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Approximate date of commencement of proposed sale to the public: From time to time, after the effective date of this Registration Statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

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.

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, 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 registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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 Non-accelerated filer (Do not check if smaller reporting company) Smaller reporting company

CALCULATION OF REGISTRATION FEE

| Title of each class of securities to be registered | Proposed maximum aggregate offering price (1)(2) | Amount of registration fee (2) |
|--|--|--------------------------------|
| Common Stock, \$.01 par value per share (3) | | |
| Preferred Stock, \$.01 par value per share (4) | | |
| Warrants (5) | | |
| Units (6) | | |
| Total | \$ 100,000,000(1) | \$ 12,880.00 |

In no event will the aggregate offering price of all securities issued from time to time by the registrant under this registration statement exceed \$100,000,000. The securities covered by this registration statement may be sold (1) separately, together or as units with other securities registered under this registration statement. Pursuant to SEC Rule 416, the registration statement also covers additional common shares that may be offered to prevent dilution as a result of stock splits, or stock dividends.

(2) The proposed maximum aggregate price has been estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act.

Subject to note (1), this registration statement covers such an indeterminate amount of common stock (with (3) accompanying purchase rights, if any), as may be sold, from time to time, at indeterminate prices, by the registrant.

Subject to note (1), this registration statement covers such an indeterminate number of shares of preferred stock (with accompanying purchase rights, if any) as may be sold from time to time at indeterminate prices by the (4) registrant. Also covered is such an indeterminate amount of common stock (with accompanying purchase rights, if any,) (i) as may be issuable or deliverable upon conversion of shares of preferred stock, and (ii) as may be required for delivery upon conversion of shares of preferred stock as a result of anti-dilution provisions.

Subject to note (1), this registration statement covers such an indeterminate amount and number of warrants, representing rights to purchase common stock and preferred stock registered under this registration statement as (5) may be sold from time to time at indeterminate prices by the registrant. Also covered is such an indeterminate amount of common stock and preferred stock (in each case, with accompanying purchase rights, if any) (i) as may be issuable or deliverable upon exercise of warrants, and (ii) as may be required for delivery upon exercise of any warrants as a result of anti-dilution provisions.

Subject to note (1), any securities registered hereunder may be sold separately or as units with other securities (6) registered hereunder. The proposed maximum offering price per unit will be determined by the registrant in connection with the issuance of the securities.

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 this Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. We may not sell the securities until the Registration Statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED JUNE 6, 2014

PROSPECTUS

NEURALSTEM, INC.

\$100,000,000

Common Stock,

Preferred stock,

Warrants

Units

We may from time to time in one or more offerings, offer and sell one or any combination of the securities we describe in this prospectus, either individually or as units comprised of one or more of the offered securities. **This prospectus may not be used to sell securities unless accompanied by a prospectus supplement, which will describe the method and the terms of the offering.** We will provide you with specific amount, price and terms of the applicable offered securities in one or more supplements to this prospectus. You should read this prospectus and any supplement carefully before you purchase any of our securities.

These securities may be offered and sold in the same offering or in separate offerings; to or through underwriters, dealers, and agents; or directly to purchasers. The names of any underwriters, dealers, or agents involved in the sale of our securities, their compensation and any over-allotment options held by them will be described in the applicable prospectus supplement, see "Plan of Distribution."

Our common stock is listed on the NYSE MKT under the symbol "CUR." On June 5, 2014, the closing price of our common stock on the NYSE MKT was \$4.64 per share. Our principal executive offices are located at 20271 Goldenrod Lane, Germantown, Maryland 20876, and our telephone number is (301) 366-4841.

INVESTING IN OUR SECURITIES INVOLVES RISKS. YOU SHOULD REVIEW CAREFULLY THE RISKS AND UNCERTAINTIES DESCRIBED UNDER THE HEADING "RISK FACTORS" ON PAGE 5 AND 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.

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

This prospectus is dated _____, 2014

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ABOUT THIS PROSPECTUS

Unless the context requires otherwise or unless otherwise noted, all references in this prospectus or any prospectus supplement to “*our company*,” “*we*,” “*our*,” “*Neuralstem*” and “*us*” refer to *Neuralstem, Inc. and its subsidiaries*.

This prospectus is a part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, utilizing a “shelf” registration process. Under this shelf process, we may sell the securities described in this prospectus in one or more offerings. This prospectus provides you with a general description of the securities we may offer. Each time we sell securities under this shelf registration, 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 headings “Where You Can Find More Information” and “Incorporation by Reference.”

You should rely only on the information that we have provided or incorporated by reference in this prospectus, any applicable prospectus supplement and any related free writing prospectus that we may authorize to be provided to you. We have not authorized any dealer, salesman or other 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 that we may authorize to be provided to you. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus or the accompanying prospectus supplement. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you.

This prospectus and the accompanying supplement to this 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 and the accompanying supplement to this 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 sold on a later date.

FORWARD-LOOKING STATEMENTS

This prospectus, including the documents that we incorporate by reference, contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). The words “anticipate,” “believe,” “ensure,” “expect,” “if,” “intend,” “estimate,” “probable,” “project,” “forecasts,” “predict,” “outlook,” “aim,” “will,” “could,” “should,” “would,” and similar expressions, and the negative thereof, are intended to identify forward-looking statements. Our forward-looking statements are based on assumptions that we believe to be reasonable but that may not prove to be accurate. The statements do not include the potential impact of future transactions, such as an acquisition, disposition, merger, joint venture or other transaction that could occur. We undertake no obligation to publicly update or revise any forward-looking statement.

Discussions containing these forward-looking statements may be found, among other places, in the Sections entitled “Business,” “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” incorporated by reference from our most recent Annual Report on Form 10-K and in our Quarterly Reports on Form 10-Q, as well as any amendments thereto, filed with the SEC. Such statements are based on currently available operating, financial and competitive information and are subject to various risks, uncertainties and assumptions that could cause actual results to differ materially from those anticipated or implied in our forward-looking statements due to a number of factors including, but not limited to, those set forth below under the section entitled “Risk Factors” in our most recent Annual Report on Form 10-K for the year ended December 31, 2013 and our Quarterly Report on Form 10-Q for the three-month period ended March 31, 2014, as updated by annual, quarterly and other reports and documents we file with the SEC after the date of this prospectus and that are incorporated by reference herein or in the applicable prospectus supplement. Given these risks, uncertainties and other factors, many of which are beyond our control, you should not place undue reliance on these forward-looking statements.

Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to revise any forward-looking statements to reflect events or developments occurring after the date of this prospectus, even if new information becomes available in the future.

THE COMPANY

Overview

We are focused on the development and commercialization of treatments based on human neuronal stem cells and our small molecule compounds. We are headquartered in Germantown, Maryland and have a wholly-owned subsidiary in China.

We have developed and maintain a portfolio of patents and patent applications that form the proprietary base for our research and development efforts. We own or exclusively license fifty-one (51) U.S. or foreign issued patents and fifty-nine (59) U.S. and foreign patent applications in the field of regenerative medicine, related to our stem cell technologies as well as our small molecule compounds. At times we have licensed the use of our intellectual property to third parties.

We believe our technology base, in combination with our know-how, and collaborative projects with major research institutions, will facilitate the development and commercialization of products for use in the treatment of a wide array of neurodegenerative conditions and in regenerative repair of acute disease.

Regenerative medicine is a young and emerging field. Regenerative medicine is the process of creating living, functional tissues to repair or replace tissue or organ function lost due to age, disease, damage, or congenital defects. There can be no assurances that we will ultimately produce viable commercialized products and processes. Even if we are able to produce a commercially viable product, there are strong competitors in this field and our products may not be able to successfully compete against them.

All of our research efforts to date are at the pre-clinical or clinical stage of development. We are focused on leveraging our key assets, including our intellectual property, our scientific team and our facilities in order to advance our technologies. In addition, we are pursuing strategic collaborations with members of academia and industry.

Clinical Programs

We have devoted substantially all our efforts to the development of our stem cell and small molecule compounds and their pre-clinical and clinical development. Below is a description of our four most advanced clinical programs, their intended indication, current stage of development and our expected future development plans.

| Program | Indication | Development Status | Future Development Plan |
|-----------|---------------------------------------|---|--|
| NSI - 566 | Amyotrophic Lateral Sclerosis (ALS) | Ongoing Phase II clinical trials | Anticipated to complete patient dosing in our Phase II clinical trials during the third quarter of 2014. |
| NSI - 566 | Chronic Spinal Cord Injury | Approved to commence Phase I clinical trials. | Phase I Trial expected to commence during the third quarter of 2014. |
| NSI - 566 | Motor deficits due to ischemic stroke | Ongoing combined Phase I/II clinical trials in China. | Dosing commenced during the fourth quarter of 2013. |
| NSI - 189 | Major Depressive Disorder | Completed Phase Ia, Phase Ib trials. | Phase II trial investigational new drug application or IND expected to be filed in the third quarter of 2014 with the trial commencing in late 2014 or early 2015. |

NSI - 566 (Stem Cells).

Amyotrophic Lateral Sclerosis (ALS)

Amyotrophic lateral sclerosis, or ALS, is a disease of the nerve cells in the brain and spinal cord that control voluntary muscle movement. In ALS, nerve cells (neurons) waste away or die, and can no longer send messages to muscles. This eventually leads to muscle weakening, twitching, and an inability to move the arms, legs, and body. The condition slowly gets worse. When the muscles in the chest area stop working, it becomes hard or impossible to breathe. We believe that NSI-566 may provide an effective treatment for ALS by providing cells which nurture and protect the patients' remaining motor neurons; and possibly repair some motor neurons which were not dead, but diseased.

We conducted the Phase I trial for our proposed treatment of ALS at Emory University in Atlanta Georgia. The purpose of the Phase I trial was to evaluate the safety and transplantation technique of our proposed treatment and procedure. The treating of patients in the Phase I trial, as designed, was completed in August of 2012. We commenced Phase II clinical trial in September of 2013. The Phase II dose escalation trial is designed to treat up to 15 ambulatory patients in six different dosing cohorts, under an accelerated dosing and treatment schedule. To date, we have treated the first four cohorts. We anticipate completing the Phase II dosing during the third quarter of 2014. Although initial data from the Phase I trial appears promising, the outcome of the trial is uncertain and this trial or future trials may ultimately be unsuccessful.

Chronic Spinal Cord Injury

A spinal cord injury or SCI generally refers to any injury to the spinal cord that is caused by trauma instead of disease although in some cases, it can be the result of diseases. Chronic Spinal Cord Injury refers to the time after the initial hospitalization. Spinal cord injuries are most often traumatic, caused by lateral bending, dislocation, rotation, axial loading, and hyperflexion or hyperextension of the cord or cauda equina. Motor vehicle accidents are the most common cause of SCIs, while other causes include falls, work-related accidents, sports injuries, and penetrations such as stab or gunshot wounds. In certain instances, SCIs can also be of a non-traumatic origin, as in the case of cancer, infection, intervertebral disc disease, vertebral injury and spinal cord vascular disease. We believe that NSI-566 may provide an effective treatment for Chronic Spinal Cord Injury by “bridging the gap” in the spinal cord created in traumatic spinal cord injury and providing new cells to help transmit the signal from the brain to points at or below the point of injury.

During the first quarter of 2013, we received approval from the United States food and drug Administration or FDA to commence our proposed Phase I clinical trial to treat chronic spinal cord injury. The entire trial will take place at The University California, San Diego. We anticipate the trial will commence during the third quarter of 2014.

Motor Deficits Due to Ischemic Stroke

Ischemic strokes, the most common type of stroke, occur as a result of an obstruction within a blood vessel supplying blood to the brain. Post-stroke motor deficits include paralysis in arms and legs and can be permanent. We believe that NSI-566 may provide an effective treatment for restoring motor deficits resulting from Ischemic Stroke by both creating new circuitry in the area of injury and through repairing and or nurturing diseased cells to improve function in patients.

In September of 2012, we received approval to commence human clinical trials to treat motor deficits due to ischemic stroke. The trial will be conducted by our wholly owned subsidiary, Neuralstem China, at BaYi Brain Hospital in Beijing, China and will utilize our spinal cord stem cells. The trial approval includes a combined phase I/II/III design and will test direct injections of NSI-566 into the brain, the same cell product used in our recently-completed Phase I ALS trial in the United States. The trial commenced in the fourth quarter of 2013 and is designed to enroll up to 118 patients. The first phase of the trial is structured to confirm the maximum safe tolerated dose.

NSI - 189 (Small Molecule Pharmaceutical Compound).

Major Depression Disorder

Major depressive disorder or MDD (also known as recurrent depressive disorder, clinical depression, major depression, unipolar depression, or unipolar disorder) is a mental disorder characterized by episodes of all-encompassing low mood accompanied by low self-esteem and loss of interest or pleasure in normally enjoyable activities. NSI-189 is being developed for the treatment of major depressive disorder and other psychiatric and/or cognitive impairment indications. NSI-189 is the lead compound in our neurogenerative small molecule drug platform. We believe that NSI-189 may provide an effective treatment for patients suffering from MDD by structurally rebuilding the hippocampus.

In February of 2011, we commenced the Phase I clinical trial (Phase Ia portion), NSI-189, at California Clinical Trials, LLC, in Glendale, California. The purpose of the Phase Ia portion of the trial was to evaluate the safety of the drug in healthy volunteers. The Phase Ia portion tested a single oral administration of NSI-189 in 24 healthy volunteers and was completed in October of 2011. In December of 2011, we received approval from the FDA to commence the Phase Ib portion of the trial. The purpose of the Phase Ib portion of the clinical trial is to determine the safety of the drug at several dosings in actual MDD patients. The Phase Ib portion consists of patients with MDD receiving daily doses for 28 consecutive days. In June of 2012, we dosed our first patient in the Phase Ib portion of the trial. To date, we have completed dosing all cohorts of patients in the Phase Ib portion of the trial and the data is being reviewed. While the final data analysis will not be completed until late May, the early look at the unblended data was encouraging enough that the Company has committed to conducting a phase two trial. We expect to file the IND for the phase two in the third or fourth quarter of 2014 and expect that the Phase II trial would start before the end of the first quarter of 2015.

Technology

Stem Cells.

Our technology enables the isolation and large-scale expansion of human neural stem cells from all areas of the developing human brain and spinal cord, thus enabling the generation of physiologically relevant human neurons of all types. We believe that our stem cell technology will assist the body in producing new cells to replace malfunctioning or dead cells as a way to treat disease and injury. Many significant and currently untreatable human diseases arise from the loss or malfunction of specific cell types in the body. Our focus is the development of effective methods to generate replacement cells from neural stem cells. We believe that replacing damaged, malfunctioning or dead neural cells with fully functional ones may be a useful therapeutic strategy in treating many diseases and conditions of the central nervous system or CNS, including: Alzheimer's disease, Parkinson's disease, Multiple Sclerosis, Lou Gehrig's disease or ALS, depression, and injuries to the spinal cord. We own or exclusively license thirty-three (33) U.S. and foreign issued patents and thirty-nine (39) U.S. and foreign patent applications related to our stem cell technologies.

To date we have focused our research efforts on applications involving spinal cord stem cells. We believe that, if successfully developed, stem cell therapeutics have the potential to provide a broad therapeutic approach comparable to traditional pharmaceuticals and genetically engineered biologics. We have established “proof of principle” in animal models for important spinal cord cell applications: ALS and Traumatic spinal cord injury. Of these applications, we have completed our first Phase I trial with regard to ALS and commenced initial Phase II trials in the third quarter of 2013. We have also received approval from the FDA to commence a Phase I trial in Chronic Spinal Cord Injury (patients one to two years out from their injury) in complete (no sensory or motor function from the site of the injury down) thoracic patients. We expect this trial to start during the third quarter of 2014. In the fourth quarter of 2013 we filed an IND to start a trial to treat acute spinal cord injury (within several weeks of the injury) in Seoul Korea. If approved as submitted, this trial will treat complete patients, who are those who have no sensory or motor function below the point of the injury and also progressively incomplete patients, who have varying degrees of each. Also, if approved as submitted, this trial will treat cervical area injuries. We expect this trial to start in the second half of 2014.

Small Molecule Pharmaceutical Compounds.

We have developed and patented a series of small molecule compounds (low molecular weight organic compounds which can efficiently cross the blood/brain barrier). We believe that these small molecule compounds will stimulate the growth of new neurons in the hippocampus and provide a treatment for depression, and possibly other cognitive impacting diseases. In mice, our research indicated that our small molecule compounds both stimulate neurogenesis of the hippocampus and increase its volume. Additionally, our research also indicates that our small molecule compounds stimulate neurogenesis of human hippocampus-derived neural stem cells in vitro. Based on this research, we believe that our small molecule compounds may assist in reversing atrophy in the human hippocampus. Such atrophy has been seen in major depression and other disorders.

Our small molecule compounds are covered by eighteen (18) exclusively owned U.S. and foreign issued patents and twenty-one (21) exclusively owned U.S. and foreign patent applications related to our small molecule compounds.

Research

We have devoted substantial resources to our research programs in order to isolate and develop a series of neural stem cell banks that we believe can serve as a basis for our therapeutic products. Our efforts are directed at developing therapies utilizing our stem cells and small molecule regenerative drugs. This research is conducted internally, through the use of third party laboratories and consulting companies under our direct supervision, and through collaboration with academic institutes.

Operating Strategy

We generally employ an outsourcing strategy where we outsource our Good Laboratory Practices or GLP preclinical development activities and Good Manufacturing Practices or GMP manufacturing and clinical development activities to contract research organizations or CROs and contract manufacturing organizations or CMOs as well as all non-critical corporate functions. Manufacturing is also outsourced to organizations with approved facilities and manufacturing practices. This outsource model allows us to better manage cash on hand and minimize non-vital expenditures. It also allows for us to operate with relatively fewer employees and lower fixed costs than that required by other companies conducting similar business.

Manufacturing

We currently manufacture our cells both in-house and on an outsource basis. We outsource the manufacturing of our pharmaceutical compounds to third party manufacturers. We manufacture cells in-house which are not required to meet stringent FDA requirements. We use these cells in our research and collaborative programs. We outsource all the manufacturing and storage of our stem cells and pharmaceuticals compound to be used in clinical and pre-clinical works, and which are accordingly subject to higher FDA requirements, to Charles River Laboratories, Inc., of Wilmington, Massachusetts (stem cells) and Albany Molecular Resources, Inc. (“AMRI”) (small molecule). Both the Charles River and AMRI facilities have the capacity to be used for manufacturing under the FDA determined GMP standards in quantities sufficient for our current and anticipated pre-trial and clinical trial needs. We have no quantity or volume commitment with either Charles River Laboratories or AMRI and our cells and pharmaceutical compounds are ordered and manufactured on an as needed basis. Additionally, during the first quarter of 2014, we relocated our headquarters to a facility with GMP manufacturing capability. We anticipate the facility will be ready to commencing manufacturing of our stem cells for our clinical trials by the second quarter of 2015. Such increased manufacturing will supplement our current outsource supply of both stem cells and pharmaceutical compounds. We believe such additional manufacturing capacity will be beneficial as our clinical trials expand by indication, geographic region and to larger patient populations.

Employees

As of March 31, 2014, we had 15 full-time employees and one (1) full-time independent contractor. Of these full-time employees and contractor, 11 work on research and development and five (5) in administration. We also use the services of numerous outside consultants in business and scientific matters.

Our Corporate Information

We were incorporated in Delaware. Our principal executive offices are located at 20271 Goldenrod Lane, Germantown, Maryland 20876, and our telephone number is (301) 366-4841. Our website is located at www.neuralstem.com.

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully consider and evaluate all of the information included and incorporated by reference or deemed to be incorporated by reference in this prospectus or the applicable prospectus supplement, including the risk factors incorporated by reference herein from our Annual Report on Form 10-K for the year ended December 31, 2013 and our Quarterly Report on Form 10-Q for the three-month period ended March 31, 2014, as updated by annual, quarterly and other reports and documents we file with the SEC after the date of this prospectus and that are incorporated by reference herein or in the applicable prospectus supplement. Our business, results of operations or financial condition could be adversely affected by any of these risks or by additional risks and uncertainties not currently known to us or that we currently consider immaterial.

USE OF PROCEEDS

Except as otherwise provided in the applicable prospectus supplement, we intend to use the net proceeds from the sale of the securities covered by this prospectus for general corporate purposes, which may include working capital, capital expenditures, research and development expenditures, clinical trial expenditures, acquisitions of new technologies or businesses, repayment of outstanding debt, and investments. Additional information on the use of net proceeds from the sale of securities covered by this prospectus may be set forth in the prospectus supplement relating to the specific offering.

DIVIDEND POLICY

We have never paid cash dividends on our common stock. Moreover, we do not anticipate paying periodic cash dividends on our common stock for the foreseeable future. We intend to use all available cash and liquid assets in the operation and growth of our business. Any future determination about the payment of dividends will be made at the

discretion of our board of directors and will depend upon our earnings, if any, capital requirements, operating and financial conditions and on such other factors as our board of directors deems relevant.

DESCRIPTION OF SECURITIES TO BE REGISTERED

Description of the Capital Stock

As of the date of this prospectus, our authorized capital stock consists of 150,000,000 shares designated as common stock, \$0.01 par value, and 7,000,000 shares designated as preferred stock, \$0.01 par value. As of May 30, 2014, there were 86,837,455 shares of common stock issued and outstanding and no shares of preferred stock outstanding. Additionally, as of such date, we have reserved for issuance pursuant to outstanding options, warrants and convertible securities, as well for future grants under our equity compensation plans, 44,285,358 shares of common stock.

The following is a summary of the material provisions of the common stock and preferred stock provided for in our certificate of incorporation and bylaws. For additional detail about our capital stock, please refer to our certificate of incorporation and bylaws, each as amended, copies of which are incorporated by reference into the registration statement to which this prospectus relates.

Common stock

The holders of common stock are entitled to one vote per share on all matters to be voted upon by the stockholders and there are no cumulative rights. Subject to preferences that may be applicable to any outstanding preferred stock, the holders of common stock are entitled to receive ratably any dividends that may be declared from time to time by the board of directors out of funds legally available for that purpose. However, we are not currently paying any dividends. In the event of our liquidation, dissolution or winding up, the holders of common stock are entitled to share ratably in all assets remaining after payment of liabilities, subject to prior distribution rights of preferred stock then outstanding. The common stock has no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. The outstanding shares of common stock are fully paid and non-assessable, and any shares of common stock to be issued upon an offering pursuant to this prospectus and the related prospectus supplement will be fully paid and nonassessable upon issuance.

The transfer agent and registrar for our common stock is American Stock Transfer and Trust Company. Our common stock is listed for quotation on the NYSE MKT under the symbol "CUR."

Preferred stock

The following description of preferred stock and the description of the terms of any particular series of preferred stock that we choose to issue hereunder and that will be set forth in the related prospectus supplement are not complete. These descriptions are qualified in their entirety by reference to our certificate of incorporation and the certificate of designation relating to that series. The rights, preferences, privileges and restrictions of the preferred stock of each series will be fixed by the certificate of designation relating to that series. The prospectus supplement also will contain a description of certain U.S. federal income tax consequences relating to the purchase and ownership of the series of preferred stock that is described in the prospectus supplement.

We currently have no shares of preferred stock outstanding. Our board of directors has the authority, without further action by the stockholders, to issue up to 7,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions granted to or imposed upon the preferred stock. Any or all of these rights may be greater than the rights of the common stock.

The board of directors, without stockholder approval, can issue preferred stock with voting, conversion or other rights that could negatively affect the voting power and other rights of the holders of common stock. Preferred stock could thus be issued quickly with terms calculated to delay or prevent a change in control of us or make it more difficult to remove our management. Additionally, the issuance of preferred stock may have the effect of decreasing the market price of the common stock.

The prospectus supplement for a series of preferred stock will specify:

• the price of and maximum number of shares;

• the designation of the shares;

• the annual dividend rate, if any, whether the dividend rate is fixed or variable, the date or dates on which dividends will accrue, the dividend payment dates, and whether dividends will be cumulative;

• the price and the terms and conditions for redemption, if any, including redemption at our option or at the option of the holders, including the time period for redemption, and any accumulated dividends or premiums;

• the liquidation preference, if any, and any accumulated dividends upon the liquidation, dissolution or winding up of our affairs;

• any sinking fund or similar provision, and, if so, the terms and provisions relating to the purpose and operation of the fund;

• the terms and conditions, if any, for conversion or exchange of shares of any other class or classes of our capital stock or any series of any other class or classes, or of any other series of the same class, or any other securities or assets, including the price or the rate of conversion or exchange and the method, if any, of adjustment;

• the voting rights; and

any or all other preferences and relative, participating, optional or other special rights, privileges or qualifications, limitations or restrictions.

Preferred stock will be fully paid and nonassessable upon issuance.

Anti-Takeover Effects of Some Provisions of Delaware Law

Provisions of Delaware law could make the acquisition of our company through a tender offer, a proxy contest or other means more difficult and could make the removal of incumbent officers and directors more difficult. We expect these provisions to discourage coercive takeover practices and inadequate takeover bids and to encourage persons seeking to acquire control of our company to first negotiate with our board of directors. We believe that the benefits provided by our ability to negotiate with the proponent of an unfriendly or unsolicited proposal outweigh the disadvantages of discouraging these proposals. We believe the negotiation of an unfriendly or unsolicited proposal could result in an improvement of its terms.

We are subject to Section 203 of the Delaware General Corporation Law, an anti-takeover law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a period of three years following the date the person became an interested stockholder, unless:

• Prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;

The stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding (a) shares owned by persons who are directors and also officers, and (b) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

On or subsequent to the date of the transaction, the business combination is approved by the board and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least two-thirds of the outstanding voting stock that is not owned by the interested stockholder.

Generally, a “business combination” includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An “interested stockholder” is a person who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of a corporation’s outstanding voting securities. We expect the existence of this provision to have an anti-takeover effect with respect to transactions our board of directors does not approve in advance. We also anticipate that Section 203 may also discourage attempts that might result in a premium over the market price for the shares of common stock held by stockholders.

Anti-Takeover Effects of Provisions of Our Charter Documents

Our amended and restated bylaws provides for our board of directors to be divided into three classes serving staggered terms. Approximately one-third of the board of directors will be elected each year. The provision for a classified board could prevent a party who acquires control of a majority of the outstanding voting stock from obtaining control of the board of directors until the second annual stockholders meeting or longer, following the date the acquirer obtains the controlling stock interest. The classified board provision could discourage a potential acquirer from making a tender offer or otherwise attempting to obtain control of our company and could increase the likelihood that incumbent directors will retain their positions. Our amended and restated bylaws provides any director or the entire Board may be removed from office at any time, with or without cause, by the affirmative vote of the holders of at least a majority of the voting power of the issued and outstanding shares of capital stock of the corporation then entitled to vote in the election of directors.

Our amended and restated bylaws establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to the board of directors. At an annual meeting, stockholders may only consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of the board of directors. Stockholders may also consider a proposal or nomination by a person who was a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has given to our Secretary timely written notice, in proper form, of his or her intention to bring that business before the meeting. The amended and restated bylaws do not give the board of directors the power to approve or disapprove stockholder nominations of candidates or proposals regarding other business to be conducted at a special or annual meeting of the stockholders. However, our bylaws may have the effect of precluding the conduct of business at a meeting if the proper procedures are not followed. These provisions may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer’s own slate of directors or otherwise attempting to obtain control of our company.

Our amended and restated bylaws provide that only our board of directors, the chairperson of the board or the chief executive officer (or president, in the absence of a chief executive officer) or holders of more than twenty percent (20%) of the total voting power of the outstanding shares of capital stock may call a special meeting of stockholders. The restriction on the ability of stockholders to call a special meeting means that a proposal to replace the board also could be delayed until the next annual meeting.

Description of the Warrants

We may issue warrants for the purchase of our preferred stock or common stock, or any combination thereof. Warrants may be issued independently or together with our preferred stock or common stock and may be attached to, or separate from, any offered securities. Each series of warrants will be issued under a separate warrant agreement to be entered into between us and the warrant holder or a bank or trust company, as warrant agent. In the event we engage a warrant agent, the warrant agent will act solely as our agent in connection with the warrants. The warrant agent will not have any obligation or relationship of agency or trust for or with any holders or beneficial owners of warrants. This summary of certain provisions of the warrants is not complete. For the terms of a particular series of warrants, you should refer to the prospectus supplement and the warrant agreement for that particular series.

The prospectus supplement relating to a particular series of warrants to purchase our common stock or preferred stock will describe the terms of the warrants, including the following:

• the title of the warrants;

• the exercise price of the warrants;

• the offering price for the warrants, if any;

• the aggregate number of warrants;

• the designation and terms of the common stock or preferred stock that may be purchased upon exercise of the warrants;

• if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each security;

• if applicable, the date from and after which the warrants and any securities issued with the warrants will be separately transferable;

• the number of shares of common stock or preferred stock that may be purchased upon exercise of a warrant and the exercise price for the warrants;

• the dates on which the right to exercise the warrants shall commence and expire;

• if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;

• the currency or currency units in which the offering price, if any, and the exercise price are payable;

• if applicable, a discussion of material U.S. federal income tax considerations;

• the antidilution provisions of the warrants, if any;

• the redemption or call provisions, if any, applicable to the warrants;

• any provisions with respect to the holder's right to require us to repurchase the warrants upon a change in control or similar event; and

• any additional terms of the warrants, including procedures, and limitations relating to the exchange, exercise and settlement of the warrants.

• Holders of equity warrants will not be entitled:

• to vote, consent or receive dividends;

• receive notice as stockholders with respect to any meeting of stockholders for the election of our directors or any other matter; or

• exercise any rights of our stockholders.

Description of the Units

We may issue units comprised of one or more of the other classes of securities described in this prospectus in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The prospectus supplement will describe:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances the securities comprising the units may be held or transferred separately;

- a description of the terms of any agreement governing the units;

- a description of the provisions for the payment, settlement, transfer or exchange of the units; and

- a discussion of material federal income tax considerations, if applicable; and

The descriptions of the units in this prospectus and in any prospectus supplement are summaries of the material provisions of the applicable agreements. These descriptions do not restate those agreements in their entirety and may not contain all the information that you may find useful. We urge you to read the applicable agreements because they, and not the summaries, define your rights as holders of the units.

PLAN OF DISTRIBUTION

We may sell the offered securities in any of the ways described below or in any combination or any other way set forth in an applicable prospectus supplement from time to time:

- to or through underwriters or dealers;

- through one or more agents; or

- directly to purchasers or to a single purchaser.

The distribution of the securities may be effected from time to time in one or more transactions:

• at a fixed price, or prices, which may be changed from time to time;

• at market prices prevailing at the time of sale;

- at prices related to such prevailing market prices; or

• at negotiated prices.

Each prospectus supplement will describe the method of distribution of the securities and any applicable restrictions.

The prospectus supplement with respect to the securities of a particular series will describe the terms of the offering of the securities, including the following:

• the name or names of any underwriters, dealers or agents and the amounts of securities underwritten or purchased by each of them;

• the public offering price of the securities and the proceeds to us and any discounts, commissions or concessions allowed or reallocated or paid to dealers; and

• any exchanges on which the securities may be listed.

Any offering price and any discounts or concessions allowed or reallocated or paid to dealers may be changed from time to time.

Only the agents or underwriters named in each prospectus supplement are agents or underwriters in connection with the securities being offered thereby.

We may authorize underwriters, dealers or other persons acting as our agents to solicit offers by certain institutions to purchase securities from us pursuant to delayed delivery contracts providing for payment and delivery on the date stated in each applicable prospectus supplement. Each contract will be for an amount not less than, and the aggregate amount of securities sold pursuant to such contracts shall not be less nor more than, the respective amounts stated in each applicable prospectus supplement. Institutions with whom the contracts, when authorized, may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and other institutions, but shall in all cases be subject to our approval. Delayed delivery contracts will be subject only to those conditions set forth in each applicable prospectus supplement, and each prospectus supplement will set forth any commissions we pay for solicitation of these contracts.

Agents, underwriters and other third parties described above may be entitled to indemnification by us against certain civil liabilities, including liabilities under the Securities Act of 1933, or to contribution from us with respect to payments that the agents, underwriters or other third parties may be required to make in respect of these civil liabilities. Agents, underwriters and such other third parties may be customers of, engage in transactions with, or perform services for us in the ordinary course of business.

One or more firms, referred to as “remarketing firms,” may also offer or sell the securities, if a prospectus supplement so indicates, in connection with a remarketing arrangement upon their purchase. Remarketing firms will act as principals for their own accounts or as our agents. These remarketing firms will offer or sell the securities in accordance with the terms of the securities. Each prospectus supplement will identify and describe any remarketing firm and the terms of its agreement, if any, with us and will describe the remarketing firm’s compensation. Remarketing firms may be deemed to be underwriters in connection with the securities they remarket. Remarketing firms may be entitled under agreements that may be entered into with us to indemnification by us against certain civil liabilities, including liabilities under the Securities Act of 1933, and may be customers of, engage in transactions with, or perform services for, us in the ordinary course of business.

Certain underwriters may use this prospectus and any accompanying prospectus supplement for offers and sales related to market-making transactions in the securities. These underwriters may act as principal or agent in these transactions, and the sales will be made at prices related to prevailing market prices at the time of sale.

The securities we offer may be new issues of securities and may have no established trading market. The securities may or may not be listed on a securities exchange. 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 can make no assurance as to the liquidity of, or the existence of trading markets for, any of the securities.

Certain persons participating in an offering may engage in over-allotment, stabilizing transactions, short covering transactions and penalty bids in accordance with rules and regulations under the Securities Exchange Act of 1934. Over-allotment 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 short 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.

We also may sell any of the securities through agents designated by us from time to time. We will name any agent involved in the offer or sale of these securities and will list commissions payable by us to these agents in the applicable prospectus supplement. These agents will be acting on a best efforts basis to solicit purchases for the period of its appointment, unless stated otherwise in the applicable prospectuses.

LEGAL MATTERS

The validity of the issuance of the securities offered hereby will be passed upon for us by The Silvestre Law Group, P.C. Westlake Village, California. The Silvestre Law Group, P.C. or its affiliates or principals own 54,000 shares of common stock and 150,000 common stock purchase warrants.

EXPERTS

The financial statements incorporated in this prospectus by reference from the Company's Annual Report on Form 10-K have been audited by Stegman & Company, an independent registered public accounting firm, as stated in their report, which is incorporated herein by reference. Such financial statements have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing. Stegman & Company has no interest in the shares being registered in this filing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement to register the securities offered by this prospectus under the Securities Act. This prospectus is part of that registration statement, but omits certain information contained in the registration statement, as permitted by SEC rules. For further information with respect to our Company and this offering, reference is made to the registration statement and the exhibits and any schedules filed with the registration statement. Statements contained in this prospectus as to the contents of any document referred to are not necessarily complete and in each instance, if the document is filed as an exhibit, reference is made to the copy of the document filed as an exhibit to the registration statement, each statement being qualified in all respects by that reference. You may obtain copies of the registration statement, including exhibits, as noted in the paragraph below or by writing or telephoning us at:

NEURALSTEM, INC

20271 Goldenrod Lane, 2nd Floor

Germantown, MD 20876

Attn: Shareholder Services

Tel: 301.366.4960

We file annual, quarterly and other reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at <http://www.sec.gov>. You may also read and copy any document we file at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. You can also inspect reports, proxy statements and other information about us at the offices of the National Association of Securities Dealers, Reports Section, 1735 K Street, N.W., Washington, D.C. 20006. We maintain a website at <http://www.neuralstem.com>. Information contained in or accessible through our website does not constitute a part of this prospectus.

In addition to announcing material financial information through our website, press releases, SEC filings and public conference calls and webcasts, we also intend to use the following social media channels as a means of disclosing information about the company, its services and other matters and for complying with our disclosure obligations under Regulation FD:

· Neuralstem's Twitter Account (https://twitter.com/Neuralstem_Inc)

· Neuralstem's Facebook Page (<https://www.facebook.com/Neuralstem>)

·Neuralstem's Company Blog (<http://neuralstem.com/neuralstem-ceo-blog>)

·Neuralstem's Google+ Page
(<https://plus.google.com/u/0/b/104875574397171789280/104875574397171789280/posts>)

·Neuralstem's LinkedIn Company Page (<http://www.linkedin.com/company/neuralstem-inc->)

The information we post through these social media channels may be deemed material. Accordingly, investors should monitor these accounts and the blog, in addition to following the company's press releases, SEC filings and public conference calls and webcasts. This list may be updated from time to time.

We have not incorporated by reference into this 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.

INFORMATION INCORPORATED BY REFERENCE

We incorporate information into this prospectus by reference, which means that we disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus, except for any such information superseded by information contained in later-filed documents or directly in this prospectus. This prospectus incorporates by reference the documents set forth below that we have previously filed with the SEC (excluding those portions of any Form 8-K that are not deemed “filed” pursuant to the General Instructions of Form 8-K). These documents contain important information about us and our financial condition.

We incorporate by reference into this prospectus the information contained in the documents listed below, which are considered to be a part of this prospectus:

Our Annual Report on Form 10-K for the year ended December 31, 2013 which was filed with the Commission on March 10, 2014;

Our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2014, which was filed with the Commission on May 12, 2014;

Our Definitive Proxy Statement on Form 14A for our 2014 Annual Meeting of Stockholders, filed with the SEC on April 24, 2014;

Our Current Reports on Form 8-K filed on, January 6, January 9, January 13, January 14, January 17, January 31, February 11, March 10, March 17, March 28, April 16, May 12, and May 23 of 2014 (excluding any information furnished in such reports under Item 2.02, Item 7.01 or Item 9.01);

The description of our common stock contained in our registration statement on Form 8-A (Registration No. 001-33672), as amended, filed with the Commission on August 23, 2007.

All reports and other documents we subsequently file pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the termination of this offering, including all such documents we may file with the SEC after the date of the initial registration statement and prior to the effectiveness of the registration statement, but excluding any information furnished to, rather than filed with, the SEC, will also be incorporated by reference into this prospectus and deemed to be part of this prospectus from the date of the filing of such reports and documents.

We will provide without charge to each person, including any beneficial owner, to whom this prospectus is delivered, upon written or oral request, a copy of any or all documents that are incorporated by reference into this prospectus, but not delivered with the prospectus, other than exhibits to such documents unless such exhibits are specifically incorporated by reference into the documents that this prospectus incorporates. You should direct written requests to: NEURALSTEM, INC, 20271 Goldenrod Lane, 2nd Floor, Germantown, MD 20876, Attn: Shareholder Services, Tel: 301.366.4960

\$100,000,000

NEURALSTEM, INC.

Common Stock

Preferred Stock

Warrants

Units

PROSPECTUS

, 2014

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Part II

Information Not Required in the Prospectus

Item 14. Other Expenses of Issuance and Distribution

The aggregate estimated (other than the registration fee) expenses payable by the Company in connection with a distribution of securities registered hereby are as follows:

| | |
|---|--------------------|
| Securities and Exchange Commission registration fee | \$12,880.00 |
| Accounting fees and expenses | * |
| Legal fees and expenses | * |
| Printing and engraving expenses | * |
| Transfer agent fees and expenses | * |
| Miscellaneous | * |
| Total | \$12,880.00 |

*To be filed by amendment or in a current report on Form 8-K

Item 15. Indemnification of Directors and Officers

Our amended and restated certificate of incorporation contains provisions that eliminate, to the maximum extent permitted by the General Corporation Law of the State of Delaware, the personal liability of directors and executive officers for monetary damages for breach of their fiduciary duties as a director or officer. Our amended and restated certificate of incorporation and bylaws provide that we shall indemnify our directors and executive officers and may indemnify our employees and other agents to the fullest extent permitted by the General Corporation Law of the State of Delaware.

Sections 145 and 102(b)(7) of the General Corporation Law of the State of Delaware provide that a corporation may indemnify any person made a party to an action by reason of the fact that he or she was a director, executive officer, employee or agent of the corporation or is or was serving at the request of the corporation against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him or her in connection with such action if he or she acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation and, with respect to any criminal action or proceeding, had no

reasonable cause to believe his or her conduct was unlawful, except that, in the case of an action by or in right of the corporation, no indemnification may generally be made in respect of any claim as to which such person is adjudged to be liable to the corporation.

We have purchased and intend to maintain insurance on behalf of any person who is or was a director or officer of our company against any loss arising from any claim asserted against him or her and incurred by him or her in any such capacity, subject to certain exclusions.

See also the undertakings set out in our response to Item 17 herein.

Item 16. Exhibits

A list of exhibits filed herewith is contained in the exhibit index that immediately precedes such exhibits and is incorporated herein by reference.

Item 17. Undertakings

(a) The undersigned Registrant hereby undertakes:

(1) to file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) to include any prospectus required by Section 10(a)(3) of the Securities Act;

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(ii) to reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) to include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

provided, however, that paragraphs (i), (ii) and (iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in this registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement;

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof;

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering;

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) If the registrant is relying on Rule 430B,

(A) Each prospectus filed by the Registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5) or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which the prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date;

(ii) If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use; and

(5) That, for the purpose of determining liability of the Registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned Registrant undertakes that in a primary offering of securities of the undersigned Registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned Registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) any preliminary prospectus or prospectus of the undersigned Registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) any free writing prospectus relating to the offering prepared by or on behalf of the undersigned Registrant or used or referred to by the undersigned Registrant;

(iii) the portion of any other free writing prospectus relating to the offering containing material information about the undersigned Registrant or its securities provided by or on behalf of an undersigned Registrant; and

(iv) any other communication that is an offer in the offering made by the undersigned Registrant to the purchaser.

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act that is incorporated by reference in this Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) The undersigned registrant hereby undertakes that: (i) for purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of the registration statement in reliance upon Rule 430A and contained in the form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of the registration statement as of the time it was declared effective; and (ii) for the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(d) If and when applicable, the undersigned Registrant hereby undertakes to file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act in accordance with the rules and regulations prescribed by the Securities and Exchange Commission under Section 305(b)(2) of the Act.

(e) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the provisions described under Item 15 above, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Rockville, State of Maryland, on June 6, 2014.

NEURALSTEM, INC

By: */s/ I. Richard Garr*
I. Richard Garr,
President, Chief
Executive Officer, Chief
Financial Officer and
Director

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints I Richard Garr, his true and lawful attorneys-in-fact and agents, with full power of substitution and re-substitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including pre-and post-effective amendments) to this registration statement and any additional registration statement pursuant to Rule 462(b) under the Securities Act of 1933, and to file the same with all exhibits thereto, and other documents in connection therewith, with the SEC, granting unto said attorneys-in-fact and agents and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that each of said attorneys-in-fact and agents or their substitute or substitutes may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

REGISTRANT'S OFFICERS AND DIRECTORS

| Name | Title | Date |
|---|---|--------------|
| <i>/s/ I. Richard Garr</i> I. Richard Garr | President, Chief Executive Officer, General Counsel and Director (Principal executive officer) | June 6, 2014 |
| <i>/s/ I. Richard Garr</i> | Chief Financial Officer (Principal financial and accounting officer) | June 6, 2014 |

I. Richard Garr

/s/ Karl Johe Chairman of the Board and Director June 6, 2014
Karl Johe

/s/ William Oldaker Director June 6, 2014
William Oldaker

/s/ Scott V. Ogilvie Director June 6, 2014
Scott V. Ogilvie

/s/ Stanley Westreich Director June 6, 2014
Stanley Westreich

/s/ Dr. Catherine Sohn Director June 6, 2014
Dr. Catherine Sohn

/s/ Sandford Smith Director June 6, 2014
Sandford Smith

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INDEX TO EXHIBITS

| Exhibit No. | Description | Filed Herewith | Incorporated by Reference | | | |
|-------------|---|----------------|---------------------------|-------------|------------|-------------|
| | | | Form | Exhibit No. | File No. | Filing Date |
| 3.01(i) | Amended and Restated Certificate of Incorporation of Neuralstem, Inc. filed on 9/29/05 | | 10-K | 3.01(i) | 001-33672 | 3/31/09 |
| 3.02(i) | Certificate of Amendment to Certificate of Incorporation of Neuralstem, Inc. filed on 5/29/08 | | DEF 14A | Appendix I | 001-33672 | 4/24/08 |
| 3.03(ii) | Amended and Restated Bylaws of Neuralstem, Inc. adopted on July 16, 2007 | | 10-QSB | 3.2(i) | 333-132923 | 8/14/07 |
| 4.01 | Form of Certificate of Designation | | | | | |
| 4.02 | Form of Preferred Stock Certificate, if any | † | | | | |
| 4.03 | Form of Warrant Agreement | † | | | | |
| 4.04 | Form of Warrant Certificate, if any | † | | | | |
| 4.05 | Form of Unit Agreement, if any | † | | | | |
| 5.01 | Opinion of Silvestre Law Group, P.C. | * | | | | |
| 23.1 | Consent of Stegman & Company | * | | | | |
| 23.2 | Consent of Silvestre Law Group, P.C. (included in Exhibit 5.1) | * | | | | |
| 24.1 | Power of Attorney (see page II-4) | * | | | | |

* Filed herein.

† To be filed by amendment or as an exhibit to a report pursuant to Section 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended, and incorporated herein by reference.