

STEMCELLS INC
Form 10-K/A
April 29, 2013
Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K/A

(Amendment No. 1)

x **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2012

or

.. **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

COMMISSION FILE NUMBER 0-19871

STEMCELLS, INC.

(Exact name of Registrant as specified in its charter)

A Delaware Corporation
(State or other jurisdiction of

94-3078125
(I.R.S. Employer

Edgar Filing: STEMCELLS INC - Form 10-K/A

incorporation or organization) Identification No.)
7707 GATEWAY BLVD 94560
NEWARK, CA (zip code)

(Address of principal offices)

Registrant's telephone number, including area code:

(510) 475-4000

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, \$0.01 par value	Nasdaq Capital Market

Securities registered pursuant to Section 12(g) of the Act:

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

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

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

Aggregate market value of common stock held by non-affiliates at June 30, 2012: \$20,259,263. Inclusion of shares held beneficially by any person should not be construed to indicate that such person possesses the power, direct or indirect, to direct or cause the direction of management policies of the registrant, or that such person is controlled by or under common control with the Registrant.

Common stock outstanding at April 3, 2013: 38,909,223 shares.

Documents incorporated by reference:

None

Table of Contents**TABLE OF CONTENTS****Year 2010 Form 10-K/A Annual Report****EXPLANATORY NOTE**

This Amendment No. 1 on Form 10-K/A amends our annual report on Form 10-K for the year ended December 31, 2012, as filed with the Securities and Exchange Commission on March 21, 2013 (the Original Report), to include the information required by Part III of Form 10-K. Specifically, information required by Items 10 through 14 of Part III is no longer being incorporated by reference to the proxy statement relating to our 2013 annual meeting of stockholders. We hereby amend our Original Report by (a) deleting the text of Items 10, 11, 12, 13, and 14 of Part III in their entirety and replacing them with the information provided below under the respective headings, (b) deleting the reference on the cover of the Original Report to the incorporation by reference to portions of our definitive proxy statement into Part III of the Original Report, and (c) amending Part IV, Item 15 to include the certifications required by section 302 of the Sarbanes-Oxley Act of 2002, filed as exhibits to this amendment, and to include reference to three material agreements entered into by the Company since we filed the Original Report. This amendment does not affect any other items in our Original Report. Because no financial statements are contained in this amendment, we are not including certifications under section 906 of the Sarbanes-Oxley Act of 2002.

Item description

	<u>Part III</u>	Page
Item 10.	<u>Directors and Executive Officers of the Registrant</u>	3
Item 11.	<u>Executive Compensation</u>	9
Item 12.	<u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	28
Item 13.	<u>Certain Relationships and Related Transactions, and Director Independence</u>	30
Item 14.	<u>Principal Accounting Fees and Services</u>	30
	<u>Part IV</u>	
Item 15.	<u>Exhibits and Financial Statement Schedules</u>	32
	<u>Exhibit 10.34</u>	
	<u>Exhibit 10.35</u>	
	<u>Exhibit 10.36</u>	
	<u>Exhibit 31.3</u>	
	<u>Exhibit 31.4</u>	

Notes regarding certain references

Except as otherwise expressly stated herein, this amendment continues to speak as of the date of the Original Report and we have not updated the disclosure contained in the Original Report or this amendment to reflect events that have occurred since the filing of the Original Report. Accordingly, this amendment should be read in conjunction with our Original Report and our other filings made with the SEC subsequent to the filing of the Original Report.

Throughout this Form 10-K/A, the words we, us, our, and StemCells refer to StemCells, Inc., including our directly and indirectly wholly-owned subsidiaries. Common stock refers to the common stock of StemCells, Inc., \$0.01 par value.

Table of Contents**PART III****Item 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT
Board of Directors**

We currently have seven directors serving on our Board of Directors. Since June 2010, our Board has been composed of Drs. Ricardo Levy, Roger Perlmutter, John Schwartz, and Irving Weissman and Messrs. Eric Bjerkholt, Scott Greer and Martin McGlynn. The following table shows the names, ages, principal occupations, and public company board memberships for the last five years of our directors, as of April 3, 2013:

Eric Bjerkholt	53	Eric Bjerkholt was elected to the Board of Directors in March 2004. He is Executive Vice President and Chief Financial Officer of Sunesis Pharmaceuticals, Inc., a biopharmaceutical company. Mr. Bjerkholt is a member of the board of directors of Round Table Pizza, Inc.
R. Scott Greer	54	Scott Greer was appointed to the Board of Directors in June 2010. He is currently a principal and managing director of Numenor Ventures LLC, which he founded in 2002 to provide funding and strategic advisory services to early stage enterprises. Mr. Greer currently serves as Chairman of Ablexis, a development stage biotechnology company, and is also on the board of Nektar Therapeutics.
Ricardo Levy, Ph.D.	68	Ricardo Levy, Ph.D. was elected to the Board of Directors in September 2001. He currently serves as a director on the board of Accelrys, Inc., a public company focused on molecular modeling and simulation software for both life and materials science research.
Martin McGlynn	66	Martin McGlynn was elected to the Board of Directors in February 2001. He is President and Chief Executive Officer of the company, a position he has held since January 2001.
Roger Perlmutter, M.D., Ph.D.	60	Roger Perlmutter, M.D., Ph.D., was elected to the Board of Directors in December 2000. He is President of Merck Research Laboratories, an international pharmaceutical company, where he leads Merck's global research endeavors. Previously, until February 2012, he was Executive Vice President, Research and Development, of Amgen, Inc.
John Schwartz, Ph.D.	78	John Schwartz, Ph.D., was elected to the Board of Directors in December 1998 and was elected Chairman of the Board at the same time. He is currently President of Quantum Strategies Management Company, a registered investment advisor.
Irving Weissman, M.D.	73	Irving Weissman, M.D., was elected to the Board of Directors in September 1997. He is the Virginia and Daniel K. Ludwig Professor of Cancer Research, Professor of Pathology and Professor of Developmental Biology at Stanford University.

Because we have a classified board, with each of our directors serving a staggered three-year term, only three of our directors are standing for reelection at our 2013 Annual Meeting. The following table shows the composition of the three classes of our Board:

Class I Directors (terms scheduled to expire in 2013, but nominated to stand for reelection at our 2013 Annual Meeting):

Eric Bjerkholt
R. Scott Greer
John Schwartz, Ph.D.

Table of Contents

Class II Directors (terms scheduled to expire in 2014):

Ricardo Levy, Ph.D.

Irving Weissman, M.D.

Class III Directors (terms scheduled to expire in 2015):

Martin McGlynn

Roger Perlmutter, M.D., Ph.D.

The independent members of our Board, as determined by the Board of Directors in accordance with the existing Nasdaq Listing rules, are Messrs. Bjerkholt and Greer and Drs. Levy, Perlmutter and Schwartz. The Board of Directors held four regular meetings and one special meeting during the fiscal year ended December 31, 2012. Each of our directors attended more than 75% of the meetings of the Board of Directors and of the committees on which he served.

For many years the roles of chairman and chief executive officer at the company have been separated. We believe that this is appropriate under current circumstances, because it allows management to make the operating decisions necessary to manage the business, while helping to maintain Board independence so that it can provide an effective oversight function. We feel that this has provided an appropriate balance of operational focus, flexibility and oversight. Our independent directors meet at regularly scheduled executive sessions without members of management.

Board Committees

Presently, the Board has four standing committees – the Audit Committee, the Compensation and Stock Option Committee (the Compensation Committee), the Corporate Governance and Nominating Committee (the Corporate Governance Committee), and the Strategic Transactions Committee – as well as a single-member committee established under the company's 2001, 2004 and 2006 equity incentive plans and the Company's 2012 Commencement Incentive Plan. The Board created the Strategic Transactions Committee in March 2009 as an *ad hoc* committee with direction to consult with management and advise the full Board on various corporate initiatives, such as the acquisition of substantially all of the operating assets of Stem Cell Sciences plc, which the company completed in April 2009. In June 2010, however, the Board reconstituted the Strategic Transactions Committee, which Mr. Greer currently chairs, as a standing committee of the Board. All members of the Audit Committee, the Compensation Committee, and the Corporate Governance Committee are, and are required by the charters of the respective committees to be, independent as determined under Nasdaq Listing rules.

Audit Committee. The Audit Committee is composed of Mr. Bjerkholt and Drs. Schwartz and Levy. The Audit Committee held four meetings during the fiscal year ended December 31, 2012. The primary function of the Audit Committee is to assist our Board in fulfilling its oversight responsibilities. The committee does this primarily by reviewing our financial reports and other financial information as well as the company's systems of internal controls regarding finance, accounting, legal compliance, and ethics that management and the Board have established. The committee also assesses our auditing, accounting and financial processes more generally. The Audit Committee meets quarterly, and at such other times as it finds necessary. It recommends to our Board the appointment of a firm of independent auditors to audit the financial statements of the company and meets with such personnel of the company to review the scope and the results of the annual audit, the amount of audit fees, the company's internal accounting controls, the company's financial statements contained in this proxy statement and other related matters. Each of the members of the Audit Committee is independent, and the Board has determined that Mr. Bjerkholt is an audit committee financial expert, as defined in SEC rules. The Audit Committee acts pursuant to a written charter which is available through our website at www.stemcellsinc.com.

Compensation Committee. The Compensation Committee is composed of Drs. Schwartz and Levy and Mr. Bjerkholt. The Compensation Committee held five meetings during the fiscal year ended December 31, 2012. The Compensation Committee makes recommendations to our Board and management concerning salaries in general, determines executive compensation and, except to the extent that such decisions have been delegated to, and made by, the single-member committee, approves incentive compensation for our employees and consultants. The Compensation Committee acts pursuant to a written charter which is available through our website at www.stemcellsinc.com.

Table of Contents

Corporate Governance Committee. The Corporate Governance Committee is composed of Drs. Levy, Perlmutter and Schwartz. The Corporate Governance Committee held one meeting in 2012 to discuss a slate of actual and potential nominees to the Board of Directors. The committee oversees nominations to the Board and considers the experience, ability and character of potential nominees to serve as directors, as well as particular skills or knowledge that may be desirable in light of the company's position at any time. From time to time, the committee has engaged the services of a paid search firm to help the committee identify potential nominees to the Board. The Company's Governance Committee and Board seek to nominate and appoint candidates to the Board who have significant business experience, technical expertise or personal attributes, or a combination of these, sufficient to suggest, in the Board's judgment, that the candidate would have the ability to help direct the affairs of the company and enhance the Board as a whole. The Committee may identify potential candidates through any reliable means available, including recommendations of past or current members of the Board from their knowledge of the industry and of the company. The Committee also considers past service on the Board or on the board of directors of other publicly traded or technology focused companies. The committee has not adopted a formulaic approach to evaluating potential nominees to the Board; it does not have a formal policy concerning diversity, for example. Rather, the committee weighs and considers the experience, expertise, intellect, and judgment of potential nominees irrespective of their race, gender, age, religion, or other personal characteristics. The committee often looks for nominees that can bring new skill sets or diverse business perspectives. Potential candidates recommended by security holders will be considered as provided in the company's Policy Regarding Shareholder Candidates for Nomination as a Director, which sets forth the procedures and conditions for such recommendations. This policy is available through our website at www.stemcellsinc.com. The Corporate Governance Committee operates pursuant to a written charter, a copy of which is also available through our website at www.stemcellsinc.com. The members of the Corporate Governance Committee approved the nomination of the Class I directors standing for reelection at the Annual Meeting.

Strategic Transactions Committee. The Strategic Transactions Committee is composed of Messrs. Bjerkholt, Greer and McGlynn and Dr. Levy. The Strategic Transactions Committee held five meetings during the fiscal year ended December 31, 2012. The Committee was created at the suggestion of our Chief Executive Officer in March 2009 to provide advice and direction, on an *ad hoc* basis, on a range of strategic initiatives being considered at the time, such as the acquisition of substantially all of the operating assets of Stem Cell Sciences plc. The Committee does not have a formal charter. However, the Board of Directors has authorized the Committee to be available to advise, consult and participate with management, as requested by the company's Chief Executive Officer, with respect to the identification, implementation, evaluation, and negotiation of potential strategic corporate transactions, with the exception of financings. Since June 2010, the Strategic Transactions Committee has been the Board's fourth standing committee, and as such it routinely provides recommendations both to management and to the full Board with regard to such matters as the Committee may deem advisable.

The following table shows the members of our four standing Board committees:

Director	Independent	Audit Committee	Compensation Committee	Corporate Governance Committee	Strategic Transactions Committee
Eric Bjerkholt	Yes	Chair	ü		ü
R. Scott Greer	Yes				Chair
Ricardo Levy, Ph.D.	Yes	ü	ü	Chair	ü
Martin McGlynn	No				ü
Roger Perlmutter, M.D., Ph.D.	Yes			ü	
John Schwartz, Ph.D.	Yes	ü	Chair	ü	
Irving Weissman, M.D.	No				

Director Oversight and Qualifications

While management is responsible for the day-to-day management of the risks the company faces, the Board, as a whole and through its committees, has responsibility for the oversight of risk management. An important part of risk management is not only understanding the risks facing the company and what steps management is

Table of Contents

taking to manage those risks, but also understanding what level of risk is appropriate for the company. In support of this oversight function, the Board receives regular reports from our Chief Executive Officer and members of senior management on operational, financial, legal, and regulatory issues and risks. The Audit Committee additionally is charged under its charter with oversight of financial risk, including the company's internal controls, and it receives regular reports from management, the company's internal auditors and the company's independent auditors. The Chairman of the Board and independent members of the Board work together to provide strong, independent oversight of the company's management and affairs through its standing committees and, when necessary, special meetings of directors.

We believe each of our directors brings valuable skills, experience, judgment, and perspectives to our company. The Board took the following qualifications into consideration, among other things, when nominating or appointing our current directors:

Eric Bjerkholt	Mr. Bjerkholt is a financial expert and currently serves as the Executive Vice President and Chief Financial Officer of Sunesis Pharmaceuticals, Inc., a biopharmaceutical company. His business experience spans more than 20 years, during which time he founded a nutraceutical company and worked as an investment banker. Mr. Bjerkholt currently serves on the board of directors of Round Table Pizza. We believe Mr. Bjerkholt's qualifications to serve on our Board of Directors include his considerable financial and business experience, especially in the life sciences industry. Mr. Bjerkholt has served on our Board for over eight years.
R. Scott Greer	Mr. Greer was appointed to our Board in June 2010. He is a financial expert with over 25 years of experience in the life sciences industry. He was founder, CEO and Chairman of Abgenix, Inc., a biotechnology company he took public in 1998 and then sold to Amgen in 2006. Mr. Greer currently serves as Chairman of Ablexis, a development stage biotechnology company, and is also on the board of Nektar Therapeutics. We believe Mr. Greer's qualifications to serve on our Board include his more than 25 years of experience in the life sciences industry.
Ricardo Levy, Ph.D.	Dr. Levy has over 30 years of experience leading technology companies in both North and South America. In 1974, he cofounded Catalytica, Inc., a manufacturing technology and energy systems company, and served as CEO from 1991 until the company was sold in 2000. Dr. Levy currently serves as director of Accerlys Inc. (formerly Pharmacopeia, Inc.) and NovoDynamics, Inc. We believe his qualifications to serve on our Board of Directors include his more than 30 years of business experience. Dr. Levy has served on our Board for over ten years.
Martin McGlynn	Mr. McGlynn has been our President and Chief Executive Officer since January 2001. He has held management positions of increasing responsibility in several countries for more than 30 years. Prior to joining our company, Mr. McGlynn was President and Chief Executive Officer of Pharmadigm, Inc., a privately held company in the fields of inflammation and genetic immunization. Prior to this, he was President and General Manager of Abbott Canada Ltd. and President of Anaquest, Inc., a company focused on anesthesia and acute care pharmaceuticals. We believe Mr. McGlynn's qualifications to serve on our Board of Directors include his significant managerial experience in our industry and his intimate knowledge of our operations as a result of his day to day leadership as our President and Chief Executive Officer. Mr. McGlynn has served on our Board for over eleven years.

Table of Contents

Roger Perlmutter, M.D., Ph.D. Dr. Perlmutter is Executive Vice President of Merck & Co, an international pharmaceutical company, and President of Merck Research Laboratories, where he leads Merck's global research endeavors. Previously, until February 2012, Dr. Perlmutter was the Executive Vice President of Research and Development of Amgen, Inc., a world leading biotechnology company, a position he held for approximately eleven years. Prior to joining Amgen, he held scientific leadership positions of increasing responsibility at Merck. He also worked as a researcher and administrator at the University of Washington. We believe Dr. Perlmutter's pharmaceutical industry experience brings an important industry perspective to the Board. Dr. Perlmutter has served on our Board for over eleven years.

John Schwartz, Ph.D. Dr. Schwartz has over 40 years of business and legal experience, including several years spent in the 1990s as President and Chief Executive Officer of Systemix, Inc., a cell-based therapeutics company which was acquired by Novartis in 1997. Before joining Systemix as its Senior Vice President and General Counsel in 1993, Dr. Schwartz served as the Vice President and General Counsel of Stanford University. He currently runs a registered investment advisor firm called Quantum Strategies Management Company. We believe Dr. Schwartz's qualifications to serve on our Board of Directors include his over 40 years of business and legal experience in our industry as well as his significant experience working at Stanford University. Dr. Schwartz has served on our Board for over 14 years.

Irving Weissman, M.D. Dr. Weissman has been a leader in the stem cell field for over 20 years. He is a professor at Stanford University and serves as the director of the Stanford Institute for Stem Cell Biology and Regenerative Medicine. He co-founded Systemix in 1988 and Cellerant Therapeutics, Inc., a hematopoietic stem cell development company, in 2001. He is a member of several scientific advisory boards and national science institutes, including the National Academy of Science, the American Academy of Arts and Science, and the Institute of Medicine of the National Academy of Sciences. We believe Dr. Weissman's qualifications to serve on our Board of Directors include the fact that he has been a leader in stem cell research for over 20 years as well as his substantial business experience in our industry. Dr. Weissman has served on our Board for over 14 years and serves as the chairman of our Scientific Advisory Board.

Stockholders who wish to communicate with our Board of Directors or with a particular director may send a letter to our corporate secretary at the following address: StemCells, Inc., 7707 Gateway Blvd., Newark, California 94560 (c/o Legal Department). Any communication should clearly specify that it is intended to be made to the entire Board or to one or more particular director(s). Our corporate secretary will review all such correspondence and forward to our Board a summary of all such correspondence and copies of all correspondence that, in the opinion of the secretary, deals with the functions of the Board or committees thereof or that he otherwise determines requires their attention. The secretary maintains a log of all correspondence received by us that is addressed to members of the Board, and any director may at any time review and request copies of any such correspondence.

Concerns relating to accounting, internal controls or auditing matters will immediately be brought to the attention of the chairman of the Audit Committee and handled in accordance with established procedures, which are set out in the Audit Committee's Policy on Receipt, Retention and Treatment of Complaints Regarding Accounting, Internal Controls and Auditing Matters. A copy of this policy is available through our website at www.stemcellsinc.com.

Table of Contents**Executive Officers, Positions Held**

Following are the name, age and other information for our named executive officers, as of April 3, 2013. All company officers have been elected to serve until their successors are elected and qualified or until their earlier resignation or removal.

Martin McGlynn, President and Chief Executive Officer	66	Martin McGlynn joined the company in January 2001, when he was appointed President and Chief Executive Officer of the company and of its wholly-owned subsidiaries. Mr. McGlynn was elected to the Board of Directors in February 2001.
Ann Tsukamoto, Ph.D. Executive Vice President, Research and Development	60	Ann Tsukamoto, Ph.D., joined the company in November 1997 as Senior Director of Scientific Operations; was appointed Vice President, Scientific Operations in June 1998; Vice President, Research and Development in February 2002; and Chief Operating Officer, with responsibility for the company's research and development efforts, in November 2006. In October 2008, Dr. Tsukamoto was appointed Executive Vice President, Research and Development, with responsibility for the company's scientific and clinical development programs. Dr. Tsukamoto is married to one of our outside directors.
Rodney Young, Chief Financial Officer and Vice President, Finance and Administration	50	Rodney Young joined the company in September 2005 as Chief Financial Officer and Vice President, Finance. In November 2006 he became CFO and Vice President, Finance and Administration. He is responsible for functions that include Finance, Information Technology and Investor Relations. From 2003 to 2005, Mr. Young was Chief Financial Officer and a director of Extropy Pharmaceuticals, Inc., a private biopharmaceutical company focused on developing drugs for pediatric indications.
Stewart Craig, Ph.D. Senior Vice President, Development and Operations	51	Stewart Craig, Ph.D., joined the company in September 2008 with responsibilities for Development, Manufacturing, Regulatory, Quality Systems, and Facilities. From 2005 to 2008, Dr. Craig was Chief Technology Officer and Vice President of Progenitor Cell Therapy, a contract services provider for research, development, manufacture, and commercialization of cell-based therapies, prior to which he has held executive positions at Xcyte Therapies, Osiris Therapeutics and SyStemix.
Ken Stratton, J.D. General Counsel	44	Ken Stratton, J.D., joined the company in February 2007 as General Counsel, with responsibility for corporate compliance and legal affairs. In March 2008, he assumed responsibility for the Human Resources function. Prior to joining StemCells, Mr. Stratton served as Deputy General Counsel for Threshold Pharmaceuticals and as Senior Legal Counsel for Medtronic, Inc.'s Vascular business unit.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934, as amended (the Exchange Act), requires our executive officers, directors, and persons who own more than 10% of a registered class of our equity securities, to file with the SEC reports of ownership of our securities and changes in reported ownership. Executive officers,

Table of Contents

directors and greater than 10% beneficial owners are required by SEC rules to furnish us with copies of all Section 16(a) reports they file. Based solely on a review of the copies of such forms furnished to us, or written representations from the reporting persons that no Form 5 was required, we believe that, during the fiscal year ended December 31, 2012, all Section 16(a) filing requirements applicable to our officers, directors and greater than 10% beneficial owners have been met, with the following exception: the Form 4 filed by Dr. Levy on October 2, 2012, reporting his annual equity grant for Board service, was filed two days late.

Code of Business Conduct and Ethics

We have adopted a Code of Ethics and Conduct that applies to all of our directors, officers, employees, and consultants. A copy of our code of ethics is posted on our website at www.stemcellsin.com. We intend to disclose any substantive amendment or waivers to this code on our website. There were no substantive amendments or waivers to this code in 2012.

**Item 11. EXECUTIVE COMPENSATION
Compensation Discussion and Analysis**

We structure our compensation programs to attract and retain talented employees and reward them for helping us achieve our short-term and long-term goals. We intend for our compensation programs to be equitable and competitive when measured against those offered by companies against whom we compete for high-level scientific and executive personnel. We also intend for them to link pay to both company and individual performance.

In seeking to accomplish these objectives, we follow a compensation strategy designed, ultimately, to reward increasing stockholder value. However, because achievement of our principle mission – the research, development and commercialization of stem cell therapeutics and related tools and technologies for academia and industry – is a long, expensive and challenging process, we often set individual compensation by using surrogate endpoints to gauge employee contributions towards building sustained stockholder value, such as:

the achievement of stated corporate goals adopted from time to time by the Board;

the leadership an executive officer has shown in inspiring and marshaling excellent performances in his or her direct reports;

the anticipation, identification and successful disposition of issues and problems that, if not addressed timely and effectively, might have a deleterious effect on the company; and

the speed and effectiveness with which an executive officer discovers, assesses and, where appropriate, pursues promising opportunities for the company.

Compensation elements. We, like most biotechnology companies, use a combination of base salary, bonuses and equity awards to compensate our employees, including our executive officers. As a small company – we have approximately 50 employees in total and only five executive officers – we feel that having so few people in each job classification and level makes it inefficient to establish a formulaic allocation of total compensation among its various elements; we rely, instead, on our experience and judgment.

In exercising this judgment, we periodically collect and review information (i) from third party market reports such as the *Radford Biotechnology Survey – Executive Report*; and (ii) from the proxy statements of other similar biotechnology companies, especially those operating in the San Francisco Bay Area, as well as

Table of Contents

those pursuing cell-based therapeutics.¹ In the case of the executive officers who report directly to the chief executive officer, we also carefully consider the recommendations of the chief executive officer when setting compensation. We integrate all of this information with our evaluation of the individual performance of each of our executive officers.

While we believe our officers and other employees are outstanding, we realize that the company is not yet profitable and that it is still in a relatively early stage of development. We therefore generally prefer to target our compensation practices so that our employees' base salaries, bonuses, equity compensation, and benefits all fall close to the 50th percentile paid by comparable companies for similar positions. Actual compensation may fall slightly above or below these targets, however, because of any number of factors such as general economic conditions, market competition for specific jobs, personal performance, and the need for internal equities within the company. For example, we have recently paid many of our employees, including some of our executive officers, at below the 50th percentile because of the recent global recession and crisis in the financial markets. At the same time, however, we have paid many of our employees, including some of our executive officers, at above the 50th percentile because of highly competitive demand for workers with their unique skill sets.

Interaction of compensation elements. The basic compensation elements—base salary, bonuses and equity awards—are, as noted, standard in our industry. Though not set independently of one other, we use each element as a portion of total compensation because we believe we would not otherwise be competitive and because we feel that together they are the proper components of a balanced compensation package:

base salary is compensation for current efforts;

bonuses, whether in cash or equity, are paid at the Board's discretion typically for achievements in meeting or exceeding corporate goals; and

equity awards are inducements to remain with the company and to build future value.

On occasion, we have considered our employee compensation programs, including our executive compensation programs, and the effect they may have on company risk. We have concluded that our employee compensation programs are simple and straight-forward and consistent with those of similarly situated research and development companies. In determining that our compensation policies and practices do not present risks that are likely to have a material adverse effect on our business, our directors have, from time to time, discussed with management the various pay practices used to compensate our employees at both the executive and non-executive levels. These inquiries have included discussions about our three primary components of compensation, namely base compensation, cash bonuses and equity incentive compensation.

Our Board of Directors has also periodically considered how bonus awards are determined and calculated by the company, noting that all bonuses are awarded entirely at the discretion of our Board after taking into consideration the progress of our company's programs. Based on its review, our Board has concluded that our bonus program properly aligns compensation with our overall goals, all of which are designed to have a positive impact on our business.

In addition, our Board has periodically examined our equity compensation practices, noting that we typically grant customary equity awards that vest over many years after the date of grant. We believe discretionary equity compensation that vests over multiple years does not encourage short-term or high-risk opportunistic behavior and instead aligns our employees' interests with the long-term interests of our stockholders by encouraging activities intended to build long-term value for the Company.

¹ In 2012, for example, we collected executive compensation information from the recent SEC filings of Aastrom Biosciences, Inc.; Affymax, Inc.; Alexza Pharmaceuticals, Inc.; Anacor Pharmaceuticals, Inc.; Athersys, Inc.; Cerus Corporation; Cytokinetics, Incorporated; Cytori Therapeutics, Inc.; Dynavax Technologies Corporation; Geron Corporation; InterMune, Inc.; MAP Pharmaceuticals, Inc.; Maxygen, Inc.; Medivation, Inc.; Neuralstem, Inc.; Osiris Therapeutics, Inc.; Rigel Pharmaceuticals, Inc.; Sangamo Biosciences, Inc.; and Sunesis Pharmaceuticals, Inc.

Table of Contents

For these reasons, we have concluded that our employee compensation programs are designed with the appropriate balance of risk and reward in relation to our company's overall business strategy and do not incentivize executives or other employees to take unnecessary or excessive risks. As a result, we believe that risks arising from our employee compensation policies and practices are not reasonably likely to have a material adverse effect on the company.

Other compensation elements and benefits. We offer all employees various health and welfare benefit plans. Our executive officers may participate in these on the same terms as other employees. We do not have a pension plan nor do we use non-qualified deferred compensation.² We offer our U.S. employees (again, including executive officers on the same terms as others) a 401(k) defined contribution plan, and match employee contributions on a 1:2 basis (*i.e.*, \$1 contribution by the company for every \$2 contribution made by the employee) up to a maximum of 3% of the employee's salary, subject to legal limitations. At this time, our 401(k) match is made in the form of shares of common stock in the company. We offer our U.K. employees a tax preferred pension scheme, and match employee contributions on a 1:1 basis up to a maximum of 12% of the employee's salary.

Compensation of Named Executive Officers

Base salary compensation; target bonuses. We consider base salary to be a critical component of our executive officers' overall compensation packages. We intend the salaries of our executive officers to reflect their actual responsibilities and job scope. We also endeavor to set base compensation levels so that their salaries are competitive with salaries paid by comparable companies to employees with similar experience, taking into account the cost of living in the San Francisco Bay Area. Accordingly, we have made occasional adjustments to the salaries of certain employees to address perceived below market anomalies, address specific retention concerns or reward special contributions made to the company. As described below, we changed the base compensation paid to certain of our executive officers in 2009, 2010 and 2012.

In addition to base salary, each full-time employee of the company, including each of our named executive officers, is given a personal target bonus (calculated as a percentage of base salary), based upon factors such as seniority, job title and the existing targets of co-workers with comparable job responsibilities within the company. Bonuses at the company are discretionary and awarded by the Board in its sole discretion. But when bonuses are awarded, we use the personal target of each employee to calculate his or her bonus amount.

With these various principles in mind, we recently took the following actions with respect to the base compensation and bonus targets of our executive officers.

From March 2007 through 2008, we maintained the annual base salary of Mr. McGlynn at \$385,000, plus a housing and transportation allowance. Effective January 2009, however, we eliminated Mr. McGlynn's housing and transportation allowance of approximately \$200,000 per year and increased Mr. McGlynn's annual base salary by \$140,000, from \$385,000 to \$525,000, and began providing him a car allowance in the amount of \$10,000 per year. The net effect of these changes was a decrease in Mr. McGlynn's base compensation of approximately 11% for 2009. Concurrent with these changes, we increased Mr. McGlynn's target bonus from 40 percent to 55 percent of his base salary, beginning with the 2009 fiscal year, to reflect the Board's view that Mr. McGlynn's leadership is a major factor in the achievement of the company's corporate goals and to further align his compensation to corporate success. More recently, effective February 1, 2012, we increased Mr. McGlynn's base salary to \$550,000 in recognition of contributions made on behalf of the company and market factors.

From March 2007 through 2009, we maintained the annual base salary of Mr. Young at \$275,000. In January 2010, however, we increased Mr. Young's annual base salary to \$325,000 in recognition of contributions

² Accordingly, we omit tables showing pension benefits and non-qualified deferred compensation.

Table of Contents

made on behalf of the company and job scope. In January 2010, we also increased Mr. Young's target bonus rate from 25% to 30% of his base salary, beginning with the 2010 fiscal year, to further align his compensation to corporate success. In February 2011, we increased Mr. Young's target bonus rate from 30% to 40% of his base salary for the same reason.

From March 2007 through 2011, we maintained the annual base salary of Dr. Tsukamoto at \$300,000. In January 2010, however, we increased Dr. Tsukamoto's target bonus from 25% to 30% of her base salary, beginning with the 2010 fiscal year, to further align her compensation to corporate success. In February 2011, we increased Dr. Tsukamoto's target bonus rate from 30% to 40% of her base salary for the same reason. More recently, effective February 1, 2012, we increased Dr. Tsukamoto's base salary to \$335,000 in recognition of contributions made on behalf of the company and market factors.

Dr. Craig joined the company in September 2008, with an annual base salary of \$275,000 and a target bonus rate of 25% of his base salary. In January 2010, however, we increased Dr. Craig's target bonus from 25% to 30% of his base salary, beginning with the 2010 fiscal year, to further align his compensation to corporate success. In February 2011, we increased Dr. Craig's target bonus rate from 30% to 40% of his base salary for the same reason. More recently, effective February 1, 2012, we increased Dr. Craig's base salary to \$300,000 in recognition of contributions made on behalf of the company and market factors.

Mr. Stratton joined the company in February 2007, with an annual base salary of \$220,000 and a target bonus rate of 20% of his base salary. In February 2008, however, we increased Mr. Stratton's annual base salary to \$250,000 in recognition of contributions made on behalf of the company and because he had assumed additional responsibilities in early 2008. In January 2010, we increased Mr. Stratton's annual base salary to \$275,000 in recognition of contributions made on behalf of the company and job scope. In January 2010, we also increased Mr. Stratton's target bonus rate from 20% to 30% of his base salary, beginning with the 2010 fiscal year, to further align his compensation to corporate success. In February 2011, we increased Mr. Stratton's target bonus rate from 30% to 40% of his base salary for the same reason. More recently, effective February 1, 2012, we increased Mr. Stratton's base salary to \$300,000 in recognition of contributions made on behalf of the company and market factors.

The base compensation and target bonus information presented above can be summarized as follows:

	Year Ended 12/31/09	Year Ended 12/31/10	Year Ended 12/31/11	Year Ended 12/31/12
	Base Compensation/ Target Bonus	Base Compensation/ Target Bonus	Base Compensation/ Target Bonus	Base Compensation/ Target Bonus
CEO	\$ 525,000/55%	\$ 525,000/55%	\$ 525,000/55%	\$ 550,000/55%
CFO	\$ 275,000/25%	\$ 325,000/30%	\$ 325,000/40%	\$ 325,000/40%
EVP, R&D	\$ 300,000/25%	\$ 300,000/30%	\$ 300,000/40%	\$ 335,000/40%
SVP, D&O	\$ 275,000/25%	\$ 275,000/30%	\$ 275,000/40%	\$ 300,000/40%
GC	\$ 250,000/20%	\$ 275,000/30%	\$ 275,000/40%	\$ 300,000/40%

Bonus compensation. We view periodic bonuses, whether paid in cash or equity, as an important element of compensation for several reasons. Bonuses help align individual employee efforts with overall corporate strategies and objectives. Bonuses also help us manage salary expense, while still allowing us to reward successes. By using discretionary bonuses as part of the compensation mix, we have greater flexibility in managing the timing and amounts of compensation. Accordingly, each year we estimate for planning purposes an aggregate bonus pool, which is calculated by using the base salaries of all our full-time employees and their respective target bonuses, and which assumes the Board will elect to award each full-time employee 100% of his or her personal target bonus amount for the year. However, as explained below, the actual bonus award for any particular year is entirely within the Board's discretion.

In practice, over the past few years, we have awarded bonuses on an annual basis after considering, among other things, the company's accomplishments against stated corporate goals adopted by the Board, the

Table of Contents

company's financial position, the status of its development programs, clinical progress and corporate development activities, and general economic factors. This has necessarily involved a subjective assessment by the Compensation Committee of corporate performance and market conditions each year.

The process of establishing our corporate goals over the past few years has been a lengthy one. For each fiscal year, our executive officers have presented the Compensation Committee of the Board with approximately five to ten proposed corporate goals, each often consisting of multiple sub-parts. Management has usually presented its recommended corporate goals to the Compensation Committee concurrent with our proposed corporate budgets for the following fiscal year. Goals have been designed to be challenging, so that one would not expect consistent achievement of all of them. Typically these goals have included some preclinical and clinical goals for our HuCNS-SC cell product candidate, financing and corporate development goals, goals related to advancement in cell manufacturing practices, and goals related to advancement of our Liver Program. While all these goals have been considered important, and we have used a cross-functional and balanced approach to setting them, we have typically prioritized our goals by assigning relative weightings to each of them, with all of them together adding up to 100%. However, by design, no one goal has ever accounted for a majority of the relative weightings.

After receiving management's recommended goals, members of the Compensation Committee typically review them with our executive officers and oftentimes provide suggestions for additional goals or changes to the recommended goals. After our executive officers and directors have completed this iterative process, which has often taken several weeks, the Compensation Committee adopts revised corporate goals consistent with the foregoing principles and recommends the updated corporate goals to the full Board for consideration and approval.

Thereafter, during each fiscal year, our executive officers have used the Board-approved corporate goals as a management tool, for example to coordinate activities, motivate personnel and help prioritize the use of company resources. The executive officers have sometimes referred back to the corporate goals when providing business updates to the Board, similar to management's reference back to an approved annual budget.

Recently, at the end of each fiscal year or shortly afterwards, our Chief Executive Officer has presented the Compensation Committee with his assessments of corporate performance against the Board-approved corporate goals, together with a summary of any important factors that weighed in his assessments, which he has provided as context.

Because our corporate goals have not been formulaic or quantitative in nature (we have not had a corporate goal tied to specific stock price, revenues or expenses, for example), our CEO's assessments have been largely qualitative in nature. Along with these assessments, our CEO has provided a percentage score for each goal reflecting the degree to which each goal was or was not, in his judgment, achieved during the year.

The Compensation Committee has usually considered these percentage scores as well as our CEO's commentary about corporate performance and more general assessments of the state of our business when determining whether to award employees a company-wide corporate bonus in any given year, and if so how much of the available bonus pool to award. However, the Compensation Committee members have used their own judgment to determine the size of any bonus award, if any. In any given year, the Board may decide in its judgment to award more than 100% of the bonus pool for the year. The Board may also decide to award less than 100% of the bonus pool, even if all of the corporate goals have been achieved, if it decides doing so would be in the best interests of the company. While the Compensation Committee and the Board as a whole use the corporate goals as a measure of success, the amount of any bonus grant, as well as how and when it will be paid, is completely within the Board's sole discretion.

With these various principles in mind, we recently took the following actions with respect to corporate bonuses for 2012.

Table of Contents

In December 2012, as part of its annual year-end review of performance, the Compensation Committee (with input from the Chief Executive Officer and other Board members) considered, among other things, significant company performance accomplishments in 2012, the company's successes measured against its 2012 corporate goals, the degree of difficulty in achieving these goals, as well as other events and circumstances that affected performance. The 2012 goals, as approved by our Board, consisted generally of the following: (i) progress in our CNS Program, including activities aimed at testing our proprietary HuCNS-SC cells in multiple disease indications within the CNS, including the initiation of a study of HuCNS-SC cells in age related macular degeneration, the dosing of additional patients in our spinal cord injury trial, and preparation for initiating a Phase II controlled study in Pelizaeus-Merzbacher disease; (ii) partnering and corporate development activities; and (iii) successful fundraising efforts.

Highlights of the 2012 accomplishments taken into account by the Compensation Committee in determining the overall company performance included:

Therapeutic Product Development

In January 2012, we published preclinical data demonstrating that our proprietary HuCNS-SC cells protect host photoreceptors and preserve vision in a well-established animal model of retinal disease. Moreover, the number of cone photoreceptors, which are responsible for central vision, remained constant over an extended period. In humans, degeneration of the cone photoreceptors accounts for the unique pattern of vision loss in dry AMD. The data was featured as the cover article in the peer-reviewed *European Journal of Neuroscience*.

Also in January 2012, the FDA authorized the initiation of a Phase I/II clinical trial of our proprietary HuCNS-SC cells in dry AMD, the most common form of AMD. AMD is the leading cause of vision loss and blindness in people over 55 years of age, and approximately 30 million people worldwide are afflicted with the disease. There are no approved treatments for dry AMD.

In February 2012, the fourth and final patient in our Phase I PMD trial completed the twelve-month follow up and evaluations required by the trial protocol, and the trial was completed.

In April 2012, we presented preliminary evidence of progressive and durable donor-cell derived myelination in all four patients who were transplanted with our proprietary HuCNS-SC cells in our Phase I clinical trial for PMD, a rare hypomyelination disorder in children. In addition, clinical assessment revealed small but measureable gains in motor and/or cognitive function in three of the four patients; the fourth patient remained clinically stable. The study was conducted by researchers at the University of California, San Francisco (UCSF). A summary of the trial results were presented at the 2012 European Leukodystrophy Association (ELA) *Families/Scientists Meeting* in Paris, France.

In May 2012, we presented data from the first interim safety review of our Phase I/II spinal cord injury clinical trial, which indicated that the surgery, immunosuppression and the HuCNS-SC cell transplants have been well tolerated. The trial, which was designed to evaluate the safety and preliminary efficacy of our proprietary HuCNS-SC cells, represents the first time that neural stem cells have been transplanted as a potential therapeutic agent for spinal cord injury. A summary of the data was presented at the Interdependence 2012 Global SCI Conference in Vancouver, Canada.

In June 2012, we initiated our Phase I/II clinical trial of our proprietary HuCNS-SC cells in dry AMD. The trial is being conducted at the Retina Foundation of the Southwest (RFSW) in Dallas, Texas, and at the Byers Institute at Stanford.

In July 2012, we presented preclinical data demonstrating that our proprietary human neural stem cells restored memory and enhanced synaptic function in two animal models relevant to Alzheimer's disease. Importantly, these results did not require reduction in beta amyloid or tau, substances that accumulate in the brains of patients with Alzheimer's disease and account for the pathological hallmarks of the disease. The data was presented at the *Alzheimer's Association International Conference 2012* in Vancouver,

Canada.

Table of Contents

In July 2012, the governing board of the California Institute for Regenerative Medicine (CIRM) approved an award to us for up to a \$20 million under the Disease Team Therapy Development Award program (RFA 10-05) to fund preclinical development of our HuCNS-SC cells in cervical spinal cord. Under RFA 10-05, funding would have been in the form of a forgivable loan. However, in March 2013, we elected not to borrow these funds from CIRM.

Also in July 2012, the Japan Patent Office granted us Patent Number 5007003 which broadly covers the prospective isolation and enrichment of neural stem and progenitor cells using antibody selection, as well as the use of these cells to treat disorders of the central nervous system. Some of the more noteworthy claims in this patent include methods for isolating human neural stem cells, as well as compositions of matter comprising enriched neural stem cells, such as our proprietary HuCNS-SC cells, and the use of enriched neural stem cells as a medicament for the treatment of neurodegenerative diseases, acute brain injury and dysfunction of the central nervous system. The term of this patent extends into 2020.

In September 2012, we presented interim six-month data from the first patient cohort in our Phase I/II clinical trial of our HuCNS-SC cells for chronic spinal cord injury. The first patient cohort all have no sensory or motor function below the level of injury and are considered to have complete spinal cord injuries. The interim data continues to demonstrate a favorable safety profile, and showed considerable gains in sensory function in two of the three patients compared to pre-transplant baselines; the third patient remained stable. The data was presented at the *51st Annual Scientific Meeting* of the International Spinal Cord Society in London, England.

Also in September 2012, the first patient with an incomplete spinal cord injury was enrolled and dosed in our Phase I/II clinical trial in chronic spinal cord injury. Patients who retain some sensory function below the level of trauma are considered to have an incomplete injury.

Also in September 2012, the governing board of CIRM approved a second disease team award to us for up to \$20 million under RFA 10-05. This second award is to fund preclinical development of our HuCNS-SC cells in Alzheimer's disease.

In October 2012, the first patient in our Phase I/II clinical trial in dry age-related macular degeneration (AMD) was enrolled and dosed.

In October 2012, two papers reporting clinical and preclinical data demonstrating the therapeutic potential of our proprietary HuCNS-SC cells for a range of myelination disorders were published in *Science Translational Medicine*, the peer-reviewed journal of the American Association for the Advancement of Science. The first paper summarized the data from our Phase I trial in Pelizaeus-Merzbacher disease (PMD), which showed preliminary evidence of progressive and durable donor cell-derived myelination in all four patients transplanted with HuCNS-SC cells. Three of the four patients showed modest gains in neurological function; the fourth patient remained stable. The second paper demonstrated that transplantation of our neural stem cells in an animal model of severe myelin deficiency results in new, functional myelin. Sophisticated analytical techniques were used to confirm that changes measured by magnetic resonance images were in fact derived from new human myelin generated by the transplanted HuCNS-SC cells and these results supported the use of similar techniques to detect and evaluate the degree of myelination in our Phase I PMD trial.

Also in October 2012, we were issued U.S. Patent Number 8,283,164 which broadly covers purified populations of human liver cells, including our human liver engrafting cells (hLEC). The hLEC cells were first isolated by our researchers in the late 1990s, and our scientists have repeatedly demonstrated the cells' engraftment and robust bioactivity *in vivo* and that they are expandable. While our hLEC cells are purified from donated adult livers not suitable for transplant, the newly issued 164 patent claims cells independent of tissue source, and therefore, has potential relevance to those deriving liver cells from induced pluripotent or embryonic stem cell platforms. The term of the 164 patent extends into 2022.

Table of Contents

Tools and Technologies Programs

In March 2012, we entered into a license agreement under which we granted genOway a worldwide, exclusive license to our Internal Ribosome Entry Site (IRES) technology for use in the development and commercialization of genetically engineered mice. We received an upfront license fee and could receive royalties on product sales.

In October 2012, we launched four new SC Proven human neural stem cell kits for use in neuroscience research. Each kit will contain high purity, multipotent neural stem cells derived from a different area of the human central nervous system, and will provide researchers with a reproducible and scalable serum-free platform with which to perform a broad range of assays. With these kits, researchers will now have the ability to compare and contrast the biological, functional and neural differentiation properties of human neural stem cells isolated from specific regions of the central nervous system, as well as to screen for the effects of different compounds on such cells.

Also in October 2012 we partnered with a UK-based biomedical company to develop and commercialize a range of cell lines and reagents to facilitate iPS cell-based research for regenerative medicine applications. The first product under the partnership, an ultra-primary human fibroblast cell line from which researchers can generate iPS cell lines, was launched under the SC Proven brand.

Financing and Other Business-related Activities

In 2012, we sold an aggregate of 9,647,471 shares of our common stock for gross proceeds of approximately \$20,452,000. These sales were made under a sales agreement entered into in June 2009 and the sales agent was paid compensation equal to 3% of gross proceeds. The shares were offered under our shelf registration statement previously filed with, and declared effective by, the SEC.

In 2012, an aggregate of 2,700,000 Series B Warrants were exercised and we received gross proceeds of \$3,375,000. The remaining 5,300,000 Series B Warrants expired unexercised by their terms on May 2, 2012. For the exercise of these warrants, we issued 2,700,000 shares of our common stock and 2,700,000 Series A Warrants.

In 2012, an aggregate of 2,198,571 Series A Warrants were exercised. For the exercise of these warrants, we issued 2,198,571 shares of our common stock and received gross proceeds of approximately \$3,078,000.

Following this review, the Compensation Committee awarded a discretionary bonus equal to 70% of the available bonus pool, based upon the committee members' assessments of market conditions, corporate risks, our market comparables, and the company's performance in 2012 measured against its 2012 corporate goals, including the successes highlighted above, among other things. The bonuses were calculated using each employee's annual base salary as of January 1, 2012, and paid in January 2013.

Accordingly, in January 2013, the company paid Mr. McGlynn a 2012 bonus in the amount of \$202,125, because on January 1, 2012 his base salary and target bonus were, respectively, \$525,000 and 55%. The company paid Mr. Young a 2012 bonus in the amount of \$91,000, because on January 1, 2012 his base salary and target bonus were, respectively, \$325,000 and 40%, and the company paid Dr. Tsukamoto a 2012 bonus in the amount of \$84,000, because on January 1, 2012 her base salary and target bonus were, respectively, \$300,000 and 40%. The company also paid Dr. Craig and Mr. Stratton each a 2012 bonus in the amount of \$77,000, because on January 1, 2012 their base salary and target bonus were, respectively, \$275,000 and 40%.

Equity Compensation general practices. We believe that equity compensation awards are an important component of our overall compensation policy because equity compensation can provide strong inducement to remain with the company and to build future stockholder value. In order to achieve these objectives, we believe that equity compensation awards need to be structured to provide both meaningful value and a meaningful opportunity to realize that value. Accordingly, from time to time, we have considered several forms of equity

Table of Contents

compensation awards, including stock options, stock appreciation rights, restricted stock, and restricted stock units, because each of these have certain advantages and disadvantages relative to the others with respect to how they might reward effort and success and how they might help us retain high contributors. Generally speaking, over the years, we have used stock options and restricted stock units as the most common equity compensation instruments. We feel each of these forms of equity has unique and important features for employee retention and for incentivizing the executive officers to build a profitable and sustainable business. Unless otherwise specifically noted in the tables herein, all option awards:

to our employees, including our executive officers, are intended to be qualified incentive stock options (ISOs) to the fullest extent permitted by law;

have an exercise price set at the closing market price of our common stock on the grant date, or on an adjacent market trading date if the market on which we are listed (currently the Nasdaq Global Market) is not open on the grant date; and

vest over four years, with one-fourth of the shares included in any grant vesting on the first anniversary of the grant and the remainder vesting 1/48th per month thereafter, always provided that the grantee remains in the company's employ on the vesting dates. These awards are time-vesting and do not depend on performance factors.

We have typically granted stock option awards to newly hired employees, effective as of their date of hire, and occasionally to existing employees upon their promotion. Both on-hire awards to non-executive officers and awards upon the promotion of current employees are usually made by either Mr. McGlynn, acting as the Board's single-member committee, or by the Compensation Committee. Awards to executive officers are made by either the Compensation Committee or by the full Board. We have not granted company-wide equity awards to full-time employees since June 2010. Instead, we have granted targeted equity awards to individual employees within the company following a careful review of equity held by each of our employees and the retention value that such awards may provide. In awarding equity grants to existing employees, we consider their contributions to the company, their roles and responsibilities, their past performance, and market conditions generally for similarly situated employees.

With these various principles in mind, we recently took the following actions with respect to equity compensation.

In June 2010, after a review of the market and company-specific information described above, the Compensation Committee approved a company-wide award to employees of 190,000 restricted stock units and options to purchase up to 184,500 shares of common stock, in the aggregate. Of particular importance, the Compensation Committee noted that a majority of the stock options previously issued to employees had strike prices significantly above the current market price of the company's stock and were therefore of limited retention value. All of the restricted stock units awarded in June 2010 have four-year vesting, with one-fourth vesting on each of the first four anniversaries following the grant date, except for the restricted stock units granted to Mr. McGlynn and Dr. Tsukamoto, each of which has three-year vesting, with one-third vesting on each of the first three anniversaries following the grant date. All of the options awarded at this time will vest one-fourth on the first anniversary following the grant and then 1/48th each month thereafter, in keeping with the company's standard practices. In this June 2010 grant, our named executive officers received, in the aggregate, 250,000 restricted stock units and options to purchase up to 265,000 shares of common stock. In September 2010, Mr. McGlynn voluntarily surrendered his rights and interests in 20,000 restricted stock units from this June 2010 grant in order to bring his grant into accordance with the provisions of the company's equity incentive plan under which the grant was made.

In January 2011, we awarded Mr. McGlynn 20,000 additional restricted stock units in recognition of his service and importance to the company's long-term goals.

Table of Contents

In January 2012, after a review of the market and company-specific information described above, the Compensation Committee approved a targeted award of 1,231,000 restricted stock units, in aggregate, to certain employees considered to be key contributors with leadership roles within the company and therefore most likely to have a direct role in building stockholder value. Of particular importance, the Compensation Committee noted that a majority of the stock options issued to employees had strike prices significantly below the current market price of the company's stock and were therefore of limited retention value. All of the restricted stock units awarded at this time have four-year vesting, with one-fourth vesting on each of the first four anniversaries following the grant date, except for the restricted stock units granted to Mr. McGlynn and Dr. Tsukamoto, each of which has three-year vesting, with one-third vesting on each of the first three anniversaries following the grant date. In this January 2012 grant, our named executive officers received, in the aggregate, 796,000 restricted stock units.

In August 2012, all of our executive officers decided to voluntarily surrender certain of their stock option awards under our 2004 and 2006 equity incentive plans, so that the option shares would be available for future grants under these plans. Collectively, the executive officers surrendered both vested and unvested options to acquire a total of 297,336 shares.

The following table summarizes the restricted stock units awarded to our named executive officers in June 2010, January 2011, and January 2012:

Name & Principal Position	Number of Restricted Stock Units Granted(1)		
	June 2010	January 2011	January 2012
Martin McGlynn President and CEO	100,000(2)	20,000	406,000
Ann Tsukamoto, Ph.D. Executive VP, Research & Development	70,000		130,000
Rodney Young CFO and VP, Finance & Administration	20,000		
Stewart Craig, Ph.D. SVP, Development & Operations	20,000		130,000
Ken Stratton, J.D. General Counsel	20,000		130,000

- (1) All share numbers reported on a post-split adjusted basis.
- (2) Mr. McGlynn was granted 120,000 restricted stock units in June 2010, however, he voluntarily surrendered 20,000 of these in September 2010 in order to bring his grant into accordance with the provisions of the company's equity incentive plan under which the grant was made.

We may grant additional options, restricted stock units or other equity compensation to current employees, including our executive officers, in 2013.

In December 2012, our Compensation Committee engaged The Croner Company, an executive compensation consultancy firm referred to us by our outside corporate counsel, to advise the Committee on setting a compensation peer group for the purpose of evaluating the different components of compensation paid to our chief executive officer. This review is still ongoing.

Employment, Severance and Change-in-Control Agreements

Employment agreements. Mr. McGlynn joined the company as our president and chief executive officer on January 15, 2001. Under the terms of an employment agreement between Mr. McGlynn and the company, dated January 2, 2001, as amended, Mr. McGlynn received an initial annual base salary of \$275,000 per year, reviewable annually by the Board of Directors, and a bonus, in the Board's sole discretion, of up to 25% of his base salary. Over time, however, we have increased Mr. McGlynn's base salary and target bonus so that they are, respectively, \$550,000 and 55% of his base salary. Pursuant to his January 2001 employment agreement, we

Table of Contents

granted Mr. McGlynn an option to purchase 40,000 shares of our common stock with an exercise price equal to the fair market value of the common stock on the initial date of his employment, one-fourth to vest on the first anniversary of his employment and the remaining three-fourths to vest in equal monthly installments during his second through fourth years of employment. These options remained unexercised and expired in 2011.

Mr. McGlynn's employment agreement also provided that the Board could, in its sole discretion, grant him a bonus option to purchase up to an additional 2,500 shares, which it did. These options also remained unexercised and expired in 2011. We also agreed to pay Mr. McGlynn a \$50,000 relocation bonus and to reimburse him for relocation expenses, which we did. Since January 2009, we have been paying Mr. McGlynn an annual car allowance of \$10,000.

Dr. Tsukamoto joined the company in November 1997 and has served as our executive vice president of research and development since September 2008. Under the terms of an employment agreement between Dr. Tsukamoto and the company, dated February 2, 1998, Dr. Tsukamoto received an annual base salary of \$130,000 per year and a discretionary target bonus of up to 10% of her base salary. Over time, however, we have increased her base salary and target bonus so that they are, respectively, \$335,000 and 40% of her base salary. Also pursuant to her employment agreement, we provide Dr. Tsukamoto with \$750,000 of term life insurance on an annual basis during her employment.

Mr. Young joined the company in September 2005 as our chief financial officer and vice president of finance. Under the terms of his agreement with the company, dated August 16, 2005, Mr. Young received an initial annual base salary of \$250,000 per year, with a target bonus of up to 25% of his base salary. Over time, however, we have increased Mr. Young's base salary and target bonus so that they are, respectively, \$325,000 and 40% of his base salary. Pursuant to his August 2005 employment agreement, we granted Mr. Young an option to purchase 45,000 shares of our common stock. This option vested over 48 months; with one-fourth of the shares having vested on the first anniversary of the date on which Mr. Young's employment began and with the remaining shares having vested at the rate of 1/48th per month on the last day of each month during the ensuing 36 months. In addition, the employment agreement provided for an option grant on the first anniversary of his employment to acquire an additional 2,500 shares of our common stock. The grant of 2,500 shares was duly made, and vested in the same manner as his earlier option grant over 48 months.

Dr. Craig joined the company in September 2008 as our senior vice president of development and operations. Under the terms of his agreement with the company, dated July 24, 2008, Dr. Craig has received an annual base salary of \$275,000 per year, with a target bonus of up to 25% of his base salary. Over time, however, we have increased Dr. Craig's base salary and target bonus so that they are, respectively, \$300,000 and 40% of his base salary. Pursuant to Dr. Craig's July 2008 employment agreement, we granted him an option to purchase 20,000 shares of our common stock. This option will vest over 48 months, with one-fourth of the shares having vested on the first anniversary of the date on which Dr. Craig's employment began and with the remaining shares vesting, subject to his continued employment by the company, at the rate of 1/48th per month on the last day of each month during the ensuing 36 months.

Mr. Stratton joined the company in February 2007 as our general counsel. Under the terms of his agreement with the company, dated February 2, 2007, Mr. Stratton received an initial annual base salary of \$220,000 per year, with a target bonus of up to 20% of his base salary. Over time, however, we have increased Mr. Stratton's base salary and target bonus so that they are, respectively, \$300,000 and 40% of his base salary. Pursuant to Mr. Stratton's February 2007 employment agreement, we granted him an option to purchase 15,000 shares of our common stock. This option vested over 48 months, with one-fourth of the shares having vested on the first anniversary of the date on which Mr. Stratton's employment began and with the remaining shares having vested at the rate of 1/48th per month on the last day of each month during the ensuing 36 months.

Table of Contents

Severance arrangements. Each of our executive officers has entered into a severance agreement with the company under which he or she would receive payments upon termination of his or her employment by us without cause³ or consequent to a change of control or, in the case of Mr. McGlynn, by virtue of disability.

In the case of Mr. McGlynn, upon termination without cause, we would continue to pay his salary and provide benefits for one year, at the base wage rate then in effect. If the termination of Mr. McGlynn's employment were associated with a change of control, the company would pay (in a lump sum) (i) two years of his salary and the reasonably projected cost of healthcare benefits, (ii) a bonus with respect to the termination year at 25% of the base salary, pro-rated for the portion of the year served, and (iii) a tax gross up for his continued healthcare benefits. In addition, all unvested stock options would vest and all stock options would be exercisable for two years after termination. If Mr. McGlynn's employment were terminated on account of disability, we would continue to pay his salary for up to six months (or until he obtained other employment or became eligible for disability income under a company plan, if sooner).

In the case of Dr. Tsukamoto, upon involuntary termination without cause whether or not associated with a change of control, we would continue to pay Dr. Tsukamoto's salary and provide benefits for twelve months, at the rate then in effect.

In the case of Mr. Young, upon involuntary termination without cause, we would continue to pay his salary and provide benefits for six months, at the rate then in effect. If the termination were associated with a change of control, we would continue to pay Mr. Young's salary and provide benefits (including his share of COBRA, grossing up for the tax effects, if any) for twelve months; in this event, any unvested options and any other stock awards held by him would vest upon termination.

In the case of Dr. Craig, upon involuntary termination without cause, whether or not associated with a change of control, we would continue to pay his salary and provide benefits for six months, at the rate then in effect.

In the case of Mr. Stratton, upon involuntary termination without cause, we would continue to pay his salary and provide benefits for six months, at the rate then in effect. If the termination were associated with a change of control, we would continue to pay Mr. Stratton's salary and provide benefits for twelve months; in this event, any unvested options and any other stock awards held by him would vest upon termination.

If we terminate the employment of any executive officer for cause, or if the officer resigns without good cause, he or she would not be entitled to any severance or other benefits.

³ Or termination by the executive officer for good reason, as defined in their respective agreements.

Table of Contents**Potential Payments Upon Termination or Change-in-Control**

The following table displays the value of what the executive officers would have received from us had their employment been terminated on December 31, 2012:

Officer	Salary	Bonus	Health	Accelerated Vesting of Options and Restricted Stock Units*	Total
Martin McGlynn					
Terminated without cause	\$ 550,000		\$ 31,663		\$ 581,663
Terminated, change of control	\$ 1,100,000	\$ 137,500	\$ 116,731(1)	\$ 736,544	\$ 2,090,775
Disability(2)	\$ 275,000				\$ 275,000
Ann Tsukamoto, Ph.D.					
Terminated without cause	\$ 335,000		\$ 15,688		\$ 350,688
Terminated, change of control	\$ 335,000		\$ 15,688	\$ 253,737(3)	\$ 604,425
Rodney Young					
Terminated without cause	\$ 162,500		\$ 8,630		\$ 171,130
Terminated, change of control	\$ 325,000		\$ 17,260	\$ 25,537(3)	\$ 367,797
Stewart Craig, Ph.D.					
Terminated without cause	\$ 150,000		\$ 10,286		\$ 160,286
Terminated, change of control	\$ 150,000		\$ 10,286	\$ 232,004(3)	\$ 392,290
Ken Stratton, J.D.					
Terminated without cause	\$ 150,000		\$ 10,192		\$ 160,192
Terminated, change of control	\$ 300,000		\$ 20,384	\$ 232,004(3)	\$ 552,388

* Value shown represents the difference between the closing market price of our stock on December 31, 2012 of \$1.63 per share and the applicable exercise price of each grant.

- (1) Includes tax gross-up on two years of healthcare costs.
- (2) Payments stop before six months if individual obtains other full-time employment or qualifies for payments under any disability income plan provided by the company.
- (3) All unvested options and restricted stock units issued under the applicable equity incentive plans vest upon a change of control under the terms of those plans.

Compensation Committee and Stock Option Report

The Compensation and Stock Option Committee has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of SEC Regulation S-K with management. Based on this review and these discussions, the Compensation Committee has recommended to the Board of Directors that the Compensation Discussion and Analysis be included in the company's proxy statement for 2013.

COMPENSATION AND STOCK OPTION COMMITTEE

John Schwartz, Ph.D., Chairman

Eric Bjerkholt

Ricardo Levy, Ph.D.

Notwithstanding anything to the contrary set forth in any of our filings under the Securities Act of 1933, as amended, or the Exchange Act that incorporate future filings, in whole or in part, the foregoing Compensation and Stock Option Committee Report shall not be incorporated by reference into any such filings.

Table of Contents**Executive Officer Compensation Tables**

The following tables set forth information with respect to the compensation of our executive officers for the fiscal years ended December 31, 2012, 2011 and 2010.

Because the Stock awards and Option awards column reflects the dollar amounts recognized as compensation expense for financial statement reporting purposes in accordance with U.S. GAAP, these imputed values include amounts from awards granted from 2005 through 2012.

Summary Compensation Table

Name and Principal Position	Year	Salary \$(1)	Bonus \$(2)	Stock Awards \$(3)	Option Awards \$(3)	All Other Compensation \$(4)	Total (\$)
Martin McGlynn President and CEO	2012	550,000	202,125	430,360		50,590	1,233,075
	2011	525,000	187,688	194,000		48,819	955,507
	2010	525,000	259,875	1,050,000	260,970	43,467	2,139,312
Ann Tsukamoto, Ph.D. EVP, Research and Development	2012	335,000	84,000	137,800		26,457	583,257
	2011	300,000	78,000			24,444	402,444
	2010	300,000	81,000	714,000	169,020	24,627	1,288,647
Rodney Young CFO and VP, Finance and Administration	2012	325,000	91,000			26,223	442,223
	2011	325,000	84,500			26,842	436,342
	2010	325,192	87,750	204,000	42,255	24,333	683,530
Stewart Craig, Ph.D. Senior VP, Development and Operations	2012	300,000	77,000	137,800		29,867	544,667
	2011	275,000	71,500			27,888	374,388
	2010	275,000	74,250	204,000	84,510	26,736	664,496
Ken Stratton, J.D. General Counsel	2012	300,000	77,000	137,800		30,019	544,819
	2011	275,000	71,500			29,445	375,945
	2010	275,096	74,250	204,000	42,255	25,713	621,314

- (1) We pay salaries on a bi-weekly basis. There were 27 pay periods in 2010 and 26 pay period in both 2011 and 2012.
- (2) Each employee's target bonus is based on his or her salary as of January 1 of the year to which it applies. For 2012, the Board awarded 70% of the target bonus for all company employees. For further description of the non-equity incentive plan see the discussion in our Compensation Discussion and Analysis and Compensation of Named Executive Officers, above.
- (3) Amounts shown represent the full grant date value of the equity awards granted in each year as computed in accordance with FASB ASC Topic 718. Assumptions used in the calculation of these amounts are included in Note 9, Stock-Based Compensation in our Form 10-K for the period ended December 31, 2012, filed with the SEC on March 21, 2013.

Table of Contents

(4) The amounts shown in the All Other Compensation column for 2012 include the following:

Name and Principal Position	Employer Match on Defined Contribution Plans (\$)(a)	Transportation Allowance (\$)	Employee Health and Welfare Benefit Plans \$(b)	Total All Other Compensation
Martin McGlynn President and CEO	7,500	10,000	33,090	50,590
Ann Tsukamoto, Ph.D EVP, Research and Development	7,500		18,957(c)	26,457
Rodney Young CFO and VP, Finance and Administration	7,500		18,723	26,223
Stewart Craig, Ph.D. Senior VP, Development and Operations	7,500		22,367	29,867
Ken Stratton, J.D. General Counsel	7,500		22,519	30,019

- (a) Under a 401(k) plan, which is open to substantially all of our employees, we make matching contributions in the form of company common stock based on each participant's voluntary salary deferrals, subject to plan and legal limits. We match participant contributions on a 1:2 basis up to a maximum of 3% of the employee's salary. Registered stock is valued and transferred to the employee's 401(k) account at the end of calendar each quarter.
- (b) We offer all employees various health and welfare benefit plans. Our executive officers may participate in these on the same terms as other employees.
- (c) Includes life insurance benefit of \$1,180.

Grants of Plan-Based Awards

The following table shows grants of plan-based equity awards made to our named executive officers during the fiscal year ended December 31, 2012:

Name & Principal Position	Grant Date	All Other Stock Awards: Number of Shares of Stock or Units #(1)	All Other Option Awards: Number of Securities Underlying Options #	Exercise or Base Price of Option Awards (\$/share)	Grant Date Fair Value of Option Awards (\$)
Martin McGlynn President and CEO	1/27/12	406,000			\$ 430,360
Ann Tsukamoto, Ph.D. EVP, Research and Development	1/27/12	130,000			\$ 137,800
Rodney Young CFO and VP, Finance and Administration					
Stewart Craig, Ph.D. Senior VP, Development and Operations	1/27/12	130,000			\$ 137,800
Ken Stratton, J.D. General Counsel	1/27/12	130,000			\$ 137,800

Edgar Filing: STEMCELLS INC - Form 10-K/A

- (1) Restricted stock units granted in 2012 to our named executive officers were made pursuant to our 2006 equity incentive plan. The restricted stock units granted to Mr. McGlynn and Dr. Tsukamoto vest over a three-year

Table of Contents

period from the date of grant: one-third of the award will vest on each grant date anniversary over the following three years. The restricted stock units granted to Dr. Craig and Mr. Stratton vest over a four-year period from the date of grant: one-fourth of the award will vest on each grant date anniversary over the following four years.

Outstanding Equity Awards at Fiscal 2012 Year-End

The following tables show equity awards held by our named executive officers as of December 31, 2012:

Name	Option Grant Date	Number of Securities Underlying Unexercised Options (#) Exercisable(1)	Option Awards		Option Exercise Price (\$/sh)(1)	Option Expiration Date
			Number of Securities Underlying Unexercised Options (#) Unexercisable(1)			
Martin McGlynn President and CEO	6/25/2010	18,749	11,251		\$ 10.50	6/25/2020
Ann Tsukamoto, Ph.D. EVP, Research and Development	6/1/2010	12,499	7,501		\$ 10.20	6/1/2020
Rodney Young CFO and VP, Finance and Administration	9/6/2005 5/15/2009 6/1/2010	22,500 6,729 3,124		1,876	\$ 54.30 \$ 17.50 \$ 10.20	9/6/2015 5/15/2019 6/1/2020
Stewart Craig, Ph.D. Senior VP, Development and Operations	6/1/2010	6,249	3,751		\$ 10.20	6/1/2020
Ken Stratton, J.D. General Counsel	02/28/2007	15,000			\$ 26.20	02/28/2017

Name	Date of Award	Stock Awards		Market Value of Securities of Restricted Stock Units That Have Not Vested (3)
		Number of Securities Underlying Restricted Stock Units That Have Not Vested (2)	#	
Martin McGlynn President and CEO	5/15/2009	5,867	\$ 9,563	
	6/25/2010	33,333	\$ 54,333	
	1/25/2011	6,667	\$ 10,867	
	1/27/2012	406,000	\$ 661,780	
Ann Tsukamoto, Ph.D. EVP, Research and Development	5/15/2009	2,334	\$ 3,804	
	6/1/2010	23,333	\$ 38,033	
	1/27/2012	130,000	\$ 211,900	
Rodney Young CFO and VP, Finance and Administration	5/15/2009	5,667	\$ 9,237	
	6/1/2010	10,000	\$ 16,300	
Stewart Craig, Ph.D. Senior VP, Development and Operations	9/15/2009	2,334	\$ 3,804	
	6/1/2010	10,000	\$ 16,300	
	1/27/2012	130,000	\$ 211,900	
Ken Stratton, J.D. General Counsel	5/15/2009	2,334	\$ 3,804	
	6/1/2010	10,000	\$ 16,300	
	1/27/2012	130,000	\$ 211,900	

Edgar Filing: STEMCELLS INC - Form 10-K/A

- (1) Unless otherwise noted, options are granted at the close of market price on the grant date (or on an adjacent market trading day if the Nasdaq Capital Market is closed on the grant date). They vest over a period of four

Table of Contents

years as follows: one-fourth of the option vests on the first anniversary of the grant date and 1/48th of the original grant vests each additional month of service.

- (2) Restricted stock units granted under our 2006 Equity Incentive Plan. These restricted stock units vest ratably over a three to four-year period on each grant date anniversary.
- (3) Based on the per share closing market price of \$1.63 for our common stock on December 31, 2012.

Option Exercises and Stock Vested

The following table sets forth the vesting in fiscal 2012 of shares of restricted stock units held by the named executive officers. No options were exercised by our named executive officers during fiscal 2012.

Name	Stock Awards	
	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$)(1)
Martin McGlynn President and CEO	91,733(2)	115,125
Ann Tsukamoto, Ph.D EVP, Research and Development	25,666(3)	17,849
Rodney Young CFO and VP, Finance and Administration	10,667(4)	8,217
Stewart Craig, Ph.D. Senior VP, Development and Operations	7,333(5)	8,183
Ken Stratton, J.D. General Counsel	7,332(6)	5,382

- (1) Calculated as the aggregate market value on the date of vesting of the shares with respect to which restrictions lapsed during 2012 (calculated before payment of any applicable withholding or other income taxes).
- (2) Mr. McGlynn was granted (i) 23,467 restricted stock units on May 15, 2009, 5,866 of which were exercised on January 20, 2012, when the market price was \$0.80, and 5,867 of which were exercised on August 2, 2012, when the market price was \$1.70; (ii) 100,000 restricted stock units on June 25, 2010, 33,333 of which were exercised on January 20, 2012, when the market price was \$0.80, and 33,334 of which were exercised on August 2, 2012, when the market price was \$1.70; and (iii) 20,000 restricted stock units on January 25, 2011, 6,667 of which were exercised on January 20, 2012, when the market price was \$0.80, and 6,666 of which were exercised on August 2, 2012, when the market price was \$1.70.
- (3) Dr. Tsukamoto was granted: (i) 9,333 restricted stock units on May 15, 2009, 2,332 of which vested on May 15, 2012, when the market price per share of our common stock was \$0.85; and (ii) 70,000 restricted stock units on June 1, 2010, 23,334 of which vested on June 1, 2012, when the market price was \$0.68.
- (4) Mr. Young was granted: (i) 22,667 restricted stock units on May 15, 2009, 5,667 of which vested on May 15, 2012, when the market price per share of our common stock was \$0.85; and (ii) 20,000 restricted stock units on June 1, 2010, 5,000 of which vested on June 1, 2012, when the market price per share of our common stock was \$0.68.
- (5) Dr. Craig was granted: (i) 9,333 restricted stock units on September 15, 2009, 2,333 of which vested on September 17, 2012, when the market price per share of our common stock was \$1.95; and (ii) 20,000 restricted stock units on June 1, 2010, 5,000 of which vested on June 1, 2012, when the market price per share of our common stock was \$0.68.
- (6) Mr. Stratton was granted: (i) 9,333 restricted stock units on May 15, 2009, 2,332 of which vested on May 15, 2012, when the market price per share of our common stock was \$0.85; and (ii) 20,000 restricted stock units on June 1, 2010, 5,000 of which vested on June 1, 2012, when the market price per share of our common stock was \$0.68.

Table of Contents

Director Compensation

Cash Compensation. Prior to December 2009, non-employee directors received quarterly retainers for Board service in the amount of \$4,500 (\$8,750 for the Chairman of the Board). Each of the chairs of the standing committees also received quarterly stipends of either \$1,000 (Audit Committee) or \$500 (Compensation and Corporate Governance Committees). Non-employee directors also received \$1,500 for each board meeting attended in person or by videoconference and \$1,000 for each standing committee meeting attended in person or by videoconference, plus \$500 for each board or committee meeting attended by phone. The non-employee directors serving on the Strategic Transactions Committee received \$1,200 per meeting attended in person or by videoconference, plus \$500 for each meeting attended by phone, but the chair of the Strategic Transactions Committee did not receive a quarterly stipend. All dollar amounts were paid in cash.

In early 2009, however, management began a review of our director compensation practices. We wanted to assess whether we were being responsive to market dynamics, as we had not adjusted director compensation for almost five years. We obtained and reviewed, among other things, the 2009 Radford Board of Directors Compensation Analysis – Level 2, Life Sciences Edition, which provided us with a broad survey of director compensation paid by publicly traded life science companies in the United States. We also benchmarked our compensation practices against compensation information from other publicly traded companies in the stem cell field.⁴ From this information, we determined that the median (i.e., 50th percentile) cash compensation paid by comparable companies tended to be approximately 40% higher than that paid by the company and that the average initial equity grants awarded by comparable companies tended to be approximately 25% higher.

Therefore, in both June and December 2009, management presented to the Board a series of recommendations to change both the cash and equity compensation paid to our non-employee directors. The Board considered in particular the market comparables collected by management. In recognition of the fact that the company's director compensation fell significantly below the average compensation paid by market comparables, the Board approved the recommended changes to the cash-based and equity compensation paid to the company's non-employee directors.

Since December 2009, non-employee directors have received quarterly retainers for Board service in the amount of \$6,250 (\$12,500 for the Chairman of the Board). The chairs of the standing committees have received quarterly stipends of either \$2,500 (Audit Committee) or \$1,250 (Compensation Committee, Corporate Governance Committee and, since it became a standing committee in June 2010, the Strategic Transactions Committee). Non-employee directors have also received \$2,000 for each board meeting attended in person or by videoconference and \$1,000 for each board meeting attended by phone, as well as \$1,000 for each standing committee meeting attended in person or by videoconference and \$500 for each committee meeting attended by phone. All these dollar amounts have been paid in cash, and we expect that this will remain largely the case for the foreseeable future. However, in March 2011, the Board approved a sub-plan under our 2006 Amended and Restated Equity Incentive Plan, called the Directors' Fee Plan, which permits directors to elect to receive all or a portion of their board fees in the form of company common stock. We issued 39,950 shares of stock under our Directors' Fee Plan as consideration for Board service in 2012.

Directors are reimbursed for their expenses in attending meetings of the Board and meetings of committees of the Board.

Equity Compensation. Prior to June 2009, non-employee directors received an initial option to purchase 2,000 shares upon appointment to the Board, with one-third of these option shares vesting on each of the first three anniversaries following the grant. Following appointment, each non-employee director received an option

⁴ In 2009 we collected director compensation information from the recent SEC filings of Aastrom Biosciences, Inc.; Athersys, Inc.; Cytori Therapeutics, Inc.; Geron Corporation; Neuralstem, Inc.; and Osiris Therapeutics, Inc.

Table of Contents

to purchase 1,000 shares upon each anniversary of his or her appointment, vesting one year after issuance, with each exercisable at the fair market value of the stock on the date of the respective grant.

In June 2009, however, the Board adopted management's recommendation to award non-employee directors with annual equity grants paid in restricted stock units rather than common stock options. The Board's decision to change the annual grants followed several months of deliberation by the company's management and Compensation Committee, which considered among other things equity compensation practices at various comparable companies, as described above, outside reports, the company's trading history, and market trends, such as the growing use of restricted stock units as director compensation by comparable companies. Each of the annual grants from June 2009 until June 2010 was for 1,000 restricted stock units, vesting on the first anniversary of the grant.

Then, in December 2009 and June 2010, the Board approved further changes proposed by management to the equity compensation practices for non-employee directors. Among other changes, the Board approved management's recommendation to award newly appointed directors an initial grant of restricted stock units rather than options. Presently, newly appointed non-employee directors will receive an initial grant upon their first appointment to the Board of 15,000 restricted stock units, with one third of this grant vesting on each of the three anniversaries following the grant. Thereafter, each non-employee director, other than the Chairman of the Board, is to receive an annual grant on each anniversary of his or her appointment to the Board in the form of 1,000 restricted stock units, vesting on the first anniversary of the grant. In addition, the Board determined that the Chairman of the Board is to receive an annual grant of 1,500 restricted stock units, vesting on the first anniversary of the grant. Each of the annual grants from June 2010 to December 2011 was for 1,000 restricted stock units (1,500 for the Chairman), vesting on the first anniversary of the grant.

More recently, in March 2012, the Board approved a further change proposed by management to the equity compensation practices for non-employee directors given the Company's stock trading price and our desire to fairly compensate our outside directors for continued Board service and incentivize them to build stockholder value. Effective January 1, 2012, each non-employee director, other than the Chairman of the Board, is to receive an annual grant on each anniversary of his or her appointment to the Board in the form of 10,000 restricted stock units, vesting on the first anniversary of the grant. In addition, the Board determined that the Chairman of the Board is to receive an annual grant of 15,000 restricted stock units, vesting on the first anniversary of the grant.

Director Compensation Table

The following table summarizes cash-based and equity compensation information for our non-employee directors, including annual Board and committee retainer fees and meeting attendance fees, for the year ended December 31, 2012:

Name	Fees Earned or Paid in Cash (\$)	Stock Awards \$(1)	All Other Compensation (\$)	Total (\$)
Eric Bjerkholt	52,500(2)	10,280(3)		62,780
R. Scott Greer	41,500(4)	6,800(5)		48,300
Ricardo Levy, Ph.D.	52,500(6)	19,300(7)		71,800
Roger Perlmutter, M.D., Ph.D.	35,000(8)	17,900(9)		52,900
John Schwartz, Ph.D.	9,375(10)	86,450(11)		95,825
Irving Weissman, M.D.	32,000(12)	20,300(13)	50,000(14)	102,300

- (1) The amounts shown in this column represent the full grant date fair value of restricted stock unit grants in 2012 as computed in accordance with FASB ASC Topic 718. Assumptions used in the calculation of these amounts are included in Note 10, "Stock-Based Compensation" in our Form 10-K for the period ended December 31, 2012, filed with the SEC on March 21, 2013.

Table of Contents

- (2) Includes an annual retainer of \$25,000, a fee for Mr. Bjerkholt's role on the Audit Committee of \$10,000, and additional fees of \$17,500 for Board and committee meetings attended. Also includes \$14,250 earned in 2012 but paid in 2013.
- (3) Mr. Bjerkholt was granted 1,000 restricted stock units on March 1, 2012, vesting on the one year anniversary of the grant, and 9,000 restricted stock units on April 18, 2012, vesting on March 1, 2013. As of December 31, 2012, he had stock options and restricted stock units outstanding for the purchase of 17,000 shares of common stock, in the aggregate.
- (4) Includes an annual retainer of \$25,000, a fee for Mr. Greer's role on the Strategic Transactions Committee of \$5,000, and additional fees of \$11,500 for Board and committee meetings attended. Also includes \$11,000 earned in 2012 but paid in 2013.
- (5) Mr. Greer was granted 10,000 restricted stock units on June 3, 2012, vesting on the one year anniversary of the grant. As of December 31, 2012, he had restricted stock units outstanding for the purchase of 15,000 shares of common stock, in the aggregate.
- (6) Includes an annual retainer of \$25,000, a fee for Dr. Levy's role on the Corporate Governance Committee of \$5,000, and additional fees of \$22,500 for Board and committee meetings attended. Also includes \$15,500 earned in 2012 but paid in 2013.
- (7) Dr. Levy was granted 10,000 restricted stock units on September 26, 2012, vesting on the one year anniversary of the grant. As of December 31, 2012, Dr. Levy had stock options and restricted stock units outstanding for the purchase of 17,073 shares of common stock, in the aggregate.
- (8) Includes an annual retainer of \$25,000, and additional fees of \$10,000 for Board and committee meetings attended. Also includes \$10,250 earned in 2012 but paid in 2013.
- (9) Dr. Perlmutter was granted 10,000 restricted stock units on December 14, 2012, vesting on the one year anniversary of the grant. As of December 31, 2012, Dr. Perlmutter had stock options and restricted stock units outstanding for the purchase of 18,565 shares of common stock, in the aggregate.
- (10) Includes an annual retainer of \$50,000, a fee for Dr. Schwartz's role on the Compensation Committee of \$5,000, and additional fees of \$18,000 for Board and committee meetings attended. Also includes \$8,875 earned in 2011 but paid in 2012.
- (11) Dr. Schwartz was granted 15,000 restricted stock units on April 18, 2012, vesting on the one year anniversary of the grant. In addition, as of October 2011 and until March 2012, Dr. Schwartz received 50% of his board service fees in the form of company common stock under our Directors' Fee Plan. In March 2012 and until December 2013, Dr. Schwartz elected to receive 100% of his future board service fees in the form of company common stock, until such time as he may deliver an updated election in accordance with the provisions of the Directors' Fee Plan. As of December 31, 2012, Dr. Schwartz had stock options and restricted stock units outstanding for the purchase of 21,500 shares of common stock, in the aggregate. Also includes \$20,750 earned in 2012 but paid in 2013 in common shares under the Directors' Fee Plan.
- (12) Includes an annual retainer of \$25,000 and additional fees of \$7,000 for Board and committee meetings attended. Also includes \$7,250 earned in 2012 but paid in 2013.
- (13) Dr. Weissman was granted 10,000 restricted stock units on October 1, 2012, vesting on the one year anniversary of the grant. As of December 31, 2012, Dr. Weissman had stock options and restricted stock units outstanding for the purchase of 22,141 shares of common stock, in the aggregate.
- (14) Dr. Weissman receives \$50,000 per year for his services as a consultant and as the chairman of our Scientific Advisory Board. As of May 2011, Dr. Weissman has received his consultancy fees under this agreement in the form of company common stock.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The following table shows the number of shares of our common stock beneficially owned, as of April 3, 2013, by (i) each of our directors, (ii) each of our named executive officers, (iii) all of our directors and executive officers as a group, and (iv) all those known by us to be a beneficial owner of more than 5% of the company's outstanding common stock. In general, beneficial ownership refers to shares that an individual or entity has the power to vote or dispose of, and any rights to acquire common stock that are currently exercisable or will become

Table of Contents

exercisable within 60 days of April 3, 2013. Unless otherwise indicated, we believe that each person named below, based on information furnished by such owners, holds sole investment and voting power with respect to such shares, subject to community property laws where applicable. We calculated percentage ownership in accordance with the rules of the SEC. The percentage of common stock beneficially owned is based on 38,909,223 shares outstanding as of April 3, 2012. In addition, shares issuable pursuant to options, restricted stock units or other convertible securities that may be acquired within 60 days of April 3, 2013 are deemed to be issued and outstanding and have been treated as outstanding in calculating and determining the beneficial ownership and percentage ownership of those persons possessing those securities, but not for any other individuals.

Name and Address of Beneficial Owner*	Amount and Nature of Beneficial Ownership	Percentage of Class Beneficially Owned
Directors and Named Executive Officers		
Eric Bjerkholt(1)	29,000	**
Stewart Craig(2)	56,711	**
R. Scott Greer	16,000	**
Ricardo Levy(3)	9,160	**
Martin McGlynn(4)	215,212	**
Roger Perlmutter(5)	10,652	**
John Schwartz(6)	77,195	**
Ken Stratton(7)	66,514	**
Ann Tsukamoto(8)	111,134	**
Irving Weissman(9)	270,223	**
Rodney Young(10)	88,493	**
All directors and executive officers as a group (eleven persons)	950,294	2.43%
5% Stockholders		
Alpha Capital Anstalt(11)	2,352,645	6.01%

* The address of all directors and executive officers listed in the table is c/o StemCells, Inc., 7707 Gateway Blvd., Newark, California 94560.

** Less than one percent.

- (1) Includes 17,000 shares issuable upon exercise of 7,000 stock options and 10,000 restricted stock units exercisable within 60 days.
- (2) Includes 12,500 shares issuable upon exercise of 7,500 stock options and 5,000 restricted stock units, exercisable within 60 days. Includes 13,386 shares in Dr. Craig's 401(k) plan.
- (3) Includes 6,160 shares issuable upon exercise of 6,160 stock options exercisable within 60 days.
- (4) Includes 27,742 shares issuable upon exercise of 21,875 stock options and 5,867 restricted stock units, exercisable within 60 days. Includes 17,134 shares in Mr. McGlynn's 401(k) plan.
- (5) Includes 7,652 shares issuable upon exercise of 7,652 stock options exercisable within 60 days.
- (6) Includes 21,500 shares issuable upon exercise of 6,500 stock options and 15,000 restricted stock units exercisable within 60 days.
- (7) Includes 22,334 shares issuable upon exercise of 15,000 stock options and 7,334 restricted stock units, exercisable within 60 days. Includes 11,602 shares in Mr. Stratton's 401(k) plan.
- (8) Includes 40,668 shares issuable upon exercise of 15,000 stock options and 25,668 restricted stock units exercisable within 60 days. Includes 16,814 shares included in Dr. Tsukamoto's 401(k) plan and 3,643 shares held in trust to which Dr. Tsukamoto disclaims beneficial ownership.
- (9) Includes 9,713 shares issuable upon exercise of 9,713 stock options exercisable within 60 days. Includes 20,536 shares held in trust to which Dr. Weissman disclaims beneficial ownership.
- (10) Includes 43,646 shares issuable upon exercise of 32,979 stock options and 10,667 restricted stock units exercisable within 60 days. Includes 19,760 shares in Mr. Young's 401(k) plan.

Table of Contents

- (11) According to a Schedule 13G filed by Alpha Capital Anstalt on February 28, 2012, Alpha Capital may be deemed to beneficially own all shares listed in the table, and has sole dispositive and voting power with respect to all shares listed in the table. The address of the principal place of business of Alpha Capital is Pradafant 7, Furstentums 9490, Vaduz, Liechtenstein.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Related parties can include any of our directors or executive officers, certain of our stockholders and their immediate family members. Each year, we prepare and require our directors and executive officers to complete Director and Officer Questionnaires identifying any transactions with us in which the officer or director or their family members have an interest. This helps us identify potential conflicts of interest. A conflict of interest occurs when an individual's private interest interferes, or appears to interfere, in any way with the interests of the company as a whole. Our code of ethics requires all directors, officers and employees who may have a potential or apparent conflict of interest to immediately notify our general counsel, who serves as our compliance officer. In addition, the Corporate Governance Committee of the Board of Directors is responsible for considering and reporting to the Board any questions of possible conflicts of interest of Board members. Our code of ethics further requires pre-clearance before any employee, officer or director engages in any personal or business activity that may raise concerns about conflict, potential conflict or apparent conflict of interest. Copies of our code of ethics and the Corporate Governance Committee charter are posted on the corporate governance section of our website at www.stemcellsinc.com.

In evaluating related party transactions and potential conflicts of interest, our compliance officer and independent directors apply the same standards of good faith and fiduciary duty they apply to their general responsibilities. They will approve a related party transaction only when, in their good faith judgment, the transaction is in the best interest of the company.

Dr. Weissman, a member of the Board of Directors, was retained in September 1997 to serve as a consultant to us. Pursuant to his consulting agreement, Dr. Weissman provides consulting services to us and serves on our Scientific Advisory Board. In return, we pay Dr. Weissman \$50,000 per year for his services. We also agreed to nominate Dr. Weissman for a position on the Board of Directors, and he agreed to serve if elected. Since October 1, 2000, he has been compensated for this service in the same manner and amount as other non-employee members of the Board. The consulting agreement with Dr. Weissman contains confidentiality, non-competition, and assignment of invention provisions and is for a term of fifteen years, subject to earlier termination by either party. In May 2011, Dr. Weissman's consulting agreement was amended by the parties so that the company could choose to pay fees owed to Dr. Weissman under the agreement in the form of company common stock.

Item 14. PRINCIPAL ACCOUNTING FEES AND SERVICES
Audit and Tax Fees

The Board of Directors, upon the recommendation of the Audit Committee, has selected the independent accounting firm of Grant Thornton LLP to audit the accounts of the company for the year ending December 31, 2013.

The Audit Committee considered the tax compliance services provided by Grant Thornton LLP, concluded that provision of such services is compatible with maintaining the independence of the independent accountants, and approved the provision by Grant Thornton LLP of tax compliance services with respect to the year ending December 31, 2012.

Table of Contents

The Audit Committee received the following information concerning the fees of the independent accountants for the years ended December 31, 2011 and 2012, has considered whether the provision of these services is compatible with independence of the independent accountants, and concluded that it is:

	Year Ended	
	12/31/12	12/31/11
Audit fees(1)	\$ 387,340	\$ 432,693
Tax fees	\$ 45,743	\$ 46,866

(1) Audit fees represents fees for the integrated audit of our annual consolidated financial statements and reviews of the interim consolidated financial statements, and review of audit-related SEC filings; also includes fees related to issuing comfort letter(s) in 2011 and 2012. Audit and tax fees include administrative overhead charges and reimbursement for out-of-pocket expenses.

Pre-Approval Policies and Procedures

The Audit Committee has adopted policies and procedures for pre-approving all services (audit and non-audit) performed by our independent auditors. In accordance with such policies and procedures, the Audit Committee is required to pre-approve all audit and non-audit services to be performed by the independent auditors in order to assure that the provision of such services is in accordance with the rules and regulations of the SEC and does not impair the auditors' independence. Under the policy, pre-approval is generally provided up to one year and any pre-approval is detailed as to the particular service or category of services and is subject to a specific budget. In addition, the Audit Committee may pre-approve additional services on a case-by-case basis. During 2012 and 2011, all services performed by our independent auditors were pre-approved.

Table of Contents**PART IV****Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES****(b) Exhibits**

The documents set forth below are filed herewith or incorporated by reference to the location indicated.

Exhibit No.	Title or Description
3.1	Restated Certificate of Incorporation of the Registrant(1)
3.2	Amended and Restated By-Laws of the Registrant(2)
4.1	Specimen Common Stock Certificate(3)
4.2	Form of Warrant Certificate issued to certain purchasers of the Registrant's common stock in November 2008(4)
4.3	Form of Warrant Certificate issued to certain purchasers of the Registrant's common stock in November 2009(5)
4.4	Form of Series A Warrant issued to certain purchasers of the Registrant's common stock in December 2011(6)
10.1	Form of at-will Employment Agreement between the Registrant and most of its employees(7)
10.2	Form of Agreement for Consulting Services between the Registrant and the members of its Scientific Advisory Board(8)
10.3 #	Cytotherapeutics, Inc. 1992 Equity Incentive Plan(8)
10.4 #	1992 Stock Option Plan for Non-Employee Directors(8)
10.5	Lease Agreement, dated as of August 1, 1992, between the Registrant and the Rhode Island Industrial Facilities Corporation(9)
10.6	First Amendment to Lease Agreement, dated as of September 15, 1994, between Registrant and the Rhode Island Industrial Facilities Corporation(9)
10.7	Lease Agreement, dated as of November 21, 1997, by and between Hub RI Properties Trust, as Landlord, and CytoTherapeutics, Inc., as Tenant(10)
10.8	Consulting Agreement, dated as of September 25, 1997, between Dr. Irving Weissman and the Registrant(11)
10.9	StemCells, Inc. 1996 Stock Option Plan(12)
10.10 #	1997 StemCells Research Stock Option Plan (the 1997 Plan)(12)
10.11 #	Form of Performance-Based Incentive Option Agreement issued under the 1997 Plan(12)
10.12	License Agreement, dated April 1, 1997, by and among Registrant, NeuroSpheres Ltd. and NeuroSpheres Holdings Ltd. (the 1997 NeuroSpheres license agreement)(13)
10.13 &	License Agreement, dated as of October 30, 2000, between the Registrant and NeuroSpheres Holdings Ltd. (the 2000 NeuroSpheres license agreement)(14)
10.14 #	Letter Agreement, dated January 2, 2001, between the Registrant and Martin McGlynn(15)
10.15 #	2001 Equity Incentive Plan(16)
10.16 #	StemCells, Inc. Amended and Restated 2004 Equity Incentive Plan(17)

Table of Contents

Exhibit No.	Title or Description
10.17 &	License Agreement, dated as of July 1, 2005, between the Registrant and ReNeuron Limited(18)
10.18 #	Letter Agreement, effective as of September 6, 2005, between the Registrant and Rodney K.B. Young(19)
10.19	Side Letter, dated October 30, 2000, between the Registrant and NeuroSpheres Ltd. regarding the 1997 and 2000 NeuroSpheres license agreements(14)
10.20	Side Letter, dated March 21, 2002, between the Registrant and NeuroSpheres Ltd. and NeuroSpheres Holdings Ltd. regarding the 2000 NeuroSpheres license agreement(21)
10.21	Side Letter, dated July 2, 2003, between the Registrant and NeuroSpheres Ltd. and NeuroSpheres Holdings Ltd. regarding the 2000 NeuroSpheres license agreement(21)
10.22 &	Side Letter, dated March 9, 2005, between the Registrant and NeuroSpheres Ltd. and NeuroSpheres Holdings Ltd. regarding the 2000 NeuroSpheres license agreement(21)
10.23	Indemnification Agreement, dated July 9, 2008, between the Registrant and NeuroSpheres Holdings, Ltd.(20)
10.24 #	Letter Agreement, effective as of February 2, 1998, between the Registrant and Ann Tsukamoto(21)
10.25 #	Memorandum of Agreement, effective as of July 17, 2000, between the Registrant and Ann Tsukamoto(21)
10.26 #	Letter Agreement, effective as of July 24, 2008, between the Registrant and Stewart Craig(21)
10.27 #	Letter Agreement, effective as of February 2, 2007, between the Registrant and Kenneth B. Stratton(21)
10.28 #	Letter Agreement, effective as of August 6, 2009, between the Registrant and Kenneth B. Stratton(21)
10.29 &	License Agreement, dated as of January 31, 2006, between Stem Cell Sciences (Australia) Pty Limited and The University of Edinburgh(21)
10.30	Lease agreement, dated December 2, 2010, between the Registrant and BMR-Gateway Boulevard LLC(22)
10.31 #	StemCells, Inc. Director s Fee Plan(23)
10.32 #	Form of equity award under Registrant s 2012 Commencement Incentive Plan(24)
10.33 #	Amended and Restated 2006 Equity Incentive Plan of StemCells, Inc.(25)
10.34 & *	Loan and Security Agreement, dated April 8, 2013, between the Registrant and Silicon Valley Bank
10.35 & *	Loan Agreement, dated April 9, 2013, between the Registrant and the California Institute for Regenerative Medicine
10.36 & *	Notice of Loan Award, effective as of April 10, 2013, between the Registrant and the California Institute for Regenerative Medicine
21	Subsidiaries of the Registrant(21)
23.1**	Consent of Grant Thornton, LLP, Independent Registered Public Accounting Firm
31.1**	Certification Pursuant to Securities Exchange Act Rule 13(a)-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (Martin McGlynn, Chief Executive Officer)

Table of Contents

Exhibit No.	Title or Description
31.2**	Certification Pursuant to Securities Exchange Act Rule 13(a)-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (Rodney K.B. Young, Chief Financial Officer)
31.3*	Certification Pursuant to Securities Exchange Act Rule 13(a)-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (Martin McGlynn, Chief Executive Officer)
31.4*	Certification Pursuant to Securities Exchange Act Rule 13(a)-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (Rodney K.B. Young, Chief Financial Officer)
32.1***	Certification Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Martin McGlynn, Chief Executive Officer)
32.2***	Certification Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Rodney K.B. Young, Chief Financial Officer)
101.1**	The following materials from the Registrant's Annual Report on Form 10-K for the year ended December 31, 2012 are formatted in XBRL (eXtensible Business Reporting Language): (i) the Condensed Consolidated Balance Sheets, (ii) the Condensed Consolidated Statements of Operations, (iii) the Condensed Consolidated Statements of Cash Flows, and (iv) Notes to Condensed Consolidated Financial Statements.

Indicates management compensatory plan, contract or arrangement.

& Confidential treatment requested as to certain portions. Material has been omitted and separately filed with the Commission.

* Filed herewith.

** Previously filed.

*** Previously furnished.

- (1) Incorporated by reference to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2006 and filed on March 15, 2007.
- (2) Incorporated by reference to the Registrant's current report on Form 8-K filed on May 7, 2007.
- (3) Incorporated by reference to the Registrant's Registration Statement on Form S-3, File No. 333-151891.
- (4) Incorporated by reference to the Registrant's current report on Form 8-K filed on November 12, 2008.
- (5) Incorporated by reference to the Registrant's current report on Form 8-K filed on October 28, 2009.
- (6) Incorporated by reference to the Registrant's current report on Form 8-K filed on December 16, 2011.
- (7) Incorporated by reference to the Registrant's annual report on Form 10-K for the fiscal year ended December 31, 2008 and filed on March 16, 2009.
- (8) Incorporated by reference to the Registrant's Registration Statement on Form S-1, File No. 33-45739.
- (9) Incorporated by reference to the Registrant's Registration Statement on Form S-1, File No. 33-85494.
- (10) Incorporated by reference to the Registrant's annual report on Form 10-K for the fiscal year ended December 31, 1997 and filed on March 30, 1998.
- (11) Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1997 and filed on November 14, 1997.
- (12) Incorporated by reference to the Registrant's Registration Statement on Form S-8, File No. 333-37313.
- (13) Incorporated by reference to the Registrant's Annual Report on Form 10-K/A for the fiscal year ended December 31, 2005 and filed on March 22, 2006.
- (14) Incorporated by reference to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2000 and filed on April 2, 2001.
- (15) Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2009.
- (16) Incorporated by reference to the Registrant's definitive proxy statement filed May 1, 2001.
- (17) Incorporated by reference to the Registrant's Registration Statement on Form S-8, File No. 333-118263.
- (18) Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2005.

Table of Contents

- (19) Incorporated by reference to the Registrant s current report on Form 8-K filed on September 7, 2005.
- (20) Incorporated by reference to the Registrant s Quarterly Report on Form 10-Q for the quarter ended September 30, 2008.
- (21) Incorporated by reference to the Registrant s annual report on Form 10-K for the fiscal year ended December 31, 2009 and filed on March 11, 2010.
- (22) Incorporated by reference to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2010 and filed on March 11, 2011.
- (23) Incorporated by reference to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2011 and filed on March 15, 2012.
- (24) Incorporated by reference to the Registrant s Registration Statement on Form S-8, File No. 333-183712.
- (25) Incorporated by reference to the Registrant s Registration Statement on Form S-8, File No. 333-144747.

Table of Contents

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Amendment No.1 to be signed on its behalf by the undersigned, thereunto duly authorized.

STEMCELLS, INC.

By: /s/ Martin McGlynn

Martin McGlynn
PRESIDENT AND CHIEF EXECUTIVE OFFICER

Dated: April 29, 2013