RenovaCare, Inc.
Form 424B5
October 18, 2017

Filed Pursuant to Rule 424(b)(5)

Registration No. 333-217499

RENOVACARE, INC.

PROSPECTUS SUPPLEMENT

To Prospectus dated May 17, 2017

920,000 Shares of Common Stock

We are offering 920,000 shares (which we refer to herein as the Shares) of our common stock, par value $0.00001 per share pursuant to this prospectus supplement and the accompanying base prospectus. The sales will be made in accordance with the Securities Purchase Agreement entered into between us and the investors (which we refer to herein as the Purchase Agreement).

Pursuant to the Purchase Agreement, we will sell to the investors the Shares at a public offering price of $2.50 per share. We will pay all of the expenses incident to the registration, offering and sale of the Shares under this prospectus supplement and the accompanying base prospectus.

	Per Share	Total
Initial price to public	$ 2.50	$ 2,300,000
Proceeds before expenses to us	$ 2.50	$ 2,300,000

In a concurrent private placement, we are also selling to the investors, for no additional consideration, a warrant to purchase one share of common stock for each share purchased for cash in this offering (which we refer to herein as the Warrants). The Warrants will be exercisable immediately on the date of issuance (which we refer to as the Initial Exercise Date), at an exercise price of $2.75 per share and will expire on the fifth (5^{th}) anniversary of the Initial Exercise Date. The Warrants and the shares of common stock issuable upon the exercise of the Warrants (which we

refer to as the Warrant Shares), are not being registered under the Securities Act of 1933, as amended (which we refer to as the Securities Act), pursuant to the registration statement of which this prospectus supplement and the accompanying base prospectus form a part and are not being offered pursuant to this prospectus supplement and the accompanying base prospectus. The Warrants are being offered pursuant to an exemption from the registration requirements of the Securities Act provided in Section 4(a)(2) of the Securities Act and/or Regulation D promulgated thereunder. The Warrants are not and will not be listed for trading on any national securities exchange. The offer and sale of the Warrants were conducted directly by us. We estimate the expenses of this offering, will be approximately $30,000. No commissions, fees or other compensation is being paid in connection with this offering or the offer and sale of the Warrants.

Our common stock is listed on the OTCQB under the symbol “RCAR.” On October 13, 2017, the last reported sale price of our common stock on the OTCQB was $3.10 per share.

As of the date of this prospectus supplement, the aggregate market value of our outstanding voting and non-voting common equity held by non-affiliates was $59,911,192 based on 75,225,418 shares of outstanding common stock, of which 19,326,191 shares were held by non-affiliates, and the last reported sale price of our common stock of $3.10 per share on October 13, 2017. Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell securities in a public primary offering with a value exceeding more than one-third of our public float in any 12-month period, if, and for so long as, our public float remains below $75,000,000. During the previous 12 calendar months prior to and including the date of this prospectus supplement, we have not sold any of our securities pursuant to General Instruction I.B.6 of Form S-3.

You should read carefully this prospectus supplement, the accompanying base prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying base prospectus before you invest.

Delivery of the Shares is expected to be made on or about October 23, 2017.

Our business and an investment in our shares of common stock involve a high degree of risk. See "Risk Factors" beginning on page S-6 of this prospectus supplement, on page 6 of the accompanying base prospectus and the risk factors described in the documents incorporated by reference into this prospectus supplement and the accompanying base prospectus for more information.

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 base prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is October 18, 2017.

TABLE OF CONTENTS

Prospectus Supplement	**Page**
ABOUT THIS PROSPECTUS SUPPLEMENT	S-1
CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS	S-2
PROSPECTUS SUPPLEMENT SUMMARY	S-2
THE OFFERING	S-4
RISK FACTORS	S-6
USE OF PROCEEDS	S-9
DILUTION	S-9
DESCRIPTION OF SECURITIES	S-10
PLAN OF DISTRIBUTION	S-11
PRIVATE PLACEMENT TRANSACTION AND WARRANTS	S-12
LEGAL MATTERS	S-13
EXPERTS	S-13
WHERE YOU CAN FIND MORE INFORMATION	S-13
INFORMATION INCORPORATED BY REFERENCE	S-13

Base Prospectus	**Page**
ABOUT THIS PROSPECTUS	1
SUMMARY	2
CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS	5
RISK FACTORS	6
ABOUT OUR COMPANY	20
USE OF PROCEEDS	20
THE SECURITIES WE MAY OFFER	21
DESCRIPTION OF CAPITAL STOCK	23
DESCRIPTION OF WARRANTS	29
DESCRIPTION OF SUBSCRIPTION RIGHTS	31
DESCRIPTION OF STOCK PURCHASE CONTRACTS	32
DESCRIPTION OF UNITS	32
PLAN OF DISTRIBUTION	32
LEGAL MATTERS	34
EXPERTS	34
INCORPORATION OF CERTAIN INFORMATION BY REFERENCE	35
WHERE YOU CAN FIND MORE INFORMATION	35

ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts, this prospectus supplement and the accompanying base prospectus, both of which are part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (the "**SEC**") using a "shelf" registration process.

The two parts of this document include: (1) this prospectus supplement, which describes the specific details regarding this offering of securities; and (2) the accompanying base prospectus, which provides a general description of the securities we may offer, some of which may not apply to this offering, and other information concerning the Company. Generally, when we refer to this "prospectus," we are referring to both documents combined. If information in this prospectus supplement is inconsistent with the accompanying base prospectus, you should rely on this prospectus supplement. You should read this prospectus supplement together with the additional information described below under the heading "**Where You Can Find More Information**" and **"Information Incorporated by Reference."**

Any statement made in this prospectus supplement or in a document incorporated or deemed to be incorporated by reference into this prospectus supplement will be deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained in this prospectus supplement or in any other subsequently filed document that is also incorporated by reference into this prospectus supplement modifies or supersedes that statement. Any statements so modified or superseded will be deemed not to constitute a part of this prospectus supplement except as so modified or superseded.

The registration statement that contains this prospectus supplement, including the exhibits to the registration statement and the information incorporated by reference, contains additional information about the securities offered under this prospectus. The registration statement can be read on the SEC website or at the SEC offices mentioned below under the heading "**Where You Can Find More Information**."

We are responsible for the information contained and incorporated by reference in this prospectus supplement, the accompanying base prospectus and any related free writing prospectus we prepare or authorize. We have not authorized anyone to provide you with different or additional information, and we take no responsibility for any other information that others may give you. If you receive any other information, you should not rely on it.

This prospectus supplement and the accompanying base prospectus do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which this prospectus supplement relates, nor do this prospectus supplement and the accompanying base prospectus constitute an offer to sell or the solicitation of an

offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

You should not assume that the information in this prospectus supplement and the accompanying base prospectus is accurate at any date other than the date indicated on the cover page of this prospectus supplement or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference. Our business, financial condition, results of operations or prospects may have changed since that date.

You should not rely on or assume the accuracy of any representation or warranty in any agreement that we have filed in connection with this offering or that we may otherwise publicly file in the future because any such representation or warranty may be subject to exceptions and qualifications contained in separate disclosure schedules, may represent the parties' risk allocation in the particular transaction, may be qualified by materiality standards that differ from what may be viewed as material for securities law purposes or may no longer continue to be true as of any given date.

Unless stated otherwise or the context otherwise requires, references in this prospectus supplement and the accompanying base prospectus to the "**Company**," "**Renovacare**," "**we**," "**us**" or "**our**" refer to Renovacare, Inc.

Table of Contents

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and the documents incorporated by reference herein, including the sections entitled "Risk Factors", contain "forward-looking statements" within the meaning of Section 21(E) of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), and Section 27A of the Securities Act of 1933, as amended (the "**Securities Act**"). These forward-looking statements include, without limitation: statements regarding proposed new products or services; statements concerning litigation or other matters; statements concerning projections, predictions, expectations, estimates or forecasts for our business, financial and operating results and future economic performance; statements of management's goals and objectives; statements concerning our competitive environment, availability of resources and regulation; trends affecting our financial condition, results of operations or future prospects; our financing plans or growth strategies; and other similar expressions concerning matters that are not historical facts. Words such as "may," "will," "should," "could," "would," "predicts," "potential," "continue," "expects," "anticipates," "f "plans," "believes," and "estimates," and variations of such terms or similar expressions, are intended to identify such forward-looking statements.

Forward-looking statements should not be read as a guarantee of future performance or results and will not necessarily be accurate indications of the times at, or by which, that performance or those results will be achieved. Forward-looking statements are based on information available at the time they are made and/or management's good faith belief as of that time with respect to future events and are subject to risks and uncertainties that could cause actual performance or results to differ materially from what is expressed in or suggested by the forward-looking statements.

Forward-looking statements speak only as of the date they are made. You should not put undue reliance on any forward-looking statements. We assume no obligation to update forward-looking statements to reflect actual results, changes in assumptions or changes in other factors affecting forward-looking information, except to the extent required by applicable securities laws. If we do update one or more forward-looking statements, no inference should be drawn that we will make additional updates with respect to those or other forward-looking statements. Investors should review our subsequent reports filed with the SEC described in the sections of this prospectus supplement and the accompanying base prospectus entitled "**Where You Can Find More Information**" and **"Information Incorporated by Reference,"** all of which are accessible on the SEC's website at ***www.sec.gov***.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information contained or incorporated by reference in this prospectus supplement and the accompanying base prospectus. This summary does not contain all the information you should consider before investing in our securities. You should carefully read this entire prospectus supplement, the accompanying base prospectus and the documents incorporated by reference herein and therein before making a decision about

whether to invest in our securities.

Our Company

Organizational History

We were incorporated under the laws of the State of Utah on July 14, 1983, under the name “Far West Gold, Inc.” On May 9, 1996, our stockholders authorized a name change to “Far West Resources, Inc.” On June 30, 1997, the stockholders authorized a name change to “American Alliance Corporation” and authorized a change in the state of domicile from Utah to Nevada. On May 20, 1999, we changed our name to “WhatsOnline.Com, Inc.,” effective as of August 3, 2000, we changed our name to Entheos Technologies, Inc. and effective as of January 5, 2011, we changed our name to Janus Resources, Inc. On January 7, 2014, we filed a Certificate of Amendment to Articles of Incorporation changing our name from “Janus Resources, Inc.” to “RenovaCare, Inc.” so as to more fully reflect our operations. We have an authorized capital of 500,000,000 shares of common stock, par value $0.00001 of which 75,225,418 shares are outstanding as of the date of this prospectus, and 10,000,000 shares of $0.0001 par value preferred stock, of which none are outstanding.

Table of Contents

Description of Business

We are a development-stage company focusing on the acquisition, development and commercialization of autologous (using a patient's own cells) cellular therapies for medical and aesthetic applications. On July 12, 2013, we, through our wholly owned subsidiary, RenovaCare Sciences Corp., completed the acquisition of our flagship technologies (collectively, the "**CellMist™ System**") along with associated United States patent applications and two foreign patent applications, the first of which was filed on August 23, 2007 (DE 10 2007 040 252.1) and the second of which was filed on April 27, 2011 (DE 10 2011 100 450.9), both of which have been granted. One of the US patent applications was granted to us on November 29, 2016 (Patent No. US 9,505,000) and the other patent application was granted to us on April 4, 2017 (Patent No. US 9,610,430). In the case of U.S. patents, a typical utility patent term is 20 years from the date on which the application for the patent was filed in the United States or, if the application contains a specific reference to an earlier filed application or applications, from the date on which the earliest such application was filed. Patents filed outside of the U.S. have a patent term typically running 20 years from the date of first filing, but which are determined by the law of the country in which they issue. Patent term may be affected by events such as maintenance (or annuity) fee payment, terminal or statutory disclaimer, post-grant proceedings, patent term adjustment, and/or patent term extension.

The CellMist™ System is comprised of (a) a treatment methodology for cell isolation for the regeneration of human skin cells (the "**CellMist™ Solution**") and (b) a solution sprayer device (the "**SkinGun™**") for delivering the cells to the treatment area. We have filed additional patent applications related to the CellMist™ Solution and SkinGun™ technologies.

The development of our CellMist™ System is in the early stage and we anticipate that we will be required to expend significant time and resources to further develop our technology and determine whether a commercially viable product can be developed. Research and development of new technologies involves a high degree of risk and there is no assurance that our development activities will result in a commercially viable product. The long-term profitability of our operations will be, in part, directly related to the cost and success of our development programs, which may be affected by a number of factors.

Corporate Information

Our corporate headquarters is located at 430 Park Avenue, Suite 702, New York, New York 10022. Our telephone number is (888) 398-0202. Our website address is www.renovacareinc.com. Information contained on our website (or any other website) does not form part of this prospectus supplement and is intended for informational purposes only.

S-3

Table of Contents

THE OFFERING

Common Stock	920,000 Shares.
Concurrent Private Placement	In a concurrent private placement, we are also selling Warrants to the investors for no additional consideration. The Warrants represent the right to purchase one (1) share of common stock for each share purchased for cash in this offering. The Warrants will be exercisable immediately on the date of issuance at an exercise price of $2.75 per share and will expire on the fifth (5th) anniversary of the Initial Exercise Date. The Warrants and the shares of common stock underlying the Warrants (the "**Warrant Shares**") are not being registered under the Securities Act pursuant to the registration statement of which this prospectus supplement and the accompanying base prospectus form a part and are not being offered pursuant to this prospectus supplement and the accompanying base prospectus. The Warrants are being offered pursuant to an exemption from the registration requirements of the Securities Act provided in Section 4(a)(2) of the Securities Act and/or Regulations D or S, promulgated thereunder.
Common Stock Outstanding after the Offering (excluding the shares of common stock underlying the Warrants or other outstanding warrants or options)	76,225,418 shares of common stock.
Use of Proceeds	We estimate that the net proceeds from the sale of the Shares offered by us will be approximately $2,270,000, based on the public offering price of $2.50 per share, after deducting estimated offering expenses of $30,000 payable by us. We intend to use the net proceeds from this offering for working capital and other general corporate purposes. See "**Use of Proceeds**" on page S-9 of this prospectus supplement for a more complete description of the intended use of proceeds from this offering.
Risk Factors	Investing in our securities involves substantial risks that are described in the **"Risk Factors"** section beginning on page S-6 of this prospectus supplement, the **"Risk Factors"** section beginning on page 6 of the accompanying base prospectus, and the risk factors described in the documents incorporated by reference into this prospectus supplement

and the accompanying base prospectus. You should carefully consider these risks before investing in our securities.

Trading Symbol

Our shares of common stock are traded on the OTCQB under the symbol "**RCAR**." There is no established trading market for the Warrants, and we do not expect an active trading market to develop. We do not intend to list the Warrants on any securities exchange or other trading market. Without an active trading market, the liquidity of the Warrants will be limited.

Table of Contents

The number of shares of our common stock to be issued and outstanding after this offering is based on 75,225,418 shares of common stock issued and outstanding as of October 18, 2017, which number excludes, as of that date, the following:

- 920,000 shares of common stock issuable upon exercise of Warrants at a weighted exercise price of $2.75 per share.
- 2,689,158 shares of common stock issuable upon exercise of previously issued and outstanding warrants at a weighted average exercise price ranging of $1.34 per share.
- 545,000 shares of common stock issuable upon exercise of stock options at a weighted average exercise price of $3.09 per share
- 411,654 shares issuable upon conversion of convertible promissory notes in the principal amount of $1,095,000, at a price, as of October 17, 2017 of $2.66 per share.

Except as otherwise specifically indicated, the information in this prospectus supplement assumes there has been no exercise of the Warrants issued in the concurrent private placement (or any other issued and outstanding warrants or options).

Recent Developments

None

Table of Contents

RISK FACTORS

*Investing in our securities involves a high degree of risk. You should carefully consider and evaluate all of the information contained in this prospectus supplement, the accompanying base prospectus and in the documents, we incorporate by reference into this prospectus supplement and the accompanying base prospectus before you decide to purchase our securities. In particular, you should carefully consider and evaluate the risks and uncertainties described under the heading "**Risk Factors**" in this prospectus supplement and the accompanying base prospectus. Any of the risks and uncertainties set forth in this prospectus supplement and the accompanying base prospectus, as updated by annual, quarterly and other reports and documents that we file with the SEC and incorporate by reference into this prospectus supplement or the accompanying base prospectus could materially and adversely affect our business, results of operations and financial condition, which in turn could materially and adversely affect the value of our securities. As a result, you could lose all or part of your investment.*

Risks Relating to this Offering of Securities

Investors will incur immediate and substantial dilution as a result of this offering.

Investors purchasing securities in this offering will incur immediate and substantial dilution in net tangible book value per share of common stock. After giving effect to the sale by us of 920,000 shares of common stock at a public offering price of $2.50 per Share, purchasers of the Shares will effectively incur dilution of $2.47 per share in the net tangible book value of their shares of common stock.

Furthermore, you may experience additional dilution to the extent that shares of our common stock are issued upon the exercise of outstanding stock options and warrants. See "**Dilution**" for a discussion of the dilution to the purchasers in this offering.

Sales of a significant number of shares of our common stock in the public markets or significant short sales of our common stock, or the perception that such sales could occur, could depress the market price of our common stock and impair our ability to raise capital.

Sales of a substantial number of shares of our common stock or other equity-related securities in the public markets, including any shares of common stock issued upon exercise of the Warrants, could depress the market price of our common stock. If there are significant short sales of our common stock, the price decline that could result from this

activity may cause the share price to decline more so, which, in turn, may cause long holders of our common stock to sell their shares, thereby contributing to further sales of common stock in the market. Such sales also may impair our ability to raise capital through the sale of additional equity securities in the future at a time and price that our management deems acceptable, if at all.

Table of Contents

We may seek to raise additional funds, finance acquisitions or develop strategic relationships by issuing securities that would dilute your ownership. Depending on the terms available to us, if these activities result in significant dilution, it may negatively impact the trading price of our shares of common stock.

We have financed our operations, and we expect to continue to finance our operations, acquisitions, if any, and the development of strategic relationships by issuing equity and/or convertible securities, which could significantly reduce the percentage ownership of our existing stockholders. Further, any additional financings that we secure may require the granting of rights, preferences or privileges senior to, or *pari passu* with, those of our common stock. Any issuances by us of equity securities may be at or below the prevailing market price of our common stock and in any event may have a dilutive impact on your ownership interest, which could cause the market price of our common stock to decline. We may also raise additional funds through the incurrence of debt or the issuance or sale of other securities or instruments senior to our shares of common stock. We cannot be certain how the repayment of those promissory notes will be funded and we may issue further equity or debt in order to raise funds to repay the promissory notes, including funding that may be highly dilutive. The holders of any securities or instruments we may issue may have rights superior to the rights of our common stockholders. If we experience dilution from the issuance of additional securities and we grant superior rights to new securities over common stockholders, it may negatively impact the trading price of our shares of common stock and you may lose all or part of your investment.

The market price of our shares of common stock is particularly volatile and you may be unable to sell your shares of common stock at or above your purchase price, which may result in substantial losses to you.

The market for our shares of common stock is characterized by significant price volatility when compared to the shares of larger, more established companies that trade on a national securities exchange and have large public floats, and we expect that our share price will continue to be more volatile than the shares of such larger, more established companies for the indefinite future. The volatility in our share price is attributable to a number of factors. First our shares of common stock are, compared to the shares of such larger, more established companies, sporadically and thinly traded. The price for our shares of common stock could, for example, decline precipitously in the event that a large number of our shares of common stock are sold on the market without commensurate demand. Secondly, we are a speculative or “risky” investment due to our lack of profits to date. As a consequence of this enhanced risk, more risk-adverse investors may, under the fear of losing all or most of their investment in the event of negative news or lack of progress, be more inclined to sell their shares of common stock on the market more quickly and at greater discounts than would be the case with the stock of a larger, more established company that trades on a national securities exchange and has a large public float.

We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

We will have broad discretion in the application of the net proceeds from this offering, including for any of the purposes described in the section of this prospectus entitled "**Use of Proceeds**." Our failure to apply these funds effectively could harm our business. Pending their use, we may invest the net proceeds from this offering in short-term, investment-grade, interest-bearing securities. These investments may not yield a favorable return to our stockholders.

We have not paid dividends in the past and do not expect to pay dividends for the foreseeable future, and any return on investment may be limited to potential future appreciation in the value of our common stock.

We currently intend to retain any future earnings to support the development and expansion of our business and do not anticipate paying cash dividends on our shares of common stock in the foreseeable future. Our payment of any future dividends will be at the discretion of our Board of Directors after taking into account various factors, including without limitation, our financial condition, operating results, cash needs, growth plans and the terms of any credit agreements that we may be a party to at the time. To the extent we do not pay dividends, our shares of common stock may be less valuable because a return on investment will only occur if and to the extent our stock price appreciates, which may never occur. In addition, investors must rely on sales of their common stock after price appreciation as the only way to realize their investment, and if the price of our common stock does not appreciate, then there will be no return on investment. Investors seeking cash dividends should not purchase our common stock.

Table of Contents

We are uncertain of our ability to continue as a going concern, indicating the possibility that we may not be able to operate in the future.

We are an early stage entity and have incurred net losses since inception. Our ability to continue as a going concern is contingent upon, among other factors, our ability to raise additional cash from equity financings, secure debt financing, and/or generate revenue from the sales of our products. We cannot provide any assurance that we will be able to raise additional capital. If we are unable to secure additional capital, we may be required to curtail our research and development initiatives and take additional measures to reduce costs in order to conserve our cash in amounts sufficient to sustain operations and meet our obligations.

As of June 30, 2017, we had cash and cash equivalents of $442,941. On July 21, 2017 we completed a private placement for the sale of 410,000 units of our securities at a price of $2.44 per unit resulting in proceeds to us of $1,000,400. We anticipate that we will remain engaged in research and product development activities through at least December 31, 2018. Based upon our current level of operations and expenditures, we believe that absent any modification or expansion of our existing research, development and testing activities, cash on hand should be sufficient to enable us to continue operations to June 30, 2018. There is no assurance that we will be able to generate revenue and achieve profitability or secure additional financing once our current cash balance is depleted. Any significant expansion in scope or acceleration in timing of our current research and development activities, or commencement of any marketing and sales activities, will require additional funds.

We rely on key officers, and their knowledge of our business and technical expertise would be difficult to replace.

We are highly dependent on our officers because of their expertise and experience in the telecommunications industry. We have agreements with our executive officers containing customary non-disclosure, non-compete, confidentiality and assignment of inventions provisions. We do not have “key person” life insurance policies for any of our officers. The loss of the technical knowledge and management and industry expertise of any of our key personnel could result in delays in product development, loss of customers and sales and diversion of management resources, which could adversely affect our operating results.

Our industry is highly competitive and we may not be able to compete effectively.

The medical device industry is highly competitive, rapidly evolving, and subject to constant technological change. We expect that new competitors are likely to join existing competitors. Many of our competitors may be larger and have greater financial, technical, operational, marketing and other resources and experience than we do. In the event that a competitor expends significant resources we may not be able to successfully compete. In addition, the pace of

technological change makes it impossible for us to predict whether we will face new competitors using different technologies to provide products. If our competitors were to provide better and more cost effective products than our products we may not be able to capture any significant market share.

Compliance with environmental, health and safety laws and regulations, including new regulations requiring higher standards, may increase our costs, limit our ability to utilize supply chains, and force design changes to our products.

Our operations are or may become subject to a variety of environmental, health and safety laws and regulations and equivalent local, state, and regulatory agencies in each of the jurisdictions in which we currently operate or may operate in the future. The manufacturing of our products uses substances regulated under various federal, state, local laws and regulations governing the environment and worker health and safety. If we, including any contract manufacturers that we may employ, do not comply with these laws including any new regulations, such non-compliance could reduce the net realizable value of our products, which would result in an immediate charge to our income statements. Our non-compliance with such laws could also negatively impact our operations and financial position as a result of fines, penalties that may be imposed on us, and increase the cost of mandated remediation or delays to any contract manufacturers we may utilize, thus we may suffer a loss of revenues, be unable to sell our products in certain markets and/or countries, be subject to penalties and enforced fees and/or suffer a competitive disadvantage. Costs to comply with current laws and regulations and/or similar future laws and regulations, if applicable, could include costs associated with modifying our products, recycling and other waste processing costs, legal and regulatory costs and insurance costs. We cannot assure you that the costs to comply with these new laws or with current and future environmental and worker health and safety laws will not have a material adverse effect on our business, operating results and financial condition.

Table of Contents

USE OF PROCEEDS

We estimate that the net proceeds from the sale of the Shares offered by this prospectus supplement and from the sale of the Warrants in the concurrent private placement, after expenses payable by us, will be approximately $2,270,000.

We intend to use the net proceeds from this offering for working capital and other general corporate purposes. Pending use of the net proceeds, we intend to invest the net proceeds in interest-bearing, investment-grade securities.

DILUTION

If you purchase shares of our common stock in this offering, you will experience dilution to the extent of the difference between the price per share you pay in this offering and the net tangible book value per share of our common stock immediately after this offering. The net tangible book value of our common stock as of September 30, 2017, was approximately $141,570 or $0.002 per share of common stock based upon 75,225,418 shares of common stock outstanding on such date. Adjusted net tangible book value per share represents the amount of our total tangible assets reduced by the amount of our total liabilities, divided by the total number of shares of common stock outstanding after giving effect to the sale of the Shares in this offering.

We are offering the Shares at a public offering price of $2.50 per share before estimated offering expenses payable by us. If you invest in our Shares in this offering, your interest will be diluted to the extent of the difference between the offering price per share and the as adjusted net tangible book value per share of our common stock immediately after completion of this offering.

The following table illustrates this dilution on a per share basis to new investors:

Public offering price per share	$	2.50
Net tangible book value per share as of September 30, 2017, before giving effect to this offering	$	141,570
Increase in net tangible book value per share attributed to existing investors	$	2,300,000
As adjusted net tangible book value per share after giving effect to this offering	$	2,441,570
Dilution to net tangible book value per share to new investors in this offering	$	2.47

S-9

Table of Contents

The total number of shares of our common stock reflected in the discussion and table above is based on 75,225,418 shares of our common stock outstanding as of October 18, 2017, which number excludes, as of that date, the following:

- 920,000 shares of common stock issuable upon exercise of Warrants at a weighted exercise price of $2.75 per share.
- 2,689,158 shares of common stock issuable upon exercise of previously issued and outstanding warrants at a weighted average exercise price ranging of $1.34 per share.
- 545,000 shares of common stock issuable upon exercise of stock options at a weighted average exercise price of $3.09 per share
- 411,654 shares issuable upon conversion of convertible promissory notes in the principal amount of $1,095,000, at a price, as of October 17, 2017 of $2.66 per share.

To the extent that any convertible debt is converted, outstanding warrants are exercised, outstanding options are exercised, new options are issued under our Equity Incentive Plan or we issue additional shares of common stock in the future, there will be further dilution to investors participating in this offering.

DESCRIPTION OF SECURITIES

The following is a summary description of our authorized capital stock and the material terms of the Shares and Warrants. This summary is not complete and is qualified in its entirety by reference to our Articles of Incorporation, our Bylaws and the Warrants, a form of which has been filed with the SEC and incorporated by reference into this prospectus supplement.

Authorized Capital Stock

As of the date of this prospectus our authorized capital stock consists of 500,000,000 shares of common stock having a par value of $0.00001 per share, of which there were 75,225,418 shares are issued and outstanding as of such date, and 10,000,000 shares of preferred stock having a par value of $0.0001 per share, of which there were no shares issued and outstanding as of such date. As of the date of this prospectus, the outstanding shares of our common stock were held by approximately 357 holders of record. The actual number of stockholders is greater than this number of record holders and includes beneficial owners of our common stock whose shares are held in street name by brokers and other nominees.

Shares

For a description of our common stock and preferred stock, see "**Description of Capital Stock**" in the accompanying base prospectus.

Warrants

For a description of the Warrants being offered in the concurrent private placement, see "Private Placement Transaction and Warrants" beginning on page S-13 of this Prospectus Supplement.

Table of Contents

PLAN OF DISTRIBUTION

We propose to offer and sell the Shares we are offering pursuant to this prospectus supplement directly to one or more investors through a securities purchase agreement directly between the purchasers and us. All of the Shares will be sold at the same price and, we expect, at a single closing. We established the price following negotiations with prospective investors and with reference to the prevailing market price of our common stock, recent trends in such price and other factors. It is possible that not all of the Shares we are offering pursuant to this prospectus supplement will be sold at the closing, in which case our net proceeds would be reduced. We expect that the sale of the Shares will be completed on or around the date indicated on the cover page of this prospectus supplement. We will not be paying any commissions or other forms of compensation for services rendered by our officers in connection with the offer and sale of the Shares.

After deducting our estimated offering expenses of approximately $30,000, we expect the net proceeds from this offering to be approximately $2,270,000.

Listing

Our common stock is listed on the OTCQB under the symbol “RCAR”.

Electronic Distribution

This prospectus supplement and the accompanying prospectus may be made available in electronic format on the Company’s website. Other than this prospectus supplement and the accompanying prospectus in electronic format, the information maintained on the Company website and any information contained in any other website reference on the Company website is not part of this prospectus supplement or the accompanying prospectus or the registration statement of which this prospectus supplement and the accompanying prospectus forms a part, has not been approved and/or endorsed by us and should not be relied upon by investors.

Table of Contents

PRIVATE PLACEMENT TRANSACTION AND WARRANTS

In a concurrent private placement, we are selling to each of the investors in this offering, for no additional consideration, Warrants to purchase one (1) share of common stock for each Share purchased for cash in this offering, for an aggregate amount of Warrants to purchase up to 920,000 shares of our common stock. Each Warrant will be exercisable beginning on the Initial Exercise Date, which is immediately upon the date of closing, at an exercise price of $2.75 per share.

The exercise price and number of shares of common stock issuable upon the exercise of the Warrants will be subject to adjustment in the event of any stock dividend and split, reverse stock split, recapitalization, reorganization or similar transaction, as described in the Warrants.

If, at any time while the Warrants are outstanding, upon the occurrence of certain events, such as the consolidation of the Company with, or merger of the Company into any other corporation, or in case of any sale or conveyance of all or substantially all of the assets of the Company other than in connection with a plan of complete liquidation of the Company, then as a condition of such consolidation, merger or sale or conveyance, adequate provision will be made whereby the holder of the Warrants will have the right to acquire and receive upon exercise of this Warrant in lieu of the shares of Common Stock immediately theretofore acquirable upon the exercise of the Warrants, such shares of stock, securities or assets as may be issued or payable with respect to or in exchange for the number of shares of Common Stock immediately theretofore acquirable and receivable upon exercise of this Warrants had such consolidation, merger or sale or conveyance not taken place.

The Warrants and the Warrant Shares are not being registered under the Securities Act pursuant to the registration statement of which this prospectus supplement and the accompanying base prospectus form a part and are not being offered pursuant to this prospectus supplement and the accompanying base prospectus. The Warrants and the Warrant Shares are being offered pursuant to an exemption from the registration requirement of the Securities Act provided in Section 4(a)(2) of the Securities Act and/or Regulations D and/or S promulgated thereunder.

After the Initial Exercise Date, if and only if there is no effective registration statement registering, or no current prospectus available for, the resale of the shares of common stock issuable upon exercise of the Warrants, the purchasers may exercise the Warrants by means of a “cashless exercise.”

This summary of the Warrants is not complete and is qualified in its entirety by reference to the Warrants, the form of which shall be filed as an exhibit to a Current Report on Form 8-K.

S-12

Table of Contents

LEGAL MATTERS

Satterlee Stephens LLP., New York, New York, will render a legal opinion as to the validity of the securities to be offered hereby.

EXPERTS

Our consolidated financial statements as of and for the years ended December 31, 2016 and 2015 have been incorporated by reference herein and in the registration statement in reliance upon the report of Peterson Sullivan LLP, independent certified public accounting firm, and upon the authority of said firm as experts in auditing and accounting. The audit report included an explanatory paragraph as to our ability to continue as a going concern.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus supplement constitutes a part of a registration statement on Form S-3 filed under the Securities Act. As permitted by the SEC's rules, this prospectus supplement and the accompanying base prospectus, which form a part of the registration statement, do not contain all the information that is included in the registration statement. You will find additional information about us in the registration statement. Any statements made in this prospectus supplement concerning legal documents are not necessarily complete and you should read the documents that are filed as exhibits to the registration statement or otherwise filed with the SEC for a more complete understanding of the document or matter.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read, without charge, and copy the documents we file at the SEC's public reference room at 100 F Street, NE, Room 1580, Washington, D.C. 20549. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. Our SEC filings are also available to the public at no cost from the SEC's website at *www.sec.gov*. Our corporate website is *www.renovacare.com*. The information on our corporate website is not incorporated by reference in this prospectus supplement or the accompanying base prospectus and you should not consider it a part of this prospectus supplement or the accompanying base prospectus.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to "incorporate by reference" into this prospectus supplement certain information. This means that we can disclose important information to you by referring you to those documents that contain the information. The information we incorporate by reference is considered a part of this prospectus supplement, and later information we file with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, on or after the date of this prospectus supplement (other than information "furnished" under Items 2.02 or 7.01 (or corresponding information furnished under Item 9.01 or included as an exhibit) of any Current Report on Form 8-K or otherwise "furnished" to the SEC, unless otherwise stated) until this offering is completed:

- Quarterly Reports on Form 10-Q for the fiscal quarter ended June 30, 2017, filed with the SEC on August 14, 2017.

- Current Reports on Form 8-K filed with the SEC on July 24, 2017, August 17, 2017., October 17, 2017, and October 18, 2017.

In accordance with Rule 402 of Regulation S-T, the XBRL related information in Exhibit 101 to our Annual Report on Form 10-K and our Quarterly Reports on Form 10-Q will not be deemed to be incorporated by reference into any registration statement or other document filed under the Securities Act, except as will be expressly set forth by specific reference in such filing.

You can obtain a copy of any or all of the documents incorporated by reference in this prospectus supplement (other than an exhibit to a document unless that exhibit is specifically incorporated by reference into that document) from the SEC on its website at *www.sec.gov*. You also can obtain these documents from us without charge by visiting our corporate website at *www.renovacare.com* or by requesting them in writing or by telephoning us at:

RenovaCare, Inc.

430 Park Avenue, Suite 702

New York, New York 10022

Tel: (888) 398-0202

Table of Contents

PROSPECTUS

RenovaCare, Inc.

$25,000,000

Common Stock, Preferred Stock

Warrants, Stock Purchase Contracts

Units and Subscription Rights

This prospectus covers our offer and sale from time to time of our common stock, preferred stock, warrants to purchase common stock and/or preferred stock, subscription rights to purchase preferred stock, common stock and/or other securities, stock purchase contracts to purchase shares of our common stock and/or preferred stock, and units, in one or more offerings. The aggregate offering price of all securities sold by us under this prospectus may not exceed $25,000,000.

This prospectus describes some of the general terms that may apply to an offering of these securities and the general manner in which these securities may be offered. Each time we offer and sell these securities we will provide specific terms of such offering in a supplement to this prospectus. A prospectus supplement may also add, update or change information contained in this prospectus or in documents we have incorporated by reference into this prospectus and, accordingly, to the extent inconsistent, information in or incorporated by reference in this prospectus is superseded by the information in the prospectus supplement and any other offering material related to such securities.

We may offer and sell these securities from time to time at fixed prices, at market prices or at negotiated prices, and such securities may be offered and sold to or through one or more underwriters, dealers or agents or directly to purchasers on a continuous or delayed basis.

Our common stock is presently quoted for trading under the symbol "**RCAR**" on the OTC Markets Group Inc. QB™ tier (the "**OTCQB**"). On May 11, 2017, the closing price of our common stock, as reported on the OTCQB was $4.20 per share.

We will sell these securities directly to investors, through agents designated from time to time or to or through underwriters or dealers, on a continuous or delayed basis. For additional information on the methods of sale, you should refer to the section entitled "Plan of Distribution" in this prospectus. If any agents or underwriters are involved in the sale of any securities with respect to which this prospectus is being delivered, the names of such agents or underwriters and any applicable fees, commissions, discounts or over-allotment options will be set forth in a prospectus supplement. The price to the public of such securities and the net proceeds we expect to receive from such sale will also be set forth in a prospectus supplement.

You should read this prospectus and any prospectus supplement, together with additional information described under the headings "Incorporation of Certain Information by Reference" and "Where You Can Find More Information," carefully before you invest in any of our securities.

INVESTING IN OUR SECURITIES INVOLVES A HIGH DEGREE OF RISK. YOU SHOULD REVIEW CAREFULLY THE RISKS AND UNCERTAINTIES DESCRIBED UNDER THE HEADING "RISK FACTORS" CONTAINED IN THE APPLICABLE PROSPECTUS SUPPLEMENT WE HAVE AUTHORIZED FOR USE IN CONNECTION WITH A SPECIFIC OFFERING, AND UNDER SIMILAR HEADINGS IN THE DOCUMENTS THAT ARE INCORPORATED BY REFERENCE INTO THIS PROSPECTUS.

THIS PROSPECTUS MAY NOT BE USED TO CONSUMMATE A SALE OF ANY SECURITIES UNLESS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is May 17, 2017

TABLE OF CONTENTS

	Page
ABOUT THIS PROSPECTUS	1
SUMMARY	2
CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS	5
RISK FACTORS	6
ABOUT OUR COMPANY	20
USE OF PROCEEDS	20
THE SECURITIES WE MAY OFFER	21
DESCRIPTION OF CAPITAL STOCK	23
DESCRIPTION OF WARRANTS	29
DESCRIPTION OF SUBSCRIPTION RIGHTS	31
DESCRIPTION OF STOCK PURCHASE CONTRACTS	32
DESCRIPTION OF UNITS	32
PLAN OF DISTRIBUTION	32
LEGAL MATTERS	34
EXPERTS	34
INCORPORATION OF CERTAIN INFORMATION BY REFERENCE	35
WHERE YOU CAN FIND MORE INFORMATION	35

You should rely only on the information contained in this prospectus or any related prospectus supplement. We have not authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. The information contained in this prospectus or incorporated by reference herein is accurate only on the date of this prospectus. Our business, financial condition, results of operations and prospects may have changed since such date. Other than as required under the federal securities laws, we undertake no obligation to publicly update or revise such information, whether as a result of new information, future events or any other reason.

This prospectus is not an offer to sell, nor is it an offer to buy, these securities in any jurisdiction where the offer or sale is not permitted.

Table of Contents

ABOUT THIS PROSPECTUS

This prospectus is a part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (the "**SEC**") utilizing a "shelf" registration process. Under this shelf registration process, we may sell any combination of the securities described in this prospectus in one or more offerings up to a total aggregate offering price of $25,000,000, in one or more offerings.

This prospectus provides you with a general description of the securities that we may offer. Each time we sell securities under this prospectus, we will provide a prospectus supplement that will contain specific information about the terms of that offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. The prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change information contained in this prospectus or in any documents that we have incorporated by reference into this prospectus. You should read this prospectus, any applicable prospectus supplement and any related free writing prospectus, together with the information incorporated herein by reference as described under the heading "Incorporation of Certain Information by Reference," before investing in any of the securities offered.

THIS PROSPECTUS MAY NOT BE USED TO CONSUMMATE A SALE OF SECURITIES UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.

Neither we, nor any agent, underwriter or dealer has authorized any person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus, any applicable prospectus supplement or any related free writing prospectus prepared by or on behalf of us or to which we have referred you. This prospectus, any applicable supplement to this prospectus or any related free writing prospectus do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus, any applicable supplement to this prospectus or any related free writing prospectus constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

You should not assume that the information contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate on any date subsequent to the date set forth on the front of the document or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus, any applicable prospectus supplement or any related free writing prospectus is delivered, or securities are sold, on a later date.

This prospectus and the information incorporated herein by reference contain summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the heading "**Where You Can Find More Information**" on page 36.

For investors outside the United States: We have not done anything that would permit this offering or possession or distribution of this prospectus or any accompanying prospectus supplement to this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus or any accompanying prospectus supplement to this prospectus must inform themselves about, and observe any restrictions relating to, the offering of securities and the distribution of this prospectus outside the United States.

Table of Contents

SUMMARY

The following summary highlights selected information contained or incorporated by reference elsewhere in this prospectus and does not contain all of the information that you should consider in making your investment decision. Before investing in any of our securities, you should carefully read this entire prospectus, the applicable prospectus supplement and any related free writing prospectus, including our financial statements and the related notes and other documents incorporated by reference in this prospectus, as well as the information under the caption "Risk Factors" contained in the applicable prospectus supplement and any related free writing prospectus and under similar headings in the other documents that are incorporated by reference into this prospectus and the exhibits to the registration statement of which this prospectus is a part.

Except where the context otherwise requires and for purposes of this prospectus only, "we," "us," "our," "Company," "our Company," and "RenovaCare" refer to RenovaCare, Inc., a Nevada corporation, and its consolidated subsidiaries.

Organizational History

We were incorporated under the laws of the State of Utah on July 14, 1983, under the name "Far West Gold, Inc." On May 9, 1996, our stockholders authorized a name change to "Far West Resources, Inc." On June 30, 1997, the stockholders authorized a name change to "American Alliance Corporation" and authorized a change in the state of domicile from Utah to Nevada. On May 20, 1999, we changed our name to "WhatsOnline.Com, Inc.," effective as of August 3, 2000, we changed our name to Entheos Technologies, Inc. and effective as of January 5, 2011, we changed our name to Janus Resources, Inc. On January 7, 2014, we filed a Certificate of Amendment to Articles of Incorporation changing our name from "Janus Resources, Inc." to "RenovaCare, Inc." so as to more fully reflect our operations. We have an authorized capital of 500,000,000 shares of common stock, par value $0.00001 of which 75,225,418 shares are outstanding as of the date of this prospectus, and 10,000,000 shares of $0.0001 par value preferred stock, of which none are outstanding.

Description of Business

We are a development-stage company focusing on the acquisition, development and commercialization of autologous (using a patient's own cells) cellular therapies for medical and aesthetic applications. On July 12, 2013, we, through our wholly owned subsidiary, RenovaCare Sciences Corp., completed the acquisition of our flagship technologies (collectively, the "**CellMist™ System**") along with associated United States patent applications and two foreign patent applications, the first of which was filed on August 23, 2007 (DE 10 2007 040 252.1) and the second of which was

filed on April 27, 2011 (DE 10 2011 100 450.9), both of which have been granted. One of the US patent applications was granted to us on November 29, 2016 (Patent No. US 9,505,000) and the other patent application was granted to us on April 4, 2017 (Patent No. US 9,610,430). In the case of U.S. patents, a typical utility patent term is 20 years from the date on which the application for the patent was filed in the United States or, if the application contains a specific reference to an earlier filed application or applications, from the date on which the earliest such application was filed. Patents filed outside of the U.S. have a patent term typically running 20 years from the date of first filing, but which are determined by the law of the country in which they issue. Patent term may be affected by events such as maintenance (or annuity) fee payment, terminal or statutory disclaimer, post-grant proceedings, patent term adjustment, and/or patent term extension.

The CellMist™ System is comprised of (a) a treatment methodology for cell isolation for the regeneration of human skin cells (the "**CellMist™ Solution**") and (b) a solution sprayer device (the "**SkinGun™**") for delivering the cells to the treatment area. We have filed additional patent applications related to the CellMist™ Solution and SkinGun™ technologies.

The development of our CellMist™ System is in the early stage and we anticipate that we will be required to expend significant time and resources to further develop our technology and determine whether a commercially viable product can be developed. Research and development of new technologies involves a high degree of risk and there is no assurance that our development activities will result in a commercially viable product. The long-term profitability of our operations will be, in part, directly related to the cost and success of our development programs, which may be affected by a number of factors.

Table of Contents

The average adult human has a skin surface area of between 16 - 21 square feet, which protects all other organs against the external environment. When a person's skin is assailed by trauma or exposed to extreme heat, the skin's various layers may be destroyed and depending on the severity of the injury, might cause life-threatening conditions. Currently, severe trauma to the skin, such as second or third degree burns, requires surgical mesh-grafting of skin, whereby healthy skin is removed from one area of the patient's body (a "**donor site**") and implanted on the damaged area.

While mesh grafting is often the method of choice, there are significant deficiencies with this method. The surgical procedure to remove healthy skin from the donor site can be painful and leaves the patient with a new wound that must also be attended to. In many instances the aesthetic results are not satisfying, as the color of the skin from the donor site may not match the skin color of the damaged skin. Additionally, the size of the donor skin removed must be substantially equal in size to the damaged skin area. These donor and injury sites can take weeks to heal, requiring expensive hospital stays, ongoing wound dressing management, and in some cases, complex anti-infection strategies.

We are currently evaluating the potential of our CellMist™ System in the treatment of tissue that has been subject to severe trauma such as second degree burns. The CellMist™ System utilizes the patient's own skin stem cells, reduces the size of the donor site, and has shown to significantly decrease scarring. Furthermore, we believe the CellMist™ System could enable treatment of other skin disorders with minimal scarring.

Intellectual Property

General

In the course of conducting our business, we from time to time create inventions. Obtaining, maintaining and protecting our inventions, including seeking patent protection, might be important depending on the nature of the invention. To that end, we seek to implement patent and other intellectual property strategies to appropriately protect our intellectual property. While we file and prosecute patent applications to protect our inventions, our pending patent applications might not result in the issuance of patents or issued patents might not provide competitive advantages. Also, our patent protection might not prevent others from developing competitive products using related or other technology.

The scope, enforceability and effective term of issued patents can be highly uncertain and often involve complex legal and factual questions. Moreover, the issuance of a patent in one country does not assure the issuance of a patent with similar claim scope in another country, and claim interpretation and infringement laws vary among countries, so we are unable to predict the extent of patent protection in any country. The patents we obtain and the unpatented

proprietary technology we hold might not afford us significant commercial protection or advantage.

In addition to issued patents describe above, we plan to file additional patent applications that, if issued, would provide further protection for The CellMist™ System. Although we believe the bases for these patents and patent applications are sound, they are untested; and there is no assurance that they will not be successfully challenged. There can be no assurance that any patent previously issued will be of commercial value, that any patent applications will result in issued patents of commercial value, or that our technology will not be held to infringe patents held by others.

Table of Contents

Strategy

Our ultimate goal is to leverage the potential of our CellMist™ System, together with our cell isolation method, as cutting edge treatments in skin therapy. Before we can do so, however, there are a number of steps we must first take, including:

- initiating a series of clinical trials to determine the CellMist™ System's safety and efficacy for treating wounds and burns;
- formalizing collaborations with universities and scientific partners;
- creating a network of clinical and research partners;
- achieving FDA and other regulatory clearance; and
- expanding the range of possible applications.

Additionally, we will likely be required to raise significant capital in order to fund our ongoing research and development operations, and there is no guarantee that we will be able to raise capital on acceptable terms, if at all.

Business Uncertainties and Going Concern Risk

Because we have not generated any revenues, we are significantly dependent on funding from outside investors. There is no guarantee that such funding will be available at all or in sufficient amounts to satisfy our required expenditures. There is substantial doubt that we can continue as an on-going business for the next twelve months unless we obtain additional capital to pay our expenditures. As discussed in more detail below, we recently raised additional capital in unregistered offerings and we intend to seek additional funding. However, we do not currently have sufficient resources to accomplish all of the conditions necessary for us to generate revenue.

Corporate Information

Our corporate headquarters is located at 430 Park Avenue, Suite 702, New York, New York 10022. Our telephone number is (888) 398-0202. Our website is www.renovacareinc.com. Information contained on our web site (or any other website) does not constitute part of this prospectus.

4

Table of Contents

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains certain "forward-looking statements," as well as information relating to the Company and its subsidiaries that is based on management's exercise of business judgment and assumptions made by and information currently available to management. Although forward-looking statements in this prospectus reflect the good faith judgment of our management, such statements can only be based on facts and factors currently known by us. Consequently, forward-looking statements are inherently subject to risks and uncertainties and actual results and outcomes may differ materially from the results and outcomes discussed in or anticipated by the forward-looking statements. When used in this document and other documents, releases and reports released by us, the words "anticipate," "believe," "estimate," "expect," "intend," "the facts suggest" and words of similar import, are intended to identify any forward-looking statements. You should not place undue reliance on these forward-looking statements. These statements reflect our current view of future events and are subject to certain risks and uncertainties as noted below. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, our actual results could differ materially from those anticipated in these forward-looking statements. Actual events, transactions and results may materially differ from the anticipated events, transactions or results described in such statements. Although we believe that our expectations are based on reasonable assumptions, we can give no assurance that our expectations will materialize. Many factors could cause actual results to differ materially from our forward-looking statements and unknown, unidentified or unpredictable factors could materially and adversely impact our future results. We undertake no obligation and do not intend to update, revise or otherwise publicly release any revisions to our forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of any unanticipated events. Several of these factors include, without limitation:

The reader is cautioned that no statements contained in this prospectus should be construed as a guarantee or assurance of future performance or results. Actual events or results may differ materially from those discussed in forward-looking statements as a result of various factors, including, without limitation, the risks described in this report and matters described in this report generally. In light of these risks and uncertainties, there can be no assurance that the forward-looking statements contained in this filing will in fact occur.

Table of Contents

RISK FACTORS

Risks Related To Our Business

We have experienced significant losses, have not generated any revenues and expect losses to continue for the foreseeable future.

We are a development-stage company. We do not have any commercialized products and have not generated any revenue since inception and do not expect to generate any revenue for the foreseeable future. We had a net loss from continuing operations of $1,898,222 and $1,318,507 for our fiscal years ended December 31, 2016 and 2015, respectively, and we have incurred a cumulative deficit of $12,893,784 million through June 30, 2017. We anticipate incurring losses through at least December 31, 2017. As a result of our recurring losses from operations and substantial accumulated deficit, our independent registered public accounting firm included an explanatory paragraph relating to our ability to continue as a going concern in its report on our audited consolidated financial statements for our fiscal year ended December 31, 2016.

We may require additional financing to expand, accelerate or sustain our current level of operations beyond our current fiscal year, and failure to obtain such financing would have a material adverse effect on our business, operating results, financial condition and prospects.

As of June 30, 2017, we had cash and cash equivalents of $442,941. We anticipate that we will remain engaged in research and product development activities through at least December 31, 2017. Based upon our current level of operations and expenditures, we believe that absent any modification or expansion of our existing research, development and testing activities, cash on hand should be sufficient to enable us to continue operations to July 2017. There is no assurance that we will be able to generate revenue and achieve profitability or secure additional financing once our current cash balance is depleted. Any significant expansion in scope or acceleration in timing of our current research and development activities, or commencement of any marketing and sales activities, will require additional funds.

If adequate funds, including proceeds, if any, from this offering are not available on reasonable terms or at all, it would result in a material adverse effect on our business, operating results, financial condition and prospects. In particular, we may be required to delay, reduce the scope of or terminate one or more of our research programs, sell rights to our CellMist™ System or other technologies or products based upon such technologies, or license the rights to such technologies or products on terms that are less favorable to us than might otherwise be available. If we raise additional funds by issuing equity or debt securities, further dilution to stockholders may result and new investors

could have rights superior to existing stockholders.

Even if financing is available to us, because we cannot currently estimate the amount of funds or time required to commercialize our technologies, we may secure less funding than is actually required to effectuate our business plan.

We cannot accurately predict the amount of funding or the time required to successfully commercialize our CellMist™ System, or any products derived therefrom. The actual cost and time required to commercialize this technology may vary significantly depending on, among other things, the results of our research and development efforts, the cost of developing, acquiring, or licensing various enabling technologies, changes in the focus and direction of our research and development programs, competitive and technological advances, the cost of filing, prosecuting, defending and enforcing claims with respect to patents, the regulatory approval process and manufacturing, marketing and other costs associated with commercialization of these technologies. Because of this uncertainty, even if financing is available to us, we may secure insufficient funding to effectuate our business plan.

Table of Contents

The success of our research and development activities is uncertain. If such efforts are not successful, we will be unable to generate revenues from our operations and we may have to cease doing business.

Commercialization of our CellMist™ System will require significant further research, development and testing as we must ascertain whether the CellMist™ System can form the basis for a commercially viable technology or product. If our research and development fails to prove commercial viability of the CellMist™ System, we may need to abandon our business model and/or cease doing business, in which case our shares may have no value and you may lose your investment. We anticipate we will remain engaged in research and development, through at least December 2017.

We currently rely on a single third party to conduct our development activities for our CellMist ™ System.

We currently rely on the services of StemCell Systems GmbH ("**StemCell Systems**") to conduct our development activities for our CellMist™ System. In the event they are unable to provide us with these services, we may need to expend a considerable amount of resources, time and money to locate another research lab which could have a material and adverse effect of our research and development activities, as well as our operating results and financial condition.

We may not be eligible to receive certain grants because of our foreign ownership.

In order to fund the ongoing research and development of our CellMist™ System we may apply for grants. In order to be eligible to receive certain of these grants, particularly those administered by the U.S. federal government, at least 50% of the outstanding shares of a company must be owned by residents of the U.S. Because our majority shareholder is not a U.S. resident, we may not be eligible to receive such grants.

The development of our CellMist ™ System is subject to the risks of failure inherent in the development of any novel technology.

Ultimately, the development and commercialization of our CellMist™ System is subject to a number of risks that are particular to the development and commercialization of any novel technology. These risks include, but are not limited to, the following:

- we may fail to develop, acquire, or license various enabling technologies that may be integral to the commercialization of the CellMist™ System (or any derivatives);
- the CellMist™ System may ultimately prove to be ineffective, unsafe or otherwise fail to receive necessary regulatory approvals;
- the CellMist™ System (or any derivatives), even if safe and effective, may be difficult to manufacture on a large scale or uneconomical to market;
- our marketing license or proprietary rights to products derived from the CellMist™ System may not be sufficient to protect our products from competitors;
- the proprietary rights of third parties may preclude us or our collaborators from making, using or marketing products utilizing the CellMist™ System; or,
- third parties may market superior, more effective, or less expensive technologies or products having comparable results to the CellMist™ System (or any derivatives).

7

Table of Contents

If we fail to manage our growth effectively, our business could be disrupted.

Our future financial performance and ability to successfully commercialize our products, of which there is no guarantee, and to compete effectively will depend, in part, on our ability to manage any future growth effectively. We expect to make significant investments to enable our future growth through, among other things, new product development, clinical trials for new indications and expansion of our marketing and sales infrastructure. Any failure to manage future growth effectively could have a material adverse effect on our business and results of operations.

We could be subject to product liability lawsuits, which could result in costly and time-consuming litigation and significant liabilities.

The development of medical device products, such as our CellMist™ System, involves an inherent risk of product liability claims and associated adverse publicity. Any products we may develop may be found to be harmful or to contain harmful substances. This exposes us to substantial risk of litigation and liability or may force us to discontinue production of certain products. There can be no assurance that we will be able to obtain or maintain insurance on reasonable terms or to otherwise protect ourselves against potential product liability claims that could impede or prevent commercialization of any products we may develop and commercialize. Furthermore, a product liability claim could damage our reputation, whether or not such claims are covered by insurance or are with or without merit. A product liability claim against us or the withdrawal of a product from the market could have a material adverse effect on our business or financial condition. Furthermore, product liability lawsuits, regardless of their success, would likely be time consuming and expensive to resolve and would divert management's time and attention, which could seriously harm our business.

If we are unable to protect effectively our intellectual property, we may not be able to operate our business and third parties may use our technology, both of which would impair our ability to compete in our markets.

Our success will depend in significant part on our ability to obtain and maintain meaningful patent protection for certain of our technologies and products throughout the world. Patent law relating to the scope of claims in the technology fields in which we will operate is still evolving. The degree of future protection for our proprietary rights is uncertain. We will rely on patents to protect a significant part of our intellectual property and to enhance our competitive position. However, our presently pending or future patent applications may not issue as patents, and any patent previously issued to us or our subsidiaries may be challenged, invalidated, held unenforceable or circumvented. Furthermore, the claims in patents that have been issued to us or our subsidiaries or that may be issued to us in the future may not be sufficiently broad to prevent third parties from producing competing products similar to our products. In addition, the laws of various foreign countries in which we plan to compete may not protect our intellectual property to the same extent as do the laws of the United States. If we fail to obtain adequate patent protection for our proprietary technology, our ability to be commercially competitive will be materially impaired.

If third parties make or file claims of intellectual property infringement against us, or otherwise seek to establish their intellectual property rights, we may have to spend time and money in response and cease some of our operations.

Third parties may claim that we are employing their proprietary technology without authorization or that we are infringing on their patents. We could incur substantial costs and diversion of management and technical personnel in defending against any of these claims. Furthermore, parties making claims against us may be able to obtain injunctive or other equitable relief which could effectively block our ability to further develop, commercialize and sell products. In the event of a successful claim of infringement, courts may order us to pay damages and obtain one or more licenses from third parties. We may not be able to obtain these licenses at a reasonable cost, if at all. Defense of any lawsuit or failure to obtain any of these licenses could prevent us from commercializing available products.

Lawsuits against us by third-parties that allege we infringe their intellectual property rights could harm our potential business and operating results.

There is considerable patent and other intellectual property activity in the industry in which we operate. We may be unaware of intellectual property rights of others that may cover some or all of our technology. Additionally, notwithstanding our receipt of a patent, a third-party may nevertheless challenge the validity of one or more claims included in the patent, which may require us to expend significant funds to defend our claims. For example, on April 4, 2017, the U.S. Patent & Trademark Office (the "**PTO**") issued to us U.S. Patent No. 9,610, 430 related to our device and method for spraying autologous skin cells. On or about April 11, 2017, we received from Avita Medical Limited ("**Avita**") a paper copy of what was labeled a Petition for *Inter Partes* Review purporting to challenge the validity of the claims in U.S. Patent No. 9,610,430 (the "**Petition**") before the Patent Trial and Appeal Board ("**PTAB**"), which is an administrative proceeding of the PTO (the "**Proceeding**"). We do not agree with the assertions set forth in the Petition and we intend to defend our intellectual property. In the event the Proceeding progresses, the PTAB may find (i) that the Petition is insufficient to establish that any such claims are unpatentable and accordingly confirm all of the claims in our U.S. Patent No. 9,610,430 or (ii) one or more claims of U.S. Patent No. 9,610,430 to be unpatentable and cancel any such claims and confirm the balance of such claims.

Table of Contents

In addition to patented technology, we rely on our unpatented proprietary technology, trade secrets, processes and know-how.

We rely on proprietary information (such as trade secrets, know-how and confidential information) to protect intellectual property that may not be patentable, or that we believe is best protected by means that do not require public disclosure. We generally seek to protect this proprietary information by entering into confidentiality agreements, or consulting, services or employment agreements that contain non-disclosure and non-use provisions with our employees, consultants, contractors, scientific advisors and third parties. However, we may fail to enter into the necessary agreements, and even if entered into, these agreements may be breached or otherwise fail to prevent disclosure, third-party infringement or misappropriation of our proprietary information, may be limited as to their term and may not provide an adequate remedy in the event of unauthorized disclosure or use of proprietary information.

We have limited control over the protection of trade secrets used by our suppliers and service providers and could lose future trade secret protection if any unauthorized disclosure of such information occurs. In addition, our proprietary information may otherwise become known or be independently developed by our competitors or other third parties. To the extent that our employees, consultants, contractors, scientific advisors and other third parties use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our and relevant third parties' proprietary rights, failure to obtain or maintain protection for our proprietary information could adversely affect our competitive business position and if third parties are able to establish that we are using their proprietary information without their permission, we may be required to obtain a license to that information, or if such a license is not available, re-design our products to avoid any such unauthorized use or temporarily delay or permanently stop manufacturing or sales of the affected products. Furthermore, laws regarding trade secret rights in certain markets where we may operate may afford little or no protection to our trade secrets.

In seeking to acquire or develop technologies, we are operating in highly competitive markets and our competitors enjoy numerous competitive advantages over us.

Our commercial success will depend on our ability to compete effectively in product development areas such as, but not limited to, safety, efficacy, ease of use, customer compliance, price, marketing and distribution. Our competitors may succeed in developing products that are more effective than any products derived from our research and development efforts or that would render such products obsolete and non-competitive. The skin care and wound care industry is characterized by intense competition, rapid product development and technological change. Most of the competition that we encounter is expected to come from companies, research institutions and universities who are researching and developing technologies and products similar to or competitive with any we may develop.

These companies enjoy numerous competitive advantages, including:

- significantly greater name recognition;
- established relations with customers;
- established distribution networks;
- more advanced technologies and product development;
- additional lines of products, and the ability to offer rebates, higher discounts or incentives to gain a competitive advantage;
- greater experience in conducting research and development, manufacturing, obtaining regulatory approval for products, and marketing approved products;
- greater financial and human resources for product development, sales and marketing, and
- the ability to endure potentially prolonged patent litigation.

As a result, we may not be able to compete effectively against these companies or their products.

Table of Contents

To the extent we are able to develop and commercialize products based upon or derived from our CellMist ™ System and underlying technology, if such products do not gain market acceptance, we may not achieve sales and market share.

Even if we are able to develop and commercialize one or more products based upon or derived from the CellMist™ System and underlying technology, of which there is no guarantee, the development of a successful market for our products may be adversely affected by a number of factors, some of which are beyond our control, including:

- customer acceptance of our products;
- obtaining third-party coverage or reimbursement for our products;
- performance and reliability of our products as compared with other alternative products;
- the ability to offer our products for sale at an attractive value and the willingness of physicians to administer our products and their acceptance as part of the medical department routine;
- the prevalence and severity of any side effects;
- the efficacy, potential advantages and timing of introduction to the market of alternative treatments; and
- our failure to develop and maintain successful relationships with health care professionals, manufacturers, distributors, and other resellers, as well as strategic partners.

Failure to achieve market acceptance for any of our products, if and when they are approved for commercial sale, will have a material adverse effect on our business, financial condition and results of operations.

We may be unsuccessful in commercializing our products due to unfavorable pricing regulations, third-party coverage and reimbursement policies or healthcare reform initiatives.

We cannot predict the pricing and reimbursement of any products we may develop and commercialize. The regulations that govern marketing approvals, pricing and reimbursement for new products vary widely from country to country. In some foreign jurisdictions, including the European Union, the pricing of medical devices and treatments is subject to governmental control. In these jurisdictions, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product candidate.

As a result, we might obtain regulatory approval for a product in a particular country, but then be subject to price regulations that delay our commercial launch of the product and negatively impact the revenue we are able to generate from the sale of the product in that country. Adverse pricing limitations may hinder our ability to recoup our investment in any products we may develop and commercialize, even after obtaining regulatory approval.

Table of Contents

Additionally, we cannot be sure that reimbursement will be available for any products we may develop and commercialize, or if reimbursement is available, what the level of reimbursement will be. Reimbursement may affect the demand for, or the price of, any product for which we obtain marketing approval. Obtaining reimbursement for any products we may develop and commercialize may be particularly difficult because of the higher prices often associated with products administered under the supervision of a physician. If reimbursement is not available or is available only at limited levels, we may not be able to successfully commercialize any products that we successfully develop. Eligibility for reimbursement does not imply that any product will be paid for in all cases or at a rate that covers our costs. Interim payments for new products, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Payment rates may vary according to the use of the product and the clinical setting in which it is used, may be based on payments allowed for lower cost products that are already reimbursed and may be incorporated into existing payments for other services.

Clinical medical device development is a lengthy and expensive process, with an uncertain outcome.

We intend to develop and commercialize pipeline products based on our CellMist™ System and underlying technology. However, before obtaining regulatory approval for the sale of for any products we may develop and commercialize, we must conduct, at our own expense, clinical studies to demonstrate that the products are safe and effective.

Preclinical and clinical testing is expensive, difficult to design and implement, can take many years to complete and is uncertain as to outcome. A failure of one or more of our clinical trials can occur at any stage of testing. We may experience numerous unforeseen events during, or as a result of, preclinical testing and the clinical trial process. Even if preclinical or clinical trials are successful, we still may be unable to commercialize the product, as success in preclinical trials, early clinical trials, or previous clinical trials, does not ensure commercial acceptance.

Similar or other events could delay or prevent our ability to complete necessary clinical trials for our pipeline products, including:

- regulators may not authorize us to conduct a clinical trial within a country or at a prospective trial site or may change the design of a study;
- delays may occur in reaching agreement on acceptable clinical trial terms with regulatory authorities or prospective sites, or obtaining institutional review board approval;
- our preclinical tests or clinical trials may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional trials or to abandon strategic projects;
- the number of patients required for our clinical trials may be larger than we anticipate, enrollment in our clinical trials may be slower or more difficult than we expect, or patients may not participate in necessary follow-up visits to obtain required data, any of which would result in significant delays in our clinical testing

process;

- our third-party contractors, such as a research institution, may fail to comply with regulatory requirements or meet their contractual obligations to us;
- we may be forced to suspend or terminate our clinical trials if the participants are being exposed, or are thought to be exposed, to unacceptable health risks or if any participant experiences an unexpected serious adverse event;
- regulators or institutional review boards may require that we hold, suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements;

Table of Contents

- undetected or concealed fraudulent activity by a clinical researcher, if discovered, could preclude the submission of clinical data prepared by that researcher, lead to the suspension or substantive scientific review of one or more of our marketing applications by regulatory agencies, and result in the recall of any approved product distributed pursuant to data determined to be fraudulent;
- the cost of our clinical trials may be significantly greater than we anticipate;
- an audit of preclinical or clinical studies by regulatory authorities may reveal noncompliance with applicable protocols or regulations, which could lead to disqualification of the results and the need to perform additional studies; and
- delays may occur in obtaining our clinical materials.

Moreover, we do not know whether preclinical tests or clinical trials will begin or be completed as planned or will need to be restructured. Significant delays could also shorten the patent protection period during which we may have the exclusive right to commercialize our products or could allow our competitors to bring products to the market before we do, impairing our ability to commercialize our products.

Development and commercialization of any products requires successful completion of the regulatory approval process, and may suffer delays or fail.

In the U.S., as well as other jurisdictions, we will be required to apply for and receive marketing authorization before we can market our products. This process can be time consuming and complicated and may result in unanticipated delays. To secure marketing authorization, an applicant generally is required to submit an application that includes the data supporting preclinical and clinical safety and efficacy as well as detailed information on the manufacturing and control of the product, proposed labeling and other additional information. Before marketing authorization is granted, regulatory authorities generally require the inspection of the manufacturing facility or facilities and quality systems (including those of third parties) at which the product candidate is manufactured and tested, as well as potential audits of the non-clinical and clinical trial sites that generated the data cited in the marketing authorization application.

We cannot predict how long the applicable regulatory authority or agency will take to grant marketing authorization or whether any such authorizations will ultimately be granted. Regulatory agencies, including the Food and Drug Administration (the "**FDA**"), have substantial discretion in the approval process, and the approval process and the requirements governing clinical trials vary from country to country. The policies of the FDA or other regulatory authorities may change or may not be explicit, and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of any products we may develop and commercialize. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the U.S., Europe or elsewhere. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and we may not achieve or sustain profitability.

Additionally, any regulatory approval that we receive may also contain requirements for potentially costly post-marketing testing and surveillance to monitor the safety and efficacy of the product candidate. Once a product is approved, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion, import, export and recordkeeping for the product will be subject to extensive and ongoing regulatory requirements. These requirements include submission of safety and other post-marketing information and reports, registration and continued compliance with good manufacturing practices for any clinical trials that we conduct post-approval.

Our product candidates may cause undesirable side effects or have other properties that could delay or prevent their regulatory approval or result in significant negative consequences following marketing approval, if any.

Undesirable side effects caused by our product candidates could cause us 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 our trials could reveal a high and unacceptable severity and prevalence of side effects. In such an event, our trials could be suspended or terminated and the FDA or comparable foreign regulatory authorities could order us to cease further development of or deny approval for our product candidates for any or all targeted indications. Any 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 our business, financial condition and prospects significantly.

Table of Contents

Additionally, if one or more of our product candidates receives marketing approval, and we 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;
- we may be required to create a medication guide outlining the risks of such side effects for distribution to patients;
- we could be sued and held liable for harm caused to patients; and
- our reputation may suffer.

We may be subject to product liability claims and we do not currently maintain product liability insurance.

The manufacture and sale of medical devices and other therapeutic products involve an inherent risk of product liability claims and associated adverse publicity. If we manage to commercialize the CellMist™ System or its underlying technology we may become subject to product liability claims or liabilities in the future, including if patients die, or suffer some other serious adverse effect whether or not such patients were predisposed to adverse outcomes.

Any product liability claims could have a material negative effect on the market acceptance and sales of our products. We currently do not maintain any product liability insurance. We do not know if we will be able to obtain product liability insurance on acceptable terms or with adequate coverage against potential liabilities. This type of insurance is expensive and may not be available on acceptable terms or at all. If we are unable to obtain or maintain sufficient insurance coverage on reasonable terms or to otherwise protect against potential product liability claims, we may be unable to continue to develop or commercialize our products or any product candidates that may receive regulatory approval in the future. A successful product liability claim brought against us in excess of our insurance coverage, if any, may require us to make substantial payments. This could adversely affect our cash position and results of operations and could increase the volatility of our stock price.

Obtaining and maintaining regulatory approval for a product candidate in one jurisdiction does not mean that we will be successful in obtaining regulatory approval for that product candidate in other jurisdictions.

Obtaining and maintaining regulatory approval for a product candidate in one jurisdiction does not guarantee that we will be able to obtain or maintain regulatory approval in any other jurisdiction, while a failure or delay in obtaining regulatory approval in one jurisdiction may have a negative effect on the regulatory approval process in others. For example, even if the FDA grants marketing approval for a product candidate, comparable regulatory authorities in foreign jurisdictions must also approve the manufacturing, marketing and promotion of the product candidate in those countries. Approval procedures vary among jurisdictions and can involve requirements and administrative review periods different from, and greater than, those in the U.S., including additional preclinical studies or clinical trials as clinical trials conducted in one jurisdiction may not be accepted by regulatory authorities in other jurisdictions. In many jurisdictions outside the U.S., a drug candidate must be approved for reimbursement before it can be approved for sale in that jurisdiction. In some cases, the price that we intend to charge for our products is also subject to approval.

Table of Contents

We may fail to obtain regulatory approval for our product candidates.

Our potential product candidates could fail to receive regulatory approval for many reasons, including one or more of the following:

- the FDA or comparable foreign regulatory authorities may disagree with the design or implementation of our clinical trials or the validation of our caregiver and patient reported outcome instruments;
- we may be unable to demonstrate to the satisfaction of the FDA or comparable foreign regulatory authorities that a product candidate is safe and effective for any of its proposed indications;
- the results of clinical trials may not meet the level of statistical significance required by the FDA or comparable foreign regulatory authorities for approval;
- we may be unable to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;
- the FDA or comparable foreign regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials;
- the data collected from clinical trials of our CellMist™ System and its underlying technology may not be sufficient to satisfy the FDA or comparable foreign regulatory authorities to support our submission or to obtain regulatory approval in the U.S. or elsewhere;
- the FDA or comparable foreign regulatory authorities may fail to approve the manufacturing processes or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and
- the approval policies or regulations of the FDA or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval.

Healthcare legislative reform measures may have a material adverse effect on our business and results of operations.

In the U.S., there have been and continue to be a number of legislative initiatives to contain healthcare costs. For example, in March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or the Health Care Reform Law, was passed, which substantially changes the way health care is financed by both governmental and private insurers, and significantly impacts the U.S. healthcare industry. The Health Care Reform Law, among other things, (i) subjects biologic products to potential competition by lower-cost biosimilars, (ii) addresses 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, (iii) increases the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program and extends the rebate program to individuals enrolled in Medicaid managed care organizations, (iv) establishes annual fees and taxes on manufacturers of certain branded prescription drugs, and (v) promotes a new Medicare Part D coverage gap discount program.

In addition, other legislative changes have been proposed and adopted in the U.S. since the Health Care Reform Law 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 up to 2% per fiscal year. On January 2, 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, or the ATRA, which, among other things, delayed for another two months the budget cuts mandated by these sequestration provisions of the Budget Control Act of 2011. On March 1, 2013, the President signed an executive order implementing sequestration, and on April 1, 2013, the 2% Medicare payment reductions went into effect. We expect 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 our product candidates or additional pricing pressures.

Table of Contents

We are subject to extensive environmental, health and safety, and other laws and regulations.

Although our business involves the controlled use of biological materials, the risk of accidental contamination or injury from these materials cannot be eliminated. If an accident, spill or release of any such chemicals or substances occurs, we could be held liable for resulting damages, including for investigation, remediation and monitoring of the contamination, including natural resource damages, the costs of which could be substantial. We are also subject to numerous environmental, health and workplace safety laws and regulations, including those governing laboratory procedures. Additional or more stringent laws and regulations affecting our operations may be adopted in the future. We may incur substantial capital costs and operating expenses and may be required to obtain consents to comply with any of these or certain other laws or regulations and the terms and conditions of any permits required pursuant to such laws and regulations, including costs to install new or updated pollution control equipment, modify our operations or perform other corrective actions at our respective facilities. In addition, fines and penalties may be imposed for noncompliance with environmental, health and safety and other laws and regulations or for the failure to have, or comply with the terms and conditions of, required environmental or other permits or consents.

We face competition from the existing standard of care and potential changes in medical practice and technology and the possibility that our competitors may develop products, treatments or procedures that are similar, more advanced, safer or more effective than ours.

The medical, biotechnology and pharmaceutical industries are intensely competitive and subject to significant technological and practice changes. We may face competition from many difference sources with respect to any products we may develop and commercialize. Possible competitors may be medical practitioners, pharmaceutical, biotechnology, medical device, and wound care companies, academic and medical institutions, governmental agencies and public and private research institutions, among others. Should any competitor's product candidates receive regulatory or marketing approval prior to ours, they may establish a strong market position and be difficult to displace, or will diminish the need for our products.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products, treatments or procedures that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any product that we may develop. Many of our current or future competitors may have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we may have. Mergers and acquisitions in the pharmaceutical, medical device, and biotechnology industries or wound care markets may result in even more resources being concentrated among a smaller number of our competitors. Other early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These companies compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

We may compete for the time and efforts of our officers and directors.

Certain of our officers and directors are also officers, directors, and employees of other companies and we may have to compete with the other companies for their time, attention and efforts. Our officers provide us their services on a part-time basis and none of our directors anticipate devoting more than approximately five (5%) percent of their working time to our matters.

Table of Contents

We maintain at-will consulting agreements with our officers that may be terminated by us or the respective officer at any time and for any reason.

We maintain at-will consulting agreements with our officers that may be terminated by us or the respective officer at any time and for any reason. If any of our officers terminate their consulting agreement it may have a material adverse effect on our business, financial condition or ability to operate.

Our growth and success depends on our ability to attract and retain additional highly qualified and skilled sales and marketing, research and development, operational, managerial and finance personnel.

Our growth and success depends on our ability to attract and retain additional highly qualified and skilled sales and marketing, research and development, operational, managerial and finance personnel. Competition for skilled personnel is intense and the unexpected loss of an employee with a particular skill could materially adversely affect our operations until a replacement can be found and trained. If we cannot attract and retain skilled scientific and operational personnel, as required, for our research and development and manufacturing operations on acceptable terms, we may not be able to develop and commercialize any products we may develop and commercialize. Further, any failure to effectively integrate new personnel could prevent us from successfully growing our company.

Risks Related To Ownership of Our Common Stock

The trading price of our common stock historically has been volatile and may not reflect its actual value.

The trading price of our common stock has, from time to time, fluctuated widely and in the future may be subject to similar fluctuations. The trading price may be affected by a number of factors including the risk factors set forth herein, as well as our operating results, financial condition, general economic our control. In recent years, broad stock market indices in general, and smaller capitalization companies in particular, have experienced substantial price fluctuations. In a volatile market, we may experience wide fluctuations in the market price of our common stock. These fluctuations may have a negative effect on the market price of our common stock. In addition, the sale of our common stock into the public market upon the effectiveness of this registration statement could put downward pressure on the trading price of our common stock.

The sale by our stockholders of restricted shares, either pursuant to a resale prospectus or Rule 144, may adversely affect our ability to raise the funds we will require to effectuate our business plan.

As of the date of this prospectus we had 75,225,418 shares issued and outstanding, of which 58,324,675 are deemed "restricted securities" within the meaning of Rule 144. The possibility that substantial amounts of our common stock may be sold into the public market, either under Rule 144, or pursuant to a resale registration statement, may adversely affect prevailing market prices for the common stock and could impair our ability to raise capital in the future through the sale of equity securities because of the perception that future resales could decrease our stock price and because of the availability of resale shares to those interested in investing in our common stock.

Our common stock is a penny stock and is not traded on a national securities exchange; therefore you may find it difficult to sell shares of our common stock you may acquire in this offering.

Our common stock is quoted on the OTCQB. The OTCQB is viewed by most investors as a less desirable, and less liquid, marketplace. As a result, an investor may find it more difficult to purchase, dispose of or obtain accurate quotations as to the value of our common stock.

Additionally, our common stock is subject to regulations of the SEC applicable to "penny stock." Penny stock includes any non-NASDAQ equity security that has a market price of less than $5.00 per share, subject to certain exceptions. Rules 15g-1 through 15g-9 under the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), imposes certain sales practice requirements on broker-dealers who sell our common stock to persons other than established customers and "accredited investors" (as defined in Rule 501(a) of the Securities Act). For transactions covered by this rule, a broker-dealer must make a special suitability determination for the purchaser and have received the purchaser's written consent to the transaction prior to the sale. This rule adversely affects the ability of broker-dealers to sell our common stock and purchasers of our common stock to sell their shares of our common stock.

Table of Contents

In addition, the penny stock regulations require that prior to any non-exempt buy/sell transaction in a penny stock, a disclosure schedule proscribed by the SEC relating to the penny stock market must be delivered by a broker-dealer to the purchaser of such penny stock. This disclosure must include the amount of commissions payable to both the broker-dealer and the registered representative and current price quotations for our common stock. The regulations also require that monthly statements be sent to holders of penny stock that disclose recent price information for the penny stock and information of the limited market for penny stocks. These requirements adversely affect the market liquidity of our common stock.

Although our common stock is currently quoted on the OTCQB, if we do not meet or comply with the recent rule changes to the OTCQB our shares may be delisted from the OTCQB and would likely be traded on the OTC Pink (aka the Pink Sheets).

Although our common stock is currently quoted on the OTCQB, effective as of May 1, 2014, the OTC Markets Group Inc. changed its rules for OTCQB eligibility. To be eligible for OTCQB, companies will be required to:

- meet a minimum bid price test of $0.01. Securities that do not meet the minimum bid price test will be downgraded to OTC Pink;
- submit an application to OTCQB and pay an application and annual fee; and
- submit an OTCQB Annual Certification confirming the Company Profile displayed on www.otcmarkets.com is current and complete and providing additional information on officers, directors, and controlling shareholders.

In the event we do not submit an annual certification and pay the annual fee our common stock will likely be downgraded to the OTC Pink, which could adversely affect the market liquidity of our common stock.

Kalen Capital Corporation ("KCC"), a private corporation solely owned by Mr. Harmel Rayat, beneficially owns approximately 66% of our issued and outstanding stock. This ownership interest may permit KCC to influence significant corporate decisions.

As of May 11, 2017, KCC, a private corporation solely owned by Harmel S. Rayat, a former officer and director of ours, beneficially owned approximately 51,874,485 shares (including shares issuable upon exercise of outstanding warrants and convertible notes), or approximately 69%, of our outstanding common stock. As a result, Mr. Rayat may be able to exercise significant influence over matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions, and will have significant control over our management

and policies. Mr. Rayat's interests may be different from yours. For example, he may support proposals and actions with which you may disagree or which are not in your interest. This concentration of ownership could delay or prevent a change in control of our company or otherwise discourage a potential acquirer from attempting to obtain control of our company, which in turn could reduce the price of our common stock. In addition, Mr. Rayat could use his voting influence to maintain our existing management and directors in office, or support or reject other management and board proposals that are subject to stockholder approval, such as the adoption of employee stock plans and significant unregistered financing transactions.

Table of Contents

There are convertible loans in the aggregate principal amount of $1,145,000 outstanding that we do not currently have the funds to repay.

On September 9, 2016, we entered into a loan agreement (the "**KCC Loan Agreement**") with KCC pursuant to which KCC agreed to loan us up to $900,000, of which we received $700,000, at an annual interest rate of 7% per year, compounded quarterly and a maturity date of December 31, 2017, which was evidenced by a convertible promissory note convertible at the lesser of (i) $1.54 or (ii) a twenty percent (20%) discount to the average closing price of our common stock as quoted on the OTCQB for the five (5) days prior to the date on which the holder elects to convert the note, subject to a floor price of $1.23. On February 23, 2017, we entered into loan agreements with KCC and a member of our Board (the "**February Loan Agreements**") pursuant to which we received $420,000, at an annual interest rate of 7% per year, compounded quarterly and a maturity date of February 23, 2018, which was evidenced by convertible promissory notes convertible at the lesser of (i) $3.45 or (ii) a twenty percent (20%) discount to the average closing price of our common stock as quoted on the OTCQB for the five (5) days prior to the date on which the holder elects to convert the note, subject to a floor price of $2.76. On March 6, 2017, we entered into a loan agreement with an investor (the "**March Loan Agreement**") pursuant to which we received $25,000, at an annual interest rate of 7% per year, compounded quarterly and a maturity date of February 23, 2018, which was evidenced by convertible promissory note. We do not currently have the funds to repay these loans.

There are options to purchase shares of our common stock currently outstanding.

As of the date of this prospectus we have granted options to purchase shares of our common stock to various persons and entities, under which we could be obligated to issue up to 545,000 shares of our common stock. The exercise prices of these options range from $0.80 to $ 4.20 per share. If issued, the shares underlying these options would increase the number of shares of our common stock currently outstanding and dilute the holdings and voting rights of our then-existing stockholders.

There are warrants to purchase shares of our common stock currently outstanding.

As of the date of this prospectus we have issued warrants to purchase shares of our common stock to various persons and entities, under which we could be obligated to issue up to 2,343,401 shares of common stock. The exercise prices of these warrants are: (1) $0.35 per share for the 720,000 Series A Warrant through July 12, 2019. The Series A Warrant vests in equal installments of 240,000 on July 12, 2014-2018 and expires on July 12, 2019; (2) $1.10 for the 910,000 shares issuable upon exercise of the Series D Warrants through June 5, 2020; (3) the lesser of (i) $1.54 or (ii) a twenty percent (20%) discount to the average closing price of our common stock as quoted on the OTCQB for the five (5) days prior to the date on which the holder elects to exercise the warrant for the 584,416 shares issuable upon exercise of the Series E Warrant. the Series E Warrant may not be exercised prior to September 9, 2017 and expires on September 9, 2021; (4) the lesser of (i) $3.45 or (ii) a twenty percent (20%) discount to the average closing price of

our common stock as quoted on the OTCQB for the five (5) days prior to the date on which the holder elects to exercise the warrant for the 128,985 shares issuable upon exercise of the Series F Warrants. The Series F Warrants may be exercised beginning on the one month anniversary of their issuance; 121,739 Series F Warrants expire on February 23, 2022 and the remaining 7,246 expire on March 9, 2022. If issued, the shares underlying the warrants would increase the number of shares of our common stock currently outstanding and dilute the holdings and voting rights of our then-existing stockholders. Each of the warrants may be exercised on a "cashless basis" using the formula set forth therein.

We may issue preferred stock which may have greater rights than our common stock.

Our Articles of Incorporation allow our Board of Directors (the "**Board**") to issue up to 10,000,000 shares of preferred stock. Currently, no shares of preferred stock are issued and outstanding. However, we can issue shares of our preferred stock in one or more series and can set the terms of the preferred stock without seeking any further approval from the holders of our common stock. Any preferred stock that we issue may rank ahead of our common stock in terms of dividend priority or liquidation premiums and may have greater voting rights than our common stock. In addition, such preferred stock may contain provisions allowing it to be converted into shares of common stock, which could dilute the value of our common stock to then current stockholders and could adversely affect the market price, if any, of our common stock.

Table of Contents

We have entered into a registration rights agreement (the "Registration Rights Agreement)" with KCC requiring us to register all the shares owned by KCC as of November 29, 2013 (the "11/29 Financing"), including all shares issuable upon conversion of any warrants then owned by KCC. If we fail to timely file the registration statements we will be obligated to issue additional shares of our common stock to KCC.

As part of the 11/29 Financing, we entered into the Registration Rights Agreement with KCC pursuant to which we agreed to file such number of registration statements as required to register for resale with the SEC all the shares owned by KCC as of November 29, 2013, including all shares issuable upon conversion of any warrants then owned by KCC. The first registration statement that we are obligated to file covers the shares and warrants issued to KCC as part of the 11/29 Financing. If we fail to timely file the registration statements we will be obligated to issue additional shares of our common stock to KCC. In the event the we fail to file a registration statement in the time period required, we will issue to KCC additional shares of our common stock equal to 5% of the shares of our common stock that were to be registered for every thirty day period for which we fail to file such registration statement, subject to proration for any portion of such thirty day period and up to a maximum number of shares of our common stock equal to 25% of the number of shares of our common stock that were to be registered. Additionally, in the event we fail to cause a registration statement to be declared effective within ninety days from the date of filing, we will issue to KCC additional shares of our common stock equal to 2.5% of the shares of our common stock that were to be registered for every thirty day period for which we fail to cause the SEC to declare such registration statement effective, subject to proration for any portion of such thirty day period and up to a maximum number of shares of our common stock equal to 10% of the number of shares of common stock included in such registration statement. We timely filed the initial registration statement that we were required to file on behalf of KCC.

Our compliance with changing laws and rules regarding corporate governance and public disclosure may result in additional expenses to us which, in turn, may adversely affect our ability to continue our operations.

Keeping abreast of, and in compliance with, changing laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002, new SEC regulations and, in the event we are ever approved for listing on a registered national exchange, such exchange's rules, will require an increased amount of management attention and external resources. We intend to continue to invest all reasonably necessary resources to comply with evolving standards, which may result in increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities. Our failure to adequately comply with any of these laws, regulations, standards or rules may result in substantial fines or other penalties and could have an adverse impact on our ongoing operations.

Because we do not intend to pay dividends for the foreseeable future you should not purchase our shares if you are seeking dividend income.

We currently intend to retain future earnings, if any, to support the development and expansion of our business and do not anticipate paying cash dividends in the foreseeable future. Our payment of any future dividends will be at the discretion of our Board after taking into account various factors, including but not limited to our financial condition, operating results, cash needs, growth plans and the terms of any credit agreements that we may be a party to at the time. Accordingly, investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize their investment. Investors seeking cash dividends should not purchase the shares offered by us pursuant to this prospectus.

Table of Contents

ABOUT OUR COMPANY

We are a development-stage company focusing on the acquisition, development and commercialization of autologous (using a patient's own cells) cellular therapies for medical and aesthetic applications. On July 12, 2013, we, through our wholly owned subsidiary, RenovaCare Sciences Corp., completed the acquisition of our flagship CellMist™ System along with associated United States patent applications and two foreign patent applications, the first of which was filed on August 23, 2007 (DE 10 2007 040 252.1) and the second of which was filed on April 27, 2011 (DE 10 2011 100 450.9), both of which have been granted. One of the US patent applications was granted to us on November 29, 2016 (Patent No. US 9,505,000) and the other patent application was granted to us on April 4, 2017 (Patent No. US 9,610,430). In the case of U.S. patents, a typical utility patent term is 20 years from the date on which the application for the patent was filed in the United States or, if the application contains a specific reference to an earlier filed application or applications, from the date on which the earliest such application was filed. Patents filed outside of the U.S. have a patent term typically running 20 years from the date of first filing, but which are determined by the law of the country in which they issue. Patent term may be affected by events such as maintenance (or annuity) fee payment, terminal or statutory disclaimer, post-grant proceedings, patent term adjustment, and/or patent term extension.

The development of our CellMist™ System is in the early stage and we anticipate that we will be required to expend significant time and resources to further develop our technology and determine whether a commercially viable product can be developed. Research and development of new technologies involves a high degree of risk and there is no assurance that our development activities will result in a commercially viable product. The long-term profitability of our operations will be, in part, directly related to the cost and success of our development programs, which may be affected by a number of factors.

Our common stock is traded on the OTCQB under the symbol "**RCAR**." On October 13, 2017, the closing price of our common stock, as reported on the OTCQB was $3.10 per share

Additional information regarding our company, including our audited financial statements and descriptions of our business, is contained in the documents incorporated by reference in this prospectus. See "**Information Incorporated by Reference**" beginning on page 36 and "**Where You Can Find Additional Information**" on page 36.

USE OF PROCEEDS

Unless otherwise indicated in a prospectus supplement, we anticipate that the net proceeds from our sale of any securities will be used to fund our clinical trial program(s), for other research and development activities and for

general corporate purposes, which may include capital expenditures and funding our working capital needs. We expect from time to time to evaluate the acquisition of businesses, products and technologies for which a portion of the net proceeds may be used, although we currently are not planning or negotiating any such transactions. Pending such uses, we may invest the net proceeds in investment grade interest-bearing securities.

The amounts actually expended for each purpose may vary significantly depending upon numerous factors, including the amount and timing of the proceeds from this offering and progress with our clinical trial program(s). Expenditures will also depend upon the establishment of collaborative arrangements with other companies, the availability of additional financing and other factors. Investors will be relying on the judgment of our management regarding the application of the proceeds of any sale of securities.

Table of Contents

THE SECURITIES WE MAY OFFER

We may offer shares of our common stock, preferred stock, warrants to purchase common stock and/or preferred stock, subscription rights to purchase preferred stock, common stock and/or other securities, stock purchase contracts to purchase shares of our common stock and/or preferred stock and units, up to a total aggregate offering price of $25,000,000 from time to time in one or more offerings under this prospectus, together with any applicable prospectus supplement and any related free writing prospectus, at prices and on terms to be determined by market conditions at the time of the relevant offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

- designation or classification;
- aggregate principal amount or aggregate offering price;
- maturity;
- discount, if any;
- rates and times of payment of interest or dividends, if any;
- redemption, conversion, exchange or sinking fund terms, if any;
- conversion or exchange prices or rates, if any, and, if applicable, any provisions for changes to or adjustments in the conversion or exchange prices or rates and in the securities or other property receivable upon conversion or exchange;
- ranking;
- restrictive covenants, if any;
- voting or other rights, if any; and
- important U.S. federal income tax considerations.

The prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change information contained in this prospectus or in documents we have incorporated by reference. However, no prospectus supplement or free writing prospectus will offer a security that is not registered and described in this prospectus at the time of the effectiveness of the registration statement of which this prospectus is a part.

Table of Contents

This prospectus may not be used to consummate a sale of securities unless it is accompanied by a prospectus supplement.

We may offer and sell, at any time and from time to time:

- shares of our common stock;
- shares of our preferred stock;
- warrants to purchase shares of our common stock and/or preferred stock;
- subscription rights to purchase any of the foregoing securities;
- stock purchase contracts to purchase any of the foregoing securities;
- units consisting of a combination of the foregoing securities; and
- any combination of these securities.

We may sell the securities directly to investors or through underwriters, dealers or agents. We, and our underwriters or agents, reserve the right to accept or reject all or part of any proposed purchase of securities. If we do offer securities through underwriters or agents, we will include in the applicable prospectus supplement:

- the names of those underwriters or agents;
- applicable fees, discounts and commissions to be paid to them;
- details regarding over-allotment options, if any; and
- the estimated net proceeds to us.

22

Table of Contents

DESCRIPTION OF OUR CAPITAL STOCK

General

The following description of our common stock and preferred stock, together with the additional information we include in any applicable prospectus supplement or in any free writing prospectuses we have authorized for use in connection with a specific offering, summarizes some of the terms and provisions of the shares of our common stock and preferred stock that we may offer under this prospectus. These summary descriptions of our common stock and preferred stock are not meant to be complete descriptions of each security. For the complete terms of our common stock and preferred stock, please refer to our articles of incorporation, as may be amended from time to time, any certificates of designation for our preferred stock that may be authorized from time to time, and our bylaws, as amended from time to time. The Nevada Revised Statutes may also affect the terms of these securities. While the terms we have summarized below will apply generally to any future common stock or preferred stock that we may offer under this prospectus, we will describe the specific terms of any series of these securities in more detail in the applicable prospectus supplement. The applicable prospectus supplement for a particular offering of our common stock or preferred stock may specify different or additional terms.

As of the date of this prospectus our authorized capital stock consists of 500,000,000 shares of common stock having a par value of $0.00001 per share, of which there were 74,650,675 shares are issued and outstanding as of such date, and 10,000,000 shares of preferred stock having a par value of $0.0001 per share, of which there were no shares issued and outstanding as of such date. As of the date of this prospectus, the outstanding shares of our common stock were held by approximately 357 holders of record. The actual number of stockholders is greater than this number of record holders and includes beneficial owners of our common stock whose shares are held in street name by brokers and other nominees.

Common Stock

Voting Rights

Each share of common stock entitles the holder to one vote on all matters submitted to a vote of the stockholders including the election of directors. According to our bylaws, if a quorum is present, action on a matter by the stockholders is approved if the votes cast by the stockholders favoring the action exceed the votes cast opposing the action, unless the vote of a greater number of affirmative votes is required by statute or the articles of incorporation, in which case such greater number of votes shall be required. Our bylaws provide that a majority of the votes entitled to be cast on a matter by the stockholders constitutes a quorum of the stockholders for action on that matter. Our bylaws

also provide that any action required or permitted to be taken at a meeting of the stockholders may be taken without a meeting, if one or more written consents setting forth the action so taken shall be signed, either manually or in facsimile, by stockholders holding at least a majority of the votes entitled to be cast at a meeting, unless the vote of a greater number of affirmative votes is required by statute or the articles of incorporation, in which case the consent of the stockholders holding such greater number of votes shall be required.

The holders of our common stock do not have cumulative voting rights, which means that the holders of more than 50% of our outstanding common stock, voting for the election of directors, can elect all of the directors to be elected, if they so choose. In such event, the holders of the remaining shares will not be able to elect any of our directors.

Table of Contents

Dividend Rights

The holders of our common stock are entitled to receive the dividends as may be declared by our board of directors out of funds legally available for dividends. Our board of directors is not obligated to declare a dividend. Any future dividends will be subject to the discretion of our board of directors and will depend upon, among other things, future earnings, the operating and financial condition of our company, its capital requirements, general business conditions and other pertinent factors. We have not paid any dividends since our inception and we do not anticipate that dividends will be paid in the foreseeable future.

Miscellaneous Rights and Provisions

In the event of our liquidation or dissolution, whether voluntary or involuntary, each share of our common stock is entitled to share ratably in any assets available for distribution to holders of our common stock after satisfaction of all liabilities.

Our common stock is not convertible or redeemable and has no preemptive, subscription or conversion rights. There are no conversions, redemption, sinking fund or similar provisions regarding our common stock.

Our common stock, after the fixed consideration thereof has been paid or performed, is not subject to assessment, and the holders of our common stock are not individually liable for the debts and liabilities of our company.

Our bylaws provide that our bylaws may be amended or repealed, or new bylaws may be adopted, by the affirmative vote of a majority of the board of directors at any regular or special meeting of the board, unless the articles of incorporation or statute reserves this power to the stockholders.

Preferred Stock

Our board of directors is authorized, subject to the limitations prescribed in our articles of incorporation and Nevada law, to provide for the issuance of shares of blank check preferred stock in series, and to establish from time to time the number of shares to be included in each such series, and to fix the designation, powers, preferences and rights of the shares of each such series and the qualifications, limitations and restrictions thereof. The authority of our board of

directors with respect to each series of preferred stock includes, but is not limited to, the rights to determine the following:

- the number of shares constituting that series of preferred stock and the distinctive designation of that series, which may be a distinguishing number, letter or title;
- the dividend rate on the shares of that series of preferred stock, whether dividends will be cumulative, and if so, from which date(s), and the relative rights of priority, if any, of payment of dividends on shares of that series;
- whether that series of preferred stock will have voting rights, in addition to the voting rights provided by law, and, if so, the terms of such voting rights;
- whether that series of preferred stock will have conversion privileges and, if so, the terms and conditions of such conversion, including provision for adjustment of the conversion rate in such events as the Board of Directors determines;

Table of Contents

- whether or not the shares of that series of preferred stock will be redeemable and, if so, the terms and conditions of such redemption, including the date or date upon or after which they are redeemable, and the amount per share payable in case of redemption, which amount may vary under different conditions and at different redemption dates;

- whether that series of preferred stock will have a sinking fund for the redemption or purchase of shares of that series and, if so, the terms and amount of such sinking fund;

the rights of the shares of that series of preferred stock in the event of voluntary or involuntary liquidation, dissolution or winding up of the Corporation, and the relative rights of priority, if any, of payment of shares of that series; and

- any other relative rights, preferences and limitations of that series of preferred stock.

Our board of directors may designate and issue series of our preferred stock with dividend, liquidation, conversion, voting or other rights that may be superior to those of our common stock. The effects of the issuance of preferred stock upon holders of our common stock may include, among other things: (1) a preference in the payment of dividends to holders of preferred stock, which may restrict our ability to declare dividends on our common stock; (2) dilution of voting power if holders of preferred stock are given voting rights; (3) dilution of equity interests and voting power if the preferred stock is convertible, and converted into, common stock; or (4) a preference in payments upon liquidation to holders of preferred stock, which may limit liquidation payments on our common stock.

We will fix the designations, voting powers, preferences and rights of the preferred stock of each series we issue under this prospectus, as well as the qualifications, limitations or restrictions thereof, in the certificate of designation relating to that series. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of any certificate of designation that contains the terms of the series of preferred stock we are offering. We will describe in the applicable prospectus supplement the terms of the series of preferred stock being offered.

Anti-Takeover Provisions

Some features of the Nevada Revised Statutes, which are further described below, may have the effect of deterring third parties from making takeover bids for control of our company or may be used to hinder or delay a takeover bid. This would decrease the chance that our stockholders would realize a premium over market price for their shares of common stock as a result of a takeover bid.

Acquisition of Controlling Interest

The Nevada Revised Statutes contain provisions governing acquisition of a controlling interest of a Nevada corporation. These provisions provide generally that any person or entity that acquires a certain percentage of the outstanding voting shares of a Nevada corporation may be denied voting rights with respect to the acquired shares, unless the holders of a majority of the voting power of the corporation, excluding shares as to which any of such acquiring person or entity, an officer or a director of the corporation, or an employee of the corporation exercises voting rights, elect to restore such voting rights in whole or in part. These provisions apply whenever a person or entity acquires shares that, but for the operation of these provisions, would bring voting power of such person or entity in the election of directors within any of the following three ranges:

- 20% or more but less than 33 1/3%;
- 33 1/3% or more but less than or equal to 50%; or
- more than 50%.

The stockholders or board of directors of a corporation may elect to exempt the stock of the corporation from these provisions through adoption of a provision to that effect in the articles of incorporation or bylaws of the corporation. Our articles of incorporation and bylaws do not exempt our common stock from these provisions.

Table of Contents

These provisions are applicable only to a Nevada corporation, which:

- has 200 or more stockholders of record, at least 100 of whom have addresses in Nevada appearing on the stock ledger of the corporation; and

- does business in Nevada directly or through an affiliated corporation.

At this time, we do not have 100 stockholders of record who have addresses in Nevada appearing on the stock ledger of our company, nor do we believe that we do business in Nevada directly or through an affiliated corporation. Therefore, we believe that these provisions do not apply to acquisitions of our shares and will not until such time as these requirements have been met. At such time as they may apply to us, these provisions may discourage companies or persons interested in acquiring a significant interest in or control of our company, regardless of whether such acquisition may be in the interest of our stockholders.

Combination with Interested Stockholder

The Nevada Revised Statutes contain provisions governing combination of a Nevada corporation that has 200 or more stockholders of record with an interested stockholder. As of the date of this prospectus we had approximately 357 stockholders of record. Therefore, these provisions apply to us as of such date.

A corporation affected by these provisions may not engage in a combination within three years after the interested stockholder acquires his, her or its shares, unless the combination or purchase is approved by the board of directors before the interested stockholder acquires such shares. Generally, if approval is not obtained, then after the expiration of the three-year period, the business combination may be consummated with the approval of the board of directors before the person became an interested stockholder or a majority of the voting power held by disinterested stockholders, or if the consideration to be received per share by disinterested stockholders is at least equal to the highest of:

- the highest price per share paid by the interested stockholder within the three years immediately preceding the date of the announcement of the combination or within three years immediately before, or in the transaction in which he, she or it became an interested stockholder, whichever is higher;

- the market value per share on the date of announcement of the combination or the date the person became an interested stockholder, whichever is higher; or

- if higher for the holders of preferred stock, the highest liquidation value of the preferred stock, if any.

Generally, these provisions define an interested stockholder as a person who is the beneficial owner, directly or indirectly, of 10% or more of the voting power of the outstanding voting shares of a corporation. Generally, these provisions define combination to include any merger or consolidation with an interested stockholder, or any sale, lease, exchange, mortgage, pledge, transfer or other disposition, in one transaction or a series of transactions, with an interested stockholder of assets of the corporation having:

- an aggregate market value equal to 5% or more of the aggregate market value of the assets of the corporation;

- an aggregate market value equal to 5% or more of the aggregate market value of all outstanding shares of the corporation; or

- representing 10% or more of the earning power or net income of the corporation.

Table of Contents

Articles of Incorporation and Bylaws

Pursuant to our Articles of Incorporation, the existence of authorized but unissued common stock and undesignated preferred stock may enable our board of directors to make more difficult or to discourage an attempt to obtain control of our Company by means of a merger, tender offer, proxy contest or otherwise, and thereby to protect the continuity of management. If, in the due exercise of its fiduciary obligations, the board of directors were to determine that a takeover proposal was not in our best interest, such shares could be issued by the board of directors without stockholder approval in one or more transactions that might prevent or render more difficult or costly the completion of the takeover transaction by diluting the voting or other rights of the proposed acquirer or insurgent stockholder group, by putting a substantial voting block in institutional or other hands that might undertake to support the position of the incumbent board of directors, by effecting an acquisition that might complicate or preclude the takeover, or otherwise.

In addition, our Articles of Incorporation grants our board of directors broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance also may adversely affect the rights and powers, including voting rights, of those holders and may have the effect of delaying, deterring or preventing a change in control of our Company.

Registration Rights Agreements

As part of the a private placement we completed on November 29, 2013 (the "**11/29 Financing**"), with Kalen Capital Corporation ("**KCC**"), a private corporation wholly owned by Harmel S. Rayat, a former officer and director of ours and the Company's majority stockholder, we entered into a registration rights agreement with KCC pursuant to which we agreed to file such number of registration statements as required to register for resale with the SEC all the shares owned by KCC as of November 29, 2013, including all shares issuable upon conversion of any warrants then owned by KCC. The first registration statement that we are obligated to file covers the shares and warrants issued to KCC as part of the 11/29 Financing. If we fail to timely file the registration statements we will be obligated to issue additional shares of our common stock to KCC. In the event the we fail to file a registration statement in the time period required, we will issue to KCC additional shares of our common stock equal to 5% of the shares of our common stock that were to be registered for every thirty day period for which we fail to file such registration statement, subject to proration for any portion of such thirty day period and up to a maximum number of shares of our common stock equal to 25% of the number of shares of our common stock that were to be registered. Additionally, in the event we fail to cause a registration statement to be declared effective within ninety days from the date of filing, we will issue to KCC additional shares of our common stock equal to 2.5% of the shares of our common stock that were to be registered for every thirty day period for which we fail to cause the SEC to declare such registration statement effective, subject to proration for any portion of such thirty day period and up to a maximum number of shares of our common stock equal to 10% of the number of shares of common stock included in such registration statement. We timely filed the initial registration statement that we were required to file on behalf of KCC.

Per the September, February and March Loan Agreements (as defined below), we have provided the investors registration rights for all shares issued upon conversion of the respective notes and exercise of the warrants issued pursuant to the loan agreements beginning on the first anniversary of the respective loan agreement.

Currently Outstanding Debt

On September 9, 2016, we entered into the Loan Agreement with KCC pursuant to which KCC agreed to loan us up to $900,000 at an annual interest rate of 7% per year, compounded quarterly. KCC provided an initial loan in the amount of $700,000, which was evidenced by a convertible promissory note (the "**Note**"); the remaining $200,000 may be loaned prior to December 31, 2017, upon the mutual agreement of the Company and KCC. The Note, including any interest due thereon, may be prepaid at any time without penalty. The Note matures on December 31, 2017, and, beginning on the first anniversary of the Note, can be converted, at KCC's sole discretion, into shares of our common stock at conversion rate equal to the lesser of: (i) $1.54, the closing price of our common stock on the day prior to the issuance of the Note or (ii) a 20% discount to the average closing price of our common stock for the five days prior to the date on which KCC elects to convert the Note.

Table of Contents

On February 23, 2017, we entered into the February Loan Agreements with KCC and Joseph Sierchio, a member of our Board, pursuant to which we borrowed an aggregate of $420,000 at an annual interest rate of 7% per year, compounded quarterly, which was evidenced by the February Notes. The February Notes mature on February 23, 2018, and, beginning on the one month anniversary, the February Notes can be converted, at the holders' sole discretion, into shares of our common stock at conversion rate equal to the lesser of: (i) $3.45, the closing price of our common stock on the day prior to the issuance of the Note or (ii) a 20% discount to the average closing price of our common stock for the five days prior to the date on which the holders elect to convert the February Notes, subject to a floor price of $2.76.

On March 9, 2017, we entered into the March Loan Agreement with an investor, pursuant to which we borrowed $25,000 at an annual interest rate of 7% per year, compounded quarterly, which was evidenced by a convertible promissory note (the "**March Note**"). The March Note matures on February 23, 2018, and, beginning on the one month anniversary, the March Note can be converted, at the holders' sole discretion, into shares of our common stock at conversion rate equal to the lesser of: (i) $3.45, or (ii) a 20% discount to the average closing price of our common stock for the five days prior to the date on which the holder elect to convert the March Note, subject to a floor price of $2.76.

Additional information regarding our currently outstanding debt, is contained in the documents incorporated by reference in this prospectus. See "Information Incorporated by Reference" beginning on page 36 and "Where You Can Find Additional Information" on page 36.

Incentive Plans

We have filed a Form S-8 registration statement under the Securities Act to register shares of our common stock issued or reserved for issuance under the 2013 Long-Term Stock Plan (the "**2013 Plan**"). The Form S-8 registration statement became effective immediately upon filing, and shares covered by that registration statement are eligible for sale in the public markets, subject to vesting restrictions and Rule 144 limitations applicable to affiliates. For a more complete discussion of our 2013 Plan, see the section titled "Executive Compensation – Long-Term Incentive Plans" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, filed with the SEC on March 28, 2017.

On June 20, 2013, our Board adopted the 2013 Plan and on November 15, 2013, a stockholder owning a majority of our issued and outstanding stock approved adoption to the 2013 Plan. Pursuant to the terms of the 2013 Plan, an aggregate of 20,000,000 shares of our common stock are reserved for issuance to our officers, directors, employees and consultants in order to attract and hire key technical personnel and management. As of the date of this prospectus there are options to purchase a total of 445,000 shares of common stock, of which 365,000 are currently exercisable, issued under the 2013 Plan.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Worldwide Stock Transfer, LLC, One University Plaza, Suite 505, Hackensack, NJ 07601, and its telephone number is (201) 820-2008.

Quotation of Common Stock

Our common stock is presently quoted for trading under the symbol "**RCAR**" on the OTCQB; none of our other securities are currently quoted or listed on any securities market or other exchange. The applicable prospectus supplement will contain information, where applicable, as to any other quotation or listing, if any, on the OTCQB or any securities market or other exchange of any other securities covered by such prospectus supplement.

Table of Contents

DESCRIPTION OF WARRANTS

The following description, together with the additional information we include in any applicable prospectus supplement or in any free writing prospectuses we have authorized for use in connection with a specific offering, summarizes some of the terms and other provisions of the warrants to purchase our common stock and/or preferred stock that we may offer under this prospectus. We may issue warrants in one or more series independently or together with other securities. Each warrant will entitle the holder to purchase for cash a number of shares of our common stock and/or preferred stock at the exercise price as will in each case be described in, or can be determined from, the applicable prospectus supplement relating to the offered warrants. We will issue warrants under one or more warrant agreements between us and a warrant agent that we will name in the prospectus supplement.

This summary description of some of the terms and other provisions of the warrants that may be offered under this prospectus is not complete and is qualified in its entirety by reference to the form of warrant and/or the warrant agreement and warrant certificate and any supplemental agreements applicable to a particular series of warrants that we may offer under this prospectus. We will file with the SEC the form of warrant and/or the warrant agreement and warrant certificate, as applicable, that contain the terms of the particular series of warrants we are offering, and any supplemental agreements, before the issuance of such warrants. The following summary description of some of the terms and other provisions of the warrants are subject to, and qualified in their entirety by reference to, all the provisions of the form of warrant and/or the warrant agreement and warrant certificate, as applicable, and any supplemental agreements applicable to a particular series of warrants that we may offer under this prospectus.

While the terms we have summarized below will apply generally to any warrants that we may offer under this prospectus, we will describe the particular terms of any series of offered warrants in more detail in the applicable prospectus supplement. The following description of warrants will apply to the warrants offered under this prospectus unless we provide otherwise in the applicable prospectus supplement. The applicable prospectus supplement for a particular series of warrants may specify different or additional terms.

We urge you to read the applicable prospectus supplement related to the particular series of warrants that we may offer under this prospectus, as well as any related free writing prospectuses, and the complete form of warrant and/or the warrant agreement and warrant certificate, as applicable, and any supplemental agreements, that contain the terms of the warrants.

The applicable prospectus supplement relating to a series of warrants offered under this prospectus will describe the following terms, where applicable, of such offered warrants:

- the offering price and aggregate number of warrants offered;
- the currency for which the warrants may be purchased;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreements and the warrants;
- the terms of any rights to redeem or call the warrants;
- the terms of any right of ours to accelerate the exercisability of the warrants;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
- the dates on which the right to exercise the warrants will commence and expire;
- the manner in which the warrant agreements and warrants may be modified;

Table of Contents

- where the warrant certificates may be transferred and exchanged;

- the date, if any, on and after which the warrants and the related shares of common stock or other securities will be separately transferable;

- the terms of the securities issuable upon exercise of the warrants; and

- any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

The applicable prospectus supplement relating to a series of warrants offered under this prospectus may also include, if applicable, a discussion of certain U.S. federal income tax and ERISA considerations.

Each warrant will entitle the holder to purchase common stock and/or preferred stock as specified in the applicable prospectus supplement and warrant agreement at the exercise price set forth in, or calculable as set forth in, the applicable prospectus supplement and warrant agreement. The warrants may be exercised as set forth in the prospectus supplement and warrant agreement. Warrants will be exercisable for U.S. dollars only. Unless we otherwise specify in the applicable prospectus supplement and warrant agreement, warrants may be exercised at any time up to the close of business on the expiration date set forth in the applicable prospectus supplement and warrant agreement. We will specify the place or places where, and the manner in which, warrants may be exercised in the applicable prospectus supplement and warrant agreement. After the close of business on the expiration date, unexercised warrants will become void.

Upon receipt of payment and the warrant or warrant certificate, as applicable, properly completed and duly executed at the corporate trust office of the warrant agent, if any, or any other office, including ours, indicated in the applicable prospectus supplement, we will, as soon as practicable, issue and deliver the common stock and/or preferred stock purchasable upon such exercise. If less than all of the warrants (or the warrants represented by such warrant certificate) are exercised, a new warrant or a new warrant certificate, as applicable, will be issued for the remaining warrants.

Prior to the exercise of any warrants to purchase common stock and/or preferred stock, holders of the warrants will not have any of the rights of holders of the common stock or preferred stock purchasable upon exercise, including, the right to vote or to receive any payments of dividends on the common stock or preferred stock purchasable upon exercise.

As of the date of this prospectus we have issued warrants to purchase shares of our common stock to various persons and entities, under which we could be obligated to issue up to 2,343,401 shares of common stock. The exercise prices of these warrants are: (1) $0.35 per share for the 720,000 Series A Warrant through July 12, 2019. The Series A Warrant vests in equal installments of 240,000 on July 12, 2014-2018 and expires on July 12, 2019; (2) $1.10 for the 910,000 shares issuable upon exercise of the Series D Warrants through June 5, 2020; (3) the lesser of (i) $1.54 or (ii) a twenty percent (20%) discount to the average closing price of our common stock as quoted on the OTCQB for the five (5) days prior to the date on which the holder elects to exercise the warrant for the 584,416 shares issuable upon exercise of the Series E Warrant. The Series E Warrant may not be exercised prior to September 9, 2017 and expires on September 9, 2021; (4) the lesser of (i) $3.45 or (ii) a twenty percent (20%) discount to the average closing price of our common stock as quoted on the OTCQB for the five (5) days prior to the date on which the holder elects to exercise the warrant for the 128,985 shares issuable upon exercise of the Series F Warrants. The Series F Warrants may be exercised beginning on the one month anniversary of their issuance; 121,739 Series F Warrants expire on February 23, 2022 and the remaining 7,246 expire on March 9, 2022 If issued, the shares underlying the warrants would increase the number of shares of our common stock currently outstanding and dilute the holdings and voting rights of our then-existing stockholders. Each of the warrants may be exercised on a "cashless basis" using the formula set forth therein.

Table of Contents

DESCRIPTION OF SUBSCRIPTION RIGHTS

The following description, together with the additional information we include in any applicable prospectus supplement or in any free writing prospectuses we have authorized for use in connection with a specific offering, summarizes some of the terms and other provisions of the subscription rights to purchase our common stock, preferred stock or other securities that we may offer under this prospectus. We may issue subscription rights in one or more series independently or together with other securities. In connection with any offering of subscription rights, we may enter into a standby arrangement with one or more underwriters or other purchasers pursuant to which the underwriters or other purchasers may be required to purchase any securities remaining unsubscribed for after such offering.

This summary description of some of the terms and other provisions of the subscription rights that may be offered under this prospectus is not complete and is qualified in its entirety by reference to the form of subscription rights certificate and any supplemental agreements applicable to a particular series of subscription rights that we may offer under this prospectus. We will file with the SEC the form of subscription rights certificate that contains the terms of the particular series of subscription rights we are offering, and any supplemental agreements, before the issuance of such subscription rights. The following summary description of some of the terms and other provisions of the subscription rights are subject to, and qualified in their entirety by reference to, all the provisions of the form of subscription rights certificate and any supplemental agreements applicable to a particular series of subscription rights that we may offer under this prospectus.

While the terms we have summarized below will apply generally to any subscription rights that we may offer under this prospectus, we will describe the particular terms of any series of offered subscription rights in more detail in the applicable prospectus supplement. The following description of subscription rights will apply to the subscription rights offered under this prospectus unless we provide otherwise in the applicable prospectus supplement. The applicable prospectus supplement for a particular series of subscription rights may specify different or additional terms.

We urge you to read the applicable prospectus supplement related to the particular series of subscription rights that we may offer under this prospectus, as well as any related free writing prospectuses, and the complete form of subscription rights certificate and any supplemental agreements, that contain the terms of the subscription rights.

The applicable prospectus supplement relating to a series of subscription rights offered under this prospectus will describe the following terms, where applicable, of such offered subscription rights:

- the price, if any, for the subscription rights;

- the exercise price payable for each share of preferred stock, common stock or other securities upon the exercise of the subscription rights;

- the number of subscription rights issued to each stockholder;

- the number and terms of the shares of preferred stock, common stock, or other securities which may be purchased per each subscription right;

- the extent to which the subscription rights are transferable;

- any other terms of the subscription rights, including the terms, procedures and limitations relating to the exchange and exercise of the subscription rights;

- the date on which the right to exercise the subscription rights shall commence, and the date on which the subscription rights shall expire;

- the extent to which the subscription rights may include an over-subscription privilege with respect to unsubscribed securities; and

- if applicable, the material terms of any standby underwriting or purchase arrangement entered into by us in connection with the offering of subscription rights.

Table of Contents

DESCRIPTION OF STOCK PURCHASE CONTRACTS

We may issue stock purchase contracts representing contracts obligating holders to purchase from us, and us to sell to the holders, a specified or varying number of shares of our common or preferred stock at a future date or dates. Alternatively, the stock purchase contracts may obligate us to purchase from holders, and obligate holders to sell to us, a specified or varying number of shares of our common or preferred stock at a future date or dates. The price per share and the number of shares may be fixed at the time the stock purchase contracts are entered into or may be determined by reference to a specific formula set forth in the stock purchase contracts. The stock purchase contracts may require us to make periodic payments to the holders of the common or preferred stock or require the holders of the common or preferred stock to make periodic payments to us. These payments may be unsecured or prefunded and may be paid on a current or on a deferred basis. The stock purchase contracts may require holders to secure their obligations under the contracts in a specified manner. The applicable prospectus supplement will describe the terms of any stock purchase contract and will contain a summary of certain United States federal income tax consequences applicable to the stock purchase contracts.

DESCRIPTION OF UNITS

We may issue units comprised of one or more of the other securities described in this prospectus or in any prospectus supplement in any combination. Each unit will be issued so that the holder of the unit is also the holder, with the rights and obligations of a holder, of each security included in the unit. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date or upon the occurrence of a specified event or occurrence.

The applicable prospectus supplement relating to units offered under this prospectus will describe the following terms, where applicable, of such units:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any unit agreement under which the units will be issued;
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units; and

- whether the units will be issued in fully registered or global form.

PLAN OF DISTRIBUTION

We may sell the securities from time to time pursuant to underwritten public offerings, negotiated transactions, block trades (which may involve crosses) or a combination of these methods. We may sell the securities to or through underwriters or dealers, through agents, or directly to one or more purchasers. We may distribute securities from time to time in one or more transactions:

- at a fixed price or prices, which may be changed;

- at market prices prevailing at the time of sale;

- at prices related to such prevailing market prices; or

- at negotiated prices.

Table of Contents

We may also sell equity securities covered by this registration statement in an "at the market offering" as defined in Rule 415 under the Securities Act. Such offering may be made into an existing trading market for such securities in transactions at other than a fixed price, either:

- on or through the facilities of the OTCQB or any other security exchange or quotation or trading service on which such securities may be listed, quoted or traded at the time of sale; and/or
- other than on the OTCQB or such other securities exchanges or quotation or trading services.

Such at the market offerings, if any, may be conducted by underwriters acting as principal or agent.

A prospectus supplement or supplements (and any related free writing prospectus that we may authorize to be provided to you) will describe the terms of the offering of the securities, including, to the extent applicable:

- the name or names of any underwriters, dealers or agents, if any;
- the purchase price of the securities and the proceeds we will receive from the sale;
- any over-allotment options under which underwriters may purchase additional securities from us;
- any agency fees or underwriting discounts and other items constituting agents' or underwriters' compensation;
- any public offering price;
- any discounts or concessions allowed or reallowed or paid to dealers; and
- any securities exchange or market on which the securities may be listed.

Only underwriters named in the prospectus supplement are underwriters of the securities offered by the prospectus supplement.

If underwriters are used in the sale, they will acquire the securities for their own account and may resell the securities from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. We may offer the securities to the public through underwriting syndicates

represented by managing underwriters or by underwriters without a syndicate. Subject to certain conditions, the underwriters will be obligated to purchase all of the securities offered by the prospectus supplement. Any public offering price and any discounts or concessions allowed or reallowed or paid to dealers may change from time to time. We may use underwriters with whom we have a material relationship. We will describe in the prospectus supplement, naming the underwriter, the nature of any such relationship.

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities, and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best-efforts basis for the period of its appointment.

We may authorize agents or underwriters to solicit offers by certain types of institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

Table of Contents

We may provide agents and underwriters with indemnification against civil liabilities related to this offering, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to these liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

All securities we offer, other than our common stock, will be new issues of securities with no established trading market. Any underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities.

Any underwriter may engage in overallotment, stabilizing transactions, short covering transactions and penalty bids. Overallotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Short covering transactions involve purchases of the securities in the open market after the distribution is completed to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a stabilizing or covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time. These transactions may be effected on any exchange or over-the-counter market or otherwise.

In compliance with guidelines of the Financial Industry Regulatory Authority ("**FINRA**"), the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate amount of the securities offered pursuant to this prospectus and any applicable prospectus supplement.

LEGAL MATTERS

Unless otherwise specified in the applicable prospectus supplement, the validity of the securities being offered under this prospectus has been passed upon for us by Satterlee Stephens LLP, New York, New York, and for any underwriters or agents by counsel named in the applicable prospectus supplement. Joseph Sierchio, a partner of Satterlee Stephens LLP, is one of our directors and the beneficial owner of 618,774 shares of our common stock.

EXPERTS

Our consolidated financial statements for the fiscal years ended December 31, 2016 and 2015, have been incorporated by reference herein in reliance upon the report of Peterson Sullivan LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

Table of Contents

INCORPORATION BY REFERENCE

The SEC allows us to "incorporate by reference" information from other documents that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus.

We incorporate by reference into this prospectus and the registration statement of which this prospectus is a part the information or documents listed below that we have filed with the SEC:

- our Annual Report on Form 10-K for the year ended December 31, 2016, filed on March 28, 2017;
- our Quarterly Reports on Form 10-Q for the periods ended June 30, 2016, September 30, 2016 and March 31, 2017, filed on August 15, 2016, November 10, 2016 and May 3, 2017 , respectively;
- our Current Reports on Form 8-K (other than portions thereof furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits accompanying such reports that are related to such items) filed on April 27, 2017, March 14, 2017 and March 1, 2017;
- the description of our common stock set forth under the heading "Description of Securities" in our Registration Statement on Form S-1 (File No. 333-215661) originally filed with the SEC on January 23, 2017, as amended by our reports we file under the Exchange Act;
- All documents filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, after the date of the initial filing of the registration statement of which this prospectus is a part and prior to the effectiveness of such registration statement; and
- All documents filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act on or after the date of this prospectus and before we stop offering the securities under this prospectus.

You may request, orally or in writing, a copy of any or all of the documents incorporated herein by reference. These documents will be provided to you at no cost, by contacting: Thomas Bold, President & CEO, 430 Park Avenue, Suite 702, New York, NY 10022, (888) 398-0202, email address: contact@renovacareinc.com. In addition, copies of any or all of the documents incorporated herein by reference may be accessed at our website at http://www.renovacareinc.com. The information on such website is not incorporated by reference and is not a part of this prospectus.

You should rely only on information contained in, or incorporated by reference into, this prospectus and any prospectus supplement. We have not authorized anyone to provide you with information different from that contained in this prospectus or incorporated by reference in this prospectus.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We file periodic reports with the SEC, including quarterly reports and annual reports which include our audited financial statements. This registration statement, including exhibits hereto, and all of our periodic reports may be inspected without charge at the Public Reference Room maintained by the SEC at 100 F Street, NE, Washington, D.C. 20549. You may obtain copies of this registration statement, including the exhibits hereto, and all of our periodic reports after payment of the fees prescribed by the SEC. For additional information regarding the operation of the Public Reference Room, you may call the SEC at 1-800-SEC-0330. The SEC also maintains a website which provides on-line access to reports and other information regarding registrants that file electronically with the SEC at: www.sec.gov. In addition, you may request a copy of any of our periodic reports filed with the Securities and Exchange Commission at no cost, by writing us at: RenovaCare, Inc., 430 Park Avenue, Suite 702, New York, NY 10022.

Table of Contents

RenovaCare, Inc.

920,000 Shares of Common Stock

PROSPECTUS SUPPLEMENT

October 18, 2017