CEL SCI CORP Form 424B5 December 27, 2013

> Filed Pursuant to Rule 424(b)(5) Registration No. 333-186103

PROSPECTUS SUPPLEMENT
To Prospectus dated December 17, 2013

CEL-SCI CORPORATION 20,457,000 Shares of Common Stock

In October, 2013, in an underwriting public offering we sold 17,826,087 shares of our common stock, as well as 20,547,000 Series S warrants, for net proceeds of approximately \$16,425,000, after deduction for underwriting discounts and commissions. The Series S warrants may be exercised at any time prior to October 11, 2018 at a price of \$1.25 per share. By means of this prospectus supplement, we are offering shares of our common stock to the holders of the Series S warrants who elect to exercise the warrants.

Our common stock is currently traded on the NYSE MKT (formerly known as the NYSE Amex) under the symbol "CVM." On December 24, 2013, the closing price of our common stock on the NYSE MKT was \$0.59 per share. Although our Series S warrants have been approved for quotation on the OTC Bulletin Board under the symbol "CSCIW", and although we have applied to list the Series S warrants on NYSE MKT, there is presently no public market for our warrants and there can be no assurance that any public market for the warrants will develop in the future. For a more detailed description of our common stock and warrants, see the section entitled "Description of Securities" beginning on page 12 of this Prospectus Supplement.

Investing in our common stock involves a high degree of risk. See "Risk Factors" beginning on page 9 of this prospectus supplement and page 11 of the accompanying prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is December 26, 2013

1

TABLE OF CONTENTS

Prospectus Supplement

	Page
About this Prospectus Supplement	3
Forward-Looking Statements	4
Prospectus Supplement Summary	4

The Offering	9
Risk Factors	10
Use of Proceeds	12
Dilution	12
Description of Securities	13
Legal Matters	15
Where You Can Find More Information	15
Incorporation of Documents by Reference	16

2

ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is the prospectus supplement, including the documents incorporated by reference, which describes the specific terms of this offering. The second part, the accompanying prospectus, including the documents incorporated by reference, provides more general information. Generally, when we refer to this prospectus, we are referring to both parts of this document combined. We urge you to carefully read this prospectus supplement and the accompanying prospectus, and the documents incorporated herein and therein, before buying any of the securities being offered by this prospectus supplement. This prospectus supplement may add, update or change information contained in the accompanying prospectus. To the extent that any statement that we make in this prospectus supplement is inconsistent with statements made in the accompanying prospectus or any documents incorporated by reference therein, the statements made in this prospectus supplement will be deemed to modify or supersede those made in the accompanying prospectus and such documents incorporated by reference therein.

You should rely only on the information contained or incorporated herein by reference in this prospectus supplement and contained or incorporated therein by reference in the accompanying prospectus. We have not authorized anyone to provide you with different or additional information. We have not authorized anyone to give any information other than that contained in the prospectus, this prospectus supplement, and any free writing prospectus prepared by us or on our behalf. If anyone provides you with different, additional or inconsistent information, you should not rely on it. You should assume that the information in this prospectus supplement and the accompanying prospectus is accurate only as of the date on the front of the applicable document and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus supplement or the accompanying prospectus, or any sale of a security. Our business, financial condition, results of operations and prospects may have changed since those dates. You should read this prospectus supplement, the accompanying prospectus and the documents incorporated by reference in this prospectus supplement and the accompanying prospectus when making your investment decision. You should also read and consider the information in the documents we have referred you to in the section of this prospectus entitled "Additional Information."

We are offering to sell, and are seeking offers to buy, the securities only in jurisdictions where such offers and sales are permitted. The distribution of this prospectus supplement and the accompanying prospectus and the offering of the securities in certain jurisdictions or to certain persons within such jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement and the accompanying prospectus must inform themselves about and observe any restrictions relating to the offering of the securities and the distribution of this prospectus supplement and the accompanying prospectus outside the United States. This prospectus supplement and the accompanying prospectus do not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement and the accompanying prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

This prospectus supplement, the accompanying prospectus, and the information incorporated herein and therein by reference may include trademarks,

3

service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included or incorporated by reference into this prospectus supplement or the accompanying prospectus are the property of their respective owners.

In this prospectus, unless otherwise specified or the context requires otherwise, we use the terms "CEL-SCI," the "Company," "we," "us" and "our" to refer to CEL-SCI Corporation. Our fiscal year ends on September 30.

FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein contain forward-looking statements. These statements relate to future events and involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performances or achievements expressed or implied by the forward-looking statements.

Factors that might affect our forward-looking statements include those disclosed in this prospectus and the accompanying prospectus.

In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "could," "would," "expects," "plans," "anticipates," "believes," "estimates," "projects," "predicts," "potential" and similar expressions intended to identify forward-looking statements. These statements reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties. Given these uncertainties, you should not place undue reliance on these forward-looking statements. We discuss many of these risks in greater detail under the heading "Risk Factors" herein and in the documents incorporated by reference herein. Also, these forward-looking statements represent our estimates and assumptions only as of the date of the document containing the applicable statement.

Unless required by law, we undertake no obligation to update or revise any forward-looking statements to reflect new information or future events or developments. Thus, you should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward-looking statements. Before deciding to purchase our securities, you should carefully consider the risk factors incorporated by reference and set forth herein, in addition to the other information set forth in this prospectus supplement, the

accompanying prospectus and in the documents incorporated by reference herein and therein.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights certain information about us, this offering and information appearing elsewhere in this prospectus supplement, in the accompanying prospectus and in the documents we incorporate by reference. This summary is not complete and does not contain all of the information that you should consider before investing in our securities. To fully understand this offering and its consequences to you, you should read this entire prospectus supplement and the accompanying prospectus carefully, including the information referred to under the heading "Risk Factors" in the accompanying prospectus and

4

set forth herein, the financial statements and other information incorporated by reference in this prospectus supplement and the accompanying prospectus when making an investment decision.

About CEL-SCI Corporation

We were formed as a Colorado corporation in 1983. Our principal office is located at 8229 Boone Boulevard, Suite 802, Vienna, VA 22182. Our telephone number is 703-506-9460 and our web site is www.cel-sci.com.

Our business consists of the following:

- Multikine(R) (Leukocyte Interleukin, Injection) investigational immunotherapy against cancer and Human Papilloma Virus (HPV);
- 2) LEAPS technology, with two investigational therapies, LEAPS-H1N1-DC pandemic flu treatment for hospitalized patients and CEL-2000, a rheumatoid arthritis treatment vaccine.

MULTIKINE

Our 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 I and Phase II clinical trials suggest that Multikine simulates the activities of a healthy person's immune system, enabling it to use the body's own anti-tumor immune response. Multikine (Leukocyte Interleukin, Injection) is the full name of this investigational therapy, which, for simplicity, is referred to in the remainder of this document as Multikine. Multikine is the trademark that we have registered for this investigational therapy, and this proprietary name is subject to FDA review in connection with our 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. Neither has its safety or efficacy been established for any use.

Multikine has been cleared by the regulators in ten countries around the world, including the U.S. FDA, for a global Phase III clinical trial in advanced primary (not yet treated) head and neck cancer patients. The trial is currently under the management of two new clinical research organizations (CROs) who are adding 60-80 clinical centers in existing and new countries to increase the speed of patient enrollment.

The trial will test the hypothesis that Multikine treatment administered prior to the current standard therapy for head and neck cancer patients

(surgical resection of the tumor and involved lymph nodes followed by radiotherapy or radiotherapy and concurrent chemotherapy) will extend the overall survival, enhance the local/regional control of the disease and reduce the rate of disease progression in patients with advanced oral squamous cell carcinoma.

The primary clinical endpoint in CEL-SCI's ongoing Phase III clinical trial is that a 10% improvement in overall survival in the Multikine treatment arm, plus the current standard of care (SOC - consisting of surgery + radiotherapy or surgery + radiochemotherapy), over that which can be achieved in the SOC arm alone (in the well-controlled Phase III clinical trial currently ongoing) must be achieved. Based on what is presently known about the current survival

5

statistics for this population, CEL-SCI believes that achievement of this endpoint should enable CEL-SCI, subject to further consultations with FDA, to move forward, prepare and submit a Biologic License Application to FDA for Multikine.

The clinical trial is giving immunotherapy to cancer patients, i.e., prior to their receiving any conventional treatment for cancer, including surgery, radiation and/or chemotherapy. This could be shown to be important because conventional therapy may weaken the immune system, and may compromise the potential effect of immunotherapy. Because Multikine is given before conventional cancer therapy, when the immune system may be more intact, we believe the possibility exists for it to have a greater likelihood of activating an anti-tumor immune response under these conditions. This likelihood is one of the clinical aspects being evaluated in the ongoing global Phase III clinical trial.

Multikine is a different kind of investigational therapy in the fight against cancer. Multikine is a defined mixture of cytokines. It is a combination immunotherapy, possessing both active and passive properties.

In October 2012 and again in November 2013, in an interim review of the safety data from the Phase III study, an Independent Data Monitoring Committee (IDMC) raised no safety concerns. The IDMC also indicated that no safety signals were found that would call into question the benefit/risk of continuing the study. CEL-SCI considers the results of the IDMC review to be important since studies have shown that up to 30% of Phase III trials fail due to safety considerations and the IDMC's safety findings from this interim review were similar to those reported by investigators during CEL-SCI's Phase I-II trials. Ultimately, the decision as to whether a drug is safe is made by the FDA based on an assessment of all of the data from a trial.

On October 7, 2013, CEL-SCI announced a Cooperative Research and Development Agreement with the U.S. Naval Medical Center, San Diego. Pursuant to this agreement, the Naval Medical Center will conduct Human Subjects Institutional Review Board approved Phase I study of CEL-SCI's investigational immunotherapy, Multikine, in HIV/HPV co-infected men and women with peri-anal warts. Anal and genital warts are commonly associated with the Human Papilloma Virus, the most common sexually transmitted disease. Men and women with a history of anogenital warts have a 30 fold increased risk of anal cancer. Persistent HPV infection in the anal region is thought to be responsible for up to 80% of anal cancers. HPV is a significant health problem in the HIV infected population as individuals are living longer as a result of greatly improved HIV medications.

The purpose of this study is to evaluate the safety and clinical impact of

Multikine as a treatment of peri-anal warts and assess its effect on anal intraepithelial dysplasia (AIN) in ${\rm HIV/HPV}$ co-infected men and women.

CEL-SCI will contribute the investigational study drug Multikine, will retain all rights to any currently owned technology, and will have the right to exclusively license any new technology developed from the collaboration.

Multikine is being given to the HIV/HPV co-infected patients with peri-anal warts since promising early results were seen in another Institutional Review Board approved Multikine Phase I study conducted at the University of Maryland. In this study, investigational therapy Multikine was given to HIV/HPV

6

co-infected women with cervical dysplasia resulting in visual and histological evidence of clearance of lesions. Furthermore, elimination of a number of HPV strains was determined by in situ polymerase chain reaction (PCR) performed on tissue biopsy collected before and after Multikine treatment. As reported by the investigators in the earlier study, the study volunteers all appeared to tolerate the treatment with no reported serious adverse events.

The treatment regimen for the study of up to 15 HIV/HPV co-infected patient volunteers with peri-anal warts to be conducted by the Naval Medical Center will be identical to the regimen that was used in the earlier Multikine cervical study in HIV/HPV co-infected patients.

In October 2013, CEL-SCI entered into a co-development and profit sharing agreement with Ergomed for Multikine in HIV/HPV co-infected men and women with peri-anal warts. This agreement will initially be in support of the development with the US Navy. Ergomed will assume up to \$3 million in clinical and regulatory costs.

Also in October 2013, CEL-SCI entered into a co-development and profit sharing agreement with Ergomed for Multikine in HIV/HPV co-infected women with cervical dysplasia. Human Papilloma Virus (HPV) is the most common sexually transmitted disease. HPV is a significant health problem in the HIV infected population as individuals are living longer as a result of greatly improved HIV medications. People living with HIV and others with compromised immunity are more at risk for HPV-related complications. Persistent HPV infection can also be a precursor to cervical cancer. Ergomed will assume up to \$3 million in clinical and regulatory costs.

CEL-SCI's focus in HPV is not the development of an antiviral against HPV in the general population. Instead it is the development of an immunotherapy to be used in patients who are immune suppressed by diseases such as HIV and are therefore less able or unable to control HPV and its resultant diseases. This group of patients has no good treatments available to them and there are, to the Company's knowledge, no competitors at the current time. HPV is also relevant to the head and neck cancer Phase III study since it is now known that HPV is a cause of head and neck cancer. Multikine was shown to kill HPV in an earlier study of HIV infected women with cervical dysplasia.

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.

7

Using the LEAPS technology, we have 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 pandemic flu treatment. CEL-SCI's LEAPS flu treatment contains epitopes known to be associated with immune protection against influenza in animal models.

Additional work on this treatment for the pandemic flu work is being pursued in collaboration with the National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health, USA. 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 L.E.A.P.S. 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 additional 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 immune cells called dendritic cells (DCs), these activated dendritic cells, 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.

With our LEAPS technology, we have also developed a second peptide named CEL-2000, a potential rheumatoid arthritis vaccine. The data from animal studies of rheumatoid arthritis using the CEL-2000 treatment vaccine demonstrated that CEL-2000 is an effective treatment against arthritis with fewer administrations than those required by other anti-rheumatoid arthritis treatments, including Enbrel(R). CEL-2000 is also potentially a more disease type-specific therapy, is calculated to be significantly less expensive and may be useful in patients unable to tolerate or who may not be responsive to existing anti-arthritis therapies.

RECENT FINANCING

On December 19, 2013, we, Laidlaw & Company (UK) Ltd. and Dawson James Securities, Inc. (the "Underwriters"), entered into an underwriting agreement (the "Underwriting Agreement") to issue and sell 4,761,905 shares of our common stock, as well as warrants to purchase an additional 4,761,905 shares of common stock. Each share of common stock is being sold together with a warrant to

purchase one share for the combined purchase price of \$0.63, minus underwriting discounts and commissions. We granted the Underwriters an option to purchase up to 476,195 additional shares of common stock and/or warrants to purchase up to 476,195 additional shares of common stock, for the combined purchase price of \$0.63 for one share and one warrant, minus underwriting discounts and

8

commissions, or the separate purchase prices per share or warrant, as applicable, set forth in the Underwriting Agreement. The option was exercisable, in whole or in part, for a period of 45 days after December 19, 2013.

On December 23, 2013, the Underwriters exercised their over-allotment option to purchase shares of common stock and 476,190 warrants. The offering of the 5,238,095 shares and the 5,238,095 warrants, which includes the 476,190 shares and warrants sold as a result of the exercise of the Underwriter's over-allotment option, closed on December 24, 2013. The net proceeds to us from the sale of the shares, warrants and over-allotment shares and warrants was approximately \$2,989,000, after deducting the underwriting discount.

The shares and warrants were offered and sold pursuant to our existing shelf registration statement on Form S-3 (333-186103) that was declared effective by the Securities and Exchange Commission on February 28, 2013, a Prospectus dated December 17, 2013 and a Prospectus Supplement dated December 19, 2013.

THE OFFERING

Common stock offered

20,457,000 shares of common stock. In October 2013, in an underwritten public offering, we sold 17,826,087 shares of our common stock, as well as 20,457,000 Series S warrants, for net proceeds of approximately \$16,425,000 after deduction for underwriting discounts and commission. The Series S warrants may be exercised at any time prior to October 11, 2018 at a price of \$1.25 per share. By means of this prospectus supplement, we are offering shares of our common stock to the holders of the Series S warrants who may exercise the warrants.

Use of proceeds

We estimate that our net proceeds from this offering, assuming all warrants are exercised, will be approximately \$25,600,000 after deducting estimated offering expenses.

We intend to use the net proceeds from this offering primarily for our Phase III clinical trial, other research and development, and general and administrative expenses.

Risk factors

You should carefully read and consider the information beginning on page 9 of this prospectus supplement and page 11 of the accompanying prospectus set

forth under the headings "Risk Factors" and all other information set forth in this prospectus supplement, the accompanying prospectus, and the documents incorporated herein and therein by reference before deciding to invest in our common stock.

9

Trading symbols:

Common Stock - NYSE MKT CVM

Series S Warrants - OTC Bulletin CSCIW

Board (1)

Although our Series S warrants have been approved for quotation on the OTC Bulletin Board under the symbol "CSCIW", and although we have applied to list the Series S warrants on NYSE MKT, as of the date of this prospectus supplement there was no public market for our warrants and there can be no assurance that any public market for the warrants will develop in the future.

Unless we indicate otherwise, the number of shares to be outstanding after this offering is based on 55,778,776 shares of our common stock outstanding as of December 24, 2013, excludes approximately 43,497,000 shares which may be issued upon the exercise of outstanding options and warrants or the conversion of a note, and reflects a 1-for-10 reverse stock split of our authorized and issued and outstanding shares of common stock, options and warrants effective as of September 25, 2013 and the corresponding adjustment of all common stock price, per share and stock option and warrant exercise price data.

RISK FACTORS

Investing in our common stock involves significant risks. You should carefully consider the "Risk Factors" included and incorporated by reference in the accompanying prospectus, this prospectus supplement and any other applicable prospectus supplement, including the risk factors incorporated by reference from our most recent Annual Report on Form 10-K for the fiscal year ended September 30, 2012, filed with the SEC on December 14, 2012, as updated by our Quarterly Reports on Form 10-Q and our other filings with the SEC, filed after the Annual Report. The risks and uncertainties we described are not the only ones facing us. Additional risks not presently known to us, or that we currently deem immaterial, may also impair our business operations. If any of these risks were to occur, our business, financial condition, or result of operations would likely suffer. In that event, the trading price of our common stock would decline, and you could lose all or part of your investment.

Risks related to this Offering

Management will have broad discretion as to the use of the proceeds of this offering.

We currently intend to use the net proceeds from this offering for our Phase III clinical trial, other research and development, and general and administrative expenses. See "Use of Proceeds" on page 11. We have not designated the amount of net proceeds we will receive from this offering for any particular purpose. Accordingly, our management will have broad discretion as to the application of these net proceeds and could use them for purposes other than those contemplated at the time of this offering. You will be relying on the judgment of our management with regard to the use of these net proceeds, and you will not have the opportunity, as part of your investment decision, to assess

whether the net proceeds are being used appropriately. It is possible that the net proceeds will be invested in a way that does not yield a favorable, or any, return for us. The failure of our management to use such funds effectively could

10

have a material adverse effect on our business, financial condition, operating results and cash flow.

You will experience immediate and substantial dilution.

Since the exercise price of the Series S warrants offered pursuant to this prospectus supplement and the accompanying prospectus is higher than the net tangible book value per share of our common stock, you will suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering. After giving effect to the sale of 20,457,000 shares of common stock upon the exercise of our Series S Warrants, at a public offering price of \$1.25 per share, if you purchase securities in this offering, you will suffer immediate and substantial dilution of approximately \$0.53 per share in the net tangible book value of the common stock you acquire. In the event that you exercise your warrants, you will experience additional dilution to the extent that the exercise price of those warrants is higher than the book value per share of our common stock. See the "Dilution" section of this prospectus supplement for a more detailed discussion of the dilution you will incur if you purchase securities in this offering.

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

We expect that significant additional capital will be needed in the future to continue our planned operations. To raise additional capital, we may in the future offer additional shares of our common stock or other securities convertible into or exchangeable for our common stock. We cannot assure you that we will be able to sell shares or other securities in any other offering at a price per share that is equal to or greater than the price per share paid by investors in this offering. The price per share at which we sell additional shares of our common stock or other securities convertible into or exchangeable for our common stock in future transactions may be higher or lower than the price per share in this offering. To the extent we raise additional capital by issuing equity securities, our stockholders may experience substantial dilution. If we sell common stock, convertible securities or other equity securities, your investment in our common stock will be diluted. These sales may also result in material dilution to our existing shareholders, and new investors could gain rights superior to our existing shareholders.

Our outstanding options and warrants may adversely affect the trading price of our common stock.

As of December 24, 2013, there were outstanding options which allows the holders to purchase approximately 5,200,000 shares of our common stock, at prices ranging between \$1.60 and \$20.00 per share, outstanding warrants which allow the holders to purchase approximately 36,721,000 shares of our common stock, at prices ranging between \$0.91 and \$17.50 per share, and a convertible note which allows the holder to acquire approximately 276,000 shares of our common stock at a conversion price of \$4.00. The outstanding options and warrants could adversely affect our ability 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 we may be able to obtain additional capital through a new offering of securities on terms more

favorable to us than the terms of the outstanding options and warrants. For the life of the options, warrants and the convertible note, the holders have the opportunity to profit from a rise in the market price of our common stock

11

without assuming the risk of ownership. The issuance of shares upon the exercise of outstanding options and warrants, or the conversion of the note, will also dilute the ownership interests of our existing stockholders.

There is currently no public market for the warrants being offered by this prospectus supplement.

There is presently no public market for our warrants. Our warrants have been approved for quotation on the OTC Bulletin Board under the symbol "CSCIW." There can be no assurance that any public market for the warrants may develop in the future. Without an active trading market, the liquidity of the warrants will be limited.

The warrants may not have any value.

The warrants have an exercise price of \$1.25 per share and expire on October 11, 2018. In the event that our common stock does not exceed the exercise price of the warrants during the period when the warrants are exercisable, the warrants may not have any value.

Holders of our warrants will have no rights as a common shareholder until they acquire our common stock.

Until you acquire shares of our common stock upon exercise of your Warrants, you will have no rights with respect to our common stock. Upon exercise of your warrants, you will be entitled to exercise the rights of a common stockholders only as to matters for which the record date occurs after the exercise date.

USE OF PROCEEDS

We intend to use the net proceeds from this offering primarily for our Phase III clinical trial, other research and development, and general and administrative expenses. We have not yet determined the amount of net proceeds to be used specifically for any of the foregoing purposes. The net proceeds from this offering will not be sufficient to complete clinical trials and other studies required for the approval of any product by the FDA, and we will need significant additional funds in the future.

Our management will have broad discretion in the application of the net proceeds from this offering, and investors will be relying on the judgment of our management with regard to the use of these net proceeds. Pending the use of the net proceeds from this offering as described above, we intend to invest the net proceeds in short-term, investment-grade, interest-bearing instruments.

DILUTION

If you exercise your Series S warrants, your interest will be diluted to the extent of the difference between the exercise price of the Series S Warrants (\$1.25) and the net tangible book value per share of our common stock at the time you sell your warrants.

The net tangible book value of our common stock on December 24, 2013 was approximately \$0.41 per share, based on 55,778,776 shares of our common stock outstanding as of December 24, 2013. Net tangible book value per share represents the amount of our total tangible assets, less our total liabilities, divided by the total number of shares of our common stock outstanding. Dilution in net tangible book value per share to new investors represents the difference between the amount per share paid by purchasers for shares and warrants in this offering and the net tangible book value per share of our common stock immediately afterwards.

Assuming all Series S Warrants are exercised (of which there is no assurance), our as-adjusted net book value as of December 24, 2013 would have been approximately \$48,536,000, (unaudited) or \$0.64 per share. This represents an immediate increase in the net tangible book value of \$0.23 per share to existing stockholders and the immediate dilution in the net tangible book value of \$0.61 per share to investors purchasing our shares in this offering.

The following table illustrates this per share dilution. All amounts in the table are unaudited.

Exercise price of Series S warrants	\$1.25
Net tangible book value per share as of December 24, 2013	\$0.41
As-adjusted net tangible book value per share as of December 24, 2013, after giving effect to this offering	\$0.64
Increase in net tangible book value per share attributable to this offering	\$0.23
Dilution per share to new investors in this offering	\$0.61

The above discussion and table assume all Series S Warrantys are exercised, and are based on 55,778,776 shares of our common stock outstanding as of December 24, 2013 and excludes approximately 43,497,000 shares of common stock issuable upon the full exercise of outstanding options and warrants or the conversion of a note.

DESCRIPTION OF SECURITIES

In this offering, we are offering 20,457,000 shares of common stock. The warrants have an exercise price of \$1.25 per share, are issuable upon the exercise of our Series S warrants, and expire on October 11, 2018.

Common stock

The material terms and provisions of our common stock are described under the caption "Description of Securities" in the accompanying prospectus. As of December 24, 2013, we had 55,778,776 shares of common stock outstanding. Our common stock is listed on the NYSE MKT under the symbol "CVM".

Warrants

The following summary of certain terms and provisions of the warrants that are being offered hereby is not complete and is subject to, and is qualified in its entirety by the provisions of the warrants, the form of which was filed as an exhibit to our report on Form 8-K that we filed on October 10, 2013.

Prospective investors should carefully review the terms and provisions of the form of warrant for a complete description of the terms and conditions of the warrants.

Cashless Exercise: If, at any time during the term of the warrants, the issuance of shares of our common stock upon exercise of the warrants is not covered by an effective registration statement, the holder is permitted to effect a cashless exercise of the warrants (in whole or in part) by having the holder deliver to us a duly executed exercise notice, canceling a portion of the warrant in payment of the purchase price payable in respect of the number of shares of our common stock purchased upon such exercise.

Transferability: The warrants may be transferred at the option of the warrant holder upon surrender of the warrant with the appropriate instruments of transfer.

Listing and Warrant Agent: Although our Series S warrants have been approved for quotation on the OTC Bulletin Board under the symbol "CSCIW", and although we have applied to list the Series S warrants on NYSE MKT, there is presently no public market for our warrants nd there can be no assurance that any public market for the warrants will develop in the future. If desired, the warrants can be issued in registered form under a warrant agent agreement with Computershare, Inc., as warrant agent.

Rights as a stockholder: Except as set forth in the warrants, the holders of the warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise the warrants

Fundamental Transactions: In the event of a fundamental transaction, as described in the warrants and generally including any merger with another entity, the sale, transfer or other disposition of all or substantially all of our assets to another entity, or the acquisition by a person of more than 50% of our common stock, the holders of the warrants will thereafter have the right to receive upon exercise of the warrants such shares of stock, securities or assets as would have been issuable or payable with respect to or in exchange for a number of shares of our common stock equal to the number of shares of our common stock issuable upon exercise of the warrants immediately prior to the fundamental transaction, and appropriate provision will be made so that the provisions of the warrants (including, for example, provisions relating to the adjustment of the exercise price) will thereafter be applicable, as nearly equivalent as may be practicable in relation to any share of stock, securities or assets deliverable upon the exercise of the warrants after the fundamental transaction. In lieu of the right to receive upon exercise the shares of stock, securities, or assets as would have been issuable or payable with respect to or in exchange for a number of shares of our common stock, the holders of the warrants, in certain limited circumstances, may require us under certain circumstances to redeem the warrants for a purchase price payable in cash of the Black-Scholes value of the warrants, as calculated pursuant to the terms of the

Limits on Exercise of Warrants: Except upon at least 61 days' prior notice from the holder to us, the holder will not have the right to exercise any portion of the warrant if the holder, together with its affiliates, would beneficially own in excess of 4.99% of the number of shares of common stock (including securities convertible into common stock) outstanding immediately after the exercise.

Rights Agreement

In November 2007 we declared a dividend of one Series A Right and one Series B Right for each share of our common stock which was outstanding on November 9, 2007. When the Rights become exercisable, each Series A Right will entitle the registered holder, subject to the terms of a Rights Agreement, to purchase from us one share of our common stock at a price equal to 20% of the market price of our common stock on the exercise date, although the price may be adjusted pursuant to the terms of the Rights Agreement. If after a person or group of affiliated persons has acquired 15% or more of our common stock or following the commencement of, a tender offer for 15% or more of our outstanding common stock (i) we are acquired in a merger or other business combination and we are not the surviving corporation, (ii) any person consolidates or merges with us and all or part of our common shares are converted or exchanged for securities, cash or property of any other person, or (iii) 50% or more of our consolidated assets or earning power are sold, proper provision will be made so that each holder of a Series B Right will thereafter have the right to receive, upon payment of the exercise price of \$100 (subject to adjustment), that number of shares of common stock of the acquiring company which at the time of such transaction has a market value that is twice the exercise price of the Series B Right.

LEGAL MATTERS

The validity of the issuance of the securities offered hereby will be passed upon for us by Hart & Hart LLC, Denver, Colorado.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus supplement and the accompanying prospectus are part of the registration statement on Form S-3 we filed with the Securities and Exchange Commission, or SEC, under the Securities Act, and do not contain all the information set forth in the registration statement. Whenever a reference is made in this prospectus supplement or the accompanying prospectus to any of our contracts, agreements or other documents, the reference may not be complete, and you should refer to the exhibits that are a part of the registration statement or the exhibits to the reports or other documents incorporated by reference into this prospectus supplement and the accompanying prospectus for a copy of such contract, agreement or other document. You may inspect a copy of the registration statement, including the exhibits and schedules, without charge, at the SEC's public reference room mentioned below, or obtain a copy from the SEC upon payment of the fees prescribed by the SEC.

We are subject to the requirements of the Securities Exchange Act of 1934 and are required to file reports, proxy statements and other information with the Securities and Exchange Commission. Copies of any such reports, proxy statements and other information filed by us can be read and copied at the Commission's Public Reference Room at 100 F. Street, N.E., Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the Commission at 1-800-SEC-0330. The Commission maintains an Internet site that contains reports, proxy and information statements, and other information regarding us. The address of that site is http://www.sec.gov.

15

You can find information about the Company on our website at http://www.cel-sci.com. Information found on our website is not part of this prospectus.

INCORPORATION OF DOCUMENTS BY REFERENCE

We incorporate by reference the filed documents listed below, except as superseded, supplemented or modified by this prospectus, and any future filings we will make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (unless otherwise noted, the SEC file number for each of the documents listed below is 001-11889):

- o Annual Report on Form 10-K for the fiscal year ended September 30, 2012.
- o Report on Form10-Q for the three months ended December 31, 2012.
- o Report on Form 10-Q for the three and six months ended March 31, 2013.
- o Report on Form 10-Q for the three and nine months ended June 30, 2013.
- o Current Reports on Form 8-K, which were filed with the SEC on December 26, 2012, June 26, 2013, July 19, 2013, July 26, 2013, August 30, 2013, September 3, 2013, October 10, 2013, October 11, 2013, November 1, 2013, December 19, 2013 and December 24, 2013.

All documents filed with the Commission by us pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act subsequent to the date of this prospectus and prior to the termination of this offering shall be deemed to be incorporated by reference into this prospectus and to be a part of this prospectus from the date of the filing of such documents. Any statement contained in a document incorporated or deemed to be incorporated by reference shall be deemed to be modified or superseded for the purposes of this prospectus to the extent that a statement contained in this prospectus or in any subsequently filed document which also is or is deemed to be incorporated by reference in this prospectus modifies or supersedes such statement. Such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

We will provide, without charge, to each person to whom a copy of this prospectus is delivered, including any beneficial owner, upon the written or oral request of such person, a copy of any or all of the documents incorporated by reference below (other than exhibits to these documents, unless the exhibits are specifically incorporated by reference into this prospectus). Requests should be directed to:

CEL-SCI Corporation 8229 Boone Blvd., #802 Vienna, Virginia 22182 (703) 506-9460