

Neuralstem, Inc.  
Form SB-2/A  
August 22, 2006

**Filed with the Securities and Exchange Commission on August 21, 2006  
Registration No. 333-132923**

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

**AMENDMENT NO. 4  
FORM SB-2**

**REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933**

**NEURALSTEM, INC.**  
*(Exact Name of Registrant as Specified in its Charter)*

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|--|--|---|
| <b>Delaware</b><br><i>(State of Incorporation)</i> | <b>2836</b><br><i>(Primary Standard Industrial<br/>Code No.)</i> | <b>52-2007292</b><br><i>(IRS Employer Identification<br/>No.)</i> |
|--|--|---|

**9700 Great Seneca Highway, Rockville, Maryland 20850**  
**(301) 366-4841**  
*(Address and telephone number of principal executive offices)*

**The Corporation Trust Company**  
**1209 Orange Street**  
**New Castle County, Wilmington, Delaware 19801**  
*(Name, address and telephone number of agent for service)*

**Copies to:**

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**31200 Via Colinas, Suite 200**  
**Westlake Village, CA 91362**

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

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.

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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.

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If delivery of the Prospectus is expected to be made pursuant to Rule 434, please check the following box. o

### CALCULATION OF REGISTRATION FEE

| Title of Each Class of Securities to be Registered                 | Amount to be Registered | Proposed Offering Price Per Share | Proposed Aggregate Offering Price | Amount Of Registration Fee       |
|--|-------------------------|-----------------------------------|-----------------------------------|----------------------------------|
| Common Stock   | 8,088,667               | \$ 1.00 <sup>(1)</sup>            | \$ 8,088,667                      | \$ 865.49                        |
| Common Stock—Penalty   | 50,000                  | \$ 1.00 <sup>(1)</sup>            | \$ 50,000                         | \$ 5.35                          |
| Common Stock underlying class “A” warrant                          | 2,508,333               | \$ 1.50 <sup>(2)(3)</sup>         | \$ 3,762,500                      | \$ 402.59                        |
| Common Stock underlying class “A” warrants—Penalty                 | 25,000                  | \$ 1.50 <sup>(2)(10)</sup>        | \$ 37,500                         | \$ 4.01                          |
| Common Stock underlying class “B” warrant                          | 2,508,333               | \$ 2.00 <sup>(2)(4)</sup>         | \$ 5,016,667                      | \$ 536.78                        |
| Common Stock underlying class “B” warrants—Penalty                 | 25,000                  | \$ 2.00 <sup>(2)(10)</sup>        | \$ 50,000                         | \$ 5.35                          |
| Common Stock underlying \$.50 warrants issued to service providers | 1,330,000               | \$ .50 <sup>(2)(5)</sup>          | \$ 665,000                        | \$ 71.16                         |
| Common Stock underlying \$5.00 warrant                             | 1,000,000               | \$ 5.00 <sup>(2)(6)</sup>         | \$ 5,000,000                      | \$ 535.00                        |
| Common Stock underlying Placement Agent Warrant                    | 800,000                 | \$ 1.10 <sup>(2)(7)</sup>         | \$ 880,000                        | \$ 94.16                         |
| <b>Total</b>   | <b>16,335,333</b>       |                                   | <b>\$ 23,550,334</b>              | <b>\$ 2,519.89<sup>(8)</sup></b> |

(1) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457 of the Securities Act based upon a per share amount of \$1.00, based on the price on which the securities were previously sold pursuant to the Company's March 2006 private placements. There is currently no trading market for the Registrant's common stock. The price of \$1.00 is a fixed price at which the selling stockholders identified herein may sell their shares until the Registrant's common stock is quoted on the OTC Bulletin Board, at which time the shares may be sold at prevailing market prices or privately negotiated prices.

(2) Fee based on exercise price applicable to shares issuable upon exercise of warrants in accordance with Rule 457(g).

(3) Represents shares of Common Stock issuable upon the exercise (at a price of \$1.50 per share) of outstanding warrants.

(4) Represents shares of Common Stock issuable upon the exercise (at a price of \$2.00 per share) of outstanding warrants.

(5) Represents shares of Common Stock issuable upon the exercise (at a price of \$.50 per share) of outstanding warrants.

(6) Represents shares of Common Stock issuable upon the exercise (at a price of \$5.00 per share) of outstanding warrants.

(7) Represents shares of Common Stock issuable upon the exercise (at a price of \$1.10 per share) of outstanding warrants.

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- (8) Registrant previously paid \$2,505.18 in connection with its filings.
  - (9) Represents shares of Common Stock issuable as penalties arising from certain registration rights.
  - (10) Represents shares of Common Stock issuable upon the exercise (at a price of \$1.50) of warrants that may become outstanding as a result of penalties arising from certain registration rights.
  - (11) Represents shares of Common Stock issuable upon the exercise (at a price of \$2.00) of warrants that may become outstanding as a result of penalties arising from certain registration rights.
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*The information in this Prospectus is not complete and may be changed. We have filed a registration statement containing this prospectus with the Securities and Exchange Commission. The securities offered for sale under this prospectus may not be offered for sale or 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.*

**OFFERING PROSPECTUS**  
**Subject to completion, dated August 21, 2006**

**NEURALSTEM, INC.**  
**A DELAWARE CORPORATION**

*16,335,333*  
*Common Shares*

The selling stockholders identified on pages 35– 45 this prospectus are offering on a resale basis a total of 16,335,333 shares of our common stock. We will not receive any proceeds from the sale of these shares by the selling stockholders.

Our common stock is not presently traded on any market or securities exchange, and we have not applied for listing or quotation on any public market. We anticipate seeking sponsorship for the trading of our common stock on the National Association of Securities Dealers OTC Bulletin Board upon the effectiveness of the registration statement of which this prospectus forms a part. However, we can provide no assurance that our shares will be traded on the OTC Bulletin Board or, if traded, that a public market will materialize. The selling shareholders will sell at a price of \$1.00 per share until our shares are quoted on the OTC Bulletin Board and thereafter at prevailing market prices or privately negotiated prices.

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**The securities offered by this prospectus involve a high degree of risk.**  
**See “Risk Factors” beginning on page 6**

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

The date of this Prospectus is August 21, 2006



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## RISK FACTORS

An investment in Neuralstem, Inc. involves significant risks. You should read these risk factors carefully before deciding whether to invest in our company. The following is a description of what we consider our key challenges and risks.

### **Risks Relating to the Company's Stage of Development**

*Since the Company has a limited operating history and has significantly shifted its operations and strategies since inception, you cannot rely upon the Company's limited historical performance to make an investment decision.*

Since inception in 1996 and through December 31, 2005, the Company has raised an aggregate of slightly in excess of approximately \$34,901,568 in capital and recorded accumulated losses totaling \$35,445,238 of December 31, 2005, the Company had a working capital deficit of \$475,243 and negative stockholder's equity of \$460,173. Our net losses for the two most recent fiscal years have been \$1,651,507 and \$9,376,543 for 2005 and 2004 respectively. During this period, we have generated only marginal revenue from licensing and grants in the amount of \$125,457 and \$309,142 for the 2004 and 2005 fiscal years, respectively.

The Company's ability to generate revenues and achieve profitability depends upon its ability to complete the development of its stem cell products, obtain the required regulatory approvals and manufacture, market and sell its products. In part because of the Company's past operating results, no assurances can be given that the Company will be able to accomplish all or any these goals.

Although the Company has generated some revenue to date, the Company has not generated any revenue from the commercial sale of its proposed stem cell products. Since inception, the Company has engaged in several related lines of business and has discontinued operations in certain areas. For example, in 2002, the Company lost a material contract with the Department of Defense and was forced to close its principal facility and lay off almost all of its employees in an attempt to focus the Company's strategy on its stem cell technology. This limited and changing history may not be adequate to enable you to fully assess the Company's current ability to develop and commercialize its technologies and proposed products, obtain approval from the U.S. Food and Drug Administration ("FDA"), achieve market acceptance of its proposed products and respond to competition. No assurances can be given as to exactly when, if at all, the Company will be able to fully develop, commercialize, market, sell and derive material revenues from its proposed products in development.

*The Company will need to raise additional capital to continue operations, and failure to do so would impair the Company's ability to fund operations, develop its technologies or promote its products.*

The Company has relied almost entirely on external financing to fund operations. Such financing has historically come primarily from the sale of common and preferred stock and convertible debt to third parties and to a lesser degree from grants, loans and revenue from license and royalty fees. The Company anticipates, based on current proposed plans and assumptions relating to its operations (including the timetable of, and costs associated with, new product development) and financing the Company has undertaken prior to the date of this prospectus, that its current working capital will be sufficient to satisfy contemplated cash requirements for approximately 11 months, assuming that the Company does not engage in an extraordinary transaction or otherwise face unexpected events or contingencies, any of which could effect cash requirements. As of June 30, 2006, the Company has cash and cash equivalents on hand of \$3,202,703. Presently, the Company has a monthly cash burn rate of \$260,000. Accordingly, the Company will need to raise additional capital to fund anticipated operating expenses and future expansion after such 11 month period. Among other things, external financing will be required to cover the further development of the Company's technologies and products and other operating costs. The Company cannot assure you that financing whether from external sources or related parties will be available if needed or on favorable terms. If additional

financing is not available when required or is not available on acceptable terms, the Company may be unable to fund operations and planned growth, develop or enhance its technologies, take advantage of business opportunities or respond to competitive market pressures. Any negative impact on the Company's operations may make capital raising more difficult and may also result in a lower price for the Company's securities.

***The Company may have difficulty raising needed capital in the future as a result of, among other factors, the Company's limited operating history and business risks associated with the Company.***

The Company's business currently generates limited amounts of cash which will not be sufficient to meet its future capital requirements. The Company's management does not know when this will change. The Company has expended and will continue to expend substantial funds in the research, development and clinical and pre-clinical testing of the Company's stem cell technologies and products. The Company will require additional funds to conduct research and development, establish and conduct clinical and pre-clinical trials, commercial-scale manufacturing arrangements and to provide for the marketing and distribution. Additional funds may not be available on acceptable terms, if at all. If adequate funds are unavailable from any available source, the Company may have to delay, reduce the scope of or eliminate one or more of its research, development or commercialization programs or product launches or marketing efforts which may materially harm the Company's business, financial condition and results of operations.

The Company's long term capital requirements are expected to depend on many factors, including:

- continued progress and cost of its research and development programs;
- progress with pre-clinical studies and clinical trials;
- time and costs involved in obtaining regulatory clearance;
- costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims;
- costs of developing sales, marketing and distribution channels and its ability to sell the Company's stem cell products;
- costs involved in establishing manufacturing capabilities for commercial quantities of its products;
- competing technological and market developments;
- market acceptance of its stem cell products;
- costs for recruiting and retaining employees and consultants; and
- costs for educating and training physicians about its stem cell products.

The Company may consume available resources more rapidly than currently anticipated, resulting in the need for additional funding. The Company may seek to raise any necessary additional funds through the exercising of warrants, options, equity or debt financings, collaborative arrangements with corporate partners or other sources, which may be dilutive to existing stockholders or otherwise have a material effect on the Company's current or future business prospects. If adequate funds are not available, the Company may be required to significantly reduce or refocus its development and commercialization efforts.

***The Company relies on stem cell technologies that it may not be able to commercially develop, which will prevent the Company from generating revenues, operating profitably or providing investors any return on their investment.***

The Company has concentrated its research on its stem cell technologies, and the Company's ability to generate revenue and operate profitably will depend on it being able to develop these technologies for human applications. These are emerging technologies with, as yet, limited human applications. The Company cannot guarantee that it will be able to develop its stem cell technologies or that such development will result in products or services with any significant commercial utility. The Company anticipates that the commercial sale of such products or services, and royalty/licensing fees related to its technology, will be the Company's primary sources of revenues. If the Company is unable to develop its technologies, investors will likely lose their entire investment.

***Inability to complete pre-clinical and clinical testing and trials will impair the viability of the Company.***

The Company is in its development stage and has not yet applied for approval by the FDA to conduct clinical trials. Even if the Company successfully files an IND and receives approval from the FDA to commence trials, the outcome of pre-clinical, clinical and product testing of the Company's products is uncertain, and if the Company is unable to satisfactorily complete such testing, or if such testing yields unsatisfactory results, the Company will be unable to commercially produce its proposed products. Before obtaining regulatory approvals for the commercial sale of any potential human products, the Company's products will be subjected to extensive pre-clinical and clinical testing to

demonstrate their safety and efficacy in humans. No assurances can be given that the clinical trials of the Company's products, or those of licensees or collaborators, will demonstrate the safety and efficacy of such products at all, or to the extent necessary to obtain appropriate regulatory approvals, or that the testing of such products will be completed in a timely manner, if at all, or without significant increases in costs, program delays or both, all of which could harm the Company's ability to generate revenues. In addition, the Company's proposed products may not prove to be more effective for treating disease or injury than current therapies. Accordingly, the Company may have to delay or abandon efforts to research, develop or obtain regulatory approval to market its proposed products. Many companies involved in biotechnology research and development have suffered significant setbacks in advanced clinical trials, even after promising results in earlier trials. The failure to adequately demonstrate the safety and efficacy of a therapeutic product under development could delay or prevent regulatory approval of the product and could harm the Company's ability to generate revenues, operate profitably or produce any return on an investment in the Company.

***The Company's additional financing requirements could result in dilution to existing stockholders.***

The additional financings which the Company will require may in the future be obtained through one or more transactions which will effectively dilute the ownership interests of stockholders. The Company has the authority to issue additional shares of common stock and preferred stock, as well as additional classes or series of ownership interests or debt obligations which may be convertible into any one or more classes or series of ownership interests. The Company is authorized to issue 75 million shares of common stock and 7 million shares of preferred stock. Such securities may be issued without the approval or other consent of the Company's stockholders.

## **Risks Relating to Intellectual Property and Government Regulation**

***The Company may not be able to withstand challenges to its intellectual property rights, such as patents, should contests be initiated in court or at the U.S Patent and Trademark Office.***

The Company relies on its intellectual property, including its issued and applied for patents, as the foundation of its business. The intellectual property rights of the Company may come under challenge, and no assurances can be given that, even though issued, the Company's current and potential future patents will survive claims commencing in the court system alleging invalidity or infringement on other patents. For example, in 2005, the Company's neural stem cell technology was challenged in the U.S. Patent and Trademark Office by a competitor. Although the Company prevailed in this particular matter upon re-examination by the patent office, these cases are complex, lengthy and expensive, and could potentially be adjudicated adversely to the Company, removing the protection afforded by an issued patent. The viability of the Company's business would suffer if such patent protection were limited or eliminated. Moreover, the costs associated with defending or settling intellectual property claims would likely have a material adverse effect on the Company.

***The Company may not be able to adequately protect against piracy of intellectual property in foreign jurisdictions.***

Considerable research in the area of stem cell therapies is being performed in countries outside of the United States, and a number of the Company's competitors are located in those countries. The laws protecting intellectual property in some of those countries may not provide protection for the Company's trade secrets and intellectual property adequate to prevent its competitors from misappropriating the Company's trade secrets or intellectual property. If the Company's trade secrets or intellectual property are misappropriated in those countries, the Company may be without adequate remedies to address the issue.

***The Company's products may not receive FDA approval, which would prevent the Company from commercially marketing its products and producing revenues.***

The FDA and comparable government agencies in foreign countries impose substantial regulations on the manufacture and marketing of pharmaceutical products through lengthy and detailed laboratory, pre-clinical and clinical testing procedures, sampling activities and other costly and time-consuming procedures. Satisfaction of these regulations typically takes several years or more and varies substantially based upon the type, complexity and novelty of the proposed product. The Company cannot yet accurately predict when it might first submit any Investigational New Drug, or IND, application to the FDA, or whether any such IND application would be granted on a timely basis, if at all, nor can the Company assure you that it will successfully complete any clinical trials in connection with any such IND application. Further, the Company cannot yet accurately predict when it might first submit any product license application for FDA approval or whether any such product license application would be granted on a timely basis, if at all. As a result, the Company cannot assure you that FDA approvals for any products developed by it will be granted on a timely basis, if at all. Any such delay in obtaining, or failure to obtain, such approvals could have a material adverse effect on the marketing of the Company's products and its ability to generate product revenue.

***Because the Company or its collaborators must obtain regulatory approval to market its products in the United States and other countries, the Company cannot predict whether or when it will be permitted to commercialize its products.***

Federal, state and local governments and agencies in the United States (including the FDA) and governments in other countries have significant regulations in place that govern many of the Company's activities. The Company is or may become subject to various federal, state and local laws, regulations and recommendations relating to safe working conditions, laboratory and manufacturing practices, the experimental use of animals and the use and disposal of hazardous or potentially hazardous substances used in connection with its research and development work. The

preclinical testing and clinical trials of the products that the Company or its collaborators develop are subject to extensive government regulation that may prevent the Company from creating commercially viable products from its discoveries. In addition, the sale by the Company or its collaborators of any commercially viable product will be subject to government regulation from several standpoints, including manufacturing, advertising and promoting, selling and marketing, labeling, and distributing. If, and to the extent that, the Company is unable to comply with these regulations, its ability to earn revenues will be materially and negatively impacted.

### **Risks Relating to Competition**

*The Company's competition includes both public and private organizations and collaborations among academic institutions and large pharmaceutical companies, most of which have significantly greater experience and financial resources than the Company does.*

The biotechnology industry is characterized by intense competition. The Company competes against numerous companies, many of which have substantially greater financial and other resources than it has. Several such enterprises have initiated cell therapy research programs and/or efforts to treat the same diseases targeted by the Company. Companies such as Geron Corporation, Genzyme Corporation, StemCells, Inc., Advanced Cell Technology, Inc., Aastrom Biosciences, Inc. and Viacell, Inc., as well as others, have substantially greater resources and experience in the Company's fields than it does, and are well situated to compete with us effectively. Of course, any of the world's largest pharmaceutical companies represent a significant actual or potential competitor with vastly greater resources than the Company's.

## **Risks Relating to the Company's Reliance on Third Parties**

***The Company's outsource model depends on collaborators, non-employee consultants, research institutions, and scientific contractors to help it develop and test its proposed products. Our ability to develop such relationships could impair or delay our ability to develop products.***

The Company's strategy for the development, clinical testing and commercialization of its proposed products is based on an outsource model. This model requires that the Company enter into collaborations with corporate partners, research institutions, scientific contractors and licensors, licensees and others in order to further develop its technology and develop products. In the event the Company is not able to enter into such relationships in the future, our ability to develop products may be seriously hindered; or we would be required to expend considerable money and research to bring such research and development functions in house. Either outcome could result in our inability to develop a commercially feasible product or in the need for substantially more working capital to complete the research in-house. Also, we are currently dependent on collaborators for a substantial portion of our research and development. Although our collaborative agreements do not impose any duties or obligations on us other than the licensing of our technology, the failure of any of these collaborations may hinder our ability to develop products in a timely fashion. By way of example, our collaboration with John Hopkins University, School of Medicine yielded findings that contributed to our patent application entitled Transplantation of Human Cells for Treatment of Neurological Disorder. Had the collaboration not have existed, our ability to apply for such patent would have been greatly hindered. We currently have 4 key collaborations. They are with:

The University of California, San Diego;  
University of South Florida;  
University of Central Florida; and  
John Hopkins University.

As we are under no financial obligation to provide additional funding under any of these collaborations, our primary risk is that no results are derived from their research. For further information relating to our collaborations, see that section of this prospectus captioned "*Our Business--Our Research and Programs*".

***We intend to rely upon the third-party FDA-approved manufacturers for our stem cells. Should these manufacturers fail to perform as expected, we will need to develop or procure other manufacturing sources, which would cause delays or interruptions in our product supply and result in the loss of significant sales and customers.***

We currently have no internal manufacturing capability, and will rely extensively on FDA-approved licensees, strategic partners or third party contract manufacturers or suppliers. We current have an agreement with Charles River Laboratories for the manufacturing and storage of our cells. The agreement is a paid for services agreement and does not require us to purchase a minimum amount of cells. In the event Charles River Laboratories fails to provide suitable cells, we would be forced to either manufacture the cells ourselves or seek other third party vendors. Should we be forced to manufacture our stem cells, we cannot give you any assurance that we will be able to develop an internal manufacturing capability or procure third party suppliers. In the event we must seek alternative third party suppliers, they may require us to purchase a minimum amount of cells, could be significantly more expensive than our current supplier, or could require other unfavorable terms. Any such event would materially impact our prospects and c would delay or development. Moreover, we cannot give you any assurance that any contract manufacturers or suppliers we procure will be able to supply our product in a timely or cost effective manner or in accordance with applicable regulatory requirements or our specifications.

## **General Risks Relating to the Company's Business**

***The Company may be subject to litigation that will be costly to defend or pursue and uncertain in its outcome.***



The Company's business may bring it into conflict with its licensees, licensors, or others with whom it has contractual or other business relationships or with its competitors or others whose interests differ from the Company's. If the Company is unable to resolve those conflicts on terms that are satisfactory to all parties, the Company may become involved in litigation brought by or against it. That litigation is likely to be expensive and may require a significant amount of management's time and attention, at the expense of other aspects of the Company's business. The outcome of litigation is always uncertain, and in some cases could include judgments against us that require the Company to pay damages, enjoin it from certain activities, or otherwise affect its legal or contractual rights, which could have a significant adverse effect on its business.

***The Company may not be able to obtain third-party patient reimbursement or favorable product pricing, which would reduce its ability to operate profitably.***

The Company's ability to successfully commercialize certain of its proposed products in the human therapeutic field may depend to a significant degree on patient reimbursement of the costs of such products and related treatments at acceptable levels from government authorities, private health insurers and other organizations, such as health maintenance organizations. The Company cannot assure you that reimbursement in the United States or foreign countries will be available for any products it may develop or, if available, will not be decreased in the future, or that reimbursement amounts will not reduce the demand for, or the price of, its products with a consequent harm to the Company's business. The Company cannot predict what additional regulation or legislation relating to the health care industry or third-party coverage and reimbursement may be enacted in the future or what effect such regulation or legislation may have on the Company's business. If additional regulations are overly onerous or expensive or if health care related legislation makes its business more expensive or burdensome than originally anticipated, the Company may be forced to significantly downsize its business plans or completely abandon its business model.

***The Company's products may be expensive to manufacture, and they may not be profitable if the Company is unable to control the costs to manufacture them.***

The Company's products may be significantly more expensive to manufacture than most other drugs currently on the market today due to a fewer number of potential manufacturers, greater level of needed expertise, and other general market conditions affecting manufacturers of stem cell based products. The Company would hope to substantially reduce manufacturing costs through process improvements, development of new science, increases in manufacturing scale and outsourcing to experienced manufacturers. If the Company is not able to make these, or other improvements, and depending on the pricing of the product, its profit margins may be significantly less than that of most drugs on the market today. In addition, the Company may not be able to charge a high enough price for any cell therapy product it develops, even if they are safe and effective, to make a profit. If the Company is unable to realize significant profits from its potential product candidates, its business would be materially harmed.

***In order to secure market share and generate revenues, the Company's proposed products must be accepted by the health care community, which can be very slow to adopt or unreceptive to new technologies and products.***

The Company's proposed products and those developed by its collaborative partners, if approved for marketing, may not achieve market acceptance since hospitals, physicians, patients or the medical community in general may decide not to accept and utilize these products. The products that the Company is attempting to develop represents substantial departures from established treatment methods and will compete with a number of more conventional drugs and therapies manufactured and marketed by major pharmaceutical companies. The degree of market acceptance of any of the Company's developed products will depend on a number of factors, including:

- the Company's establishment and demonstration to the medical community of the clinical efficacy and safety of its proposed products;
- the Company's ability to create products that are superior to alternatives currently on the market;
- the Company's ability to establish in the medical community the potential advantage of its treatments over alternative treatment methods; and
- reimbursement policies of government and third-party payors.

If the health care community does not accept the Company's products for any of the foregoing reasons, or for any other reason, the Company's business would be materially harmed.

***We depend on two key employees for our continued operations and future success. A loss of either employee could significantly hinder our ability to move forward with our business plan.***

The loss of either of our key executive officers, Richard Garr and Karl Johe, would be significantly detrimental to us. We currently do not maintain "key person" life insurance on the lives of Messrs. Garr or Johe. As a result, the Company will not receive any compensation upon the death or incapacity of these key individuals.

In addition, the Company's anticipated growth and expansion into areas and activities requiring additional expertise, such as clinical testing, regulatory compliance, manufacturing and marketing, will require the addition of new management personnel and the development of additional expertise by existing management personnel. There is intense competition for qualified personnel in the areas of the Company's present and planned activities, and there can be no assurance that the Company will be able to continue to attract and retain the qualified personnel necessary for the development of its business. The failure to attract and retain such personnel or to develop such expertise would adversely affect the Company's business.

***The Company has entered into long-term contracts with key personnel and stockholders, with significant anti-termination provisions, which could make future changes in management difficult or expensive.***

Messrs. Garr and Johe have entered into seven (7) year employment agreements with the Company which expire on November 1, 2012 and which include termination provisions stating that if either employee is terminated for any reason other than a voluntary resignation, then all compensation due to such employee under the terms of the respective agreement shall become due and payable immediately. These provisions will make the replacement of either of these employees very costly to the Company, and could cause difficulty in effecting a change in control of the Company. Termination prior to full term on the contracts would cost the Company \$240,000 per year unserved, or as much as \$1,680,000 per contract, and immediate vesting of all outstanding options (1,200,000 shares each). Further, three of the Company's existing shareholders (Westreich, Solomon and Drescher, collectively owning approximately 36% of the outstanding shares of Common Stock), have entered into a voting agreement such that so long as Messrs. Garr and Johe are stockholders, these 3 owners will vote their shares for the election of Garr and Johe as directors of the Company. This voting agreement gives more control to Johe and Garr than their respective stockholdings alone would provide, and will also make future changes in control more difficult without their approval. For further information relating to these agreements, see that section of this prospectus captioned "*Executive Compensation--Employment Agreements and Change in Control Arrangements*".

***The Company has no product liability insurance, which may leave it vulnerable to future claims that the Company will be unable to satisfy.***

The testing, manufacturing, marketing and sale of human therapeutic products entails an inherent risk of product liability claims, and the Company cannot assure you that substantial product liability claims will not be asserted against it. The Company has no product liability insurance. In the event the Company is forced to expend significant funds on defending product liability actions, and in the event those funds come from operating capital, the Company will be required to reduce its business activities, which could lead to significant losses.

***The Company cannot assure you that adequate insurance coverage will be available in the future on acceptable terms, if at all, or that, if available, the Company will be able to maintain any such insurance at sufficient levels of coverage or that any such insurance will provide adequate protection against potential liabilities.***

The Company will have limited director and officer insurance and commercial insurance policies. Any significant insurance claims would have a material adverse effect on its business, financial condition and results of operations. Insurance availability, coverage terms and pricing continue to vary with market conditions. The Company endeavors to obtain appropriate insurance coverage for insurable risks that it identifies, however, the Company may fail to correctly anticipate or quantify insurable risks, may not be able to obtain appropriate insurance coverage, and insurers may not respond as the Company intends to cover insurable events that may occur. The Company has observed rapidly changing conditions in the insurance markets relating to nearly all areas of traditional corporate insurance. Such conditions have resulted in higher premium costs, higher policy deductibles, and lower coverage limits. For some risks, the Company may not have or maintain insurance coverage because of cost or availability.

#### **Risks Relating to the Company's Common Stock**

***There is no public market for the Company's securities and no assurances can be given that one will ever develop.***

The Company is a private company. Without registration, there is only a limited ability of a security holder to sell their securities, as those transfers or sales would be made privately. Therefore, an investment in our common stock should be considered as totally illiquid, and investors are cautioned that may not be able to liquidate their investment readily or at all when the need or desire to sell arises. Moreover, no assurances can be given that a public market for our securities will ever materialize. Additionally, even if a public market for our securities develops and our securities become listed, the trading volume may be limited, making it difficult for an investor to sell shares.

***The Company has identified significant weaknesses with regard to its financial control procedures. These weaknesses, if not remedied, could result in a significant misstatement of the Company's financials or its inability to provide timely disclosure to the public should it become subject to such reporting requirements.***

As a result of its stage of development, lack of resources and changes that have occurred in the Company's operations since 2002, there are currently deficiencies in the operating effectiveness of the Company's internal controls over financial reporting that the Company believes would collectively constitute significant deficiencies and material weaknesses under standards established by the American Institute of Certified Public Accountants, resulting in more than a remote likelihood that a material misstatement of the annual or interim financial statements of the Company will not be prevented or detected. Specifically, the Company has found deficiencies or weaknesses with the timely reporting of transactions and the documentation thereof. By way of example, in the past, the company has failed to document capital transactions when they occur, has failed to establish controls for document retention, and has failed to account for transactions using GAAP. As of the date of this prospectus, the Company does not have a permanent Chief Financial Officer, although Richard Garr, the Company's President, is temporarily serving in this capacity. As a result, there is a risk that the Company may not be able to properly account for operations and/or generate reliable financial statements. This may further result in the Company not being able to meet its periodic filing requirements in

a timely manner.

***When and if the Company becomes a public company, the Company faces risks related to compliance with corporate governance laws and financial reporting standards.***

The Sarbanes-Oxley Act of 2002, as well as related new rules and regulations implemented by the Securities and Exchange Commission and the Public Company Accounting Oversight Board, require changes in the corporate governance practices and financial reporting standards for public companies. These new laws, rules and regulations, including compliance with Section 404 of the Sarbanes-Oxley Act of 2002 relating to internal control over financial reporting (“Section 404”), will materially increase the Company's legal and financial compliance costs and made some activities more time-consuming and more burdensome. Starting in 2007, Section 404 of the Sarbanes-Oxley Act of 2002 will require that the Company's management assess the Company's internal control over financial reporting annually and include a report on its assessment in its annual report filed with the SEC. The Company's independent registered public accounting firm is required to audit both the design and operating effectiveness of its internal controls and management's assessment of the design and the operating effectiveness of its internal controls. There exist material weaknesses and deficiencies at this time in the Company's internal controls. These weaknesses and deficiencies could have a material adverse effect on the Company's business and operations.

***The Company does not intend to pay cash dividends on its common stock in the foreseeable future.***

Any payment of cash dividends will depend upon the Company's financial condition, results of operations, capital requirements and other factors and will be at the discretion of the Board of Directors. The Company does not anticipate paying cash dividends on its common stock in the foreseeable future. Furthermore, the Company may incur additional indebtedness that may severely restrict or prohibit the payment of dividends.

***Our issuance of additional common shares or preferred shares, or options or warrants to purchase those shares, could dilute your proportionate ownership and voting rights and negatively impact the value of your investment in our common shares as the result of preferential voting rights or veto powers, dividend rights, disproportionate rights to appoint directors to our board, conversion rights, redemption rights and liquidation provisions granted to the preferred shareholders, including the grant of rights that could discourage or prevent the distribution of dividends to you, or prevent the sale of our assets or a potential takeover of our company.***

We are entitled under our certificate of incorporation to issue up to 75,000,000 common and 7,000,000 “blank check” preferred shares. As of August 21, 2006, we have issued an outstanding 25,820,939 common shares, 11,121,667 common shares reserved for issuance upon the exercise of current outstanding options and warrants, and an aggregate of 100,000 common shares reserved for issuance in the event we incur additional penalties pursuant to the registration rights granted our investors in the March 2006 private placement. Accordingly, we will be entitled to issue up to 37,957,395 additional common shares and 7,000,000 additional preferred shares. Our board may generally issue those common and preferred shares, or options or warrants to purchase those shares, without further approval by our shareholders based upon such factors as our board of directors may deem relevant at that time. Any preferred shares we may issue shall have such rights, preferences, privileges and restrictions as may be designated from time-to-time by our board, including preferential dividend rights, voting rights, conversion rights, redemption rights and liquidation provisions. It is likely that we will be required to issue a large amount of additional securities to raise capital to further our development and marketing plans. It is also likely that we will be required to issue a large amount of additional securities to directors, officers, employees and consultants as compensatory grants in connection with their services, both in the form of stand-alone grants or under our various stock plans. We cannot give you any assurance that we will not issue additional common or preferred shares, or options or warrants to purchase those shares, under circumstances we may deem appropriate at the time.

***Messers Garr, Johe, Solomon and Westreich currently beneficially own approximately 40% of our outstanding common shares. These shareholders will retain the ability to substantially control our management and the outcome of corporate actions requiring shareholder approval notwithstanding the overall opposition of our other shareholders. This concentration of ownership could discourage or prevent a potential takeover of our company that might otherwise result in you receiving a premium over the market price for your common shares.***

Messers Garr, Johe, Solomon and Westreich own approximately 40% of our outstanding common shares. As a consequence of their level of stock ownership, the group will substantially retain the ability to elect a majority of our board of directors, and thereby control our management. This group of shareholders has the ability to significantly control the outcome of corporate actions requiring shareholder approval, including mergers and other changes of corporate control, going private transactions, and other extraordinary transactions. See “Principal Stockholders”.

## **FORWARD LOOKING STATEMENTS**

In this prospectus we make a number of statements, referred to as “forward-looking statements”, which are intended to convey our expectations or predictions regarding the occurrence of possible future events or the existence of trends and factors that may impact our future plans and operating results. These forward-looking statements are derived, in part, from various assumptions and analyses we have made in the context of our current business plan and information currently available to use and in light of our experience and perceptions of historical trends, current conditions and expected future developments and other factors we believe are appropriate in the circumstances. You can generally

identify forward looking statements through words and phrases such as “*believe*”, “*expect*”, “*seek*”, “*estimate*”, “*anticipate*”, “*intend*”, “*plan*”, “*budget*”, “*project*”, “*may likely result*”, “*may be*”, “*may continue*” and other similar expressions. When making a forward-looking statement you should remain mindful that actual results or developments may vary substantially from those expected as expressed in or implied by that statement for a number of reasons or factors, including but not limited to:

- the success of our research and development activities, the development of a viable commercial production model, and the speed with which regulatory authorizations and product launches may be achieved;
- whether or not a market for our product develops and, if a market develops, the rate at which it develops;
- our ability to successfully sell our products if a market develops;
- our ability to attract and retain qualified personnel to implement our growth strategies;
- our ability to develop sales marketing and distribution capabilities;
- our ability to obtain reimbursement from third party payers for the products that we sell;
- the accuracy of our estimates and projections;

- our ability to fund our short-term and long-term financing needs;
- changes in our business plan and corporate strategies; and
- other risks and uncertainties discussed in greater detail in the section captioned “Risk Factors”

Each forward-looking statement should be read in context with and in understanding of the various other disclosures concerning our company and our business made elsewhere in this prospectus. You should not place undue reliance on any forward-looking statement as a prediction of actual results or developments. We are not obligated to update or revise any forward-looking statements contained in this prospectus to reflect new events or circumstances unless and to the extent required by applicable law.

### **USE OF PROCEEDS**

The proceeds from the sale of the common shares to be sold under this prospectus will be retained by the selling shareholders, and will not be paid or remitted or otherwise made available to our company. Should any selling shareholder acquire the shares to be sold by exercising common share purchase warrants, or options we would receive the proceeds from the exercise price. In such an event we anticipate we would use the proceeds of such exercise for working capital and general corporate purposes.

### **OUR BUSINESS**

We are a biotechnology company focused on developing and commercializing human neural stem cell technology in the emerging field of regenerative medicine.

#### ***Our History***

We were incorporated in 1997 in the state of Maryland and re-incorporated in the state of Delaware in 2001. From 1997 until 2003, our research focused on: *Genomics*, which is the study of genes and their functions; *Drug Discovery*, which consists of the identification of molecules with desired biological effects that have promise as new therapeutic drugs; and *Cell Therapy*, which consists of treatments in which cells are administered to patients in order to repair damaged or depleted tissues.

In 2001, we were paid a licensing fee of \$7.5 million by Gene Logic, Inc., payable over three years, to create a database using our technology. Also, in 2001, the Company received a Defense Department contract to do drug screening using the cells derived from its technology in the amount of \$2.5 million over 18 months. Finally, during this period, we pursued our own research into transplanting cells derived from our technology to cure disease. We reached a high of roughly 50 employees in early 2000, mostly involved in the infrastructure involved with the Gene Logic/genomics and drug discovery programs.

In late 2000 and early 2001, as a result of the decline in biotech funding markets and the accompanying devaluation of the genomics industry, our genomics program was no longer commercially viable. Additionally, in late 2002, the Department of Defense cancelled the program which funded our drug discover efforts. As a result, by the end of 2003, the Company made the strategic decision to lay off its employees involved in the genomic and drug discovery programs and focus entirely on transplantation of its neural stem cells to treat diseases in patients.

The Company spent 2004 restructuring its capitalization and creating an “outsourced” model of product development by having the research conducted at various universities and research labs and having all other functions outsourced. In November of 2004 we completed a ten-for-three reverse stock split.



In 2005, the Company continued to operate under this model, with all accounting, legal, facility, manufacturing, transplantation experimentation and regulatory functions outsourced, under the supervision of Richard Garr, the Company's President and Chief Executive Officer, and Dr. Johe, the Company's Chairman and Chief Scientific Officer.

*Overview*

In 2004, we refocused our research efforts to concentrate primarily in the field of Cell Therapy. Specifically, we are focused on the development and commercialization of treatments based on transplanting human neural stem cells.

We have developed and maintain a portfolio of patents and patent applications that form the proprietary base for our research and development efforts in the area of neural stem cell research, and have ownership or exclusive licensing of four issued patents and 12 patent pending applications in the field of regenerative medicine and related technologies. We believe our technology base, in combination with our know-how, and collaborative projects with major research institutions provides a competitive advantage and will facilitate the successful development and commercialization of products for use in treatment of a wide array of neurodegenerative conditions and in regenerative repair of acute disease.

This is a young and emerging field. There can be no assurances that our intellectual property portfolio 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 product may not be able to successfully compete against them.

All of our research efforts to date are at the level of basic research or in the pre-clinical stage of development. We are focused on leveraging our key assets, including our intellectual property, our scientific team, our facilities and our capital, to accelerate the advancement of our stem cell technologies. In addition, we are pursuing strategic collaborations with members of academia. We are currently headquartered in Rockville, Maryland.

### ***The Field of Regenerative Medicine***

The emerging field of treatment called "regenerative medicine" or "cell therapy" refers to treatments that are founded on the concept of producing new cells to replace malfunctioning or dead cells as a vehicle 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 or 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 (CNS) including: Alzheimer's disease, Parkinson's disease, Multiple Sclerosis, Amyotrophic Lateral Sclerosis (ALS, or Lou Gehrig's Disease), depression, and injuries to the spinal cord.

### ***Stem Cell Therapy Background***

Cells maintain normal physiological function in healthy individuals by secreting or metabolizing substances, such as sugars, amino acids, neurotransmitters and hormones, which are essential to life. When cells are damaged or destroyed, they no longer produce, metabolize or accurately regulate those substances. Cell loss or impaired cellular functions are leading causes of degenerative diseases, and some of the specific substances or proteins that are deficient in some of these diseases have been identified. Although administering these substances or proteins has some advantages over traditional pharmaceuticals, such as specificity, there is no existing technology that can deliver them precisely to the sites of action, under the appropriate physiological regulation, in the appropriate quantity, nor for the duration required to cure the degenerative condition. Cells, however, may do all this naturally. Thus, where failing cells are no longer producing needed substances or proteins or where there has been irreversible tissue damage or organ failure, transplantation of stem or progenitor cells may enable the generation of new functional cells, thus potentially restoring organ function and the patient's health.

Stem cells have two defining characteristics: (i) they produce all the kinds of mature cells making up the particular organ; and (ii) they self renew -- that is, some of the cells developed from stem cells are themselves new stem cells, thus permitting the process to continue again and again. Stem cells are known to exist for a number of systems of the human body, including the blood and immune system, the central and peripheral nervous systems (including the brain), the skin, bone, and even hair. They are thought to exist for many others, including the liver and pancreas endocrine systems, gut, muscle, and heart. Stem cells are responsible for organ regeneration during normal cell replacement and, to a greater or lesser extent, after injury.

Stem cells are rare and only available in limited supply, whether from the patients themselves or from donors. Also, cells can often be obtained only through significant surgical procedures. Therefore, in order to develop stem cell therapeutics, three key challenges must be overcome: (i) identifying the stem or progenitor cells of a particular organ and testing them for therapeutic potential; (ii) creating processes to enable use of these rare cells in clinical applications, such as expanding and banking them in sufficient quantities to transplant into multiple patients; and (iii) demonstrating the safety and efficacy of these potential therapeutics in human clinical trials.

### ***The Potential of Our Tissue-Derived Stem Cell-Based Therapy***

We believe that, if successfully developed, stem cell therapeutics have the potential to provide a broad therapeutic approach comparable in importance to traditional pharmaceuticals and genetically engineered biologics. With respect to the human neural stem cells we have developed proprietary and reproducible processes to identify, isolate, expand, purify<sup>1</sup> and control the cells differentiation in mature functioning human neurons<sup>2</sup> and glia<sup>3</sup> and bank human neural

stem cells from brain tissue. Because the cells are purified normal human neural stem cells, they may be better suited for transplantation and may provide a safer and more effective alternative to therapies that are based on cells derived from cancer cells, animal derived cells or are an unpurified mix of many different cell types.

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<sup>1</sup> **Purification** of our cells is the process whereby we separate “raw” donor tissue into our cells. During the process, we monitor the division of the neural stems cells and remove or “weed out” any cells which have failed to divide after a predetermined period of time. We repeat this process 3 to 4 times until the cells remaining have been “purified” in our estimation.

<sup>2</sup> **Neurons** are a major class of cells in the nervous system. Neurons are sometimes called nerve cells, though this term is technically imprecise since many neurons do not form nerves. In vertebrates, they are found in the brain, the spinal cord and in the nerves and ganglia of the peripheral nervous system, and their primary role is to process and transmit neural information. One important characteristic of neurons is that they have excitable membranes which allow them to generate and propagate electrical signals.

<sup>3</sup> **Glial** cells, commonly called neuroglia or simply glia, are non-neuronal cells that provide support and nutrition, maintain homeostasis, form myelin, and participate in signal transmission in the nervous system. In the human brain, glia are estimated to outnumber neurons by as much as 50 to 1.

**Potential Markets**

We believe that, if successfully developed, neural stem cell-based therapies have the potential to treat a broad range of diseases and injuries of the CNS. We believe the potential applications of our technologies given our current research focus includes developing neural cell therapies to treat Parkinson's disease, Amyotrophic Lateral Sclerosis (ALS), and injuries to the spinal cord.

We believe the potential markets for regenerative medicine based on our neural stem cell therapies are large. The table below summarizes the potential United States patient populations which we believe may be amenable to neural cell transplantation and represent potential target markets for our products:

**POTENTIAL U.S. PATIENT POPULATIONS  
FOR NEURAL CELL-BASED THERAPIES**

| <b>Medical Condition</b>      | <b>Number of Patients*</b> |
|-------------------------------|----------------------------|
| Parkinson's Disease           | 1 million                  |
| Spinal-cord injuries          | 0.25 million               |
| Amyotrophic Lateral Sclerosis | 0.03 million               |

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\* These estimates are based on the most current patient estimates published by the following organizations as of April 2006; the Parkinson's Disease Foundation, the Parkinson's Action Network, the Foundation for Spinal Cord Injury Prevention, Care and Cure, and the Amyotrophic Lateral Sclerosis Association.

**Our Technology**

Our technology is the ability to isolate human neural stem cells from most areas of the developing human brain and spinal cord and our technology includes the ability to grow them into physiologically relevant human neurons of all types. Our two issued core patents entitled *Isolation, Propagation, and Directed Differentiation of Stem Cell from Embryonic and Adult Central Nervous System of Mammals* and *In Vitro Generation of Differentiated Neurons from Cultures of Mammalian Multi-potential CNS Stem Cell* contain claims which cover the process of deriving the cells and the cells created from such process.

Our technology is the ability to isolate human neural stem cells from most areas of the developing human brain and spinal cord and to grow them into physiologically relevant human neurons of all types. Our core patents entitled:

- *Isolation, Propagation, and Directed Differentiation of Stem Cell from Embryonic and Adult Central Nervous System of Mammal; and*
- *In Vitro Generation of Differentiated Neurons from Cultures of Mammalian Multi-potential CNS Stem Cell*

contain claims which cover the details of this process and the culture of cells created. What differentiates our stem cell technology from others is that our patented processes do not require us to “push” the cells towards a certain fate by adding specific growth factors. Our cells actually “become” the type of cell they are fated to be. We believe this process and the resulting cells create a technology platform that allows for the efficient isolation and ability to produce, in commercially reasonable quantities, neural stem cells from the human brain and spinal cord.

Our technology allows for cells to grow in cultured dishes, also known as *in vitro* growth, without mutations or other adverse events that would compromise their usefulness. We believe this provides for two distinct advantages:

- First, the growth or expansion of the cells *in vitro* occurs while the cells are still in their “stem cell” or blank state which allows for the creation of commercially reasonable quantities of neural stem cells. Once a sufficient number of blank cells have been grown, our technology allows us to program or differentiate the cells into either neurons or glia; and
- Secondly, we have the ability to sample the cells while still *in vitro* in order to confirm that the cells are differentiating in the desired cell type.

Our technology also has ancillary uses with respect to drug development. Our ability to grow and differentiate neural cells *in vitro* , gives us the ability to analyze the potential biological effects of molecules on these cells. This has resulted in the identification of a group of small molecule compounds with the potential to enhance the survival of the endogenous cells residing in the hippocampus<sup>3</sup> region on the brain.

### ***Business Strategy***

We are seeking to develop and commercialize stem cell therapeutics to treat, and possibly cure, a range of human diseases. Our strategy has been to be the first to identify, isolate and patent important human neural stem and progenitor cells derived from human tissue with therapeutic and commercial importance; to develop techniques which enable the expansion and banking of those cells; and then to take them into clinical development as transplantable therapeutics.

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<sup>3</sup> The hippocampus region of the brain plays a part in memory and navigation. We believe that this ability to enhance the survival rate of the endogenous cells may result in the development of drugs or compounds that could be used to treat a variety of central nervous system diseases.

A central element of our business strategy is to obtain patent protection for the compositions, processes and uses of these multiple types of cells that would make the commercial development of neural stem cell therapeutics financially feasible. We have obtained rights to certain inventions relating to stem cells and progenitor through our own research and from academic collaborators. We expect to continue to expand our search for, and to seek to acquire rights from third parties where relevant relating to, neural stem and progenitor cells, and to further develop our intellectual property positions with respect to these cells in-house and through research at commercial and scholarly institutions.

### ***Our Research and Programs***

We have devoted substantial resources to our research programs to isolate and develop a series of neural stem cell banks that we believe can serve as a basis for therapeutic products. Our efforts to date have been directed at methods to identify, isolate and culture large varieties of stem cells of the human nervous system, and to develop therapies utilizing these stem cells. This research is conducted both internally and through the use of third party laboratory consulting companies under our direct supervision.

In addition to research which we conduct internally or under our direct supervision, we conduct research and development through research collaborations. These collaborations, or programs, are undertaken with both commercial and scholarly institutes pursuant to the terms and conditions of our standard material transfer agreement.

The material terms of our standard material transfer agreement requires us to provide our research partner or collaborator with access to our technology or “research materials,” which are comprised of our neurological stem cells, for a specific pre-defined purpose. As part of the agreement, we agree to provide sufficient research materials and technical assistance to accomplish the purpose of the program. The determination of sufficiency is determined at our sole discretion. As part of these agreements, we are entitled to certain reporting rights and the right to have patentable discoveries presented to us prior to publication in order for us to file applicable patents. In the event we choose to file a patent, we will either be responsible for all filing and maintenance fees or we will split the fees with our research partner depending on the type of patent to be filed. The agreements also provide for us to receive a fully paid up, royalty free, non-exclusive license to any inventions made by our partner with respect to our technologies and their interest in any intellectual property jointly developed and first right to negotiate an exclusive license. The agreements also provide confidentiality between the parties. Generally each party is responsible for its own expense, there are no milestone payment or royalty payment requirements and the duration of these agreements is for a three year term which can be terminated by either party with 90 days written notice.

The only agreement which varies from our general terms is the agreement pertaining to our work with the University of California San Diego. In addition to the general terms, the agreement also required us to provide a grant of \$13,680, which we have already paid. We have no other payment obligations under any of our current material transfer agreements unless the studies result in findings which we choose to patent. We will then incur the costs associated with the filing and maintenance of such patent.

In addition to our general research regarding the application of our technology to central nervous systems diseases, we are presently involved in the following specific programs with our partners in order to demonstrate that our products work in small, non-statistically controlled studies (commonly referred to as proof-of-principle), in animal models:

*University of California San Diego, San Diego, CA:* In May of 2002, we initiated a research project with the University of California in San Diego for the purpose of researching the applicability of our technology to the treatment of Ischemic Spastic Paraplegia and traumatic spinal cord injury. The project is ongoing. The research yielded findings that contributed to our filing of patent entitled Transplantation of Human Cells for Treatment of Neurological Disorders.

John Hopkins University, School of Medicine, Baltimore, MD: In March of 2001 we initiated a research project with John Hopkins University, School of Medicine for the purpose of researching the applicability of our technology to the treatment of Amyotrophic Lateral Sclerosis and traumatic spinal cord injury. The project is ongoing. The research yielded findings that contributed to our filing of patent entitled Transplantation of Human Cells for Treatment of Neurological Disorders.

University of Southern Florida, Tampa, FL: In September of 2005 we initiated a research project with the University of Southern Florida for the purpose of researching the applicability of our technology to the treatment of Parkinson's Disease. The project is ongoing.

University of Central Florida, Orlando, FL: In March of 2006 we initiated a research project with the University of Central Florida for the purpose of researching the applicability of our technology to the treatment of spinal cord injuries. The project is ongoing.

We have attached copies of the material transfer agreements governing the above collaborations as exhibits to this prospectus.

### ***Our Grants***

In August of 2005 we were awarded a two year, \$500,000 Small Business Innovation Research non competitive grant from the National Institute of Health (NIH), to further our research with regard to depression. Under the terms of the grant, we submit an annual budget of \$250,000 to be used for the purpose of testing our compounds in various models of depression. Any changes or modifications to the submitted budget must be approved by case manager. After we incur expenses, we submit those expenses to the NIH for reimbursement. The grant covers salary, wages, personnel costs, supplies, travel costs, and consortium/contractual costs with regard to the research.

The only conditions to full funding of the grant are that we use the proceeds to further or research regarding depression and that we use the funds as budgeted. Notwithstanding, in the event of a budget variance, we can seek approval of such variance from the case manager and such variance would be funded provided the aggregate funding does not exceed the amount of the grant. As of July 31, 2006, we have received an aggregate of \$160,000 pursuant to this grant.

### ***Our Intellectual Property Licensed to Others***

The following summarizes licenses from us to third parties.

A-T Children's Project. On December 22, 2004, we entered into a non exclusive limited license and material transfer agreement with A-T Children's Project ("A-TCP"), pursuant to which we granted to A-TCP a non-exclusive limited license to use all of our intellectual property for use in developing suitable tests for screening compounds to treat Ataxia-Telangiectasia. The license limits the use of our cells *in vitro* for compound screen development and not for any therapeutic use of the cells. In consideration of the rights and licenses granted to A-TCP, A-TCP paid to us a one time payment of \$37,500.

The initial term of A-TCP license is for a period of 10 years and contains certain conditions as to confidentiality which will survive the term. The agreement does not make any provisions for early termination by the parties and is silent with regard to notice requirements. The agreement does not contain any indemnification provisions or conditions regarding infringement or right to defend.

Biomedical Research Models, Inc. License. On February 7, 2005, we entered into an exclusive, worldwide, royalty-bearing license with Biomedical Research Models, Inc. ("BRM"), pursuant to which we exclusively licensed to

BRM certain technology and patent rights embodied in our patent application entitled “Use of Fused Imidazoles, Aminopyrimidines, Isonicotinamides, Aminomethyl Phenoxy piperidines and Aryloxy piperidines to Promote and Detect Endogenous Neurogenesis.” Under the agreement, we license rights to certain patent rights and technology useful as compounds and therapeutic agents to treat diabetes and its complications.

Under the terms of the agreement, BRM is obligated to pay us an annual license fee of \$75,000 on January 1, 2007 and 2008. In the event a milestone payment becomes due during this period, the annual payments will cease and the last amounts paid will be credited towards the milestone payment. BRM has agreed to the following milestone payments:

- (i) \$750,000 within 30 days of initiating Phase I clinical trials (Milestone 1);
- (ii) \$1,000,000 within 30 days of initiating Phase II clinical trials (Milestone 2);
- (iii) \$1,500,000 within 30 days of initiating Phase III clinical trials (Milestone 3);
- (iv) \$35,000,000 within one year after full commercial approval and licensure is granted by the United States Food and Drug Administration (Milestone 4); and
- (v) A one time sale bonus of \$100 million within one year after the first time the aggregate net sales of any licensed product by BRM reaches \$1.0 billion.



Under the terms of the agreement, BRM shall also pay us royalties of 7.0% of net sales of products they market directly, or 20% of any sub-license income. For a more detailed description of the BRM license, please refer to the exclusive licensing agreement filed as an exhibit to this prospectus.

The term of the BRM license is for a period of 15 years however the agreement provides for early termination in the event that BRM does not undertake diligence to develop product and introduce those products into the commercial market. The agreement can also be terminated in the event of a material breach by the other party upon 90 days written notice.

The agreement also requires BRM to indemnify Neuralstem against any liability incurred as a result of BRM's use of the technology but excludes any liability as a result of our gross negligence or intentional activities. Additionally, the agreement provides that all costs associated with the preparation, filing, prosecution and maintenance of all Neuralstem patent rights under the agreement will be the sole responsibility of BRM. The agreement also grants BRM the right to prosecute and or defend against any third party infringement of the licensed intellectual property at its sole expense. In the event that BRM does not prosecute or defend against an infringement within a reasonable time of becoming aware of such infringement, Neuralstem shall have the right to prosecute such infringement.

*High Med Technologies, Inc. License.* On July 7, 2005, we entered into a limited exclusive, licensing agreement relating to the sales, distribution and marketing of our technology by High Med Technologies, Inc. (HiMed). Under the agreement, we granted HiMed the exclusive right (excluding Neuralstem) to create, manufacture, develop, sublicense or offer for sale our technology for the sole purpose of in vitro research that does not involve the injection of cells or cell-derivative materials into living animals or human beings. Accordingly, we have limited HiMed use under the license to *in vitro* uses, and there is no license for any therapeutic use of the cells. As part of the agreement, HiMed has agreed to certain revenue targets which if met, will extend the term of this agreement from five years to the life of all applicable patents. Accordingly, we have licensed HiMed any and all technology that we control, but only for limited in vitro uses mentioned above.

As compensation under the license, we will be entitled to:

- 80% of revenues obtained by HiMed where HiMed does not manufacture and supply the product to the customer; and
- 20% of revenues obtained by HiMed where HiMed is required to manufacture and supply the product to the customer.

We have also agreed that should we directly supply a customer who is or was a customer of HiMed, we will be required to pay HiMed 20% of any revenues received therefrom.

The initial term of the HiMed license is for a period of 5 years but automatically extends to the life of certain patents in the event annual target revenues are met. The agreement does not make any provisions for early termination by the parties and is silent with regard to notice requirements. The agreement does not contain any indemnification provisions or conditions regarding infringement or right to defend.

### ***Manufacturing***

We currently manufacture our cells both in-house and on an outsource basis. We manufacture cells in-house which are not required to meet stringent FDA requirements. We use these cells in our research grant and collaborative programs. We outsource all the manufacturing and storage of our stem cells to be used in pre-clinical works, and which are accordingly subject to the higher FDA requirements, to Charles River Laboratories, Inc., of Wilmington, Massachusetts. The Charles River facility has the capacity to be used for cell processing under the FDA determined Good Manufacturing Practices (GMP) in quantities sufficient for our current pre-trial and anticipated future clinical

trial needs. We believe the facility has sufficient capacity to provide for our needs in the near to intermediate term. We have no quantity or volume commitment with Charles River Laboratories and our cells are ordered and manufactured on an as needed basis.

### ***Products & Marketing***

Because of the early stage of our programs, we have yet to identify any specific product and we have not yet addressed questions of channels of distribution and marketing of potential future products. We are however focusing our efforts on applications of our technology to diseases that affect the central nerve system.

### ***Our Intellectual Property***

Our research and development is supported by our intellectual property. We currently own or have exclusive licenses to 4 patents and 12 patent applications pending worldwide in the field of regenerative medicine and stem cell therapy.

Our success will likely depend upon our ability to preserve our proprietary technologies and operate without infringing the proprietary rights of other parties. However, we may rely on certain proprietary technologies and know-how that are not patentable. We protect our proprietary information, in part, by the use of confidentiality agreements with our employees, consultants and certain of our contractors.

When appropriate, we seek patent protection for inventions in our core technologies and in ancillary technologies that support our core technologies or which we otherwise believe will provide us with a competitive advantage. We accomplish this by filing patent applications for discoveries we make, either alone or in collaboration with scientific collaborators and strategic partners. Typically, although not always, we file patent applications both in the United States and in select international markets. In addition, we plan to obtain licenses or options to acquire licenses to patent filings from other individuals and organizations that we anticipate could be useful in advancing our research, development and commercialization initiatives and our strategic business interests.

The following table identifies the issued and pending patents we own that we believe currently support our technology platform.

***Patents Pending***

| <b>Number</b>  | <b>Country</b> | <b>Filing Date</b> | <b>Issue Date</b> | <b>Expiration Date</b> | <b>Title</b>   |
|----------------|----------------|--------------------|-------------------|------------------------|--|
| 97923569.4     | EP             | 05/07/97           | Pending           | N/A                    | Isolation, Propagation, and Directed Differentiation of Stem Cell from Embryonic and Adult Central Nervous System of Mammals                                       |
| 2257068        | CA             | 05/07/97           | Pending           | N/A                    | Isolation, Propagation, and Directed Differentiation of Stem Cell from Embryonic and Adult Central Nervous System of Mammals                                       |
| 99948396.9     | EP             | 09/20/99           | Pending           | N/A                    | Stable Neural Stem Cell Lines  |
| 2002-526065    | JAP            | 09/20/99           | Pending           | N/A                    | Stable Neural Stem Cell Lines  |
| 2343571        | CA             | 09/20/99           | Pending           | N/A                    | Stable Neural Stem Cell Lines  |
| 10/047,352     | US             | 01/14/02           | Pending           | N/A                    | Stable Neural Stem Cells   |
| 10/728,652     | US             | 12/05/03           | Pending           | N/A                    | Method for Discovering Neurogenic Agents   |
| 2004/053071    | WO             | 12/05/03           | Pending           | N/A                    | Method for Discovering Neurogenic Agents   |
| 10/914,460     | US             | 08/09/04           | Pending           | N/A                    | Use of Fused Imidazoles, Aminopyrimidines, Isonicotinamides, Aminomethyl Phenoxy piperidines and Aryloxy piperidines to Promote and Detect Endogenous Neurogenesis |
| 1576134        | EP             | 12/05/03           | Pending           | N/A                    | Method for Discovering Neurogenic Agents   |
| 11/281,640     | US             | 11/17/05           | Pending           | N/A                    | Transplantation of Human Cells for Treatment of Neurological Disorders   |
| PCT/US05/41367 | WO             | 11/17/05           | Pending           | N/A                    | Transplantation of Human Cells for Treatment of Neurological Disorders   |

***Patents Issued***

| <b>Number</b> | <b>Country</b> | <b>Filing Date</b> | <b>Issue Date</b> | <b>Expiration Date</b> | <b>Title</b> |
|---------------|----------------|--------------------|-------------------|------------------------|--------------|
|---------------|----------------|--------------------|-------------------|------------------------|--------------|

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|           |           |          |          |            |  |
|-----------|-----------|----------|----------|------------|--|
| 5,753,506 | US        | 09/25/96 | 05/19/98 | 09/25/2016 | Isolation, Propagation, and Directed Differentiation of Stem Cell from Embryonic and Adult Central Nervous System of Mammals |
| 6,040,180 | US        | 05/07/97 | 03/21/00 | 09/25/2016 | In Vitro Generation of Differentiated Neurons from Cultures of Mammalian Multi-potential CNS Stem Cell                       |
| 6,284,539 | US        | 10/09/98 | 09/04/01 | 10/9/2018  | Method for Generating Dopaminergic Cells Derived from Neural Precursors  |
| 755849    | Australia | 09/22/99 | 04/03/03 | 09/20/2019 | Stable Neural Stem Cell Lines  |

We also rely upon trade-secret protection for our confidential and proprietary information and take active measures to control access to that information.

Our policy is to require our employees, consultants and significant scientific collaborators and sponsored researchers to execute confidentiality agreements upon the commencement of an employment or consulting relationship with us. These agreements generally provide that all confidential information developed or made known to the individual by us during the course of the individual's relationship with us is to be kept confidential and not disclosed to third parties except in specific circumstances. In the case of employees and consultants, the agreements generally provide that all inventions conceived by the individual in the course of rendering services to us shall be our exclusive property.

The patent positions of pharmaceutical and biotechnology companies, including ours, are uncertain and involve complex and evolving legal and factual questions. The coverage sought in a patent application can be denied or significantly reduced before or after the patent is issued. Consequently, we do not know whether any of our pending applications will result in the issuance of patents, or if any existing or future patents will provide significant protection or commercial advantage or will be circumvented by others. Since patent applications are secret until the applications are published (usually eighteen months after the earliest effective filing date), and since publication of discoveries in the scientific or patent literature often lags behind actual discoveries, we cannot be certain that we were the first to make the inventions covered by each of our pending patent applications or that we were the first to file patent applications for such inventions. There can be no assurance that patents will issue from our pending or future patent applications or, if issued, that such patents will be of commercial benefit to us, afford us adequate protection from competing products, or not be challenged or declared invalid.

In the event that a third party has also filed a patent application relating to inventions claimed in our patent applications, we may have to participate in interference proceedings declared by the United States Patent and Trademark Office to determine priority of invention, which could result in substantial uncertainties and cost for us, even if the eventual outcome is favorable to us. There can be no assurance that our patents, if issued, would be held valid by a court of competent jurisdiction.

A number of pharmaceutical, biotechnology and other companies, universities and research institutions have filed patent applications or have been issued patents relating to cell therapy, stem cells and other technologies potentially relevant to or required by our expected products. We cannot predict which, if any, of such applications will issue as patents or the claims that might be allowed.

If third party patents or patent applications contain claims infringed by our technology and such claims are ultimately determined to be valid, there can be no assurance that we would be able to obtain licenses to these patents at a reasonable cost, if at all, or be able to develop or obtain alternative non-infringing technology. If we are unable to obtain such licenses or develop or obtain alternative non-infringing technology at a reasonable cost, we may not be able to develop certain products commercially. There can be no assurance that we will not be obliged to defend ourselves in court against allegations of infringement of third party patents. Patent litigation is very expensive and could consume substantial resources and create significant uncertainties. An adverse outcome in such a suit could subject us to significant liabilities to third parties, require us to seek licenses from third parties, or require us to cease using such technology.

### ***Competition***

The biotechnology industries are characterized by rapidly evolving technology and intense competition. Our competitors include major multinational pharmaceutical companies, specialty biotechnology companies and chemical and medical products companies operating in the fields of regenerative medicine, cell therapy, tissue engineering and tissue regeneration. Many of these companies are well-established and possess technical, research and development, financial and sales and marketing resources significantly greater than ours. In addition, certain smaller biotech companies have formed strategic collaborations, partnerships and other types of joint ventures with larger, well

established industry competitors that afford these companies potential research and development and commercialization advantages. Academic institutions, governmental agencies and other public and private research organizations are also conducting and financing research activities which may produce products directly competitive to those we are developing. Moreover, many of these competitors may be able to obtain patent protection, obtain FDA and other regulatory approvals and begin commercial sales of their products before we do.

In the general area of cell-based therapies, we compete with a variety of companies, most of whom are specialty biotechnology companies. Some of these, such as Geron Corporation, Genzyme Corporation, StemCells, Inc., Aastrom Biosciences, Inc. and Viacell, Inc., are well-established and have substantial technical and financial resources compared to us. However, as cell-based products are only just emerging as medical therapies, many of our direct competitors are smaller biotechnology and specialty medical products companies. These smaller companies may become significant competitors through rapid evolution of new technologies. Any of these companies could substantially strengthen their competitive position through strategic alliances or collaborative arrangements with large pharmaceutical or biotechnology companies.

The diseases and medical conditions we are targeting have no effective long-term therapies. Nevertheless, we expect that our technologies and products will compete with a variety of therapeutic products and procedures offered by major pharmaceutical companies. Many pharmaceutical and biotechnology companies are investigating new drugs and therapeutic approaches for the same purposes, which may achieve new efficacy profiles, extend the therapeutic window for such products, alter the prognosis of these diseases, or prevent their onset. We believe that our products, when and if successfully developed, will compete with these products principally on the basis of improved and extended efficacy and safety and their overall economic benefit to the health care system.

Competition for any stem cell products that we may develop may be in the form of existing and new drugs, other forms of cell transplantation, surgical procedures, and gene therapy. We believe that some of our competitors are also trying to develop similar stem cell-based technologies. We expect that all of these products will compete with our potential stem cell products based on efficacy, safety, cost and intellectual property positions. We may also face competition from companies that have filed patent applications relating to the use of genetically modified cells to treat disease, disorder or injury. In the event our therapies should require the use of such genetically modified cells, we may be required to seek licenses from these competitors in order to commercialize certain of our proposed products, and such licenses may not be granted.

If we develop products that receive regulatory approval, they would then have to compete for market acceptance and market share. For certain of our potential products, an important success factor will be the timing of market introduction of competitive products. This timing will be a function of the relative speed with which we and our competitors can develop products, complete the clinical testing and approval processes, and supply commercial quantities of a product to market. These competitive products may also impact the timing of clinical testing and approval processes by limiting the number of clinical investigators and patients available to test our potential products.

### ***Government Regulation***

Regulation by governmental authorities in the United States and other countries is a significant factor in our research and development and will be a significant factor in the manufacture and marketing of our proposed products. The nature and extent to which such regulation applies to us will vary depending on the nature of any products we may develop. We anticipate that many, if not all, of our products will require regulatory approval by governmental agencies prior to commercialization. In particular, human therapeutic products are subject to rigorous preclinical and clinical testing and other approval procedures of the U.S. Food and Drug Administration, referred to as the FDA, and similar regulatory authorities in European and other countries. Various governmental statutes and regulations also govern or influence testing, manufacturing, safety, labeling, storage and recordkeeping related to such products and their marketing. The process of obtaining these approvals and the subsequent compliance with appropriate statutes and regulations require the expenditure of substantial time and money, and there can be no guarantee that approvals will be granted.

***FDA Approval*** The FDA requirements for our potential products to be marketed in the United States include the following five steps:

Preclinical laboratory and animal tests must be conducted. Preclinical tests include laboratory evaluation of the cells and the formulation intended for use in humans for quality and consistency. In vivo studies are performed in normal animals and specific disease models to assess the potential safety and efficacy of the cell therapy product.

An investigational new drug application, or IND, must be submitted to the FDA, and the IND must become effective before human clinical trials in the United States may commence. The IND is submitted to the FDA with the preclinical data, a proposed development plan and a proposed protocol for a study in humans. The IND becomes effective 30 days following receipt by the FDA, provided there are no questions, requests for delay or objections from the FDA. If the FDA has questions or concerns, it notifies the sponsor, and the IND will then be on clinical hold until a satisfactory response is made by the sponsor.

Adequate and well-controlled human clinical trials must be conducted to establish the safety and efficacy of the product. Clinical trials involve the evaluation of a potential product under the supervision of a qualified physician, in accordance with a protocol that details the objectives of the study, the parameters to be used to monitor safety and the efficacy criteria to be evaluated. Each protocol is submitted to the FDA as part of the IND. The protocol for each clinical study must be approved by an independent institutional review board, or IRB, of the institution at which the study is conducted, and the informed consent of all participants must be obtained. The IRB reviews the existing information on the product, considers ethical factors, the safety of human subjects, the potential benefits of the therapy

and the possible liability of the institution. The IRB is responsible for ongoing safety assessment of the subjects during the clinical investigation. Clinical development is traditionally conducted in three sequential phases.

- Phase 1 studies for a cell therapy product are designed to evaluate safety in a small number of subjects in a selected patient population by assessing adverse effects, and may include multiple dose levels. This study may also gather preliminary evidence of a beneficial effect on the disease.
- Phase 2 may involve studies in a limited patient population to determine biological and clinical effects of the product and to identify possible adverse effects and safety risks of the product in the selected patient population.
- Phase 3 trials would be undertaken to conclusively demonstrate clinical benefit or effect and to test further for safety within a broader patient population, generally at multiple study sites. The FDA continually reviews the clinical trial plans and results and may suggest changes or may require discontinuance of the trials at any time if significant safety issues arise.

Marketing authorization applications must be submitted to the FDA. The results of the preclinical studies and clinical studies are submitted to the FDA in the form of marketing approval authorization applications.



The FDA must approve the applications prior to any commercial sale or practice of the technology or product. Biologic product manufacturing establishments located in certain states also may be subject to separate regulatory and licensing requirements. The testing and approval process will require substantial time, effort and expense. The time for approval is affected by a number of factors, including relative risks and benefits demonstrated in clinical trials, the availability of alternative treatments and the severity of the disease, and animal studies or clinical trials that may be requested during the FDA review period.

Our research and development is based largely on the use of human stem and progenitor cells. The FDA has initiated a risk-based approach to regulating human cell, tissue and cellular and tissue-based products and has published current Good Tissue Practice regulations. As part of this approach, the FDA has published final rules for registration of establishments that engage in the recovery, screening, testing, processing, storage or distribution of human cells, tissues, and cellular and tissue-based products, and for the listing of such products. While the Company believes that it is in compliance with all such practices and regulations; we are not required to register until we apply for licensure from the FDA for our product, subject to successful completion of human trials. In addition, the FDA has published rules for making suitability and eligibility determinations for donors of cells and tissue and for current good tissue practice for manufacturers using them, which have recently taken effect. We cannot now determine the full effects of this regulatory initiative, including precisely how it may affect the clarity of regulatory obligations and the extent of regulatory burdens associated with our stem cell research and the manufacture and marketing of stem cell products.

***European and Other Regulatory Approval*** Approval of a product by regulatory authorities comparable to the FDA in Europe and other countries will likely be necessary prior to commencement of marketing a product in any of these countries. The regulatory authorities in each country may impose their own requirements and may refuse to grant approval, or may require additional data before granting approval, even though the relevant product has been approved by the FDA or another authority. The regulatory authorities in the European Union, or EU, and other developed countries have lengthy approval processes for pharmaceutical products. The process for gaining approval in particular countries varies, but is generally similar to the FDA approval process. In Europe, the European Committee for Proprietary Medicinal Products provides a mechanism for EU-member states to exchange information on all aspects of product licensing. The EU has established a European agency for the evaluation of medical products, with both a centralized community procedure and a decentralized procedure, the latter being based on the principle of licensing within one member country followed by mutual recognition by the other member countries.

***Other Regulations*** In addition to safety regulations enforced by the FDA, we are also subject to regulations under the Occupational Safety and Health Act, the Environmental Protection Act, the Toxic Substances Control Act and other present and potential future and federal, state, local, and foreign regulations.

Outside the United States, we will be subject to regulations that govern the import of drug products from the United States or other manufacturing sites and foreign regulatory requirements governing human clinical trials and marketing approval for our products. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursements vary widely from country to country.

The United States Congress, several states and foreign countries have considered legislation banning or restricting human application of stem cell-based and nuclear transfer based technologies. No assurance can be given regarding future restrictions or prohibitions that might affect our technology and business. In addition, we cannot assure you that future judicial rulings with respect to nuclear transfer technology or human stem cells will not have the effect of delaying, limiting or preventing the use of nuclear transfer technology or stem cell-based technology or delaying, limiting or preventing the sale, manufacture or use of products or services derived from nuclear transfer technology or stem cell-derived material. Any such legislative or judicial development would harm our ability to generate revenues and operate profitably.

For additional information about governmental regulations that will affect our planned and intended business operations, see "RISK FACTORS" beginning on page 6.

***Employees***

As of August 21, 2006, we had two full-time employees and two part-time employees. Of these employees, one is directly involved in research and development activities and three are engaged in business development and administration. We also use the services of numerous outside consultants in business and scientific matters. We believe that we have good relations with our employees and consultants.

**PROPERTIES**

We currently lease two facilities. Our executive offices and primary research facilities are located at 9700 Great Seneca Highway, Rockville MD, 20850. We lease these facilities consisting of approximately 2,500 square feet for \$4,000.00 per month. The term of our lease expires on March 31, 2007.

We have recently entered into a 12 month lease to secure animal research space in San Diego California at a monthly lease rate of \$5,500. This amount includes personnel and supplies used in connection with our animal tests

The aforesaid properties are in good condition and we believe they will be suitable for our purposes for the next 12 months. There is no affiliation between us or any of our principals or agents and our landlords or any of their principals or agents.

## MANAGEMENT'S DISCUSSION AND ANALYSIS AND PLAN OF OPERATION

### *Overview*

This prospectus contains forward-looking statements that involve risks and uncertainties. See "Risk Factors" set forth on page 6 of this prospectus for a more complete discussion of these factors. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date that they are made. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

The following discussion should be read in conjunction with the consolidated financial statements and notes thereto included in this prospectus.

We are a biotechnology company focused on developing and commercializing human stem cell technology in the emerging fields of regenerative medicine and stem cell therapy.

### *Trends & Outlook*

**Revenue;** Our revenue is currently derived from grant reimbursements and licensing fees. As our focus is now on pre-clinical work in anticipation of entering clinical trials in 2007, we are not concentrated on increasing revenue. Additionally, as our current grants wind down, revenue can be expected to continue decreasing. Finally, as most grants use a fiscal year of October 31, revenue attributed to grants tends to be lower in the initial quarters of the year and increases in subsequent quarters.

Long-term, we anticipate that grant revenue as a percentage of revenue will decrease and our revenue will be derived primarily from licensing fees and the sale of our cell therapy products. At present we are in our pre-clinical stage of development and as a result, we can not accurately predict when or if we will be able to produce a product for commercialization. Accordingly, cannot accurately estimate when such change in revenue composition will occur or if it will ever occur.

**Research & Development Expense;** Our research and development expenses consist primarily of costs associated with basic and pre-clinical research exclusively in the field of human neural stem cell therapies and regenerative medicine, related to our clinical cell therapy candidates. These expenses represent both pre-clinical development costs and costs associated with non-clinical support activities such as quality control and regulatory processes. The cost of our research and development personnel is the most significant category of expense; however, we also incur expenses with third parties, including license agreements, third party contract services, sponsored research programs and consulting expenses.

We do not segregate research and development costs by project because our research is focused exclusively on human stem cell therapies as a unitary field of study. Although we have different areas of focus for our research, these areas are completely intertwined and have not yet matured to the point where they are separate and distinct projects. The intellectual property, scientists and other resources dedicated to these efforts are not separately allocated to individual projects, but rather are conducting our research on an integrated basis.

We expect that research and development expenses will continue to increase in the foreseeable future as we add personnel, expand our pre-clinical research (animal surgeries, manufacturing of cells, and in vitro characterization of cells which includes testing and cell quality control), begin clinical trial activities, increase our regulatory compliance capabilities, and ultimately begin manufacturing. We do anticipate hiring Qunitiles, Inc. to assist with regulatory compliance and patient enrollment as we moved from pre-clinical to clinical stage. The expenses associated with this regulatory compliance and patient enrollment is budgeted at \$200,000 to \$250,000 over a twelve month period. Additionally, we anticipate hiring 2 additional technicians to assist in the in-house growing of our cells for grant and collaborative work. With regard to material and personnel costs, as the industry continues to mature and grow, we have seen increased demand for qualified personnel and suitable materials. Notwithstanding, we feel that our outsource model will provide us with some protection regarding fluctuating pricing.

Although we feel the above increase in personnel will be sufficient for our short term needs, the amount of the monetary increases stemming from increased personnel and expenses as we move from pre-clinical to clinical state is difficult to predict due to the uncertainty inherent in the timing and extent of progress in our research programs, and initiation of clinical trials. In addition, the results from our basic research and pre-clinical trials, as well as the results of trials of similar therapeutics under development by others, will influence the number, size and duration of planned and unplanned trials. As our research efforts mature, we will continue to review the direction of our research based on an assessment of the value of possible commercial applications emerging from these efforts. Based on this continuing review, we expect to establish discrete research programs and evaluate the cost and potential for cash inflows from commercializing products, partnering with others in the biotechnology industry, or licensing the technologies associated with these programs to third parties.

We believe that it is not possible at this stage to provide a meaningful estimate of the total cost to complete our ongoing projects and bring any proposed products to market. The use of human stem cells as a therapy is an emerging area of medicine, and it is not known what clinical trials will be required by the FDA in order to gain marketing approval. The costs to complete such clinical trials could vary substantially depending upon the projects selected for development, the number of clinical trials required and the number of patients needed for each study. At a minimum, we feel that any trials will require at least 10 patients at an estimated cost of \$100,000 per patient. It is possible that the completion of these studies could be delayed for a variety of reasons, including difficulties in enrolling patients, delays in manufacturing, incomplete or inconsistent data from the pre-clinical or clinical trials, and difficulties evaluating the trial results. Any delay in completion of a trial would increase the cost of that trial, which would harm our results of operations. Due to these uncertainties, we cannot reasonably estimate the size, nature nor timing of the costs to complete, or the amount or timing of the net cash inflows from our current activities. Until we obtain further relevant pre-clinical and clinical data, we will not be able to estimate our future expenses related to these programs or when, if ever, and to what extent we will receive cash inflows from resulting products.

***General and Administrative Expenses;*** Our general and administrative expenses consist of the general costs, expenses and salaries for the operation and maintenance of our business. We anticipate that general and administrative expenses will increase as we progress from pre-clinical to a clinical phase. Additionally, upon this registration statement becoming effective, we will be subject to the periodic reporting requirements of the Exchange Act. As a result, we foresee an increase in general and administrative expenses relating to professional services (legal, accounting, audit) and estimate such fees to be \$10,000 per month. Moreover, in August of 2006 we became the subject of patent litigation with one of our competitors, StemCells, Inc.. The litigation is in its initial stages and it is hard to estimate what the actual costs stemming there from will be. We have currently budgeted an additional \$20,000 per month but this amount could significantly increase. Notwithstanding, we anticipate that General and Administrative Expense related to our core business will increase at a slower rate than that of similar companies making such transition do in large part to our outsourcing model.

### ***Significant Accounting Policies***

Our financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. Note 1 of the Notes to Consolidated Financial Statements describes the significant accounting policies used in the preparation of the consolidated financial statements. Certain of these significant accounting policies are considered to be critical accounting policies, as defined below.

A critical accounting policy is defined as one that is both material to the presentation of our financial statements and requires management to make difficult, subjective or complex judgments that could have a material effect on our financial condition and results of operations. Specifically, critical accounting estimates have the following attributes: 1) we are required to make assumptions about matters that are highly uncertain at the time of the estimate; and 2) different estimates we could reasonably have used, or changes in the estimate that are reasonably likely to occur, would have a material effect on our financial condition or results of operations.

Estimates and assumptions about future events and their effects cannot be determined with certainty. We base our estimates on historical experience and on various other assumptions believed to be applicable and reasonable under the circumstances. These estimates may change as new events occur, as additional information is obtained and as our operating environment changes. These changes have historically been minor and have been included in the consolidated financial statements as soon as they became known. Based on a critical assessment of our accounting policies and the underlying judgments and uncertainties affecting the application of those policies, management believes that our consolidated financial statements are fairly stated in accordance with accounting principles generally accepted in the United States, and present a meaningful presentation of our financial condition and results of operations. We believe the following critical accounting policies reflect our more significant estimates and

assumptions used in the preparation of our consolidated financial statements:

***Use of Estimates***--These financial statements have been prepared in accordance with accounting principles generally accepted in the United States and, accordingly, require management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Specifically, our management has estimated the expected economic life and value of our licensed technology, our net operating loss for tax purposes and our stock, option and warrant expenses related to compensation to employees and directors, consultants and investment banks. Actual results could differ from those estimates.

***Cash and Equivalents***--Cash equivalents are comprised of certain highly liquid investments with maturity of three months or less when purchased. We maintain our cash in bank deposit accounts, which at times, may exceed federally insured limits. We have not experienced any losses in such account.

***Revenue Recognition***--Our revenues, to date, revenue has been derived primarily from providing treated samples for gene expression data from stem cell experiments and from providing services as a subcontractor under federal grant programs. Revenue is recognized when there is persuasive evidence that an arrangement exists, delivery of goods and services has occurred, the price is fixed and determinable, and collection is reasonably assured.

***Intangible and Long-Lived Assets***--We follow SFAS No. 144, "Accounting for Impairment of Disposal of Long-Lived Assets," which established a "primary asset" approach to determine the cash flow estimation period for a group of assets and liabilities that represents the unit of accounting for a long lived asset to be held and used. Long-lived assets to be held and used are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. The carrying amount of a long-lived asset is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset. Long-lived assets to be disposed of are reported at the lower of carrying amount or fair value less cost to sell. During the period ended December 31, 2005 no impairment losses were recognized.

***Research and Development Costs***--Research and development costs consist of expenditures for the research and development of patents and technology, which are not capitalizable and charged to operations when incurred. Our research and development costs consist mainly of payroll and payroll related expenses, research supplies and costs incurred in connection with specific research grants.

***Stock Based Compensation***--We recognize expenses for stock-based compensation arrangements in accordance with provisions of Accounting Principles Board (APB) Opinion No. 25, "Accounting for Stock Issued to Employees," and related Interpretations. Accordingly, compensation cost is recognized for the excess of the estimated fair value of the stock at the grant date over the exercise price, if any. The Company accounts for equity instruments issued to non-employees in accordance with EITF 96-18, "Accounting for Equity Instruments that are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling Good or Services." Accordingly, the estimated fair value of the equity instrument is recorded on the earlier of the performance commitment date or the date the services required are completed.

Beginning in 2006, we adopted SFAS No. 123R "Share Based Payment" which superseded APB Opinion No. 25. SFAS No. 123R requires compensation costs related to share-based payment transactions to be recognized in the financial statements. We do not believe the adoption of SFAS No. 123R will have a material impact on our financial statements.

## RESULTS OF OPERATIONS

### ***Result of Operations for the Years ending December 31, 2004 and 2005***

Revenues for the twelve months ended December 31, 2005 and December 31, 2004 were approximately \$309,142 and \$125,457 respectively. These amounts relate primarily to grant reimbursements for the twelve months ending December 31, 2004 and license fees, grant reimbursements and royalties for the twelve months ending December 31, 2005. The increase in revenue in current periods was due to additional licensing revenues.

Research and development expenses for the twelve months ended December 31, 2005 and December 31, 2004 were approximately \$568,299 and \$428,402, respectively. The increase in expenses in current periods, consists mainly of payroll and payroll related expenses, research supplies and costs incurred in connection with specific research grants.

Grant reimbursements for the twelve months ended December 31, 2005 and December 31, 2004 were approximately \$70,000 and \$125,000, respectively. These amounts represent approved reimbursements under a 3<sup>rd</sup> party grant from the Defense Research Projects Agency in which we served as a subcontractor.

General and administrative expenses for the twelve months ended December 31, 2005 and December 31, 2004 were approximately \$1,256,278 and \$555,080, respectively. The principal increase in expenses in 2005 versus 2004 is a result of approximately \$660,000 in stock-based expenses related to consultants.

Other income (expense) for the twelve months ended December 31, 2005 and December 31, 2004 were approximately \$(84,149) and \$(8,362,963), respectively. The decrease in other income (loss) in the twelve months ended December 31, 2005, compared to other income (loss) in the prior periods, relates primarily to a one time charge of \$842,719 and \$7,527,179 in 2004 stemming from the sale of obsolete lab equipment and 3,125,000 shares given to Class C Preferred Shareholders as an inducement of converting from noteholders into preferred shareholders without any monetary consideration to us.

Net loss for the twelve months ended December 31, 2005 and December 31, 2004 was approximately \$1,651,507 and \$9,376,543 respectively. The increased loss in the current periods is the result of the foregoing factors discussed.

***Results of Operations for the 6 month periods ending June 30, 2006 and 2005.***

Revenues for the six month period ending June 30, 2006 and June 30, 2005 were approximately \$59,211 and \$157,813 respectively. The decrease in revenue in current period was mostly due to winding down of a subcontracting engagement.

Research and development expenses for the six month period ending June 30, 2006 and June 30, 2005 were approximately \$824,592 and \$144,949, respectively. The increase in expenses in current period, consists mainly of payroll and payroll related expenses, research supplies and costs incurred in connection with our current effort to produce preclinical data which results in animal surgeries, manufacturing of cells, and in vitro characterization of cells which includes testing and cell quality control.

General and administrative expenses for the six month period ending June 30, 2006 and June 30, 2005 were approximately \$452,558 and \$101,758, respectively. The principal increase in expenses in the current periods versus the same periods last year is a result of increases in professional fees and expenses related to accountants and financial advisors related to capital raised in 2006.



Nonoperating income (expense) for the six month period ending June 30, 2006 and June 30, 2005 were approximately \$(389,749) and \$0. The increase in 2006 relates to expense relating to warrant liability.

Net loss for the six month period ending June 30, 2006 and June 30, 2005 was approximately \$1,633,650 and \$114,856, respectively. The increased loss in the current periods is the result of the foregoing factors discussed.

### ***Recent Accounting Pronouncements***

In December 2004, the FASB issued SFAS No. 123 (revised 2004), "Share-Based Payment." SFAS No. 123R replaced SFAS No. 123 and superseded Accounting Principles Board Opinion No. 25. SFAS No. 123R will require compensation costs related to share-based payment transactions to be recognized in the financial statements. On April 14, 2005, the Securities and Exchange Commission issued an announcement amending the compliance dates for the FASB's SFAS 123R that addresses accounting for equity based compensation arrangements. Under SFAS 123R registrants would have been required to implement the standard as of the beginning of the first interim or annual period that begins after June 15, 2005. The Commission's new rule will allow companies to implement SFAS 123R at the beginning of the next fiscal year after June 15, 2005. The Company anticipates adopting SFAS 123R in the first quarter 2006. The Company does not believe that the adoption of SFAS No. 123R will have a material impact on our financial statements.

In December 2004, the FASB issued SFAS No. 153, "Exchanges of Nonmonetary Assets, an amendment of APB Opinion No. 29" ("SFAS No. 153"). SFAS No. 153 is based on the principle that exchanges of nonmonetary assets should be measured based on the fair value of the assets exchanged. APB Opinion No. 29, "Accounting for Nonmonetary Transactions," provided an exception to its basic measurement principle (fair value) for exchanges of similar productive assets. Under APB Opinion No. 29, an exchange of a productive asset for a similar productive asset was based on the recorded amount of the asset relinquished. SFAS No. 153 eliminates this exception and replaces it with an exception of exchanges of nonmonetary assets that do not have commercial substance. SFAS No. 153 became effective for our Company as of July 1, 2005. The Company will apply the requirements of SFAS No. 153 on any future nonmonetary exchange transactions.

In March 2005, the FASB issued FASB Interpretation ("FIN") No. 47 "Accounting for Conditional Asset Retirement Obligations--an Interpretation of FASB Statement No. 143" ("FIN No. 47"). FIN No. 47 clarifies the timing of liability recognition for legal obligations associated with the retirement of a tangible long-lived asset when the timing and/or method of settlement are conditional on a future event. FIN No. 47 is effective for us no later than December 31, 2005. We do not expect that the adoption of FIN No. 47 will have a material impact on our financial condition or results of operations.

Note 1. In May 2005, the FASB issued SFAS No. 154, "Accounting Changes and Error Corrections, a replacement of APB No. 20 and FASB Statement No. 3" ("SFAS No. 154"). SFAS No. 154 requires retrospective application to prior periods' financial statements of a voluntary change in accounting principle unless it is impracticable. APB Opinion No. 20 "Accounting Changes," previously required that most voluntary changes in accounting principle be recognized by including in net income of the period of the change the cumulative effect of changing to the new accounting principle. This statement is effective for our Company as of January 1, 2006. The Company does not believe that the adoption of SFAS No. 154 will have a material impact on our financial statements.

In February 2006, the FASB issued FASB Statement No. 155, Accounting for Certain Hybrid Instruments. This standard amends the guidance in FASB Statements No. 133, Accounting for Derivative Instruments and Hedging Activities, and No. 140, Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities. Statement 155 allows financial instruments that have embedded derivatives to be accounted for as a whole (eliminating the need to bifurcate the derivative from its host) if the holder elects to account for the whole instrument on a fair value basis. Management is currently evaluating the impact FASB 155 will have on our consolidated

financial statements.

In September 2005, the Emerging Issues Task Force, or EITF, reached a consensus on Issue 05-8, "Income Tax Consequences of Issuing Convertible Debt with a Beneficial Conversion Feature." EITF Issues No. 98-5, "Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustable Conversion Ratios," and No. 00-27, "Application of Issue No. 98-5 to Certain Convertible Instruments," provide guidance on how companies should bifurcate convertible debt issued with a beneficial conversion feature into a liability and an equity component. For income tax purposes, such an instrument is only recorded as a liability. A question has been raised as to whether a basis difference results from the issuance of convertible debt with a beneficial conversion feature and, if so, whether the basis difference is a temporary difference. We do not expect the provisions of this consensus to have a material impact on our financial position, results of operations or cash flows.

In November 2004, the Emerging Issues Task Force or EITF reached final consensus on Issue 04-8, "The Effect of Contingently Convertible Debt on Diluted Earnings per Share." Contingently convertible debt instruments, commonly referred to as Co-Cos, are structured financial transactions that combine the features of contingently issuable shares with a convertible debt instrument. Co-Cos are convertible into common shares of the issuer after the common stock price has exceeded a predetermined threshold for a specified time period (market price trigger). The issue is when the dilutive effect of Co-Cos should be included in diluted earnings per share. Management does not expect the implementation of this new standard to have a material impact on our financial position, results of operations and cash flows.

In September 2005, the Emerging Issues Task Force or EITF discussed Issue 05-4, "The Effect of a Liquidated Damages Clause on a Freestanding Instrument Subject to EITF Issue No. 00-19, "Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock." The Effect of a Liquidated Damages Clause on a Freestanding Financial Instrument Subject to EITF Issue No. 00-19, "Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock." Issuance of a registration rights agreement with a liquidated damages clause is common when equity instruments, stock purchase warrants, and financial instruments that are convertible into equity securities are issued. The agreement requires the issuer to use its "best efforts" to file a registration statement for the resale of the equity instruments or the shares of stock underlying the stock purchase warrant or convertible financial instrument and have it declared effective by the end of a specified grace period. The issuer may also be required to maintain the effectiveness of the registration statement for a period of time or pay a liquidated damage penalty to the investor each month until the registration statement is declared effective. Given the potential significance of the penalty, a question arises as to the effect, if any this feature has on the related financial instruments if they are subject to the scope of Issue 00-19. We are currently evaluating the effects of EITF 05-4 and have not been able to ascertain, if any, impact to our financial statements.

In September 2005, the Emerging Issues Task Force, or EITF, reached a consensus on Issue 05-7, "Accounting for Modifications to Conversion Options Embedded in Debt Securities and Related Issues." EITF Issue No. 96-19, "Debtor's Accounting for a Modification or Exchange of Debt Instruments," provides guidance on whether modifications of debt result in an extinguishment of that debt. In certain situations, companies may change the terms of a conversion option as part of a debt modification, which may result in the following circumstances: (a) the change in the conversion option's terms causes the fair value of the conversion option to change but does not result in the modification meeting the condition in Issue 96-19 that would require the modification to be accounted for as an extinguishment of debt, and (b) the change in the conversion option's terms did not result in separate accounting for the conversion option under Statement 133. When both of these circumstances exist, questions have arisen regarding whether (a) the modification to the conversion option, which changes its fair value, should affect subsequent interest expense recognition related to the debt and (b) a beneficial conversion feature related to a debt modification should be recognized by the borrower if the modification increases the intrinsic value of the debt. We do not expect the provisions of this consensus to have a material impact on our financial position, results of operations or cash flows.

In June 2005, the Emerging Issues Task Force, or EITF, reached a consensus on Issue 05-2, "The Meaning of "Conventional Convertible Debt Instrument" in EITF Issue 00-19. Paragraph 4 of Issue 00-19 states that "the requirements of paragraphs 12-32 of this issue do not apply if the hybrid contract is a conventional convertible debt instrument in which the holder may only realize the value of the conversion option by exercising the option and receiving the entire proceeds in a fixed number of shares or the equivalent amount of cash (at the discretion of the issuer)". The term "conventional convertible debt instrument" is not defined in Issue 00-19 and, as a result, questions have arisen regarding when a convertible debt instrument should be considered "conventional" for purposes of Issue 00-19. A question has also arisen related to whether conventional convertible preferred stock should be treated similar to conventional convertible debt. We do not expect the provisions of this consensus to have a material impact on our financial position, results of operations or cash flows.

In June 2005, the Emerging Issues Task Force, or EITF, reached a consensus on Issue 05-6, "Determining the Amortization Period for Leasehold Improvements, which requires that leasehold improvements acquired in a business combination or purchased subsequent to the inception of a lease be amortized over the lesser of the useful life of the assets or a term that includes renewals that are reasonably assured at the date of the business combination or purchase. EITF 05-6 is effective for periods beginning after July 1, 2005. We do not expect the provisions of this consensus to have a material impact on our financial position, results of operations or cash flows.

In March 2005, the SEC released Staff Accounting Bulletin No. 107, "Share-Based Payment" ("SAB 107"), which provides interpretive guidance related to the interaction between SFAS 123(R) and certain SEC rules and regulations. It also provides the SEC staff's views regarding valuation of share-based payment arrangements. In April 2005, the SEC amended the compliance dates for SFAS 123(R), to allow companies to implement the standard at the beginning

of their next fiscal year, instead of the next reporting period beginning after June 15, 2005. Management is currently evaluating the impact SAB 107 will have on our consolidated financial statements.

***Liquidity and Capital Resources***

We are financing our operations primarily with the proceeds from our convertible notes and private placement offerings. During the years ended December 31, 2005 and 2004, we raised through these offerings a total of \$1,234,255 and \$373,432, respectively which are described in Notes 2 and 5 to our Financial Statements. During the six month period ending June 30, 2006, we completed the private placement of our securities with gross proceeds to us of \$5,000,000. To a substantially lesser degree, financing of our operations is provided through grant funding, payments received under license agreements, and interest earned on cash and cash equivalents.

We have incurred substantial net losses each year since inception as a result of research and development and general and administrative expenses in support of our operations. We anticipate incurring substantial net losses in the future.

Cash, cash equivalents, and cash held in escrow at December 31, 2005 and December 31, 2004 were approximately \$526,381 and \$39,054, respectively. Cash, cash equivalents, and cash held in escrow at June 30, 2006 was approximately \$3,202,703. The increase in the current period is the result of closing the financing described above, net of amounts spent for payment of notes and accounts payable, increased legal and accounting fees, fees paid to the placement agent, and increases in other research and development and general and administrative expenses.

Our cash and cash equivalents are limited. We expect to require substantial additional funding. Our future cash requirements will depend on many factors, including the pace and scope of our research and development programs, the costs involved in filing, prosecuting, maintaining and enforcing patents and other costs associated with commercializing our potential products. We intend to seek additional funding primarily through public or private financing transactions, and, to a lesser degree, new licensing or scientific collaborations, grants from governmental or other institutions, and other related transactions. If we are unable to raise additional funds, we will be forced to either scale back our business efforts or curtail our business activities entirely.

We anticipate that our available cash and expected income will be sufficient to finance most of our current activities for at least 11 months from the date of this prospectus, although certain of these activities and related personnel may need to be reduced. Additionally, in the event we are able to file a successful IND with the FDA, we anticipate we will enter clinical trials in 2007. In the event of such trials, we would incur additional expenses associated with such trials which are estimated to exceed \$1,000,000. Assuming our current monthly cash burn rate of \$260,000, increased expense from regulatory compliance and personnel required for the pre-trial and clinical trial work, as well as the estimated cost of the trial, our cash on hand is sufficient to finance our current operations, pre-clinical and clinical work for at least 8 months from the date of this prospectus. We cannot assure you that public or private financing or grants will be available on acceptable terms, if at all. Several factors will affect our ability to raise additional funding, including, but not limited to, the volatility of our Common Stock.

## LEGAL PROCEEDINGS

As of the date of this prospectus, there are no material pending legal or governmental proceedings relating to our company or properties to which we are a party, and to our knowledge there are no material proceedings to which any of our directors, executive officers or affiliates are a party adverse to us or which have a material interest adverse to us, other than the following:

On July 28, 2006, StemCells, Inc. and StemCells California, Inc. (collectively "Stemcells") of Palo Alto, California, filed suit against Neuralstem, Inc. in U.S. District Court in Maryland, alleging that Neuralstem has been infringing, contributing to the infringement of, and/or inducing the infringement of four patents owned by or exclusively licensed to StemCells relating to stem cell culture compositions, genetically modified stem cell cultures, and methods of using such cultures. StemCells has sought monetary relief and a permanent injunction. Neuralstem's response to the suit is due on September 19, 2006.

## MANAGEMENT

The following table sets forth the name, age and position of each of our directors, executive officers and significant employees as of August 21, 2006. Except as noted below each director will hold office until the next annual meeting of our stockholders or until his or her successor has been elected and qualified. Our executive officers are appointed by, and serve at the discretion of, the Board of Directors.

| Name                  | Age | Position  |
|-----------------------|-----|---|
| I. Richard Garr       | 53  | Chief Executive Officer, Chief Financial Officer, President, General Counsel and Director |
| Karl Johe, Ph.D.      | 46  | Chief Scientific Officer, Chairman of the Board, and Director                             |
| Malcolm Currie, Ph.D. | 79  | Director Elect  |

**Mr. I. Richard Garr, JD** has been our Chief Executive Office, Chief Financial Officer, President, Board Director & Co-Founder since 1996. Mr. Garr was previously an attorney with Beli, Weil & Jacobs, the B&G Companies, and

Circle Management Companies. Mr. Garr is a graduate of Drew University (1976) and the Columbus School of Law, The Catholic University of America (1979). Additionally, he was a founder and current Board member of the First Star Foundation, a children's charity focused on abused children's issues; a founder of The Starlight Foundation Mid Atlantic chapter, which focuses on helping seriously ill children; and is a past Honorary Chairman of the Brain Tumor Society.

**Mr. Karl Johe, Ph.D.** has been our Chief Scientific Officer, Chairman & Co-Founder since 1996. Mr. Johe has over 15 years of research and laboratory experience. Dr. Johe is the sole inventor of Neuralstem's granted stem cell patents and is responsible for strategic planning and development of the Company's therapeutic products. Dr. Johe received his Bachelor of Arts Degree in Chemistry from the University of Kansas. Dr. Johe also received a Master's Degree from the University of Kansas and his doctorate was received from the Albert Einstein College of Medicine. From 1993 to January 1997, Dr. Johe served as a Staff Scientist at the Laboratory of Molecular Biology of the National Institute of Neurological Disease and Stroke in Bethesda, Maryland. While holding this position, Dr. Johe conducted research on the isolation of neural stem cells, the elucidation of mechanisms directing cell type specification of central nervous system stem cells and the establishment of an in vitro model of mammalian neurogenesis.

**Malcolm Currie, Ph.D.** was elected by our directors to serve as a board member on January 23 of 2006. Dr. Currie has preliminarily accepted the appointment subject to our stock being listed on a national exchange or traded over-the-counter. Dr. Currie has been the Chairman of the Board of Regal One Corporation since 1995, and the CEO since 2001. From 1969 to 1973, Dr. Currie was the Undersecretary of Research and Engineering for the Office of Defense. From 1973 to 1977, Dr. Currie was President of the Missile Systems Group for Hughes Aircraft Corporation. From 1977 to 1988, Dr. Currie started as Executive Vice President and eventually became Chief Executive Officer and Chairman of the Board of Hughes Aircraft Corporation. From 1992 to present, Dr. Currie has been Chairman Emeritus of Hughes Aircraft Corporation. Dr. Currie is also on the Board of Directors of LSI Logic, Enova Systems, Inamed Corp., and Innovative Micro Technologies. Dr. Currie obtained a graduate MBA from the University of California, Berkeley, and a PhD in Engineering and Physics at the University of California, Berkeley.

***Audit Committee Financial Expert***

The functions of the Audit and Compensation Committee are: (i) to recommend the engagement of the Company's independent auditors and review with them the plan, scope and results of their audit for each year; (ii) to consider and review other matters relating to the financial and accounting affairs of the Company; and (iii) to review and recommend to the Board of Directors all compensation packages, including the number and terms of stock options, offered to officers and executive employees of the Company. The Company's entire Board of Directors serves as the Company's Audit Committee and Compensation Committee.

***Code of Ethics***

We have adopted a "Code of Ethics for Directors, Officers and Employees" that applies to all employees, including our executive officers. A copy of our Code of Ethics for Directors, Officers and Employees is filed as Exhibit 14.1 to this Registration Statement.

**EXECUTIVE COMPENSATION*****Summary Compensation Table***

The following table sets forth information for the most recent fiscal year concerning the compensation of (i) the Chief Executive Officer and (ii) all other executive officers of Neuralstem, Inc. who earned over \$100,000 in salary and bonus in the fiscal year ended December 31, 2005 (together the "Named Executive Officers").

| Name and Principal Position                      | Year | Annual Compensation |            |                                   | Long-Term Compensation Awards |                                   |
|--|------|---------------------|------------|-----------------------------------|-------------------------------|-----------------------------------|
|  |      | Salary (\$)         | Bonus (\$) | Other Annual Compensation (\$)(3) | Restricted Stock Awards (\$)  | Securities Underlying Options (#) |
| I Richard Garr<br><i>Chief Executive Officer</i> | 2005 | \$ 240,000          | (1) \$ --  | \$ 27,605                         | \$ --                         | 1,200,000(4)                      |
| Karl Johe<br><i>Chief Scientific Officer</i>     | 2005 | \$ 240,000          | (2) \$ --  | \$ 23,070                         | \$ --                         | 1,200,000(4)                      |

(1) Includes \$200,000 paid as consulting fees and \$40,000 paid pursuant to the November 1, 2005 employment agreement with the Company.

(2) Includes \$200,000 paid as consulting fees and \$40,000 paid pursuant to the November 1, 2005 employment agreement with the Company.

(3) Includes, among other things, automobile allowances, perquisites and other personal benefits.

(4) The options vest annually at a rate of 300,000 per year and will expire in 10 years if not exercised.

***Option Grants in Last Fiscal Year***

The following tables set forth certain information for the Named Executive Officers with respect to grants and exercises in fiscal 2005 of options to purchase our Common Stock:

| <b>Name</b>     | <b>Number of Securities<br/>Underlying<br/>Options Granted<br/>(#)</b> | <b>% of Total Options<br/>Granted to Employees<br/>in Fiscal Year (1)</b> | <b>Exercise or<br/>Base Price<br/>(\$/sh)</b> | <b>Expiration<br/>Date</b> |
|-----------------|--|---|---|----------------------------|
| I. Richard Garr | 1,200,000  | 50 %  | \$ .50  | 7/27/2015                  |
| Karl Johe       | 1,200,000  | 50 %  | \$ .50  | 7/27/2015                  |

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(1) The numerator in calculating this percentage includes common share purchase options granted to each named executive officer in fiscal 2005 in his capacity as an officer or employee. The denominator in calculating this percentage is 2,400,000, which represents options granted to all Neuralstem, Inc. employees during fiscal 2005, including those to the named executive officers.



**Compensation of Directors**

For the fiscal year ended December 31, 2005, we paid no compensation to our directors for their services on our board.

**Employment Agreements and Change-in-Control Arrangements**

**Employment Agreement with I. Richard Garr** On November 1, 2005, we entered into an amendment to the employment agreement with Richard Garr, our Chief Executive Officer, President and Chief Financial Officer. The agreement provides for annual compensation in the amount of \$240,000 and extends his term of employment until October 31, 2012. Additionally, the agreement provides for a \$500 monthly automobile allowance and the reimbursement of reasonable business expenses. The agreement also provides for an industry standard bonus upon the formation of a compensation committee by the company.

The agreement also provides for severance (“Termination Provisions”) an amount equal to the greater of: (i) the aggregate compensation remaining on his contract; or (ii) \$1,000,000, in the event Mr. Garr is terminated for any reason. In the event of termination, the agreement also provides for the immediate vesting of 100% of stock options granted to Mr. Garr during his term of employment. These termination provisions apply whether employee is terminated for “cause” or “without cause.” Additionally, in the event employee voluntarily terminates his employment following a change in control and material reassignment of duties, he will also be entitled to the termination provisions under the contract. In the event of early termination, the Termination Provisions will require us to make a substantial payment to the employee. By way of example, such payments would be approximately as follows:

| Termination Date                       | Amount of Payment <sup>(1)</sup> |
|--|----------------------------------|
| October 31, 2006                       | \$ 1,476,000                     |
| October 31, 2007                       | \$ 1,230,000                     |
| October 31, 2008 until end of Contract | \$ 1,000,000                     |

(1) Assumes payment of annual salary of \$240,000 and a monthly automobile allowance of \$500.00. Does not include health benefits, bonuses or increase in annual salary.

Mr. Garr's agreement contains non-solicitation, and confidentiality and non-competition covenants. The agreement may be terminated by either party with or without cause and without prior notice subject to the termination provisions as discussed.

**Employment Agreement with Karl Y. Johe, Ph.D.** On November 1, 2005, we entered into an amendment to the employment agreement with Karl Y. Johe, Ph.D., our Chief Scientific Officer and Chairman of the Board. The agreement provides for a minimum annual compensation in the amount of \$240,000 and in no event less than the salary of the Chief Executive Officer. The agreement also extends his term of employment until October 31, 2012. Additionally, the agreement provides for a \$500 monthly automobile allowance and the reimbursement of reasonable business expenses. The agreement also provides for an industry standard bonus upon the formation of a compensation committee by the company.

The agreement also provides for severance (“Termination Provisions”) an amount equal to the greater of: (i) the aggregate compensation remaining on his contract; or (ii) \$1,000,000, in the event Mr. Johe is terminated for any reason. In the event of termination, the agreement also provides for the immediate vesting of 100% of stock options granted to Mr. Johe during his term of employment. These termination provisions apply whether employee is

terminated for “cause” or “without cause.” Additionally, in the event employee voluntarily terminates his employment following a change in control and material reassignment of duties, he will also be entitled to the termination provisions under the contract. In the event of early termination, the Termination Provisions will require us to make a substantial payment to the employee. By way of example, such payments would be approximately as follows:

| Termination Date                       | Amount of Payment <sup>(1)</sup> |
|--|----------------------------------|
| October 31, 2006                       | \$ 1,476,000                     |
| October 31, 2007                       | \$ 1,230,000                     |
| October 31, 2008 until end of Contract | \$ 1,000,000                     |

(1) Assumes payment of annual salary of \$240,000 and a monthly automobile allowance of \$500.00. Does not include health benefits, bonuses or increase in annual salary.

Mr. Johe's agreement contains non-solicitation, and confidentiality and non-competition covenants. The agreement may be terminated by either party with or without cause and without prior notice subject to the termination provisions as discussed.

### PRINCIPAL STOCKHOLDERS

The following tables set forth certain information regarding the beneficial ownership of our common stock. Beneficial ownership is determined in accordance with the applicable rules of the Securities and Exchange Commission and includes voting or investment power with respect to shares of our common stock. The information set forth below is not necessarily indicative of beneficial ownership for any other purpose, and the inclusion of any shares deemed beneficially owned in this table does not constitute an admission of beneficial ownership of those shares. Unless otherwise indicated, to our knowledge, all persons named in the table have sole voting and investment power with respect to their shares of common stock, except, where applicable, to the extent authority is shared by spouses under applicable state community property laws.

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The following table sets forth information regarding beneficial ownership of our capital stock as of August 21, 2006 by:

- each person, or group of affiliated persons, known to us to be the beneficial owner of more than 5% of the outstanding shares of our common stock;
- each of our directors and named executive officers; and
- all of our directors and executive officers as a group.

| Name  | Common Stock          |       |
|---|-----------------------|-------|
|   | Amount <sup>(1)</sup> | %     |
| Stanley Westreich <sup>(2)(8)</sup>                                       | 4,321,114             | 16.7% |
| Regal One Corporation <sup>(3)(9)</sup>                                   | 2,815,287             | 10.9% |
| Karl Johe <sup>(4)</sup>  | 2,084,584             | 8.1%  |
| Merrill Solomon <sup>(5)(10)</sup>  | 2,177,097             | 8.4 % |
| Richard Garr <sup>(6)</sup>   | 1,810,084             | 7.0%  |
| JMG Capital Partners, LP/JMG Triton Offshore Fund, Ltd <sup>(7)(11)</sup> | 2,006,667             | 7.8%  |
| Malcolm Currie <sup>(3)(12)</sup>   | 50,167                | *     |