCI's stockholders may experience substantial dilution. These sales may result in material dilution to CEL-SCI's existing stockholders and new investors could gain rights superior to existing stockholders.

CEL-SCI's outstanding options and warrants may adversely affect the trading price of its common stock.

As of September 30, 2018, there were outstanding warrants which allow the holders to purchase 15,499,471 shares of common stock, with a weighted average exercise price of $5.26 per share, and outstanding options which allow the holders to purchase up to 3,160,127 shares of common stock, with a weighted average exercise price of $7.30 per share. The outstanding options and warrants could adversely affect the ability of CEL-SCI to obtain future financing or engage in certain mergers or other transactions, since the holders of options and warrants can be expected to exercise them at a time when CEL-SCI may be able to obtain additional capital through a new offering of securities on terms more favorable to CEL-SCI than the terms of the outstanding options and warrants. For the life of the options and warrants, the holders have the opportunity to profit from a rise in the market price of its common stock without assuming the risk of ownership. The issuance of shares upon the exercise or conversion of outstanding options and warrants will also dilute the ownership interests of CEL-SCI's existing stockholders.

CEL-SCI's ability to utilize its net operating loss carryforwards and certain other tax attributes may be limited.

Under Section 382 of the Internal Revenue Code of 1986, as amended, if a corporation undergoes an "ownership change" (generally defined as a greater than 50% change (by value) in its equity ownership over a three-year period), the corporation's ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes to offset its post-change income may be limited. As a result of public offerings and other transactions, CEL-SCI may experience ownership changes in the future based on subsequent shifts in CEL-SCI's stock ownership, some of which are outside its control. As a result, the ability to use the pre-change net operating loss carryforwards and other pre-change tax attributes to offset U.S. federal taxable income may be subject to limitations, which could result in increased tax liability to CEL-SCI.

Since CEL-SCI does not intend to pay dividends on its common stock, any potential return to investors will result only from any increases in the price of its common stock.

At the present time, CEL-SCI intends to use available funds to finance its operations. Accordingly, while payment of dividends rests within the discretion of its board of directors, no common stock dividends have been declared or paid by CEL-SCI and CEL-SCI has no intention of paying any common stock dividends in the foreseeable future. Additionally, any future debt financing arrangement may contain terms prohibiting or limiting the amount of dividends that may be declared or paid on CEL-SCI's common stock. Any return to CEL-SCI's shareholders will therefore be limited to appreciation in the price of its common stock, which may never occur. If CEL-SCI's stock price does not increase, CEL-SCI'S shareholders are unlikely to receive any return on their investments in CEL-SCI's common stock.

The price of CEL-SCI's common stock has been volatile and is likely to continue to be volatile, which could result in substantial losses for CEL-SCI's shareholders.

CEL-SCI's stock price has been, and is likely to continue to be, volatile. As a result of this volatility, CEL-SCI's shareholders may not be able to sell their shares at or above its current market price. The market price for CEL-SCI's common stock may be influenced by many factors, including:

actual or anticipated fluctuations in CEL-SCI's financial condition and operating results;

actual or anticipated changes in CEL-SCI's growth rate relative to competitors;

competition from existing products or new products or product candidates that may emerge;

development of new technologies that may make CEL-SCI's technology less attractive;

changes in physician, hospital or healthcare provider practices that may make CEL-SCI's product candidates less useful;

announcements by CEL-SCI, its partners or competitors of significant acquisitions, strategic partnerships, joint ventures, collaborations or capital commitments;

developments or disputes concerning patent applications, issued patents or other proprietary rights;

the recruitment or departure of key personnel;

failure to meet or exceed financial estimates and projections of the investment community or that CEL-SCI provides to the public;

actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;

variations in its financial results or those of companies that are perceived to be similar to CEL-SCI;

changes to coverage and reimbursement levels by commercial third-party payors and government payors, including Medicare, and any announcements relating to reimbursement levels;

general economic, industry and market conditions; and

the other factors described in this “Risk Factors” section.

CEL-SCI has been advised that it is not in compliance with certain continued listing standards of the NYSE American.

On July 12, 2018, CEL-SCI received a letter from the NYSE American, its current listing exchange, which advised CEL-SCI that, based upon its quarterly report for the quarter ended March 31, 2018, CEL-SCI was noncompliant with certain continued listing standards of the NYSE American. CEL-SCI can maintain its listing by submitting a plan of compliance by August 13, 2018. This plan must advise of actions CEL-SCI has taken or will take to regain compliance with the continued listing standards by January 14, 2019. CEL-SCI submitted such a plan on July 30, 2018. On August 16, 2018, the Exchange notified CEL-SCI that it accepted CEL-SCI's plan of compliance and granted CEL-SCI until January 14, 2019 to regain compliance with the continued listing standards. Although, the NYSE American will not normally remove the securities if an issuer has a market capitalization of at least $50 million, if CEL-SCI does not make sufficient progress under the plan to reestablish compliance by January 14, 2019, the staff of the exchange may initiate proceedings to delist CEL-SCI's securities from the NYSE American. CEL-SCI may appeal a delisting determination in accordance with the rules of the exchange. On September 30, 2018, CEL-SCI's market capitalization was $113.5 million.

The letter from the NYSE American had no immediate effect on the listing of CEL-SCI's securities on the exchange.

Under its amended bylaws, stockholders that initiate certain proceedings may be obligated to reimburse CEL-SCI and its officers and directors for all fees, costs and expenses incurred in connection with such proceedings if the claim proves unsuccessful.

On February 18, 2015, CEL-SCI adopted new bylaws which include a fee-shifting provision in Article X for stockholder claims. Article X provides that in the event any stockholder initiates or asserts a claim against CEL-SCI, or any of its officers or directors, including any derivative claim or claim purportedly filed on CEL-SCI's behalf, and the stockholder does not obtain a judgment on the merits that substantially achieves, in substance and amount, the full remedy sought, then the stockholder will be obligated to reimburse CEL-SCI and any of its officers or directors named in the action, for all fees, costs and expenses of every kind and description that CEL-SCI or its officers or directors may incur in connection with the claim. In adopting Article X, it is the intent that:

all actions, including federal securities law claims, would be subject to Article X;

the phrase "a judgment on the merits" means the determination by a court of competent jurisdiction on the matters submitted to the court;

the phrase "substantially achieves, in both substance and amount" means the plaintiffs in the action would be awarded at least 90% of the relief sought;

only persons who were stockholders at the time an action was brought would be subject to Article X; and

only the directors or officers named in the action would be allowed to recover.

The fee-shifting provision contained in Article X of the bylaws is not limited to specific types of actions, but is rather potentially applicable to the fullest extent permitted by law. Fee-shifting bylaws are relatively new and untested. The case law and potential legislative action on fee-shifting bylaws are evolving and there exists considerable uncertainty

regarding the validity of, and potential judicial and legislative responses to, such bylaws. For example, it is unclear whether the ability to invoke the fee-shifting bylaw in connection with claims under the federal securities laws would be pre-empted by federal law. Similarly, it is unclear how courts might apply the standard that a claiming stockholder must obtain a judgment that substantially achieves, in substance and amount, the full remedy sought. The application of the fee-shifting bylaw in connection with such claims, if any, will depend in part on future developments of the law. CEL-SCI cannot assure its shareholders that CEL-SCI will or will not invoke the fee-shifting bylaw in any particular dispute In addition, given the unsettled state of the law related to fee-shifting bylaws, such as CEL-SCI's, CEL-SCI may incur significant additional costs associated with resolving disputes with respect to such bylaw, which could adversely affect its business and financial condition.

If a stockholder that brings any such claim, suit, action or proceeding is unable to obtain the required judgment, the attorneys' fees and other litigation expenses that might be shifted to a claiming stockholder are potentially significant. This fee-shifting bylaw, therefore, may dissuade or discourage stockholders (and their attorneys) from initiating lawsuits or claims against CEL-SCI or its directors and officers. In addition, it may impact the fees, contingency or otherwise, required by potential plaintiffs' attorneys to represent the stockholders or otherwise discourage plaintiffs' attorneys from representing the stockholders at all. As a result, this bylaw may limit the ability of stockholders to affect the management and direction of CEL-SCI, particularly through litigation or the threat of litigation.