STEMCELLS INC Form S-1 May 23, 2016 Table of Contents

As filed with the Securities and Exchange Commission on May 23, 2016

Registration No. 333-

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

FORM S-1

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

STEMCELLS, INC.

Delaware (State or other jurisdiction of

94-3078125 (I.R.S. Employer

incorporation or organization)

Identification No.)

7707 Gateway Blvd

Newark, CA 94560

(510) 456-4000

(Address, including zip code, and telephone number, including area code, of registrant s principal executive offices)

Ian Massey

President and Chief Executive Officer

StemCells, Inc.

7707 Gateway Blvd

Newark, CA 94560

(510) 456-4000

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Marko Zatylny

Ropes & Gray LLP

Prudential Tower, 800 Boylston Street

Boston, MA 02199

(617) 951-7000

Approximate date of commencement of proposed sale to public: From time to time after this registration statement becomes effective.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. x

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. "

If this Form is a post effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. "

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

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

CALCULATION OF REGISTRATION FEE

	Proposed	
Title of Each Class Of	Maximum Aggregate	
Securities To Be Registered Common Stock, par value \$0.01 per share(1)	Offering Price \$30,000,000	Amount Of Registration Fee \$3,021.00(2)
Non-transferable Rights to purchase Common Stock, par value \$0.01 per share	Ψ30,000,000	\$0.00(3)

- (1) This registration statement relates to: (a) non-transferable subscription rights to purchase common stock of the Registrant, which subscription rights are to be distributed to holders of the Registrant s common stock and of certain of the Registrant s warrants; and (b) the shares of common stock deliverable upon the exercise of the subscription rights pursuant to the rights offering.
- (2) Calculated pursuant to Rule 457(o) of the Securities Act of 1933, as amended, based on an estimate of the proposed maximum aggregate offering price.
- (3) Evidencing the rights to subscribe for [] shares of common stock pursuant to Rule 457(g) under the Securities Act, no separate registration fee is required for the rights because the rights are being registered in the same registration statement as the common stock of the registrant underlying the rights, which rights are being issued for no consideration.

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

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. THE SECURITIES MAY NOT BE SOLD UNTIL THE REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND IT IS NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY STATE WHERE THE OFFER OR SALE IS NOT PERMITTED.

Subject to Completion, dated May 23, 2016

PROSPECTUS

Non-Transferable Subscription Rights to Purchase up to Shares

of Common Stock at \$ per Share

and the Shares Issuable pursuant to such Subscription Rights

Subject to the conditions described in this prospectus, we are distributing, at no charge, to our holders of our common stock and our warrants, non-transferable subscription rights to purchase an aggregate of up to shares of our common stock, par value \$0.01 per share (the common stock). We refer to this offering as the rights offering. You will receive a subscription right to purchase of a share of common stock at a price of \$ per share for each whole share of common stock that you owned, or in the case of holders of warrants, would own upon exercise of your warrants, as of 5:00 p.m., Eastern Time, on , 2016, the record date. If you exercise your subscription rights in full, and other stockholders and warrant holders do not fully exercise their subscription rights, you will be entitled to an over-subscription privilege to purchase a portion of the unsubscribed shares of common stock at the subscription price, subject to proration and ownership limitations, which we refer to as the over-subscription privilege.

The subscription rights will expire if they are not exercised at 5:00 p.m., Eastern Time, on , 2016, unless we extend the subscription rights offering period. We may extend the expiration of the rights offering and the period for exercising your subscription rights in our sole discretion. You should carefully consider whether to exercise your subscription rights prior to the expiration of the rights offering. All exercises of subscription rights are irrevocable, even if we extend the expiration of the rights offering. We are not making any recommendation regarding your exercise of the subscription rights.

We have not entered into any standby purchase agreement or other similar arrangement in connection with the rights offering. The rights offering is being conducted on a best-efforts basis and there is no minimum amount of proceeds necessary to be received in order for us to close the rights offering.

We have engaged to act as dealer-manager[s] in the rights offering.

Investing in our common stock involves risks. See <u>Risk Factors</u> beginning on page 14 of this prospectus. You should carefully consider these risk factors, as well as the information contained in this prospectus, before you invest.

We have agreed with Broadridge Corporate Issuer Solutions, Inc. to serve as the rights agent for the rights offering. The rights agent will hold in escrow the funds we receive from subscribers until we complete, abandon or terminate the rights offering. If you want to participate in this rights offering and you are the record holder of your shares or warrants, we recommend that you submit your subscription documents to the rights agent well before that deadline. If you want to participate in this rights offering and you hold shares or warrants through your broker, dealer, custodian bank or other nominee, you should promptly contact your broker, dealer, bank or other nominee and submit your subscription documents in accordance with the instructions and within the time period provided by your broker, dealer, custodian bank or other nominee. For a detailed discussion, see The Rights Offering The Subscription Rights.

We are not requiring an overall minimum subscription to complete the rights offering. However, we reserve the right to terminate the rights offering for any reason at any time before it expires. If we terminate the rights offering, all subscription payments received will be returned promptly, without interest or penalty.

Our common stock is listed on NASDAQ under the symbol STEM. On , 2016, the last reported sale price for our common stock on NASDAQ was \$ per share.

	Per	
	Subscription Right	Total(2)
Subscription price	\$	\$
Dealer-Manager fees and expenses(1)	\$	\$
Proceeds to us, before expenses	\$	\$

- (1) In connection with this rights offering, we have agreed to pay fees to the dealer-manager[s] equal to:
- (2) Assumes the rights offering is fully subscribed.

Our Board of Directors is not making any recommendation regarding your exercise of the subscription rights. You should carefully consider whether to exercise your subscription rights prior to the expiration of the rights offering.

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.

Dealer-Manager[s]

The date of this prospectus is , 2016

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LETTER FROM OUR CHIEF EXECUTIVE OFFICER

QUESTIONS AND ANSWERS RELATING TO THE RIGHTS OFFERING

The following are examples of what we anticipate will be common questions about the rights offering. The answers are based on selected information from this prospectus and the documents incorporated by reference herein. The following questions and answers do not contain all of the information that may be important to you and may not address all of the questions that you may have about the rights offering. This prospectus and the documents incorporated by reference herein contain more detailed descriptions of the terms and conditions of the rights offering and provide additional information about us and our business, including potential risks related to the rights offering, our common stock and our business. We urge you to read this entire prospectus and the documents incorporated by reference into this prospectus.

What is the rights offering?

Subject to the conditions described below, we will distribute to holders of our common stock and our warrants as of the record date of . 2016, at no charge, non-transferable subscription rights to purchase shares of our common stock. You will receive subscription right for each share of common stock you owned as of 5:00 p.m., Eastern Time, on the record date. The subscription rights will not be tradable. Each subscription right entitles the holder to a basic subscription right and an over-subscription privilege, which is described below. The subscription rights will expire if they are not exercised by 5:00 p.m., Eastern Time, on . . . , 2016, unless extended or earlier terminated by the Company.

What is each basic subscription right?

Each basic subscription right gives the holder the opportunity to purchase of a share of our common stock at a per share for each whole share of common stock owned (as well as holders our warrants, subscription price of \$ as described below) as of 5:00 p.m., Eastern Time, on , 2016, the record date. Only whole rights are exercisable and any fractional rights remaining after aggregating all of the subscription rights issued to you will be rounded down to the nearest whole number. You will not receive any payment with respect to fractional rights that are rounded down. In the rights offering, we will grant to you, as a stockholder or warrant holder of record as of 5:00 p.m., Eastern Time, on the record date, rights for each share of our common stock you owned at that time, or would own upon exercise of your warrants. For example, if you owned 100 shares of our common stock as of 5:00 p.m., Eastern Time, on the record date, you would receive subscription rights and would have the right to purchase shares of common stock (rounded down from approximately shares of common stock) for \$ with your subscription rights. You may exercise any whole number of your subscription rights, or you may choose not to exercise any subscription rights. In order to properly exercise your subscription right, you must deliver the subscription payment and a properly completed subscription rights certificate provided to you, or if you hold your rights through a broker, dealer, custodian bank or other nominee, complete and return to your record holder the form entitled Beneficial Owner Election Form or such other appropriate documents as are provided by your record holder related to your subscription right prior to the expiration of the rights offering.

If you hold your shares in the name of a broker, dealer, custodian bank or other nominee who uses the services of the Depository Trust Company, or DTC, DTC will issue the appropriate number of subscription rights to your nominee for each share of our common stock you own, or would own upon exercise of your warrants, on the record date. The subscription right of each whole subscription right can then be used to purchase share of common stock for per share. If you are not contacted by your nominee, you should contact your nominee as soon as possible.

What is the over-subscription privilege?

We do not expect all of our rights holders to exercise all of their subscription rights. The over-subscription privilege provides rights holders that exercise all of their basic subscription rights the opportunity to purchase the shares that are not purchased by other rights holders. If you fully exercise your basic subscription right, the over-

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subscription privilege of each right entitles you to subscribe for additional shares of our common stock unclaimed by other holders of rights in this rights offering at the same subscription price per share. If an insufficient number of shares are available to fully satisfy all over-subscription privilege requests, the available shares will be distributed proportionately among rights holders who exercise their over-subscription privilege based on the number of shares each rights holder subscribed for under the basic subscription right.

In order to properly exercise your over-subscription privilege, you must deliver the subscription payment for exercise of your over-subscription privilege before the expiration of the rights offering. Because we will not know the total number of unsubscribed shares before the expiration of the rights offering, if you wish to maximize the number of shares you purchase pursuant to your over-subscription privilege, you will need to deliver payment in an amount equal to the aggregate subscription price for the maximum number of shares available, assuming that no rights holder other than you has purchased any shares pursuant to their basic subscription right and over-subscription privilege. The rights agent will return any excess payments by mail without interest or deduction promptly after the expiration of the subscription period. See The Rights Offering The Subscription Rights Over-Subscription Privilege.

What should I do if I want to participate in the rights offering but my shares or warrants are held in the name of my broker, dealer, custodian bank or other nominee?

If you hold your shares of our common stock or warrants in the name of a broker, dealer, custodian bank or other nominee, then your broker, dealer, custodian bank or other nominee is the record holder of the shares you own. The record holder must exercise the subscription rights on your behalf for the shares of our common stock you wish to purchase.

If you wish to participate in the rights offering and purchase shares of our common stock, please promptly contact the record holder of your shares. We will ask your broker, dealer, custodian bank or other nominee to notify you of the rights offering. You should complete and return to your record holder the form entitled Beneficial Owner Election Form. You should receive this form from your record holder with the other rights offering materials.

Will fractional subscription rights be issued?

No. We will not issue fractional subscription rights in the rights offering. Fractional subscription rights remaining after aggregating all of the rights distributed to you will be rounded down to the nearest whole number of share a holder would otherwise be able to purchase. You will not receive any payment with respect to fractional shares that are rounded down.

Why are we conducting the rights offering?

We are conducting the rights offering to raise additional capital for general corporate purposes, including our clinical trials in connection with the Pathway Study, other related research and development expenditures, general administrative expenses, working capital and capital expenditures.

How was the subscription price determined?

We established a pricing committee (the Pricing Committee) of our Board of Directors, comprised of Eric Bjerkholt, Scott Greer and Ricardo Levy. The terms of the rights offering, including the subscription price, was approved by the Pricing Committee. The subscription price was determined based on a variety of factors, including historical and current trading prices for our common stock, general business conditions, our need for capital, alternatives available to us for raising capital, potential market conditions, and our desire to provide an opportunity to our stockholders and

warrant holders to participate in the rights offering on a pro rata basis. In conjunction with its review of these factors, the Pricing Committee also reviewed our history and prospects, including our past and present earnings and cash requirements, our prospects for future earnings, and the outlook

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for our industry, and our current financial condition. The Pricing Committee also believed that the subscription price should be designed to provide an incentive to our current stockholders and warrant holders to participate in the rights offering and exercise their basic subscription rights and their over-subscription privilege.

The subscription price does not necessarily bear any relationship to any established criteria for value. You should not consider the subscription price as an indication of actual value of our company or our common stock. The market price of our common stock may decline during or after the rights offering. You should obtain a current price quote for our common stock before exercising your subscription rights and make your own assessment of our business and financial condition, our prospects for the future, the terms of the rights offering, the information in this prospectus and the other considerations relevant to your circumstances. Once made, all exercises of subscription rights are irrevocable.

Am I required to exercise all of the subscription rights I receive in the rights offering?

No. You may exercise any whole number of your subscription rights, or you may choose not to exercise any subscription rights. If you do not exercise any subscription rights, the number of shares of our common stock you own will not change. However, if you choose not to exercise your subscription rights, your proportionate ownership interest in the Company will be diluted by the issuance of shares to others who do choose to exercise their subscription rights.

How soon must I act to exercise my subscription rights?

If you received a subscription rights certificate and elect to exercise any or all of your subscription rights, the rights agent must receive your completed and signed subscription rights certificate and payment for both your basic subscription rights and any over-subscription privilege you elect to exercise before the rights offering expires on , 2016, at 5:00 p.m., Eastern Time. If you hold your shares in the name of a broker, dealer, bank, or other nominee, your nominee may establish a deadline before the expiration of the rights offering by which you must provide it with your instructions to exercise your subscription rights, along with the required subscription payment.

The subscription rights may be exercised at any time beginning after the commencement of the rights offering and prior to the expiration of the rights offering. The rights offering will expire at 5:00 p.m., Eastern Time, on the date that is days after the commencement of the rights offering. The rights offering is currently expected to expire at 5:00 p.m., Eastern Time, on , 2016. If you elect to exercise any rights, the rights agent must actually receive all required documents and payments from you prior to the expiration of the rights offering. If your required subscription exercise documentation is received by the rights agent after the expiration of the rights offering, we may, in our sole discretion, choose to accept your subscription, but we shall be under no obligation to do so. We may extend the expiration of the rights offering in our sole discretion. However, we currently do not intend to extend the expiration of the rights offering.

When will I receive my subscription rights certificate?

As soon as practicable after the conditions to the commencement of the rights offering described below have been met, we will distribute the subscription rights certificates to individuals who owned shares of our common stock or who owned warrants to purchase shares of our common stock, in each case, as of 5:00 p.m., Eastern Time, on , 2016 based on our stockholder registry maintained at the transfer agent for our common stock. However, if you hold your shares of common stock in street name through a broker, dealer, custodian bank or other nominee, you will not receive an actual subscription rights certificate. Instead, as described in this prospectus, you must instruct your broker, dealer, custodian bank or other nominee whether or not to exercise rights on your behalf. If

you wish to obtain a separate subscription rights certificate, you should promptly contact your broker, dealer, custodian bank or other nominee and request a separate subscription rights certificate. It is not necessary to have a physical subscription rights certificate to elect to exercise your rights if your shares are held by a broker, dealer, custodian bank or other nominee.

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May I transfer my subscription rights?

No. The subscription rights may be exercised only by the stockholders or the warrant holders to whom they are distributed and they may not be sold, transferred, assigned or given away to anyone else, other than by operation of law. As a result, subscription rights certificates may be completed only by the stockholder who receives the certificate. The subscription rights will not be listed for trading on any stock exchange or market.

Are we requiring a minimum subscription to complete the rights offering?

No.

Are there any conditions to completing the rights offering?

No.

Can we extend, terminate or amend the rights offering?

Yes. We may decide to terminate the rights offering at any time and for any reason before the closing of the rights offering. If we terminate the rights offering, any money received from subscribing rights holders will be returned promptly, without interest or penalty. We also have the right to extend the expiration of the rights offering for additional periods at our sole discretion. If we elect to extend the expiration of the rights offering, we will issue a press release announcing such extension no later than 9:00 a.m., Eastern Time, on the next business day after the most recently announced expiration date. We do not presently intend to extend the expiration of the rights offering.

How do I exercise my subscription rights? What forms and payment are required to purchase shares of common stock?

If you are a stockholder of record (meaning you hold your shares of our common stock or warrants in your name and not through a broker, dealer, bank, or other nominee) or a holder of our warrants and you wish to participate in the rights offering, you must deliver a properly completed and signed subscription rights certificate, together with payment of the subscription price for both your basic subscription rights and any over-subscription privilege you elect to exercise, to the rights agent before 5:00 p.m., Eastern Time, on , 2016. If you are exercising your subscription rights through your broker, dealer, custodian bank or other nominee, you should promptly contact your broker, dealer, custodian bank or other nominee and submit your subscription documents and payment for the shares of common stock subscribed for in accordance with the instructions and within the time period provided by your broker, dealer, custodian bank or other nominee.

If you cannot deliver your subscription rights certificate to the rights agent prior to the expiration of the rights offering, you may follow the guaranteed delivery procedures described under The Rights Offering Guaranteed Delivery Procedures.

If you send a payment that is insufficient to purchase the number of shares you requested, or if the number of shares you requested is not specified in the forms, the payment received will be applied to exercise your subscription rights to the full extent possible based on the amount of the payment received.

When will I receive my new shares?

If you purchase shares of our common stock through the rights offering, you will receive your new shares as soon as practicable after the closing of the rights offering.

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After I send in my payment and subscription rights certificate, may I cancel my exercise of subscription rights?

No. All exercises of subscription rights are irrevocable, even if you later learn information that you consider to be unfavorable to the exercise of your subscription rights and even if we extend the expiration of the rights offering. You should not exercise your subscription rights unless you are certain that you wish to purchase additional shares of our common stock at a subscription price of \$ per share.

Will holders of our warrants be permitted to participate in the rights offering?

Holders of our outstanding warrants are permitted to participate in the rights offering. As of May , 2016, we had outstanding warrants to purchase an aggregate of additional shares of common stock at a weighted average exercise price of \$. Of that total, there were warrants to purchase an aggregate of shares of common stock outstanding with a per share exercise price of between \$ and \$, and the weighted average exercise price of those warrants was \$. All holders of our outstanding warrants may participate in the rights offering without first exercising their warrants for shares of common stock, as if such warrants had been exercised for the maximum possible number of shares of common stock that such warrant could be exercised for on the date immediately prior to the record date.

As a warrant holder, will the exercise price of my warrants be adjusted if I participate in the rights offering?

If at least % of all shares represented by unexercised warrants, collectively across all series of our outstanding warrants, participate in the rights offering, the exercise price of all outstanding warrants will reset to \$ per share. By way of example, as of the record date, there were warrants outstanding to purchase shares of our common stock. If holders of warrants representing at least shares exercise in full their subscription rights in this offering, then the exercise price for all outstanding warrants will be reset to \$ per share. A reduction in the exercise price of our warrants may result in additional dilution to the extent any warrants are exercised following a reduction of the exercise price. See Risk Factors .

How many shares of our common stock will be outstanding after the rights offering?

Approximately shares of our common stock are issued and outstanding as of May , 2016. If the rights offering is fully subscribed, meaning that we issue the maximum possible number of shares of common stock upon exercise of rights, including 100% participation of the warrant holders we will issue an aggregate of shares in connection with the rights offering in exchange for an exercise price of \$ per share, or an aggregate of \$. Please see Use of Proceeds and The Rights Offering.

Are any of the Company s officers or directors participating in the rights offering?

To the extent they hold common stock as of the record date, our directors and executive officers will be entitled to participate in the rights offering on the same terms and conditions applicable to other stockholders.

Have any other stockholders indicated that they will exercise their rights?

To our knowledge, none of our other stockholders have indicated whether or not they will exercise rights in the rights offering.

How much will our Company receive from the rights offering?

If the rights offering is fully subscribed, meaning that we issue the maximum possible number of shares of common stock upon exercise of rights, including 100% participation of the warrant holders (even though some warrants are currently out of the money), we expect to receive an aggregate of approximately \$ from the sale of shares pursuant to the rights offering. See Use of Proceeds.

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Are there risks in exercising my subscription rights?

Yes. The exercise of your subscription rights involves risks. Exercising your subscription rights involves the purchase of additional shares of our common stock and should be considered as carefully as you would consider any other equity investment. Among other things, you should carefully consider the risks described under the heading Risk Factors in this prospectus and the documents incorporated by reference herein.

If the rights offering is not completed, will my subscription payment be refunded to me?

Yes. The rights agent will hold all funds it receives in a segregated bank account until completion of the rights offering. If the rights offering is not completed, all subscription payments received by the rights agent will be returned, without interest, as soon as practicable. If you own shares in street name, it may take longer for you to receive payment because the rights agent will return payments through the record holder of the shares.

How do I exercise my subscription rights if I live outside the United States?

We will not mail this prospectus or the subscription rights certificates to stockholders whose addresses are outside the United States or who have an army post office or foreign post office address. The rights agent will hold the subscription rights certificates for their account. To exercise subscription rights, our foreign stockholders must notify the rights agent and timely follow the procedures described in The Rights Offering Foreign Stockholders.

What fees or charges apply if I purchase shares of common stock?

We are not charging any fee or sales commission to issue subscription rights to you or to issue shares to you if you exercise your subscription rights. If you hold your shares through a nominee and exercise your subscription rights through the record holder of your shares, you are responsible for paying any fees your record holder may charge you.

What are the U.S. federal income tax consequences of exercising subscription rights?

For U.S. federal income tax purposes, we believe and intend to take the position that you generally should not recognize income or loss in connection with the receipt or exercise of subscription rights for U.S. federal income tax purposes, but the treatment of the receipt and exercise of subscription rights is unclear in certain respects. You are urged to consult your own tax advisor as to your particular tax consequences resulting from the receipt and exercise of subscription rights and the receipt, ownership and disposition of our common stock. For further information, please see Risk Factors The tax treatment of the rights offering may be treated as a taxable event to you and Material U.S. Federal Income Tax Consequences.

To whom should I send my forms and payment?

If your shares are held in the name of a broker, dealer, custodian bank or other nominee, then you should send your beneficial owner election form and subscription payment to that record holder. If you are the record holder, then you should send your subscription rights certificate and subscription payment by hand delivery, first class mail or courier service to:

By hand or overnight courier:

Broadridge Corporate Issuer Solutions, Inc.

Attn: BCIS IWS,

51 Mercedes Way

Edgewood, NY 11717.

By mail:*

Broadridge Corporate Issuer Solutions, Inc.

Attn: BCIS Re-Organization Dept., P.O. Box 1317

Brentwood, NY 11717.

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^{*} If your chosen delivery method is USPS Priority Mail or USPS Registered Mail, you must utilize the overnight courier address.

You are solely responsible for completing delivery of your subscription rights certificate and payment to the rights agent or, if you are not a record holder your beneficial owner election form and payment to your broker, dealer, custodian bank or other nominee. We urge you to allow sufficient time for delivery of your subscription materials to the rights agent or your broker, dealer, custodian bank or other nominee.

Whom should I contact if I have other questions?

If you have other questions or need assistance, please contact the rights agent, Broadridge Corporate Issuer Solutions, Inc., at (855) 793-5068.

Who are the dealer-managers?

and will act as dealer-manager[s] for the rights offering. Under the terms and subject to the conditions contained in the dealer-manager agreement, the dealer-manager[s] will use their best efforts to solicit the exercise of subscription rights. We have agreed to pay the dealer-manager[s] for certain fees for acting as dealer-manager[s]. The dealer-manager[s] [are/is] not underwriting or placing any of the subscription rights issued in this offering and do not make any recommendation with respect to such subscription rights (including with respect to the exercise or expiration of such subscription rights).

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PROSPECTUS SUMMARY

The following is a summary of selected information contained elsewhere or incorporated by reference in this prospectus. It does not contain all of the information that you should consider before buying our securities. You should read this entire prospectus, including the information incorporated by reference herein, carefully, especially the section entitled Risk Factors and Note Regarding Forward-Looking Statements and the consolidated financial statements and related notes.

Unless otherwise indicated all historical and pro forma common stock and per share data in this prospectus have been retroactively restated to the earliest period presented to account for the one-for-twelve reverse stock split that became effective on May 9, 2016.

The Company

Business Overview

We are engaged in researching, developing, and commercializing cell-based therapeutics. Our research and development (R&D) programs are primarily focused on identifying and developing potential cell-based therapeutics which can either restore or support organ function. In particular, since we relocated our operations to California in 1999, our R&D efforts have been directed at refining our methods for identifying, isolating, culturing, and purifying the human neural stem cell and developing this cell as potential cell-based therapeutics for the central nervous system (CNS). Our HuCNS-SC® cells (purified human neural stem cells) are currently in clinical development for several indications, with a primary focus on chronic spinal cord injury.

In 2015, we completed our Phase I/II clinical trial for the treatment of chronic spinal cord injury, which represents the first time that neural stem cells have been transplanted as a potential therapeutic agent for spinal cord injury. The Phase I/II trial evaluated both safety and preliminary efficacy of our proprietary HuCNS-SC human neural stem cells as a treatment for chronic thoracic spinal cord injury. Under this trial, a total of twelve patients with either complete and incomplete injuries as classified by the American Spinal Injury Association Impairment Scale (AIS) were enrolled and transplanted with our HuCNS-SC cells; seven patients with complete injury (AIS A) and five patients with an incomplete injury (AIS B). In May 2015, we reported the results from twelve-month data that revealed sustained improvements in sensory function that emerged consistently around three months after transplantation and persisted until the end of the study. The patterns of sensory gains were confirmed to involve multiple sensory pathways and were observed more frequently in the patients with less severe injury; three of the seven AIS A patients and four of the five AIS B patients showed signs of positive sensory gains confirming the previously reported interim results. In addition, two patients progressed during the study from the most severe classification, AIS A, to the lesser degree of injury grade, AIS B.

In October 2014, we initiated a Phase II proof of concept clinical trial to further investigate our HuCNS-SC cells as a treatment for spinal cord injury. Our Phase II Pathway Study is the first clinical trial designed to evaluate both the safety and efficacy of transplanting human neural stem cells into patients with cervical spinal cord injury. Traumatic injuries to the cervical (neck) region of the spinal cord, also known as tetraplegia or quadriplegia, impair sensation and motor function of the hands, arms, legs, and trunk. The Pathway Study is being conducted as a randomized, controlled, single-blind study and efficacy will be primarily measured by assessing motor function according to the International Standards for Neurological Classification of Spinal Cord Injury. The primary efficacy outcome will focus on change in upper extremity strength as measured in the hands, arms, and shoulders. The trial will follow the participants for one year and will enroll up to 52 subjects. The trial has three cohorts; the first cohort is an open-label dose escalation arm involving six patients to determine the cell dose to be used for the second and third cohort of the

study; the second cohort will enroll forty patients and forms the single-blinded controlled arm of the Phase II study with the primary efficacy outcome being tested is the change in motor strength of the various muscle groups in the upper extremities innervated by the cervical spinal cord; the third cohort is an optional open label cohort targeted to enroll six patients to assess safety and

preliminary efficacy in patients with less severe injuries (AIS C). We transplanted our first subject in this Phase II trial in December 2014 and completed transplanting the six patients comprising the first cohort of this trial in April 2015. The six-month interim results for the first cohort showed an overall pattern of motor improvement in four of the six patients as measured by gains in both strength and fine motor skills. In addition, four of the six patients showed improvement in the spinal level of injury as defined by the ISNCSCI (International Standards for Neurological Classification of Spinal Cord Injury) assessment of at least one level. Consistent with our prior study in chronic spinal cord injury, changes in muscle strength and function were observed around three months post-transplant. We commenced enrollment of the second cohort in the Pathway Study in June 2015.

We previously completed a Phase I clinical trial in infantile and late infantile neuronal ceroid lipofuscinosis (NCL), which showed that our HuCNS-SC cells were well tolerated and non-tumorigenic, and that there was evidence of engraftment and long-term survival of the transplanted HuCNS-SC cells. In October 2013, the results of a four-year, long-term follow up study of the patients from the initial Phase I study in NCL showed there were no long-term safety or tolerability issues associated with the cells up to five years post-transplantation.

In October 2012, we published in Science Translational Medicine, a peer-reviewed journal, the data from our four-patient Phase I clinical trial in PMD, which showed preliminary evidence of durable and progressive donor-derived myelination in all four patients. In addition, there were measurable gains in neurological function in three of the four patients, with the fourth patient clinically stable.

Our Corporate Information

We are incorporated in Delaware. Our principal executive offices are located at 7707 Gateway Blvd., Suite 140, Newark, California 94560 and our telephone number is (510) 456-4000. Our website is located at www.stemcellsinc.com. We have not incorporated by reference into this prospectus supplement or the accompanying prospectus the information in, or that can be accessed through, our website, and you should not consider it to be a part of this prospectus supplement or the accompanying prospectus.

Recent Developments

Our Board of Directors authorized the one-for-twelve reverse stock split that became effective on May 9, 2016. All prior periods presented in this prospectus have been adjusted to reflect the one-for-twelve reverse stock split. Financial information updated by this capital change includes earnings per common share, stock price per common share, weighted average common shares, outstanding common shares and common stock.

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The Rights Offering

The following summary describes the principal terms of the rights offering, but is not intended to be complete. See the information under the heading The Rights Offering in this prospectus for a more detailed description of the terms and conditions of the rights offering.

Securities Offered

Subject to the conditions described in this prospectus, we are distributing, at no charge, to our stockholders and to our warrant holders, non-transferable subscription rights to purchase shares of our common stock for each share of common stock owned at 5:00 p.m., Eastern Time, as of the record date set forth below. For a summary of the treatment of outstanding warrants to purchase shares of common stock in the rights offering, see Treatment of Warrants below.

Record Date

5:00 p.m., Eastern Time,

, 2016.

Expiration of the Rights Offering

The rights offering will expire at 5:00 p.m., Eastern Time, on the date that is days after the commencement of the rights offering. The rights offering is currently expected to expire at 5:00 p.m., Eastern Time, on , 2016. We may extend the expiration of the rights offering in our sole discretion. If your required subscription exercise documentation is received by the rights agent after the expiration of the rights offering, we may, in our sole discretion, choose to accept your subscription, but we shall be under no obligation to do so.

Subscription Price

\$ per each whole share, payable in cash. To be effective, any payment related to the exercise of a right must clear prior to the expiration of the rights offering.

Use of Proceeds

We intend to use the net proceeds of this offering for general corporate purposes, including working capital, capital expenditures and research and development, as well as acquisitions and other strategic purposes. See Use of Proceeds.

Basic Subscription Right

Holders of our common stock or our warrants will receive a subscription right to purchase of a share of common stock for a price of \$ per each whole share. The number of subscription rights you may exercise appears on your subscription rights certificate or beneficial owner election form.

Over-Subscription Privilege

If you exercise your basic subscription rights in full, you may also choose to purchase a portion of any shares of our common that are not purchased by our other rights holders through the exercise of their basic subscription rights, subject to proration and stock ownership limitations described elsewhere.

Non-Transferability of Rights

The subscription rights may not be sold, transferred, assigned or given away to anyone. The subscription rights will not be listed for trading on any stock exchange or market.

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No Board Recommendation

Our Board of Directors is not making a recommendation regarding your exercise of the subscription rights. You are urged to make your decision based on your own assessment of our business and the rights offering. Please see Risk Factors for a discussion of some of the risks involved in investing in our common stock.

Conditions

We are not requiring a minimum subscription to complete the rights offering.

No Revocation

All exercises of subscription rights are irrevocable, even if you later learn information that you consider to be unfavorable to the exercise of your subscription rights and even if we extend the expiration of the rights offering. You should not exercise your subscription rights unless you are certain that you wish to purchase additional shares of our common stock at a subscription price of \$ per each whole share.

U.S. Federal Income Tax Considerations

We believe and intend to take the position that you generally should not recognize income or loss in connection with the receipt or exercise of subscription rights for U.S. federal income tax purposes. However the rules applicable to the receipt and exercise of subscription rights are complicated and unclear in certain respects, and it is possible that the Internal Revenue Service (IRS) could challenge our position. You are urged to consult your own tax advisor as to your particular tax consequences resulting from the receipt and exercise of subscription rights and the receipt, ownership and disposition of our common stock. For further information, please see Risk Factors The tax treatment of the rights offering may be treated as a taxable event to you and Material U.S. Federal Income Tax Consequences.

Extension, Amendment, Withdrawal and Termination

The period for exercising your subscription rights may be extended by us in our sole discretion. We may extend the expiration date of the rights offering by giving oral or written notice to the rights agent on or before the scheduled expiration date. If we elect to extend the expiration of the rights offering, we will issue a press release announcing such extension no later than 9:00 a.m., Eastern Time, on the next business day after the most recently announced expiration date.

Procedures for Exercising Rights

To exercise your subscription rights, a holder of record must complete the subscription rights certificate and deliver it to the rights agent, Broadridge Corporate Investor Solutions, Inc., together with full payment for all the subscription rights and any over-subscription privilege you elect to exercise under the subscription right. A beneficial owner must complete the beneficial owner election form and deliver it to their broker,

dealer, bank or nominee, together will full payment for all subscription rights and any over-subscription privilege you elect to exercise under the subscription right. You may deliver such subscription documents and payments by mail or commercial carrier. If regular mail is used for this purpose, we recommend using registered mail, properly insured, with return receipt requested or, if you are not a record holder.

If you cannot deliver your subscription rights certificate to the rights agent prior to the expiration of the rights offering, you may follow the guaranteed delivery procedures described under The Rights Offering Guaranteed Delivery Procedures.

Rights Agent

Broadridge Corporate Investor Solutions, Inc.

Shares Outstanding Before the Record Date Approximately

shares of our common stock will be issued and outstanding as of May , 2016

Rights Offering

Shares Outstanding After Completion of the If the rights offering is fully subscribed, meaning that we issue the maximum possible number of shares of common stock upon exercise of rights, including 100% participation of the warrant holders, we will issue an aggregate of shares in connection with the rights offering in exchange for an aggregate exercise price of \$

Risk Factors

Stockholders and warrant holders considering making an investment by exercising subscription rights in the rights offering or by purchasing rights in the open market or otherwise should carefully read and consider the information set forth in Risk Factors beginning on page prospectus, the documents incorporated by reference herein and the risks that we have highlighted in other sections of this prospectus.

Market for common stock

Our common stock is listed on NASDAQ under the trading symbol STEM.

Treatment of Warrants

As of May , 2016, we had outstanding warrants to purchase an additional shares of common stock. Holders of our aggregate of warrants may participate in the rights offering without first exercising their warrants for shares of common stock, as if such warrants had been exercised for the maximum possible number of shares of common stock that such warrant could be exercised for on the date immediately prior to the record date.

Dealer-Manager[s]

and

Distribution arrangements

Under the terms and subject to the conditions contained in the dealer-manager agreement, the dealer-manager[s] will use their best efforts to solicit the exercise of subscription rights. We have agreed to pay the dealer-manager[s] certain fees for acting as dealer-manager[s].

The dealer-manager[s] [are/is] not underwriting or placing any of the subscription rights being issued in this offering and [do/does] not make any recommendation with respect to such subscription rights (including with respect to the exercise or expiration of such subscription rights).

RISK FACTORS

Investing in our securities involves a high degree of risk. You should read and carefully consider and evaluate the Risk Factors and Note Regarding Forward-Looking Statements included and incorporated by reference in this prospectus, including the risk factors under the heading. Item 1A. Risk Factors incorporated by reference from our Annual Report on Form 10-K for the year ended December 31, 2015, our Quarterly Report on Form 10-Q for the quarter ended March 31, 2016, and in any other reports that we file with the Securities and Exchange Commission (the SEC) pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended (the Exchange Act), filed after such quarterly report. The information included or incorporated by reference in this prospectus may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future. For a description of these reports and documents, and information about where you can find them, see the sections entitled. Where You Can Find Additional Information and Incorporation of Certain Documents by Reference in this prospectus.

The risks and uncertainties we describe are not the only ones facing us. Additional risks not presently known to us, or that we currently deem immaterial, may also impair our business operations. If any of these risks were to occur, our business, financial condition, or results of operations would likely suffer. In that event, the trading price of our common stock could decline and you could lose all or part of your investment.

Risks Related to the Rights Offering

and

Our stock price has been, and will likely continue to be, highly volatile, and may decline before or after the subscription rights expire.

The market price per share of our common stock has been and is likely to continue to be highly volatile due to the risks and uncertainties described under the caption Risk Factors in our Annual Report on Form 10-K for the year ended December 31, 2015, as well as other factors, including:

our ability to develop and test our technologies;

our ability to patent or obtain licenses to necessary technologies;

conditions and publicity regarding the industry in which we operate, as well as the specific areas our product candidates seek to address;

competition in our industry;

economic and other external factors or other disasters or crises;

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price and volume fluctuations in the stock market at large that are unrelated to our operating performance;

comments by securities analysts, or our failure to meet market expectations.

Over the two-year period ended May 20, 2016, the trading price of our common stock as reported on the NASDAQ Capital Market ranged from a high of \$29.16 to a low of \$2.45 per share. As a result of this volatility, an investment in our stock is subject to substantial risk. Furthermore, the volatility of our stock price could negatively impact our ability to raise capital or acquire businesses or technologies.

We cannot assure you that the market price of our common stock will not decline after you elect to exercise your subscription rights. If that occurs, you may have committed to buy shares of our common stock in the rights offering at a price greater than the prevailing market price, and could have an immediate unrealized loss. Until shares are delivered upon expiration of the rights offering, you will not be able to sell the shares of our common stock that you purchase in the rights offering. We will not pay you interest on funds delivered to the rights agent pursuant to the exercise of subscription rights.

Your interest in our Company may be diluted as a result of this rights offering.

Stockholders who do not fully exercise should expect that they will, at the completion of this offering, own a smaller proportional interest in our Company than would otherwise be the case had they fully exercised their basic subscription rights and over-subscription privilege. Even if a stockholder fully exercises its subscription rights, such stockholder should expect to own a smaller proportioned interest in our Company if warrant holders exercise their subscription rights. Further, because the price per share of our common stock being offered may be substantially higher than the net tangible book value per share of our common stock, you may suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering. If you purchase shares of common stock in this offering at the subscription price, you may suffer immediate and substantial dilution in the net tangible book value of the common stock. See Dilution in this prospectus for a more detailed discussion of the dilution which may incur in connection with this offering.

Our stock could be delisted from NASDAQ, which could affect our stock s market price and liquidity. Our listing on NASDAQ is contingent upon meeting all the continued listing requirements of NASDAQ which include maintaining a minimum bid price of not less than \$1.00 per share and a minimum of \$2.5 million in stockholders equity. NASDAQ Listing Rule 5810(c)(3)(A) provides that a failure to meet the minimum bid price requirement exists if the deficiency continues for a period of 30 consecutive business days.

On May 14, 2015, we received written notice from NASDAQ that the closing bid price for our common stock had been below \$1.00 per share for the previous 30 consecutive business days, and that we were therefore not in compliance with the requirements for continued inclusion on NASDAQ under NASDAQ Listing Rule 5550(a)(2). In accordance with NASDAQ Listing Rule 5810(c)(3)(A), we had 180 calendar days, or until November 10, 2015, to regain compliance with the minimum bid price requirement. To regain compliance with the \$1.00 minimum bid listing requirement of NASDAQ, the closing bid price per share of our common stock would have to be \$1.00 or higher for a minimum of ten consecutive business days during this initial 180-day compliance period.

On November 11, 2015, we were notified by NASDAQ that we had not regained compliance with the minimum \$1.00 bid price per share requirement. However, NASDAQ determined that we are eligible under NASDAQ Listing Rule 5810(c)(3)(A) for an additional 180 calendar day period, or until May 9, 2016, to regain compliance. This second 180 day period relates exclusively to the bid price deficiency.

On May 6, 2016, we effected a one-for-twelve reverse stock split. As a result of the reverse stock split, each twelve shares of the Company s common stock automatically combined into and became one share of Company common stock. Our price per share at May 10, 2016 was \$2.90, above the minimum bid price. On May 20, 2016 we received a clearance letter from NASDAQ notifying us that we had regained compliance with the minimum \$1.00 bid price per share requirement.

If our common stock is delisted from NASDAQ, our ability to raise capital in the future may be limited. Delisting could also result in less liquidity for our stockholders and a lower stock price. Such a de-listing would likely have a negative effect on the price of our common stock and would impair your ability to sell or purchase our common stock when you wish to do so. In the event of a de-listing, we expect to take actions to restore our compliance with NASDAQ s listing requirements, but we can provide no assurance that any action taken by us would result in our common stock becoming listed again, or that any such action would stabilize the market price or improve the liquidity of our common stock.

The rights offering may cause the price of our common stock to decrease.

The number of shares of common stock we could issue if the rights offering is completed, including with respect to warrant holders who are entitled to participate in the rights offering without first exercising their warrants, may result in an immediate decrease in the trading price of our common stock. This decrease may continue after the completion of the rights offering. If that occurs, your purchase of shares of our common stock

in the rights offering may be at a price greater than the prevailing trading price of our common stock in the aftermath of the completion of the rights offering. Further, if a substantial number of subscription rights are exercised, and the holders of the shares received upon exercise of those subscription rights choose to sell some or all of those shares, the resulting sales could depress the market price of our common stock.

We may enter into other financing transactions, including an equity line sales agreement, during the subscription rights offering period which may cause the price of our common stock to decrease.

In order to raise additional capital, we may offer additional shares of our common stock or other securities convertible into or exchangeable for our common stock at prices that may not be the same as the price per share in this offering. On May 5, 2016, we held our Annual Meeting of Stockholders at which our stockholders approved the sale of up to \$16 million in shares of our common stock to a single institutional investor through a committed equity line purchase agreement. We may sell shares or other securities in any future offering at a price per share that is lower than the price per share paid by investors in this offering, including during the subscription rights offering period, which would result in those newly issued shares being dilutive and may cause the price of our common stock to decrease. In addition, investors purchasing shares or other securities in the future could have rights superior to existing stockholders, which could impair the value of your shares. The price per share at which we sell additional shares of our common stock, or securities convertible or exchangeable into common stock, in future transactions may be higher or lower than the subscription price paid by investors in this offering.

Completion of the rights offering is not subject to a minimum offering amount.

Completion of the rights offering is not subject to us raising a minimum offering amount and, therefore, proceeds may be insufficient to meet our objectives, thereby increasing the risk to investors in this offering, including investing in a company that continues to require capital.

The subscription rights are not transferable, and there is no market for the subscription rights.

You may not sell, transfer, assign or give away your subscription rights. Because the subscription rights are non-transferable, there is no market or other means for you to directly realize any value associated with the subscription rights. You must exercise the subscription rights to realize any potential value from your subscription rights.

The subscription price for this offering is not an indication of the value of our common stock.

The subscription price is not necessarily related to our book value, net worth or any other established criteria of value and may or may not be considered the fair value of our common stock to be offered in the rights offering. We cannot give any assurance that our common stock will trade at or above the subscription price in any given time period. After the date of this prospectus, our common stock may trade at prices above or below the subscription price.

We may be or become the target of class action litigation, which is costly and time-consuming to defend.

In the past, following periods of market volatility in the price of a company s securities or the reporting of unfavorable news, stockholders have often instituted class action litigation. If the market value of our securities experience adverse fluctuations and we become involved in this type of litigation, regardless of the outcome, we could incur substantial legal costs and our management s attention could be diverted from the operation of our business, causing our business to suffer.

Price adjustment provisions in certain of our outstanding warrants may make it more difficult and expensive for us to r