

UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

**SCHEDULE 14A**

Proxy Statement Pursuant to Section 14(a) of the Securities  
Exchange Act of 1934 (Amendment No. \_\_\_\_\_)

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

Preliminary Proxy Statement

Confidential, for Use of the Commission Only (as permitted  
by Rule 14a-6(e)(2))

Definitive Proxy Statement

Definitive Additional Materials

Soliciting Material Pursuant to Rule 14a-12

**Pressure BioSciences, Inc.**

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box):

No fee required.

Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

(1) Title of each class of securities to which transaction applies:

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(2) Aggregate number of securities to which transaction applies:

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(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

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(4) Proposed maximum aggregate value of transaction:

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Fee paid previously with preliminary materials.

Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the form or schedule and the date of its filing.

(1) Amount Previously Paid:

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(2) Form, Schedule or Registration Statement No.:

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(3) Filing Party:

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(4) Date Filed:

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**Pressure BioSciences, Inc.**  
**14 Norfolk Avenue**  
**South Easton, MA 02375**  
(508) 230-1828 (T)  
(508) 230-1829 (F)  
www.pressurebiosciences.com

December 5, 2011

Dear Stockholder:

You are cordially invited to attend the Special Meeting in Lieu of the Annual Meeting of Stockholders (the "Meeting") of Pressure BioSciences, Inc. (the "Company") to be held on Thursday, December 29, 2011, at 2:00 p.m. at the Company's principal executive offices located at 14 Norfolk Avenue, South Easton, MA 02375.

Detailed information about the Meeting and the proposals to be acted upon is included in the accompanying notice of Meeting and proxy statement. The Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2010, as amended, also accompanies this letter.

Whether or not you plan to attend the Meeting, you can ensure your shares of the Company's common stock are voted at the Meeting by submitting your instructions in writing by returning the enclosed proxy card. If you plan to attend the Meeting in person, please remember to bring a form of personal identification with you and, if you are acting as a proxy for another stockholder, please bring written confirmation from the record owner that you are acting as a proxy.

Please note that the rules regarding how brokers may vote shares held in "street name" have recently changed with respect to the certain matters. If your shares are held in street name, in addition to other non-routine matters, brokers may no longer vote your shares on the election of directors in the absence of your specific instructions as to how to vote. Proposal Nos. 1 and 2 presented in this Proxy Statement are considered non-routine matters while Proposal Nos. 3 through 6 in this Proxy Statement are considered routine matters. If your shares are held in street name, it is important that you provide instructions to your broker regarding the voting of your shares.

Sincerely,

R. Wayne Fritzsche

Chairman of the Board of Directors

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**PRESSURE BIOSCIENCES, INC.**

**NOTICE OF SPECIAL MEETING**

**IN LIEU OF THE ANNUAL MEETING OF STOCKHOLDERS**

*To be Held on December 29, 2011*

**Important Notice Regarding the Availability of Proxy Materials for the  
Special Meeting in Lieu of the Annual  
Meeting of Stockholders to be Held on December 29, 2011.**

**The Proxy Statement and Annual Report on Form 10-K are available at  
<http://www.pressurebiosciences.com/newsroom/category/investor-relations/2011-shareholder-proxy>**

NOTICE is hereby given that a Special Meeting in Lieu of the Annual Meeting of Stockholders (the "Meeting") of Pressure BioSciences, Inc. ("PBI" or the "Company") will be held on December 29, 2011, at 2:00 p.m. at the Company's principal executive offices located at 14 Norfolk Avenue, South Easton, MA 02375, for the following purposes, as more fully described in the proxy statement accompanying this notice:

1. To elect three Class III Directors to hold office until the 2014 Annual Meeting of Stockholders and until their successors are duly elected and qualified.
2. To approve the issuance of units consisting of Series D Convertible Preferred Stock and warrants to purchase shares of our common stock, in accordance with applicable Nasdaq Listing Rules.
3. To approve an amendment to our articles of organization to increase the number of our authorized shares of common stock from 20,000,000 to 50,000,000.
4. To approve an amendment to our articles of organization to effect a reverse stock split of our common stock by a ratio of not less than one-for-two and not more than one-for-four at any time within twelve months following the Meeting, with the decision of whether or not to implement a reverse stock split and the exact ratio to be set at a whole number within this range to be made by our Board of Directors in its sole discretion.
5. To ratify the appointment of Marcum LLP as our independent registered public accounting firm for 2012.
6. To consider and vote on a proposal to approve the adjournment of the Meeting, if necessary or appropriate, to solicit additional proxies, in the event that there are not sufficient votes at the time of such adjournment to approve any of Proposal Nos. 1 through 4.
7. To consider and vote upon any matters incidental to the foregoing purposes and any other matters which may properly come before the Meeting or any adjourned session thereof.

The Board of Directors has fixed the close of business on November 17, 2011 as the record date for determining the stockholders entitled to notice of, and to vote at, the Meeting.

By Order of the Board of Directors:

Richard T. Schumacher  
Clerk

South Easton, Massachusetts

December 5, 2011

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IMPORTANT

**Whether or not you intend to attend the Meeting in person, please ensure that your shares of the Company's common stock are present and voted at the Meeting by submitting your instructions in writing by completing, signing, dating, and returning the enclosed proxy card in the enclosed, self-addressed envelope.**

This notice, proxy statement and form of proxy card are being first mailed to stockholders of the Company on or about December 5, 2011.

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**PRESSURE BIOSCIENCES, INC.**

**PROXY STATEMENT**

**FOR THE SPECIAL MEETING IN LIEU OF  
THE ANNUAL MEETING OF STOCKHOLDERS  
TO BE HELD ON DECEMBER 29, 2011**

**General**

This proxy statement is being furnished in connection with the solicitation of proxies by the Board of Directors of Pressure BioSciences, Inc., a Massachusetts corporation, with its principal executive offices located at 14 Norfolk Avenue, South Easton, MA 02375, for use at the Special Meeting in Lieu of the Annual Meeting of Stockholders to be held on December 29, 2011 at 2:00 p.m. and at any adjournments or postponements thereof (the "Meeting") for the purposes set forth herein and in the accompanying Notice of Special Meeting in Lieu of the Annual Meeting of Stockholders. In this proxy statement we refer to Pressure BioSciences, Inc. as "PBI," "the Company," "we," or "us."

The enclosed proxy relating to the Meeting is solicited on behalf of the Company's Board of Directors (the "Board of Directors" or the "Board") and the cost of such solicitation will be borne by the Company. Certain of the Company's officers and regular employees may solicit proxies by correspondence, telephone, or in person, without extra compensation. We will also pay to banks, brokers, nominees, and certain other fiduciaries their reasonable expenses incurred in forwarding proxy material to the beneficial owners of securities held by them. It is expected that this proxy statement, the accompanying notice of Meeting, proxy card, and Annual Report on Form 10-K for the fiscal year ended December 31, 2010, as amended, will be sent or given to stockholders on or about December 5, 2011.

**Voting Securities and Record Date**

Stockholders of record of the Company's common stock, \$0.01 par value (the "Common Stock"), at the close of business on November 17, 2011, the record date for the Meeting, will be entitled to receive notice of, and to vote at, the Meeting. As of November 17, 2011, there were issued and outstanding 6,723,993 shares of Common Stock, all of which are entitled to vote. Each share of Common Stock outstanding at the close of business on the record date is entitled to one vote on each matter that is voted. In addition, as of November 17, 2011, there were issued and outstanding 88,098 shares of the Company's Series C Convertible Preferred Stock, par value \$0.01 per share ("Series C Preferred Stock"), and 743 shares of the Company's Series D Convertible Preferred Stock, par value \$0.01 per share ("Series D Preferred Stock"), none of which are entitled to vote at the Meeting.

**Quorum**

A quorum, consisting of the holders of a majority of the shares of Common Stock issued, outstanding, and entitled to vote at the Meeting, will be required to be present in person or by proxy for the transaction of business at the Meeting. Stockholders of record present at the Meeting in person or by proxy, abstentions, and "broker non-votes" (as defined below) are counted as present or represented at the Meeting for the purpose of determining whether a quorum exists. A "broker non-vote" occurs when a broker, bank, or representative ("broker or representative") does not vote on a particular matter because it either does not have discretionary voting authority on that matter or it does not exercise its discretionary voting authority on that matter.

**Manner of Voting**

Stockholders of Record

Shares entitled to be voted at the Meeting can only be voted if the stockholder of record of such shares is present at the Meeting or returns a signed proxy card. Shares represented by a valid proxy will be voted in accordance with your instructions.

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A stockholder of record who votes his or her shares by returning a proxy card, may revoke the proxy at any time before the stockholder's shares are voted at the Meeting by written notice to the Clerk of the Company received prior to the Meeting, by executing and returning a later dated proxy card prior to the Meeting, or by voting by ballot at the Meeting.

### Beneficial Stockholders

If you hold your shares through a broker or representative, you can only vote your shares in the manner prescribed by the broker or representative. Detailed instructions from your broker or representative will generally be included with your proxy material. These instructions may also include information on whether your shares can be voted by telephone or over the Internet or the manner in which you may revoke your votes. If you choose to vote your shares by telephone or over the Internet, you should follow the instructions provided by the broker or representative.

### **Voting of Proxies**

The votes of stockholders present in person or represented by proxy at the Meeting will be tabulated by an inspector of elections appointed by the Company. Shares represented by proxy will be voted in accordance with your specific instructions. If you sign and return your proxy card without indicating specific instructions, your shares will be voted FOR each of Proposal Nos. 1 through 6. If any other matters shall properly come before the Meeting, the authorized proxy will be voted by the proxies in accordance with their best judgment.

If you hold your shares as a beneficial owner rather than a stockholder of record, your broker or representative will vote the shares that it holds for you in accordance with your instructions (if timely received) or, in the absence of such instructions, your broker or representative may vote on certain matters for which it has discretionary voting authority. Your broker will be permitted to vote your shares on Proposal Nos. 3 through 6 without your instructions. Proposal Nos. 1 and 2 are considered "non-routine" matters and your broker or representative does not have discretionary voting authority with respect to these matters. Therefore, the shares that do not receive voting instructions will be treated as "broker non-votes."

### **Required Vote**

Abstentions and broker non-votes are included in the number of shares present or represented for purposes of a quorum, but are not considered as shares voting or votes cast with respect to any matter presented at the Meeting.

The affirmative vote of the holders of a plurality of the votes cast by stockholders at the Meeting is required for Proposal No. 1 to elect the nominees as Class III Directors of the Company. Abstentions and broker non-votes will not have any effect on the Proposal No. 1 to elect directors.

The approval of each of Proposal No. 2 (Approval of Issuance of Units) and Proposal No. 6 (Adjournment Proposal) requires the affirmative vote of the holders of a majority of the votes cast at the Meeting. Abstentions will have the effect of being cast against Proposal Nos. 2 and 6 and broker non-votes will have no effect on Proposal Nos. 2 or 6.

The approval of Proposal No. 3 (Increase in Authorized Common Stock) and Proposal No. 4 (Reverse Stock Split) requires the affirmative vote of the holders of a majority of the issued and outstanding shares of the Company's Common Stock entitled to vote at the Meeting. Abstentions and broker non-votes will have the effect of being cast against Proposal Nos. 3 and 4.

With respect to Proposal No. 5, our Amended and Restated Bylaws, as amended, do not require that our stockholders ratify the appointment of Marcum LLP as our independent registered public accounting firm. However, we are submitting the proposal for ratification as a matter of good corporate governance. If our stockholders do not ratify the appointment, the Audit Committee will reconsider whether or not to retain Marcum LLP. Even if the appointment is ratified, the Audit Committee, at its discretion, may change the appointment at any time during the year if the Audit Committee determines that such a change would be in the best interests of the Company and its stockholders. Ratification of the appointment of Marcum LLP as the Company's independent registered public accounting firm requires the affirmative vote of the holders of a majority of the votes cast at the Meeting. Abstentions will have the effect of being cast against Proposal No. 5 and broker non-votes will have no effect.

## PROPOSAL NO. 1

### ELECTION OF DIRECTORS

At the Meeting, three Class III Directors are to be elected to serve until the 2014 Annual Meeting of Stockholders and until their respective successors has been duly elected and qualified. The Board of Directors, upon the recommendation of the Nominating Committee, has nominated Richard T. Schumacher, Alan I. Goldberg and Gregory G. Freitag for election as Class III Directors. Mr. Schumacher, Mr. Goldberg and Mr. Freitag are currently directors of the Company and have not been nominated pursuant to any arrangement or understanding with any person.

The Company's Restated Articles of Organization, as amended (the "Articles of Organization"), and Amended and Restated Bylaws, as amended (the "Bylaws"), provide that our Board of Directors shall be divided into three classes. At each annual meeting of stockholders, the directors elected to succeed those whose terms expire are identified as being in the same class as the directors they succeed and are elected to hold office for a term to expire at the third annual meeting of stockholders after their election, and until their respective successors are duly elected and qualified, unless an adjustment in the term to which an individual director shall be elected is made because of a change in the number of directors.

Our Articles of Organization and Bylaws do not require our stockholders to elect any directors in a class the term of office of which extends beyond the Meeting. The terms of office of Messrs. Schumacher, Goldberg and Freitag, the Company's Class III Directors, expire at the Meeting. The terms of office of the Class I Directors and Class II Directors, comprised of Calvin A. Saravis, R. Wayne Fritzsche, J. Donald Payne, Alan D. Rosenson and Jeffrey N. Peterson, continue after the Meeting. Mr. Peterson was appointed pursuant to an informal agreement between the Company and Clayton A. Struve in connection with securities purchased by Mr. Struve in the Company's private placement completed in June 2011.

At the Meeting, it is the intention of the persons named as proxies to vote for the election of Messrs. Schumacher, Goldberg and Freitag as Class III Directors. In the unanticipated event that any of Mr. Schumacher, Mr. Goldberg and/or Mr. Freitag should be unable to serve, the persons named as proxies will vote the proxy for such substitute(s), if any, as the present Board of Directors may designate or the present Board of Directors may reduce the number of directors.

In selecting members for our Board of Directors, we consider each individual's unique and diversified background and expertise. We believe that selecting directors with a wide range of talents and skills provides a functional diversity that allows our Board to provide strong leadership. The following noteworthy experience, qualifications, attributes and skills for each Board member, together with the biographical information for each nominee described below, led to our conclusion that the person should serve as a director of PBI in light of our business and structure:

- Mr. R. Wayne Fritzsche, the Chairman of our Board, provides substantial experience and skills in financial, management and operational matters. Mr. Fritzsche is the founder and current president of FAI LLC, a consulting firm that provides strategic, financial, and scientific consulting to medical companies in the life sciences and healthcare industries.
- Mr. Richard T. Schumacher, the Company's founder, provides valuable operational, sales and management expertise and experience and has significant knowledge of the Company's technology and products. Prior to founding the company, Mr. Schumacher spent over 16 years working in the clinical research setting. In the more than 30 years since the Company's formation, Mr. Schumacher has served the Company in various roles, including President, Chief Executive Officer and Chairman.
- Dr. Calvin Saravis provides substantial expertise and experience in the science and technology of the Company's products. Dr. Saravis has over 20 years of experience as a professor and

- researcher at various educational institutions and has served on the Company's Scientific Advisory Board since 2003.
- Messrs. Payne, Rosenson, Goldberg and Freitag each provide a wealth of knowledge and experience in financial, accounting and administrative matters. Mr. Payne has nearly 20 years of experience managing public and private life science companies in various executive capacities. He is also Certified Public Accountant in Texas, and a member of the AICPA and Financial Executives Institute. Mr. Rosenson is the founder of ALJAR Investments, Inc., an investment management firm, and has over 20 years of experience providing consulting services to high-level executives and business owners through his company Consulting Innovations, Inc. Mr. Goldberg's experience includes serving as Chairman of a private investment company, and Vice President of Morgan Stanley Dean Witter. Mr. Freitag's experience includes serving in a number of business, financial and operational roles, including most recently as chief executive officer and chief financial officer for AxoGen, Inc., an intellectual property licensing and holding company.
- Mr. Jeffrey N. Peterson is the CEO of Target Discovery, Inc., a personalized medicine diagnostics company, and has broad executive, general management, multi-functional, multi-business, and international experience.

### Vote Required to Elect the Nominees as Directors

The affirmative vote of the holders of a plurality of the votes cast by stockholders at the Meeting is required for the election of Richard T. Schumacher, Alan I. Goldberg and Gregory G. Freitag as Class III Directors of the Company.

The Board of Directors recommends that stockholders vote "FOR" the election of Richard T. Schumacher, Alan I. Goldberg, and Gregory G. Freitag as Class III Directors of the Company.

### Information on Nominees and Other Directors

The following information includes additional information as of the date of this proxy statement about each nominee and director whose term extends beyond the Meeting, including his age, all positions he holds with us, his principal occupation and business experience during the past five years, the names of other publicly-held companies for which he currently serves as a director or held a directorship during the past five years, and the year in which each nominee's term would expire, if elected.

<u>Name</u>	<u>Age</u>	<u>Position</u>	<u>Director Since</u>	<u>Year Term Expires, if Elected, and Class</u>
R. Wayne Fritzsche	62	Chairman of the Board	2003	2012 Class I
Calvin A. Saravis, Ph.D. <sup>(1)</sup>	81	Director	1986	2012 Class I
Jeffrey N. Peterson <sup>(2)</sup>	56	Director	2011	2012 Class I
J. Donald Payne <sup>(3)</sup>	56	Director	2003	2013 Class II
Alan D. Rosenson <sup>(3)</sup>	47	Director	2009	2013 Class II
Richard T. Schumacher*	61	Director, President, Chief Executive Officer, Treasurer, and Clerk	1978	2014 Class III
Alan I. Goldberg* <sup>(4)</sup>	68	Director	2010	2014 Class III
Gregory G. Freitag* <sup>(4)</sup>	49	Director	2010	2014 Class III

\*Nominees for Class III Director.

- (1) Member of the Compensation Committee, Nominating Committee and Scientific Advisory Board
- (2) Member of the Compensation Committee and Nominating Committee
- (3) Member of the Audit Committee, Compensation Committee, and Nominating Committee
- (4) Member of the Audit Committee

*Mr. R. Wayne Fritzsche* has served as a director and Chairman of the Board of Directors of the Company since October 2003. Mr. Fritzsche has served as a member of the Company's Scientific Advisory Board since 1999. Mr. Fritzsche is the founder of FAI LLC, a consulting firm that provides strategic, financial, and scientific consulting to medical companies in the life sciences and healthcare industries, and has served as its President since 1991. He was a part of the founding group of The Immune Response Company (IMNR) along with Dr. Jonas Salk. From 2001 until 2004, Mr. Fritzsche has served as a board member of Opexa Pharmaceuticals, a multiple sclerosis and cell immunology therapy company, and Vascular Sciences, Inc., an extracorporeal, macular degeneration company. He also previously served as a board member of Intelligent Medical Imaging, an automated microscopic imaging company, from 1994 to 1997, Clarion Pharmaceuticals, a drug development company, from 1994 to 1996, Nobex Pharmaceuticals, a drug delivery firm, from 1996 to 2001, Cardio Command, Inc., a transesophageal cardiac monitoring and pacing firm, from 1999 to 2001, and Hesed BioMed, an antisense oligonucleotide and catalytic antibody company, from 2000 to 2002. Mr. Fritzsche is a founder of Transplan, Inc., an organ transplant device company whose primary focus is in heart transport. Mr. Fritzsche holds a BA from Rowan University (formerly Glassboro State College), and an MBA from the University of San Diego.

*Dr. Calvin A. Saravis* has served as a director of the Company since 1986. Dr. Saravis has also served as Chairman of the



Company's Scientific Advisory Board since 2003. From 1984 to 1998 he was an Associate Professor of Surgery (Biochemistry) at Harvard Medical School (presently emeritus) and Chief, Division of Immunology, Department of Surgery, Harvard Medical School, Boston City Hospital; and from 1983 to 1999, he was an Associate Research Professor of Pathology at Boston University School of Medicine (presently emeritus). From 1971 to 1997, Dr. Saravis was a Senior Research Associate at the Mallory Institute of Pathology and from 1979 to 1997 he was a Senior Research Associate at the Cancer Research Institute-New England Deaconess Hospital. Dr. Saravis received his Ph.D. in immunology and serology from Rutgers University.

*Mr. Jeffrey N. Peterson* has served as a director of the Company since July 2011. Since 1999, he has served as the chief executive officer of Target Discovery, Inc. ("TDI"), a personalized medicine diagnostics (PMDx) company. Mr. Peterson also serves as Chairman of TDI's majority-owned subsidiary, Veritomyx, Inc., which is completing development and commercialization of a tool in accurate peptide, protein and isoform identification and characterization. Prior to joining TDI, Mr. Peterson served as CEO of Sharpe, Peterson, Ocheltree & Associates, an international business development consulting firm assisting Fortune 500 and many smaller firms in business expansion and strategy, for three years prior to incorporating TDI. Prior to that, he spent 9 years in key management roles in Abbott Laboratories' Diagnostics and International (Pharmaceuticals, Hospital Products, Nutritionals, Consumer) businesses, last serving as CEO and General Manager of Abbott South Africa. Mr. Peterson's experience prior to Abbott Laboratories included 11 years with General Electric's Engineered Materials and Plastics businesses, spanning roles in strategic planning, business development, technology licensing, marketing and sales, operations, quality control and R&D. Mr. Peterson holds BSChE and MSChE (Chemical Engineering) degrees from MIT. He serves as Chair Emeritus of the BayBio Institute, a non-profit organization serving the life science community, and on the board of BayBio, a trade association for the life sciences industry in Northern California. He is a member of the Coalition for 21st Century Medicine, and of BIO's Personalized Medicine & Diagnostics Group. Mr. Peterson has served on the board of directors SanGlobal Ed Corp. (d/b/a MyVerse), a teen and collegiate personal and professional development web and mobile resource site.

*Mr. J. Donald Payne* has served as a director of the Company since December 2003. Commencing in 2011, Mr. Payne has served as the Senior Vice President and Chief Financial and Administrative Officer of Oncolix, Inc., a privately-held pharmaceutical company engaged in cancer research. Mr. Payne previously served as President and a Director of Nanospectra Biosciences, Inc., a privately-held medical device company developing products for cancer from 2001 until 2011. Prior to that, Mr. Payne held various executive positions in finance and administration of public and private life science companies since 1992, served as a financial executive in the energy industry from

1980 through 1990, and was in public accounting from 1976 to 1980. Mr. Payne received an MBA from Rice University in 1992 and a BBA from Texas A&M University in 1976. He is a Certified Public Accountant in Texas, and a member of the AICPA and Financial Executives Institute.

*Mr. Alan D. Rosenson* has served as a director of the Company since September 2009. Mr. Rosenson currently serves as President of ALJAR Investments, Inc., an investment firm which he founded in 1994 and through which he manages stock and bond portfolios for private clients. In 1987, Mr. Rosenson founded Consulting Innovations, Inc., an information systems firm, that currently provides consulting services and technology training to high-level executives and business owners. Mr. Rosenson has been a volunteer for various charities from 1990 to the present. Mr. Rosenson earned his B.A. degree from Indiana University with honors, and his MBA degree from Washington University in St. Louis.

*Mr. Richard T. Schumacher*, the founder of the Company, has served as a director of the Company since 1978. He has served as the Company's Chief Executive Officer since April 16, 2004 and President since September 14, 2004. He previously served as Chief Executive Officer and Chairman of the Board of the Company from 1992 to February 2003. From July 9, 2003 until April 14, 2004 he served as a consultant to the Company pursuant to a consulting agreement. He served as President of the Company from 1986 to August 1999. Mr. Schumacher served as the Director of Infectious Disease Services for Clinical Sciences Laboratory, a New England-based medical reference laboratory, from 1986 to 1988. From 1972 to 1985, Mr. Schumacher was employed by the Center for Blood Research, a nonprofit medical research institute associated with Harvard Medical School. Mr. Schumacher received a B.S. in Zoology from the University of New Hampshire.

*Mr. Alan I. Goldberg* has served as a director of the Company since July 2010. Mr. Goldberg has served as Chairman in the private investment company, Alphi Investment Management Co. from 1987 until 2000. He has been a member of the Chicago Board of Trade since 1977 and currently holds two memberships. He was a Vice President of Morgan Stanley Dean Witter from 1970 to 1977. He has a finance degree from the Kellogg School of Management at Northwestern University. He has served on private and public company boards, and is active in several educational and community charities.

*Mr. Gregory G. Freitag, JD, CPA*, has served as a director of the Company since July 2010. He has served as the Chief Financial Officer and a member of the Board of Directors of AxoGen, Inc. (formerly Lectec Corporation), an intellectual property licensing and holding company since June 2010, and as Chief Financial Officer and director of AxoGen Corporation, a wholly owned subsidiary of AxoGen, Inc., since October 2011. From June 2010 to September 2011, he also served as Chief Executive Officer of Lectec Corporation. Since May 2009, Mr. Freitag has been a founder and principal of FreiMc, LLC, a consulting and advisory firm, and EmployRx, Inc., a business that provides services to self-insured employers relating to prescription drug benefits. Mr. Freitag founded both FreiMc, LLC and EmployRx, Inc. Mr. Freitag previously served as the Director of Business Development at Pfizer Health Solutions, a former subsidiary of Pfizer, Inc., from January 2006 to May 2009. From July 2005 to January 2006, Mr. Freitag was a consultant for Guidant Corporation in their business development group. Prior to Guidant Corporation, Mr. Freitag was the Chief Executive Officer of HTS Biosystems, a biotechnology tools start-up company, from March 2000 until its sale in early 2005. Mr. Freitag was the Chief Operating Officer, Chief Financial Officer and General Counsel of Quantech, Ltd., a public point of care diagnostic company, from December 1995 to March 2000. Mr. Freitag received a B.A. degree in Business and Economics from Macalester College and a J.D. degree from the University of Chicago.

## **Corporate Governance**

*Board of Directors and Committee Meetings; Annual Meeting Attendance.* The Board of Directors held fourteen (14) meetings during the year ended December 31, 2010. Each director attended at least 75% of all meetings of the Board of Directors and each committee of the Board of Directors on which they served. All of the Company's directors are encouraged to attend the Company's annual meetings of stockholders. All five (5) of the Company's directors serving in 2010 were in attendance at the Company's 2010 Special Meeting in Lieu of the Annual Meeting of Stockholders.

*Board Independence.* The Board of Directors has reviewed the qualifications of each of Messrs. Payne, Goldberg, Freitag, Rosenson, Peterson and Dr. Saravis, constituting more than a majority of the Company's

directors, and has affirmatively determined that each individual is “independent” as such term is defined under the current listing standards of the Nasdaq Stock Market. The Board of Directors has determined that none of these directors has a material relationship with the Company that would interfere with the exercise of independent judgment. In addition, each member of the Audit Committee is independent as required under Section 10A(m)(3) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”).

*Stockholder Communications.* Any stockholder wishing to communicate with any of the Company’s directors regarding the Company may write to the director, c/o Clerk, Pressure BioSciences, Inc., 14 Norfolk Avenue, South Easton, MA 02375. The Clerk will forward these communications directly to the director(s).

*Code of Ethics.* Pursuant to Section 406 of the Sarbanes-Oxley Act of 2002, the Company has adopted a Code of Ethics for Senior Financial Officers that applies to the Company’s principal executive officer, principal financial officer, principal accounting officer, controller, and other persons performing similar functions. A copy of the code of ethics is posted on, and may be obtained free of charge from the investor relations portion of the Company’s website at [www.pressurebiosciences.com](http://www.pressurebiosciences.com). If the Company makes any amendments to its Code of Ethics or grants any waiver, including any implicit waiver, from a provision of this Code of Ethics to the Company’s principal executive officer, principal financial officer, principal accounting officer, controller, or other persons performing similar functions, the Company will disclose the nature of such amendment or waiver, the name of the person to whom the waiver was granted and the date of waiver in a Current Report on Form 8-K.

### **Board Leadership Structure and Role in Risk Oversight**

The Board of Directors has responsibility for establishing broad corporate policies and reviewing our overall performance rather than day-to-day operations. The Board’s primary responsibility is to oversee the management of the Company and, in so doing, serve the best interests of the Company and its stockholders. The Board selects, evaluates and provides for the succession of executive officers and, subject to stockholder election, directors. It reviews and approves corporate objectives and strategies, and evaluates significant policies and proposed major commitments of corporate resources. The Board participates in decisions that have a potential major economic impact on the Company and its stockholders. Management keeps the directors informed of Company activity through regular written reports and presentations at Board and committee meetings.

The Board of Directors is led by its Chairman, Mr. Fritzsche. Each of our Audit, Nominating and Compensation Committees provide oversight and assess risk in their respective areas. In addition, the Board and each committee have an active role in overseeing management of our Company’s risk. The Board regularly reviews information regarding our operations, credit, and liquidity, as well as the risks associated with each.

### **Board Committees**

Standing committees of the Board of Directors include an Audit Committee, a Compensation Committee, and a Nominating Committee.

#### *Audit Committee.*

Messrs. Payne, Rosenson, Goldberg and Freitag are currently the members of the Audit Committee.

The Board of Directors has determined that Mr. Payne qualifies as an “audit committee financial expert” as defined in Item 407(d) (5) of Regulation S-K.

The Audit Committee operates pursuant to a written charter (the “Audit Committee Charter”), a current copy of which is publicly available on the investor relations portion of the Company’s website at [www.pressurebiosciences.com](http://www.pressurebiosciences.com). Under the provisions of the Audit Committee Charter, the primary functions of the Audit Committee are to assist the Board of Directors with the oversight of (i) the Company’s financial reporting process, accounting functions, and internal controls, and (ii) the qualifications, independence, appointment, retention, compensation, and performance of the Company’s independent registered public accounting firm. The

Audit Committee is also responsible for the establishment of “whistle-blowing” procedures, and the oversight of other compliance matters. The Audit Committee held six (6) meetings during fiscal 2010.

#### *Compensation Committee.*

##### General

Messrs. Payne, Peterson and Rosenson and Dr. Saravis are currently the members of the Compensation Committee. The Compensation Committee operates pursuant to a written charter, a current copy of which is publicly available on the investor relations portion of the Company’s website at [www.pressurebiosciences.com](http://www.pressurebiosciences.com). The primary functions of the Compensation Committee include (i) reviewing and approving our executive compensation, (ii) reviewing the recommendations of the President and Chief Executive Officer regarding the compensation of our executive officers, (iii) evaluating the performance of the President and Chief Executive Officer, (iv) overseeing the administration and approval of grants of stock options and other equity awards under our equity incentive plans, and (v) recommending compensation for our Board of Directors and each committee thereof for review and approval by the Board of Directors. The Compensation Committee held one (1) meeting during fiscal 2010.

The Compensation Committee may form and delegate authority to one or more subcommittees as it deems appropriate from time to time under the circumstances (including (a) a subcommittee consisting of a single member and (b) a subcommittee consisting of at least two members, each of whom qualifies as a “non-employee director,” as such term is defined from time to time in Rule 16b-3 promulgated under the Exchange Act, and an “outside director,” as such term is defined from time to time in Section 162(m) of the Internal Revenue Code of 1986, as amended, and the rules and regulations thereunder).

##### Compensation Objectives

In light of the relatively early stage of commercialization of our products, we recognize the importance of attracting and retaining key employees with sufficient experience, skills, and qualifications in areas vital to our success, such as operations, finance, sales and marketing, research and development, engineering, and individuals who are committed to our short- and long-term goals. The Compensation Committee has designed our executive compensation programs with the intent of attracting, motivating, and retaining experienced executives and, subject to our limited financial resources, rewarding them for their contributions by offering them a competitive base salary, potential for annual cash incentive bonuses, and long-term equity-based incentives, typically in the form of stock options. The Compensation Committee strives to balance the need to retain key employees with financial prudence given our history of operating losses, limited financial resources and the early stage of our commercialization.

##### Executive Officers and Director Compensation Process

The Compensation Committee considers and determines executive compensation according to an annual objective setting and measurement cycle. Specifically, corporate goals for the year are initially developed by our executive officers and are then presented to the Board of Directors and Compensation Committee for review and approval. Individual goals are intended to focus on contributions that facilitate the achievement of the corporate goals. Individual goals are first proposed by each executive officer, other than the President and Chief Executive Officer, then discussed by the entire senior executive management team and ultimately compiled and prepared for submission to the Board of Directors and the Compensation Committee, by the President and Chief Executive Officer. The Compensation Committee sets and approves the goals for the President and Chief Executive Officer. Generally, corporate and individual goals are set during the first quarter of each calendar year. The objective setting process is coordinated with our annual financial planning and budgeting process so our Board of Directors and Compensation Committee can consider overall corporate and individual objectives in the context of budget constraints and cost control considerations. Annual salary increases, bonuses, and equity awards, such as stock option grants, if any, are tied to the achievement of these corporate and individual performance goals as well as our financial position and prospects.

Under the annual performance review program, the Compensation Committee evaluates individual performance against the goals for the recently completed year. The Compensation Committee’s evaluation generally

occurs in the first quarter of the following year. The evaluation of each executive (other than the President and Chief Executive Officer) begins with a written self-assessment submitted by the executive to the President and Chief Executive Officer. The President and Chief Executive Officer then prepares a written evaluation based on the executive's self-assessment, the President and Chief Executive Officer's evaluation, and input from others within the Company. This process leads to a recommendation by the President and Chief Executive Officer for a salary increase, bonus, and equity award, if any, which is then considered by the Compensation Committee. In the case of the President and Chief Executive Officer, the Compensation Committee conducts his performance evaluation and determines his compensation, including salary increase, bonus, and equity awards, if any. We generally expect, but are not required, to implement salary increases, bonuses, and equity awards, for all executive officers, if and to the extent granted, by April 1 of each year.

Non-employee director compensation is set by our Board of Directors upon the recommendation of the Compensation Committee. In developing its recommendations, the Compensation Committee is guided by the following goals: compensation should be fair relative to the required services for directors of comparable companies in our industry and at our company's stage of development; compensation should align directors' interests with the long-term interest of stockholders; the structure of the compensation should be simple, transparent, and easy for stockholders to understand; and compensation should be consistent with the financial resources, prospects, and competitive outlook for the Company.

In evaluating executive officer and director compensation, the Compensation Committee considers the practices of companies of similar size, geographic location, and market focus. In order to develop reasonable benchmark data the Compensation Committee has referred to publicly available sources such as Salary.com and the BioWorld Survey. While the Compensation Committee does not believe benchmarking is appropriate as a stand-alone tool for setting compensation due to the unique aspects of our business objectives and current stage of development, the Compensation Committee generally believes that gathering this compensation information is an important part of its compensation-related decision making process.

The Compensation Committee has the authority to hire and fire advisors and compensation consultants as needed and approve their fees. No advisors or compensation consultants were hired or fired in fiscal 2010.

The Compensation Committee is also authorized to delegate any of its responsibilities to subcommittees or individuals as it deems appropriate. The Compensation Committee did not delegate any of its responsibilities in fiscal 2010.

#### *Nominating Committee.*

Messrs. Payne, Peterson, and Rosenson, and Dr. Saravis are currently the members of the Company's Nominating Committee. The Nominating Committee operates pursuant to a written charter, a current copy of which is publicly available on the investor relations portion of the Company's website at [www.pressurebiosciences.com](http://www.pressurebiosciences.com). The Nominating Committee held one (1) meeting during fiscal year 2010.

The primary functions of the Nominating Committee are to (i) identify, review, and evaluate candidates to serve as directors of the Company, (ii) make recommendations of candidates to the Board of Directors for all directorships to be filled by the stockholders or the Board of Directors, and (iii) serve as a focal point for communication between such candidates, the Board of Directors, and management.

The Nominating Committee may consider candidates recommended by stockholders as well as from other sources such as other directors or officers, third party search firms, or other appropriate sources. For all potential candidates, the Nominating Committee may consider all factors it deems relevant, such as a candidate's personal integrity and sound judgment, business and professional skills and experience, independence, possible conflicts of interest, diversity, the extent to which the candidate would fill a present need on the Board of Directors, and concern for the long-term interests of the stockholders. These criteria include whether the candidate assists in achieving a mix of Board members that represents diversity of background and professional experience, including with respect to ethnic background, age and gender. In general, persons recommended by stockholders will be considered on the same basis as candidates from other sources. If a stockholder wishes to recommend a candidate for director for

election at the 2012 Annual Meeting of Stockholders, he or she must follow the procedures described below under “Stockholder Proposals.”

#### **Audit Committee Report**

The Audit Committee has reviewed and discussed the Company’s audited financial statements for the year ended December 31, 2010 with management of the Company. The Audit Committee also discussed with Marcum LLP (“Marcum”), the Company’s independent registered public accounting firm, the matters required to be discussed by the Auditing Standards Board Statement on Auditing Standards No. 61, as amended, as adopted by the Public Company Accounting Oversight Board in Rule 3200T. The Audit Committee has also received and reviewed the required written disclosures and a confirming letter from Marcum under applicable requirements of the Public Accounting Oversight Board regarding Marcum’s independence, and has discussed the matter with Marcum.

Based upon its review and discussions of the foregoing, the Audit Committee recommended to the Board of Directors that the Company’s audited financial statements for the year ended December 31, 2010 be included in the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2010.

#### **Audit Committee:**

J. Donald Payne  
Alan D. Rosenson  
Alan I. Goldberg  
Gregory G. Freitag

## INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Audit Committee appointed Marcum LLP (“Marcum”), an independent registered public accounting firm, to audit the Company’s consolidated financial statements for the fiscal year ending December 31, 2011. Marcum, and its predecessor UHY LLP (“UHY”), has served as the Company’s independent registered public accounting firm since September 14, 2006. A representative of Marcum will be available during the Meeting to make a statement if such representative desires to do so and to respond to questions.

### Independent Registered Public Accounting Fees

The following is a summary of the fees billed to the Company by Marcum, the Company’s current independent registered public accounting firm, for the fiscal year ended December 31, 2010 and fees billed to the Company by UHY for the fiscal year ended December 31, 2009:

	Fiscal 2010 Fees	Fiscal 2009 Fees
Audit Fees	\$ 111,696	\$ 113,315
Audit-Related Fees	3,500	10,243
Tax and Other Fees	-	-
	<u>\$ 115,196</u>	<u>\$ 123,558</u>

*Audit Fees.* Consists of aggregate fees billed for professional services rendered for the audit of the Company’s consolidated financial statements and review of the interim consolidated financial statements included in quarterly reports, as well as services that are normally provided by the independent registered public accounting firm in connection with statutory and regulatory filings or engagements.

*Audit-Related Fees.* Consists of aggregate fees billed for assurance and related services that are reasonably related to the performance of the audit or review of the Company’s consolidated financial statements and are not reported under “Audit Fees.” Fees billed by Marcum for 2010 were fees associated with a consent delivered in connection with the Company’s Registration Statement on Form S-8. Fees billed by UHY for 2009 were fees associated with responding to an SEC comment letter and for preliminary internal controls testing. There were no other fees for services rendered by Marcum or UHY other than those described above.

### Audit Committee Policy on Pre-Approval of Services

The Audit Committee’s policy is to pre-approve all audit and permissible non-audit services provided by the independent registered public accounting firm. These services may include audit services, audit-related services, tax services, and other services. Pre-approval is generally provided for up to one year. The Audit Committee may also pre-approve particular services on a case-by-case basis.

## SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS

### AND MANAGEMENT

The following table sets forth certain information as of November 17, 2011 concerning the beneficial ownership of Common Stock for: (i) each director and director nominee, (ii) each Named Executive Officer in the Summary Compensation Table under “Executive Compensation” below, (iii) all executive officers and directors as a group, and (iv) each person (including any “group” as that term is used in Section 13(d)(3) of the Exchange Act) known by the Company to be the beneficial owner of 5% or more of the Company’s Common Stock. The address for each of the persons below who are beneficial owners of 5% or more of the Company’s Common Stock is the Company’s corporate address at 14 Norfolk Avenue, South Easton, MA 02375.

Beneficial ownership has been determined in accordance with the rules of the Securities and Exchange Commission (“SEC”) and is calculated based on 6,723,993 shares of our Common Stock issued and outstanding as of November 17, 2011. Shares of Common Stock subject to options, warrants, preferred stock or other securities convertible into Common Stock that are currently exercisable or convertible, or exercisable or convertible within 60

days of November 17, 2011, are deemed outstanding for computing the percentage of the person holding the option, warrant, preferred stock, or convertible security but are not deemed outstanding for computing the percentage of any other person.

Except as indicated by the footnotes below, the Company believes, based on the information furnished to it, that the persons and entities named in the table below have sole voting and investment power with respect to all shares of Common Stock that they beneficially own.

Name	Number of Shares of Common Stock Beneficially Owned(1)	Percent of Class
Richard T. Schumacher(2)	844,937	11.6%
R. Wayne Fritzsche(3)	482,967	7.0%
Alan D. Rosenson(4)	289,274	4.2%
Alan I. Goldberg(5)	249,027	3.6%
J. Donald Payne(6)	159,800	2.3%
Calvin A. Saravis, Ph.D(7)	133,809	2.0%
Edmund Y. Ting, Ph.D(8)	128,938	1.9%
Gregory G. Freitag(9)	94,303	1.4%
Jeffrey N. Peterson(10)	17,976	0.3%
Matthew B. Potter(11)	1,524	0.0%
All Executive Officers and Directors as a Group (twelve persons)	2,632,874	31.6%

- 1) The terms of the Company's Series C Preferred Stock and warrants issued in connection with the Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock contain a limitation on conversion which prevents the holder from converting shares of Series C Preferred Stock into, or exercise of the warrants for, shares of Common Stock if, after giving effect to the conversion or exercise, as the case may be, the holder would beneficially own more than 4.99% of the outstanding shares of Common Stock. The holder may elect to increase this limitation to 9.99%, 14.99% or 19.99%, upon not less than 61 days prior written notice to the Company. With respect to Mr. Schumacher, because he beneficially owned more than 19.99% of the outstanding shares of Common Stock prior to his acquisition of shares of Series C Preferred Stock, the conversion limitation no longer applies to him.
- 2) Includes (i) 340,000 shares of Common Stock issuable upon exercise of options; (ii) 60,210 shares of Common Stock issuable upon conversion of Series C Preferred Stock; (iii) 81,950 shares of Common Stock issuable upon the exercise of warrants; and (iv) 104,000 shares of Common Stock issuable upon conversion of an outstanding convertible promissory note. Does not include 20,162 shares of Common Stock held by Mr. Schumacher's minor son as his wife exercises all voting and investment control over such shares.
- 3) Includes 135,000 shares of Common Stock issuable upon exercise of options. Excludes 219,310 shares of Common Stock issuable upon exercise of warrants held by Mr. Fritzsche because such exercise is subject to "blocker" provisions as described above.
- 4) Includes (i) 25,000 shares of Common Stock issuable upon exercise of options; and (ii) 131,500 shares of Common Stock issuable upon exercise of warrants.
- 5) Includes (i) 25,000 shares of Common Stock issuable upon exercise of options; and (ii) 96,960 shares of Common Stock issuable upon the exercise of warrants.



- 6) Includes (i) 88,000 shares of Common Stock issuable upon exercise of options; and (ii) 13,050 shares of Common Stock issuable upon the exercise of warrants.
- 7) Includes 110,000 shares of Common Stock issuable upon exercise of options.
- 8) Includes (i) 114,000 shares of Common Stock issuable upon exercise of options; and (ii) 5,220 shares of Common Stock issuable upon the exercise of warrants.
- 9) Includes (i) 25,000 shares of Common Stock issuable upon exercise of options; and (ii) 26,640 shares of Common Stock issuable upon the exercise of warrants.
- 10) Includes 15,000 shares of Common Stock issuable upon exercise of options.
- 11) Includes 1,300 shares of Common Stock issuable upon the exercise of warrants.

## EXECUTIVE COMPENSATION

### Summary Compensation Table

The Summary Compensation Table below sets forth the total compensation paid or earned for the fiscal years ended December 31, 2010 and 2009 for: (i) each individual serving as the Company's Chief Executive Officer ("CEO") or acting in a similar capacity during any part of fiscal year 2010; and (ii) the other two most highly paid executive officers (collectively, the "Named Executive Officers") who were serving as executive officers at the end of fiscal year 2010.

Name and Principal Position	Fiscal Year	Salary <sup>(1)</sup>	Option Awards <sup>(2)</sup>	All other Compensation <sup>(3)</sup>	Total
Richard T. Schumacher President, Chief Executive Officer and Chief Financial Officer	2010	\$ 281,456	\$ -	\$ 26,640	\$ 308,096
	2009	279,594	88,517	18,720	386,831
Edmund Ting, Ph.D Senior Vice President of Engineering	2010	192,546	-	1,329	193,875
	2009	194,940	55,375	1,319	251,634
Matthew B. Potter <sup>(4)</sup> Vice President of Sales	2010	160,793	-	7,572	168,365
	2009	162,779	35,522	1,791	200,092

(1) Salary refers to base salary compensation paid through the Company's normal payroll process. No bonus was paid to any Named Executive Officer for 2009 or 2010.

(2) Amounts shown do not reflect compensation received by the Named Executive Officers. Instead, the amounts shown are the aggregate grant date fair value as determined pursuant to FASB ASC 718, Compensation-Stock Compensation. Please refer to Note 2, xiii, "Accounting for Stock-Based Compensation" in the Notes to the Company's Consolidated Financial Statements included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2010, as amended, for the relevant assumptions used to determine the valuation of stock option grants. No stock options were granted in 2010 to the Company's executive officers.

(3) "All Other Compensation" includes the Company's match to the executives' 401(k) contribution and premiums paid on life insurance for the executives. Both of these benefits are available to all employees of the Company. In the case of Mr. Schumacher, "All Other Compensation" also includes \$7,980 in premiums paid by the Company for a life insurance policy to which Mr. Schumacher's wife is the beneficiary. Mr. Schumacher's compensation includes \$18,496 and \$10,576 paid to his spouse, a part-time employee of the Company, for 2010 and 2009, respectively. Included in "All Other Compensation" for Mr. Potter, is \$5,800 that was paid as commissions on product sales.

(4) Mr. Potter resigned from the Company on May 13, 2011.

### Outstanding Equity Awards at Fiscal-Year End

The following table sets forth certain information regarding outstanding stock options awards for each of the Named Executive Officers as of December 31, 2010.

Name	Option Awards			
	Number of Securities Underlying Unexercised Options Exercisable	Number of Securities Underlying Unexercised Options Unexercisable <sup>(1)</sup>	Option Exercise Price (\$)	Option Expiration Date
Richard T. Schumacher President, Chief Executive Officer and Chief Financial Officer	40,000	0	\$ 2.60	5/2/2011
	60,000	0	\$ 3.08	2/11/2012
	30,000	0	\$ 2.70	12/2/2012
	75,000	0	\$ 2.92	6/17/2015
	30,000	0	\$ 3.86	3/30/2016
	70,000	0	\$ 3.51	2/12/2017
	50,000	25,000	(2) \$ 0.77	3/12/2019
Edmund Y. Ting, Ph.D	60,000	0	\$ 3.87	4/24/2016

Senior Vice President of Engineering	8,000	4,000	(3) \$	2.75	9/25/2018
	28,000	14,000	(3) \$	0.77	3/12/2019
Matthew B. Potter	23,333	11,667	(4) \$	4.18	2/25/2018
Vice President of Sales	3,333	1,667	(4) \$	2.75	9/25/2018
	23,334	11,666	(4) \$	0.77	3/12/2019

- (1) All unvested stock options listed in this column were granted to the Named Executive Officer pursuant to the Company's 2005 Equity Incentive Plan. All of such stock options vest ratably over three years in equal yearly installments except the stock options granted on March 12, 2009 of which one-third vested immediately and two-thirds vest over two years in equal yearly installments. All options expire ten years after the date of grant. Unvested stock options become fully vested and exercisable upon a change of control of the Company.
- (2) Options to purchase 75,000 shares of Common Stock were granted to Mr. Schumacher on March 12, 2009, of which 25,000 shares became immediately vested on March 12, 2009 and 25,000 vested on March 12, 2010. The remaining 25,000 vested on March 12, 2011.
- (3) Options to purchase 12,000 shares of Common Stock were granted to Dr. Ting on September 25, 2008, of which 4,000 shares became vested on September 25, 2009 and 4,000 shares vested on September 25, 2010. The remaining 4,000 shares vested on September 25, 2011. Options to purchase 42,000 shares of Common Stock were granted to Dr. Ting on March 12, 2009, of which 14,000 shares became immediately vested on March 12, 2009 and 14,000 shares vested on March 12, 2010. The remaining 14,000 vested on March 12, 2011.
- (4) Options to purchase 35,000 shares of Common Stock were granted to Mr. Potter on February 25, 2008, of which 11,666 shares vested on February 25, 2009 and 11,667 vested on February 25, 2009. The remaining 11,667 shares vested on February 25, 2011. Options to purchase 5,000 shares of Common Stock were granted to Mr. Potter on September 25, 2008, of which 1,666 shares vested on September 25, 2009 and 1,667 vested on September 25, 2010. The remaining 1,667 vested on September 25, 2011. Options to purchase 35,000 shares of Common Stock were granted to Mr. Potter on March 12, 2009, of which 11,668 shares vested on March 12, 2009 and 11,666 vested on March 12, 2010. The remaining 11,666 vested on March 12, 2011.

#### Retirement Plan

All employees, including the Named Executive Officers, may participate in the Company's 401(k) Plan. Under the 401(k) Plan, employees may elect to make before tax contributions of up to 60% of their base salary, subject to current Internal Revenue Service limits. The 401(k) Plan does not permit an investment in the Company's Common Stock. The Company matches employee contributions up to 50% of the first 2% of the employee's earnings. The Company's contribution is 100% vested immediately.

#### Severance Arrangements

Pursuant to severance agreements among the Company and each of our executive officers, each of Mr. Schumacher, Dr. Ting, Dr. Lazarev, Dr. Lawrence, and Mr. Potter (prior to his resignation), the Company's executive officers, is entitled to receive a severance payment if terminated by the Company without cause. The severance benefits would include a payment in an amount equal to one year of such executive officer's annualized base salary compensation plus accrued paid time off. Additionally, the officer will be entitled to receive medical and dental insurance coverage for one year following the date of termination.

#### Change-in-Control Arrangements

Pursuant to severance agreements among the Company and each of our executive officers, each of the Company's executive officers, other than Mr. Schumacher, is entitled to receive a change of control payment in an amount equal to one year of such executive officer's annualized base salary compensation, accrued paid time off, and medical and dental coverage, in the event of a change of control of the Company. In the case of Mr. Schumacher, this payment is equal to two years of annualized base salary compensation, accrued paid time off, and two years of medical and dental coverage.

Pursuant to the Company's 2005 Equity Incentive Plan, any unvested stock options held by a Named Executive Officer will become fully vested upon a change in control (as defined in the 2005 Equity Incentive Plan) of the Company.

#### Director Compensation

The following table sets forth certain information regarding compensation earned or paid to the Company's directors during fiscal year 2010.

Name	Fees Earned or Paid in Cash <sup>(1)</sup>	Option Awards <sup>(2)(3)</sup>	Total
R. Wayne Fritzsche	\$ 10,000	\$ -	\$ 10,000
Calvin A. Saravis, Ph.D	10,000	-	10,000
J. Donald Payne	10,000	-	10,000
Alan D. Rosenson	10,000	-	10,000
Alan I. Goldberg	5,000	26,663	31,663

The Company's non-employee directors receive the following compensation for service as a director of the Company:

(1) Each director earned a quarterly stipend of \$2,500 for attending meetings of the full Board of Directors (whether telephonic or in-person) and attending committee meetings in 2010. However, the Board of Directors elected to defer and accrue the payment of these fees until the Company's financial performance improves as determined by the Board of Directors. The Company last paid the quarterly stipend earned by the Company's Board of Directors for the third quarter of 2008. The aggregate amount of cash fees for which payment has been deferred and accrued by the Board of Directors to past and present Board members is approximately \$85,000. There is no limit to the number of meetings of the Board of Directors or committees that may be called.

(2) Amounts shown do not reflect compensation received by the directors. Instead, the amounts shown are the aggregate grant date fair value as determined pursuant to FASB ASC 718, Compensation-Stock Compensation. Please refer to Note 2, xiii, "Accounting for Stock-Based Compensation" in the Notes to the Company's Consolidated Financial Statements included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2010, for the relevant assumptions used to determine the valuation of stock option grants.

(3) The following table shows the total number of outstanding stock options as of December 31, 2010 that have been issued as director compensation.

Name	Aggregate Number of Stock Options Outstanding
R. Wayne Fritzsche	138,000
Calvin A. Saravis, Ph.D	125,000
J. Donald Payne	88,000
Alan D. Rosenson	25,000
Alan I. Goldberg	25,000
Gregory G. Freitag	25,000

## PROPOSAL NO. 2

### APPROVAL OF THE ISSUANCE OF UNITS CONSISTING OF SERIES D PREFERRED STOCK AND WARRANTS IN ACCORDANCE WITH APPLICABLE NASDAQ LISTING RULES

#### Background and Overview

On November 8, 2011, we entered into a Placement Agency Agreement (the "Placement Agency Agreement") with Ladenburg Thalmann & Co. Inc. (the "Placement Agent"), pursuant to which the Placement Agent agreed to act as our exclusive placement agent for the registered direct public offering (the "Offering") of up to 850 units (the "Units"), each consisting of (i) one share of Series D Preferred Stock, which is convertible into 1,538.46 shares of Common Stock at a conversion price of \$0.65 per share, subject to adjustment as provided in our Articles of Organization, and (ii) one Series F Warrant (the "Series F Warrants") to purchase approximately 614 shares of Common Stock at an exercise price of \$0.81 per share, subject to adjustment as provided in the Series F Warrants. The Placement Agent agreed to use its best efforts to arrange for the sale of all of the Units being offered in the Offering. In connection with the Offering, the Placement Agent received a cash fee equal to 8% of the gross proceeds of the Offering.

On November 10, 2011, we completed the issuance and sale of 843 Units pursuant to the terms of a Securities Purchase Agreement, dated November 8, 2011 (the "Purchase Agreement") with certain investors, including those identified by the Placement Agent, for aggregate gross proceeds of \$843,000. The net proceeds to us, after expenses, were approximately \$650,000, which are expected to be used for commercialization of our current and future products, to fund our research and development activities, for general working capital needs and for repayment of up to \$100,000 of the amount outstanding under our existing debt. As of the closing of the transactions contemplated by the Purchase Agreement, the investors' ownership of our Common Stock, on an as-converted basis, represented approximately 21.0% of all outstanding shares of Common Stock.

Unless our stockholders approve the issuance of the Units in accordance with applicable Nasdaq Listing Rules, the terms of the Series D Preferred Stock and Series F Warrants, which terms are described in further detail below, limit the ability of the investors to convert their shares of Series D Preferred Stock and exercise their Series F Warrants into that number of shares of Common Stock that, when aggregated with any shares of Common Stock issued to the investors or to our Placement Agent or other registered broker-dealers in connection with the Offering on or after November 10, 2011 and prior to the conversion date or exercise date, would exceed 1,307,460 shares of Common Stock (subject to adjustment for forward and reverse stock splits, recapitalizations and the like) (such number of shares, the "Issuable Maximum"). The Issuable Maximum represents 19.9% of our issued and outstanding Common Stock immediately prior to the closing of the transactions contemplated by the Purchase Agreement.

#### Terms of the Series D Preferred Stock

The material terms and provisions of the Series D Preferred Stock are summarized below. This summary is not a complete description of the terms of the Series D Preferred Stock. For the complete terms of the Series D Preferred Stock, you should refer to the form of amendment to our Articles of Organization, including the certificate of designation attached thereto, which was filed as Exhibit 3.1 to our Current Report on Form 8-K filed with the SEC on November 10, 2011.

#### *Voting Rights*

Except as required by law, holders of the Series D Preferred Stock do not have rights to vote on any matters, questions or proceedings, including the election of directors. However, as long as any shares of Series D Preferred Stock are issued and outstanding, we will not, without the affirmative vote of the holders of a majority of the then outstanding Series D Preferred Stock, (1) alter or change adversely the powers, preferences or rights given

to the Series D Preferred Stock or alter or amend the certificate of designation, (2) authorize or create any class of shares ranking as to dividends, redemption or distribution of assets upon liquidation senior to, or otherwise pari passu with, the Series D Preferred Stock, (3) amend our Articles of Organization in any manner that adversely affects any rights of the holders of Series D Preferred Stock, (4) increase the number of authorized Series D Preferred Stock, or (5) enter into any agreement with respect to any of the foregoing.

#### *Conversion*

Subject to certain ownership limitations as described below, shares of Series D Preferred Stock are convertible at any time and from time to time at the option of the holder into our shares of Common Stock at a conversion ratio determined by dividing the stated value of the Series D Preferred Stock (or \$1,000), subject to increase for accrued and unpaid dividends, by a conversion price of \$0.65 per share, or the conversion ratio. Accordingly, each share of Series D Preferred Stock is initially convertible into 1,538.46 shares of Common Stock (subject to our discretion either to round up to the next whole number of shares of Common Stock or to pay cash instead of any fraction of a share of Common Stock; no fractional shares of Common Stock will be issued). The conversion price is subject to adjustment in the case of stock splits, stock dividends, combinations of shares and similar recapitalization transactions. The conversion price is also subject to adjustment in the event that we issue any shares of Common Stock or Common Stock equivalents at a per share price that is lower than the conversion price for the Series D Preferred Stock then in effect. Upon any such issuance at a lower price, the conversion price will be reduced to the per share price at which such shares of Common Stock or Common Stock equivalents are issued. No adjustment in the conversion price will be made for issuances of Common Stock under our stock option plans or upon conversion or exercise of options, warrants or shares of our Series C Preferred Stock outstanding as the date on which the Series D Preferred Stock are first issued.

If at any time following the six-month anniversary of the closing of the Offering, our shares of Common Stock trade on the Nasdaq Capital Market, the OTC Bulletin Board or any other designated stock exchange (or any successors to any of these trading markets), or the trading markets, with a per share sale price at any time during the day on which the principal trading market is open for business of at least 300% of the then effective conversion price for at least 20 trading days during a 30 consecutive day trading period and the volume for each trading day during such 30 consecutive trading day period exceeds \$50,000, then we may elect to cause all of the outstanding Series D Preferred Stock to convert into the number of shares of Common Stock (subject to certain beneficial ownership limitations) at the then current conversion ratio. In such event, within one trading day, we will deliver a written notice to all holders of Series D Preferred Stock requiring each holder to convert all or part of such holder's Series D Preferred Stock, plus all accrued but unpaid dividends thereon and all liquidated damages and other amounts due in respect of the Series D Preferred Stock, into shares of Common Stock at the then current conversion ratio.

Subject to limited exceptions, a holder of Series D Preferred Stock will not have the right to convert, and we will not have the right to force such holder to convert, any portion of our Series D Preferred Stock if the holder, together with its affiliates and any persons acting as a group together with such holder or any of such holder's affiliates, would beneficially own in excess of 4.99% (or 9.99% as elected by the holder pursuant to the terms of the certificate of designation) of the number of our shares of Common Stock outstanding immediately after giving effect to its conversion.

As described above, prior to receiving stockholder approval for the issuance of the shares of Common Stock issuable upon conversion of the Series D Preferred Stock and upon exercise of the Series F Warrants in the aggregate in excess of 19.9% of the issued and outstanding shares of Common Stock, the Series D Preferred Stock may not be converted to the extent such conversion, when aggregated with the issuance of any shares of Common Stock issued upon exercise of the Series F Warrants and any warrants issued to our placement agent or other registered broker-dealers in connection with the Offering, would cause the issuance of in excess of 1,307,460 shares of Common Stock, or 19.9% the number of issued and outstanding shares of Common Stock on the date on which the Series D Preferred Stock were first issued.

In addition, in the event we consummate a merger or consolidation with or into another person or other reorganization event in which our shares of Common Stock are converted or exchanged for securities, cash or other property, or we sell, lease, license or otherwise dispose of all or substantially all of our assets or we or another

person acquire 50% or more of our outstanding shares of Common Stock, then following such event, the holders of the Series D Preferred Stock will be entitled to receive upon conversion of the Series D Preferred Stock the same kind and amount of securities, cash or property which the holders of the Series D Preferred Stock would have received had they converted the Series D Preferred Stock immediately prior to such fundamental transaction. Any successor to us or surviving entity shall assume the obligations under the Series D Preferred Stock.

#### *Dividends*

We may not pay any dividends on shares of our Common Stock unless we also pay dividends on the Series D Preferred Stock in the same form and amount, on an as-if-converted basis, as dividends actually paid on shares of our Common Stock. Except for such dividends, no other dividends may be paid on the Series D Preferred Stock.

#### *Liquidation*

The Series D Preferred Stock ranks, with respect to rights upon liquidation, winding-up or dissolution, (1) senior to our shares of Common Stock and Common Stock equivalents, and (2) senior to any series of preferred stock ranked junior to the Series D Preferred Stock, including shares of our Series C Preferred Stock. Further, upon any liquidation, dissolution or winding up of the Company, after payment or provision for payment of debts and other liabilities of the Company, and before any distribution or payment is made to the holders of any junior securities, the holders of Series D Preferred Stock shall first be entitled to be paid out of the assets of the Company available for distribution to its stockholders an amount equal to \$1,000 per share, subject to certain adjustment for accrued but unpaid dividends, after which any of our remaining assets shall be distributed among the holders of the other classes or series of shares in accordance with our Articles of Organization. If the assets of the Company are insufficient to pay in full such amounts to the holders of the Series D Preferred Stock, then the entire assets to be distributed to the holders of Series D Preferred Stock will be ratably distributed among the holders in accordance with the respective amounts that would be payable on such shares if all amounts payable thereon were paid in full.

#### **Terms of the Series F Warrants**

The material terms and provisions of the Series F Warrants are summarized below. This summary is not a complete description of the terms of the Warrants. For the complete terms of the Warrants, you should refer to the form of Warrant that was filed as Exhibit 4.1 to our Current Report on Form 8-K filed with the Securities and Exchange Commission on November 10, 2011.

Each Series F Warrant represents the right to purchase approximately 614 shares of Common Stock, which number of shares is equal to thirty-nine and nine tenths percent (39.9%) of the amount that the holder paid for the Units divided by \$0.65. Series F Warrants entitle the holder to purchase shares of our Common Stock at an exercise price equal to \$0.81 per share, subject to adjustments described in the Series F Warrants. Subject to certain limitations as described below, the Series F Warrants are exercisable at the option of the holder beginning on the six month anniversary of the date of issuance and will expire and entitle the holder to a cashless exercise five years from the initial exercise date, or sooner as described below.

Subject to limited exceptions, a holder of Series F Warrants will not have the right to exercise any portion of its Series F Warrants if the holder, together with its affiliates, would beneficially own in excess of 4.99% (or 9.99% as elected by the holder pursuant to the terms of the Series F Warrant) of the number of our shares of Common Stock issued and outstanding immediately after giving effect to such exercise.

The exercise price and the number of shares of Common Stock issuable upon exercise of the Series F Warrants is subject to appropriate adjustment in the event of recapitalization events, stock dividends, stock splits, stock combinations, reclassifications, reorganizations or similar events affecting our shares of Common Stock, and also upon any distributions of assets, including cash, shares or other property to our stockholders.

The exercise price is also subject to adjustment in the event that we issue any shares of Common Stock or Common Stock equivalents at a per share price that is lower than the exercise price for the Series F Warrants then in effect. Upon any such issuance, the exercise price will be reduced to the per share price at which such shares of

Common Stock or Common Stock equivalents are issued. No adjustment in the exercise price will be made for issuances of Common Stock under our stock option plans or upon conversion or exercise of options, warrants or shares of Series C Preferred Stock outstanding on the date on which the Series D Preferred Stock are first issued.

The Series F Warrant holders may pay the exercise price by wire transfer or cashier's check drawn on a United States bank unless such holders are utilizing the cashless exercise provisions of the Series F Warrants. The Series F Warrants may be exercised by cashless exercise at the expiration of the Series F Warrant, and sooner, if at the time of exercise there is no effective registration statement for the shares issuable upon exercise or the prospectus constituting a part of the registration statement is not available for the issuance of such shares. At the close of business on the applicable expiration date, any unexercised Series F Warrants will be void.

As described above, prior to receiving stockholder approval for the issuance of the shares of Common Stock issuable upon conversion of the Series D Preferred Stock and upon exercise of the Series F Warrants in the aggregate in excess of 19.9% of the issued and outstanding shares of Common Stock, the Series F Warrants may not be exercised to the extent such exercise, when aggregated with the issuance of any shares of Common Stock issued upon conversion of the Series D Preferred Stock and any warrants issued to our Placement Agent or other registered broker-dealers in connection with the Offering, would cause the issuance of in excess of 1,307,460 shares of Common Stock, or 19.9% the number of issued and outstanding shares of Common Stock on the date on which the Series D Preferred Stock were first issued.

In addition, in the event we consummate a merger or consolidation with or into another person or other reorganization event in which our shares of Common Stock are converted or exchanged for securities, cash or other property, or we sell, lease, license or otherwise dispose of all or substantially all of our assets or we or another person acquire 50% or more of our outstanding shares of Common Stock, then following such event, the holders of the Series F Warrants will be entitled to receive upon exercise of the Series F Warrants the same kind and amount of securities, cash or property which the holders would have received had they exercised the Series F Warrants immediately prior to such fundamental transaction. Any successor to us or surviving entity shall assume the obligations under the Series F Warrants.

Upon a holder's exercise of a Series F Warrant, we will issue the shares of Common Stock issuable upon exercise of the Series F Warrant within three business days following our receipt of notice of exercise and payment of the exercise price. Prior to the exercise of any Series F Warrants to purchase shares of Common Stock, holders of the Series F Warrants will not have any of the rights of holders of the shares of Common Stock purchasable upon exercise, including the right to vote or to receive any payments of dividends on the shares of Common Stock purchasable upon exercise.

#### **NASDAQ Listing Rules**

Our Common Stock is currently listed on the Nasdaq Capital Market, and therefore we are subject to the Nasdaq Listing Rules.

Under Nasdaq Listing Rule 5635(b), prior stockholder approval is required for issuances of securities that will result in a "change of control" of the issuer (the "Nasdaq Change of Control Rule"). Nasdaq may deem a change of control to occur when, as a result of an issuance, an investor or a group would own, or have the right to acquire, 20% or more of the outstanding shares of common stock or voting power and such ownership or voting power would be the largest ownership position of the issuer. The terms of the Series D Preferred Stock and Series F Warrants currently limit the conversion of the Series D Preferred Stock and exercise of the Series F Warrants if such conversion or exercise would exceed the Issuable Maximum, and, accordingly, no "change of control" has occurred under applicable Nasdaq Listing Rules. However, since the conversion and exercise rights of the investors would otherwise entitle them to acquire 20% or more of our outstanding Common Stock, such conversion and exercise rights, if not otherwise limited as currently provided by the terms of the Series D Preferred Stock and the Series F Warrants, could constitute a change of control under the Nasdaq Change of Control Rule and thereby requiring stockholder approval under the Nasdaq Change of Control Rule.

Under Nasdaq Listing Rule 5635(d)(2), prior stockholder approval is also required for the issuance, other than in a public offering, of securities convertible into common stock at a price less than the greater of book or



market value if the securities are convertible into 20% or more of an issuer's common stock (the "Nasdaq Private Placement Rule"). Although the Units were issued in a registered direct public offering, given the relatively small number of investors in the Offering, we have not deemed the Units to have been issued in a public offering, which would have exempted us from this Nasdaq Listing Rule. The terms of the Series D Preferred Stock and Series F Warrants currently limit the conversion of the Series D Preferred Stock and exercise of the Series F Warrants if such conversion or exercise would exceed the Issuable Maximum. However, since the conversion and exercise rights of the investors would otherwise entitle them to acquire 20% or more of our outstanding Common Stock at a price less than the greater of book or market value, such conversion and exercise rights, if not otherwise limited as currently provided by the terms of the Series D Preferred Stock and the Series F Warrants, require stockholder approval under the Nasdaq Private Placement Rule.

In the Purchase Agreement, we agreed with the investors to hold a meeting of stockholders at the earliest practical date, but in no event later than 60 days from the closing date, for the purpose of obtaining stockholders approval in accordance with applicable Nasdaq Listing Rules of the issuance of all shares of Common Stock issuable upon conversion of the Series D Preferred Stock and upon exercise of the Series F Warrants in excess of the Issuable Maximum. We also agreed to continue to call a meeting every four months thereafter until stockholder approval of the issuance in excess of the Issuable Maximum is obtained or the Series D Preferred Stock is no longer outstanding.

#### **Vote Required**

We are seeking your approval of this Proposal No. 2 in order to satisfy the stockholder approval requirements of the Nasdaq Change of Control Rule and Nasdaq Private Placement Rule with respect to the issuance of the Units and the conversion of the Series D Preferred Stock, and the exercise of the Series F Warrants comprising the Units. The affirmative vote of the holders of a majority of the votes cast at the Meeting is required for the approval of Proposal No. 2.

#### **Board Recommendation**

The completion of the Offering was crucial to our ongoing efforts to secure adequate financing to continue our operations. Our Board of Directors has determined that the terms of the Offering, including the Purchase Agreement, the Series D Preferred Stock and the Series F Warrants, are in the best interests of the Company. The Board therefore recommends that stockholders approve this Proposal No. 2.

**THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" PROPOSAL NO. 2.**

### PROPOSAL NO. 3

#### APPROVAL OF AMENDMENT TO THE COMPANY'S ARTICLES OF ORGANIZATION TO INCREASE THE AUTHORIZED COMMON STOCK

We require additional capital to fund our continuing operations. We may not have enough authorized but unissued shares of Common Stock to raise needed capital through an equity financing. An equity financing may be the best or only financing alternative available to us or there may not be sufficient time to seek stockholder approval of a specific equity financing transaction given our limited cash resources. One way to secure the required number of authorized but unissued shares of Common Stock would be for our Board of Directors to implement a reverse stock split, if Proposal No. 4 in this proxy statement is approved. However, a reverse stock split would reduce the public float of our Common Stock and could have an adverse impact on our liquidity. As a result, our Board of Directors would prefer not to implement the reverse stock split unless it is necessary to maintain the Company's listing on the Nasdaq Capital Market, such as to increase the minimum bid price for our Common Stock. If our Common Stock trades above \$1.00 per share for any consecutive twenty day period prior to any delisting, a reverse stock split may not be needed for purposes of maintaining the Company's listing on the Nasdaq Capital Market. For these reasons, we are seeking stockholder approval to authorize our Board of Directors, in its sole discretion, to amend Article IV of our Articles of Organization to increase the number of authorized shares of Common Stock of the Company from 20 million shares to 50 million shares. This approval will give our Board of Directors additional flexibility to act in the best interests of the Company and our stockholders in deciding whether or not to do a reverse stock split, assuming our stockholders approve Proposal No. 4.

If this Proposal No. 3 is approved by the stockholders, the Board of Directors will have the authority, in its sole discretion and without further action by stockholders, to increase the authorized shares of Common Stock at any time within twelve months from the Meeting. Assuming that the stockholders approve the amendment to increase the number of authorized shares of Common Stock, and subsequently, our Board of Directors decides to move forward to implement the amendment, the amendment will be effective upon its filing with the Secretary of the Commonwealth of the Commonwealth of Massachusetts. Our Board of Directors reserves the right, notwithstanding stockholder approval and without further action by the stockholders, to decide not to proceed with increasing the number of shares of authorized Common Stock, or, if Proposal No. 4 is approved, to effectuate the reverse split of the Common Stock, if our Board of Directors determines, in its sole discretion, that such actions are in the best interests of the Company and its stockholders.

We currently have 20 million shares of authorized Common Stock. As of the Record Date, there were approximately 6.7 million shares of Common Stock issued and outstanding. In addition, as of the Record Date, there were approximately 2.0 million shares of Common Stock issuable upon conversion of the Company's Series C Preferred Stock and Series D Preferred Stock, 5.2 million shares of Common Stock reserved for issuance upon exercise of or conversion of outstanding warrants and convertible loans, 1.5 million shares of Common Stock reserved for issuance upon exercise of outstanding stock options, and additional 400,000 shares reserved for issuance for future awards under our 2005 Equity Incentive Plan. Based on the number of outstanding and reserved shares of Common Stock described above, we have approximately 4.2 million shares of Common Stock remaining available for issuance as of the Record Date.

If approved by our stockholders, the additional authorized shares of Common Stock would be available for issuance for any proper corporate purpose as determined by our Board of Directors without further approval by the stockholders, except as required by law, the Listing Rules of the Nasdaq Stock Market or the rules of any other national securities exchange on which our shares of Common Stock are listed. Our Board of Directors is seeking approval of the amendment to our Articles of Organization to increase our authorized Common Stock now because opportunities requiring prompt action may arise in the near future and our Board of Directors believes the delay and expense in seeking stockholder approval for additional authorized Common Stock at that time could deprive the Company and our stockholders of the ability to benefit effectively from such opportunities. Except as set forth below, although, as of the date of this proxy statement, we have no current intended uses for the additional shares that would be available for issuance following approval of the amendment to our Articles of Organization to increase our authorized Common Stock by our stockholders, we continue to actively seek additional financing opportunities, including through the issuance of our equity securities, and a transaction involving the issuance of additional shares of our Common Stock could arise at any time following the date of this proxy statement. In this regard, we recently engaged Ladenburg Thalmann & Co. Inc. to assist us in capital-raising activities. Promptly following the date of this proxy statement, the Company currently intends to file a registration statement with the Securities and Exchange Commission under the Securities Act of 1933, as amended, for the offer and sale of securities to the public. The Company currently contemplates that the securities may consist of a new class of convertible preferred stock and warrants to purchase shares of Common Stock, although the terms of any such class of convertible preferred stock and warrants have not yet been defined. Depending upon market conditions and other factors, the Company may or may not proceed with any such offer and sale of securities. If it does proceed with such offer and sale of securities, and if Proposal No. 3 is approved by our stockholders, the additional authorized shares of Common Stock would be available for such offer and sale of securities. Further, if Proposal No. 4 is approved by our stockholders, and our Board of Directors determines to effectuate the reverse stock split prior to the implementation of an amendment to our Articles of Organization to increase the number of our authorized shares of Common Stock, we will not implement such amendment to our Articles of Organization, despite having stockholder approval to do so.

The additional shares of Common Stock to be authorized will have rights identical to our currently outstanding Common Stock. The proposed amendment will not affect the par value of the Common Stock, which will remain at \$0.01 per share. Under our Articles of Organization, our stockholders do not have preemptive rights to subscribe to additional securities that we may issue; in other words, current holders of Common Stock do not have a prior right to purchase any new issue of our capital stock to maintain their proportionate ownership of Common Stock. If we issue additional shares of Common Stock or other securities convertible into Common Stock in the future, it will dilute the voting rights of existing holders of Common Stock and will also dilute earnings per share and book value per share.

#### Anti-Takeover Effects

The proposed amendment to our Articles of Organization to increase the number of our authorized shares of Common Stock could, under certain circumstances, have an anti-takeover effect, although this is not the intent of the Board of Directors. For example, it may be possible for the Board of Directors to delay or impede a takeover or transfer of control of the Company by causing such additional authorized shares to be issued to holders who might side with the Board of Directors in opposing a takeover bid that the Board of Directors determines is not in the best interests of the Company and its stockholders. The amendment to our Articles of Organization therefore may have the effect of discouraging unsolicited takeover attempts. By potentially discouraging initiation of any such unsolicited takeover attempt, the proposed amendment may limit the opportunity for our stockholders to dispose of their shares at the higher price generally available in takeover attempts or that may be available under a merger proposal. The proposed amendment may have the effect of permitting our current management, including the current Board of Directors, to retain its position, and place it in a better position to resist changes that stockholders may wish to make if they are dissatisfied with the conduct of the Company's business. The Board of Directors, however, is not aware of any attempt to take control of the Company and the Board of Directors has not presented this proposal with the intent that it be utilized as a type of anti-takeover device. There are other provisions currently in the Company's Articles of Organization, Bylaws, Shareholders Rights Plan and Massachusetts law which could have an anti-takeover effect. A summary of these provisions is set forth below

*Massachusetts Law*

*Control Share Acquisition Law.* Under Chapter 110D of the Massachusetts General Laws governing "control share acquisitions," any stockholder of certain publicly-held Massachusetts corporations who acquires certain ranges of voting power — one-fifth or more but less than one-third of all voting power, one-third or more but less than a majority of all voting power, or a majority or more of all voting power — may not (except in certain transactions) vote such stock unless the stockholders (excluding the shares held by the interested stockholders) of the corporation so authorize. As permitted by Chapter 110D, our Bylaws include a provision which excludes the Company from the applicability of that statute.

*Business Combination Statute.* Chapter 110F of the Massachusetts General Laws, entitled “Business Combinations with Interested Shareholders,” applies to publicly-held Massachusetts corporations with 200 or more stockholders of record. Generally, this statute prohibits such Massachusetts corporations from engaging in a “business combination” with an “interested shareholder” for a period of three years following the date of the transaction in which the person becomes an interested shareholder unless (a) the interested shareholder obtains the approval of the corporation’s Board of Directors prior to becoming an interested shareholder; (b) the interested shareholder acquires at least 90% of the voting stock of the corporation (excluding shares held by certain affiliates of the corporation) outstanding at the time he becomes an interested shareholder; or (c) the business combination is

both approved by the Board of Directors and authorized at an annual or special meeting of stockholders by the holders of at least two-thirds of the outstanding voting stock of the corporation (excluding shares held by the interested shareholder). An “interested shareholder” is a person who, together with affiliates and associates, owns (or at any time within the prior three years did own) 5% or more of the outstanding voting stock of the corporation. A “business combination” includes, among other transactions, a merger, stock or asset sale and other transactions resulting in a financial benefit to the stockholder. Our Articles of Organization and Bylaws do not expressly provide for opting out of the provisions of Chapter 110F. As a result, the application of this statute to the Company could discourage or make it more difficult for any person or group of persons to attempt to obtain control over the Company. We may at any time amend our Articles of Organization or Bylaws to elect not to be governed by Chapter 110F, by a vote of the holders of a majority of our outstanding Common Stock, but such an amendment would not be effective for twelve months and would not apply to a business combination with any person who became an interested shareholder prior to the date of the amendment.

#### *Certain Provisions of the Company’s Articles of Organization, Bylaws and Shareholder Rights Plan*

Our Articles of Organization include several provisions which may render more difficult an unfriendly tender offer, proxy contest, merger or other change in control of our ownership.

*Preferred Stock.* Our Articles of Organization permit our Board of Directors to issue preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof, without further vote or action by the stockholders. The issuance of preferred stock may have the effect of delaying, deferring or preventing a change in control of the Company and may adversely affect the voting and other rights of the holders of our Common Stock.

*Classification of Board of Directors.* Our Articles of Organization provide for the classification of our Board of Directors into three classes, with the classes being elected for staggered three-year terms. At each annual meeting of stockholders, directors will be elected to succeed those in the class whose term then expires, and each elected director shall serve for a term expiring at the third succeeding annual meeting of stockholders after such director’s election, and until the director’s successor is elected and qualified. Thus, directors stand for election only once in three years. This provision also restricts the ability of stockholders to enlarge the Board of Directors. Changes in the number of directors may be effected by a vote of a majority of the Continuing Directors (as defined in our Articles of Organization) or by the stockholders by vote of at least 80% of our outstanding Common Stock, voting as a single class. Under this provision, directors may only be removed with or without cause by the affirmative vote of the holders at least 80% of the combined voting power of the outstanding shares of our Common Stock, voting together as a single class, or upon the vote of a majority of the Continuing Directors.

*Fair Price Provision.* Our Articles of Organization contain a “Fair Price Provision” that is intended to protect stockholders who do not tender their shares in a takeover bid by guaranteeing them a minimum price for their shares in any subsequent attempt to purchase such remaining shares at a price lower than the acquiror’s original acquisition price. The Fair Price Provision requires the affirmative vote of the holders of at least 80% of our outstanding Common Stock for certain business combinations with a Related Person (as defined in our Articles of Organization), unless specified price criteria and procedural requirements are met or the business combination is approved by a majority of the Continuing Directors. A Related Person includes a person who, together with affiliates and associates beneficially owns more than 5% of the Company’s outstanding Common Stock.

*Shareholder Rights Plan.* Under our Rights Agreements, each outstanding share of Common Stock has attached to it one purchase right which entitles its holder to purchase from the Company one one-thousandth of a share of Series A Junior Participating Preferred Stock at a price subject to adjustment. This could prevent or delay a change in control of ownership of the Company.

*Indemnification Provision.* Our Articles of Organization provide that we may, either in our Bylaws or by contract, provide for the indemnification of our directors, officers, employees and agents, by whomever elected or appointed, to the fullest extent permitted by applicable law, as it may be amended from time to time.

#### *No Appraisal Rights*

Under the Massachusetts Business Corporation Act, stockholders will not be entitled to appraisal rights with respect to the proposed amendment to our Articles of Organization to increase the number of our authorized shares of Common Stock, and we do not intend to independently provide stockholders with any such right.

#### **Vote Required**

The affirmative vote of the holders of a majority of the shares of the Company’s Common Stock issued and outstanding and entitled to vote is required to approve the amendment of our Articles of Organization to increase the number of authorized shares of Common Stock from 20 million to 50 million.

#### **Board Recommendation**

The Board of Directors unanimously recommends that stockholders vote “FOR” Proposal No. 3, the approval of the amendment to our Articles of Organization to increase the number of our authorized shares of Common Stock from 20 million to 50 million.

**THE BOARD OF DIRECTORS RECOMMENDS A VOTE “FOR” PROPOSAL NO. 3.**

## PROPOSAL NO. 4

### APPROVAL OF AMENDMENT TO THE COMPANY'S ARTICLES OF ORGANIZATION TO EFFECT A REVERSE STOCK SPLIT

#### Introduction

Our Board of Directors is recommending that our stockholders approve an amendment to our Articles of Organization to effect a reverse stock split of the Company's outstanding shares of Common Stock at a ratio within a range of 1:2 to 1:4. If this proposal is approved, our Board of Directors or a committee thereof will have the authority and discretion to decide, within twelve months from the Meeting, whether to implement the split and the exact amount of the split within this range, if it is to be implemented. If our Board of Directors decides to implement the split, it will become effective upon the filing of an amendment to our Articles of Organization with the Secretary of the Commonwealth of the Commonwealth of Massachusetts (the "Effective Date"). If the reverse stock split is implemented, the number of issued and outstanding shares of Common Stock would be reduced in accordance with the exchange ratio selected by the Board of Directors or committee thereof. The total number of authorized shares of Common Stock would remain unchanged at its current total of 20,000,000, unless we have previously implemented Articles of Amendment to effectuate an increase in the number of our authorized shares of Common Stock pursuant to Proposal No. 3 (assuming stockholder approval of Proposal No. 3), in which case, we would reduce the authorized Common Stock by the split ratio. The form of amendment to our Articles of Organization to effect the reverse stock split is attached as *Annex A* to this proxy statement.

#### Purpose and Background of the Reverse Stock Split

The primary objective in proposing the reverse stock split is to raise the per share trading price of our Common Stock. In addition, if the amendment to increase the number of our authorized shares of Common Stock pursuant to Proposal No. 3 has not previously been implemented, the reverse split would also have the effect of increasing the number of shares of Common Stock available for future issuance, as described below. Our Board of Directors believes that the reverse stock split would, among other things, (i) better enable us to maintain the listing of our Common Stock on the Nasdaq Capital Market, and (ii) better enable us to raise funds to finance our operations. As described in Proposal No. 3, our Board of Directors would prefer not to implement the reverse stock split unless it is necessary to maintain the Company's listing on the Nasdaq Capital Market, such as to increase the minimum bid price for our Common Stock. However, our Board of Directors believes it is necessary to retain discretion whether to implement, and if implemented, the exact ratio of the reverse split within the range of 1:2 to 1:4 as the Board of Directors deems it to be in the best interests of the Company.

Our Common Stock is currently listed on the Nasdaq Capital Market. On October 4, 2011, we received written notification from the Listing Qualifications Department of the Nasdaq Stock Market LLC stating that our Common Stock is subject to delisting from the Nasdaq Capital Market, pending our opportunity to request a hearing before a Nasdaq Listing Qualifications Panel. We had previously received letters from Nasdaq on April 13, 2011, advising us that our stockholders' equity for the year ended December 31, 2010 had fallen below the minimum requirement for continued inclusion on the Nasdaq Capital Market and on August 15, 2011, advising us that, for the previous 30 consecutive business days, the bid price of our Common Stock had closed below the minimum \$1.00 bid price requirement for continued inclusion on the Nasdaq Capital Market. On November 17, 2011, we had a hearing before the Nasdaq Listing Qualifications Panel, and discussed our plans to regain compliance with the Nasdaq continued listing standards, including the minimum bid price requirement. Our shares of Common Stock will continue to be listed on the Nasdaq Capital Market until a decision is rendered by the Nasdaq Listing Qualifications Panel.

If Nasdaq does not accept our plan to bring us into compliance with the stockholders' equity listing standard and to maintain the minimum bid price requirement for continued inclusion on the Nasdaq Capital Market or if we fail to comply with any other listing standards applicable to issuers listed on the Nasdaq Capital Market, our Common Stock will be delisted from the Nasdaq Capital Market. Upon delisting, our Common Stock would be

traded on the over-the-counter bulletin board, or OTC, or in the “pink sheets”. These alternative markets are generally considered to be less efficient than, and not as broad as, the Nasdaq Capital Market.

The closing sale price of our Common Stock on November 16, 2011 was \$0.75 per share. Our Board of Directors has considered the potential harm to the Company of a delisting from the Nasdaq Capital Market and believes that a reverse stock split would help us regain compliance with Nasdaq’s minimum bid price listing standard.

Furthermore, our Board of Directors believes that the reverse stock split could facilitate our efforts to raise capital to fund our operations. As previously disclosed in our periodic reports filed with the SEC, we will need to raise additional capital and may elect to do so through the issuance of equity securities. The reverse stock split would reduce the number of shares of Common Stock outstanding without reducing the total number of authorized shares of Common Stock, except as described below. As a result, we would have a larger number of authorized but unissued shares from which to issue additional shares of Common Stock, or securities convertible or exercisable into shares of Common Stock, in equity financing transactions. If, however, we have implemented Proposal No. 3 (assuming stockholder approval of Proposal No. 3) to increase the number of our authorized shares of Common Stock prior to effectuating the reverse split, we would also reduce the number our authorized shares of Common Stock by the split ratio.

We currently have no immediate intended uses for the additional shares that would be available for issuance following the reverse stock split. However, based on our current business plan, we will, by February 2012 require significant additional capital to fund our operations. Accordingly, we are actively considering several sources of capital and the issuance of additional equity or debt securities and, as described in Proposal No. 3, we recently engaged Ladenburg Thalmann & Co. Inc. to assist us in capital-raising activities. Promptly following the date of this proxy statement, the Company currently intends to file a registration statement with the Securities and Exchange Commission under the Securities Act of 1933, as amended, for the offer and sale of securities to the public. The Company currently contemplates that the securities may consist of a new class of convertible preferred stock and warrants to purchase shares of Common Stock, although the terms of any such class of convertible preferred stock and warrants have not yet been defined. Depending upon market conditions and other factors, the Company may or may not proceed with any such offer and sale of securities. Except for the foregoing, as of the date of this proxy statement, however, we have no such plans, agreements or understandings in place with respect to any of these potential sources of funds.

The purpose of seeking stockholder approval of a range of exchange ratios from 1:2 to 1:4 (rather than a fixed exchange ratio) is to provide us with the flexibility to achieve the desired results of the reverse stock split. If our stockholders approve this proposal, our Board of Directors or a committee thereof would effect a reverse stock split only upon the Board of Directors or committee’s determination that a reverse stock split would be in the best interests of the Company at that time. If our Board of Directors were to effect a reverse stock split, the Board of Directors would set the timing for such a split and select the specific ratio within the range of 1:2 to 1:4. No further action on the part of stockholders would be required to either implement or abandon the reverse stock split. If our stockholders approve the proposal, and the Board of Directors or a committee of the Board of Directors determines to effect the reverse stock split, we would communicate to the public, prior to the Effective Date, additional details regarding the reverse stock split, including the specific ratio selected by the Board or committee. If our Board of Directors or a committee thereof does not implement the reverse stock split within twelve months from the Meeting, the authority granted in this proposal to implement the reverse stock split will terminate. Our Board of Directors reserves its right to elect not to proceed with the reverse stock split if it determines, in its sole discretion, that this proposal is no longer in the best interests of the Company.

### **Material Effects of Proposed Reverse Stock Split**

Our Board of Directors believes that the reverse stock split will increase the price level of our Common Stock in order to, among other things, regain compliance with the Nasdaq Capital Market’s minimum bid price listing standard. The Board of Directors cannot predict, however, the effect of the reverse stock split upon the market price for the Common Stock, and the history of similar reverse stock splits for companies in like circumstances is varied. The market price per share of Common Stock after the reverse stock split may not rise in proportion to the reduction in the number of shares of Common Stock outstanding resulting from the reverse stock split, which would reduce the market capitalization of the Company. The market price per post-reverse stock split share may not remain in excess of the \$1.00 minimum bid price as required by the Nasdaq Capital Market, or we may not otherwise meet the additional requirements for continued listing on the Nasdaq Capital Market. The market price of the Common Stock may also be based on our performance and other factors, the effect of which our Board of Directors cannot predict.

The reverse stock split will affect all of our stockholders uniformly and will not affect any stockholder’s percentage ownership interests or proportionate voting power, except to the extent that the reverse stock split results in any of stockholders owning a fractional share. In lieu of issuing fractional shares, stockholders who otherwise would be entitled to receive fractional shares because they hold a number of shares not evenly divisible by the reverse stock split ratio will automatically be entitled to receive an additional fraction of a share of Common Stock to round up to the next whole share.

The principal effects of the reverse stock split will be that (i) the number of shares of Common Stock issued and outstanding will be reduced from 6,723,993 shares as of November 17, 2011 to a range of approximately 3,362,000 (1:2 reverse split ratio) to 1,681,000 (1:4 reverse split ratio) shares, depending on the exact split ratio chosen by our Board of Directors or a committee thereof, (ii) the conversion ratio for all outstanding shares of our issued and outstanding Preferred Stock will be adjusted such that the number of shares of Common Stock issuable upon the conversion of such Preferred Stock will be reduced to one-half to one-fourth of the number of shares of Common Stock that were issuable upon conversion of such Preferred Stock immediately before the Effective Date, (iii) all outstanding options and warrants entitling the holders thereof to purchase shares of Common Stock will enable such holders to purchase, upon exercise of their options or warrants, one-half to one-fourth of the number of shares of Common Stock which such holders would have been able to purchase upon exercise of their options or warrants immediately preceding the reverse stock split, at an exercise price equal to two to four times the exercise price specified before the reverse stock split, resulting in the same aggregate price being required to be paid upon exercise thereof immediately preceding the reverse stock split and (iv) the number of shares reserved for issuance pursuant to the 2005 Equity Incentive Plan of additional awards will be reduced to one-half to one-fourth of the number of shares currently included in each such plan.

The reverse stock split will not affect the par value of the Common Stock. As a result, on the Effective Date of the reverse stock split, the stated capital on the Company's balance sheet attributable to the Common Stock will be reduced to one-half to one-fourth of its present amount, depending on the exact amount of the split, and the additional paid-in capital account will be credited with the amount by which the stated capital is reduced. The per share net income or loss and net book value of the Common Stock will be retroactively increased for each period because there will be fewer shares of Common Stock outstanding.

The amendment will not change the terms of the Common Stock. After the reverse stock split, the shares of Common Stock will have the same voting rights and rights to dividends and distributions and will be identical in all other respects to the Common Stock now authorized. Each stockholder's percentage ownership of the new Common Stock will not be altered except for the effect of eliminating fractional shares. The Common Stock issued pursuant to the reverse stock split will remain fully paid and non-assessable. The reverse stock split is not intended as, and will not have the effect of, a "going private transaction" covered by Rule 13e-3 under the Exchange Act. Following the reverse stock split, we will continue to be subject to the periodic reporting requirements of the Exchange Act.

The reverse stock split will not change the number of issued and outstanding shares of our Series C Preferred Stock and Series D Preferred Stock (collectively, the "Preferred Stock") or the terms of the Preferred Stock, except that the conversion ratio for all issued and outstanding shares of the Preferred Stock will be adjusted upon the Effective Date, such that the number of shares of Common Stock issuable upon the conversion of the Preferred Stock will be reduced to one-half to one-fourth of the number of shares of Common Stock that were issuable upon conversion of the Preferred Stock immediately before the Effective Date.

Because we will not reduce the number of authorized shares of Common Stock (unless we have previously increased the number of our authorized shares of Common Stock pursuant to Proposal No.3, in which case, we will reduce the number of our authorized shares by the split ratio), the overall effect will be an increase in authorized but unissued shares of Common Stock as a result of the reverse stock split. These shares may be issued at the Board's discretion. Any future issuances will have the effect of diluting the percentage of stock ownership and voting rights of the present holders of Common Stock. If the reverse stock split is not approved, we may be unable to raise additional capital. If the reverse split does not reduce the number of our authorized shares of Common Stock, the effect of such increase in our authorized but unissued shares of Common Stock could be viewed, under certain circumstances, to have an anti-takeover effect, although this is not the intent of the Board of Directors. For a discussion of potential anti-takeover effects, please see the discussion under the heading "Anti-Takeover Effects" in Proposal No. 3.

The reverse stock split would result in some stockholders owning "odd-lots" of less than 100 shares of our Common Stock. Brokerage commissions and other costs of transactions in odd-lots are generally higher than the costs of transactions in "round-lots" of even multiples of 100 shares.

#### **Procedure for Effecting Reverse Stock Split and Exchange of Stock Certificates**

If the reverse stock split is approved by our stockholders, and our Board of Directors or a committee thereof determines it is in the best interests of the Company to effect the split, the reverse stock split would become effective at such time as the amendment to our Articles of Organization, the form of which is attached as *Annex A* to this proxy statement, is filed with the Secretary of the Commonwealth of the Commonwealth of Massachusetts. Upon the filing of the amendment, all of our existing Common Stock will be converted into new Common Stock as set forth in the amendment.

As soon as practicable after the Effective Date, stockholders will be notified that the reverse stock split has been effected. Computershare Trust Company, our transfer agent, will act as exchange agent for purposes of implementing the exchange of stock certificates. Holders of pre-reverse stock split shares will be asked to surrender to the exchange agent certificates representing pre-reverse stock split shares in exchange for certificates representing post-reverse stock split shares in accordance with the procedures to be set forth in a letter of transmittal that will be delivered to the Company's stockholders. No new certificates will be issued to a stockholder until the stockholder has surrendered to the exchange agent his, her or its outstanding certificate(s) together with the properly completed and executed letter of transmittal. STOCKHOLDERS SHOULD NOT DESTROY ANY STOCK CERTIFICATES AND SHOULD NOT SUBMIT ANY CERTIFICATES UNTIL REQUESTED TO DO SO. Stockholders whose shares are held by their broker or representative do not need to submit old share certificates for exchange. These shares will automatically reflect the new quantity of shares based on the reverse stock split. Beginning on the Effective Date, each certificate representing pre-reverse stock split shares will be deemed for all corporate purposes to evidence ownership of post-reverse stock split shares.

#### **Fractional Shares**

The Company will not issue fractional certificates for post-reverse stock split shares in connection with the reverse stock split. In lieu of issuing fractional shares, stockholders who otherwise would be entitled to receive fractional shares because they hold a number of shares not evenly divisible by the reverse stock split ratio will automatically be entitled to receive an additional fraction of a share of Common Stock to round up to the next whole share.

#### **Criteria to be Used for Decision to Apply the Reverse Stock Split**

If the stockholders approve the reverse stock split, our Board of Directors or a committee thereof will be authorized to proceed with the reverse stock split. In determining whether to proceed with the reverse stock split and setting the exact amount of split, if any, our Board of Directors or committee thereof will consider a number of factors, including market conditions, existing and expected trading prices of our Common Stock, the Nasdaq Capital Market listing requirements, our funding requirements and the amount of our authorized but unissued Common Stock.

#### **No Appraisal Rights**

Under the Massachusetts Business Corporation Act, stockholders will not be entitled to appraisal rights with respect to the proposed amendment to our Articles of Organization to effect the reverse stock split, and we do not intend to independently provide stockholders with



any such right.

### **Certain U.S. Federal Income Tax Consequences of the Reverse Stock Split**

The following summary describes certain material U.S. federal income tax consequences of the reverse stock split to holders of our Common Stock.

Unless otherwise specifically indicated herein, this summary addresses the tax consequences only to a beneficial owner of our Common Stock that is a citizen or individual resident of the United States, a corporation organized in or under the laws of the United States or any state thereof or the District of Columbia or otherwise subject to U.S. federal income taxation on a net income basis in respect of our Common Stock (a “U.S. holder”). This summary does not address all of the tax consequences that may be relevant to any particular investor, including tax considerations that arise from rules of general application to all taxpayers or to certain classes of taxpayers or that are generally assumed to be known by investors. This summary also does not address the tax consequences to (i) persons that may be subject to special treatment under U.S. federal income tax law, such as banks, insurance companies, thrift institutions, regulated investment companies, real estate investment trusts, tax-exempt organizations, U.S. expatriates, persons subject to the alternative minimum tax, traders in securities that elect to mark to market and dealers in securities or currencies, (ii) persons that hold our Common Stock as part of a position in a “straddle” or as part of a “hedging,” “conversion” or other integrated investment transaction for federal income tax purposes, or (iii) persons that do not hold our Common Stock as “capital assets” (generally, property held for investment).

This summary is based on the provisions of the Internal Revenue Code of 1986, as amended, U.S. Treasury regulations, administrative rulings and judicial authority, all as in effect as of the date of this proxy statement. Subsequent developments in U.S. federal income tax law, including changes in law or differing interpretations, which may be applied retroactively, could have a material effect on the U.S. federal income tax consequences of the reverse stock split.

If a partnership (or other entity classified as a partnership for U.S. federal income tax purposes) is the beneficial owner of our Common Stock, the U.S. federal income tax treatment of a partner in the partnership will generally depend on the status of the partner and the activities of the partnership. Partnerships that hold our Common Stock, and partners in such partnerships, should consult their own tax advisors regarding the U.S. federal income tax consequences of the reverse stock split.

#### ***U.S. Holders***

The reverse stock split should be treated as a recapitalization for U.S. federal income tax purposes. Therefore, no gain or loss will be recognized upon the reverse stock split. Accordingly, the aggregate tax basis in the Common Stock received pursuant to the reverse stock split should equal the aggregate tax basis in the Common Stock surrendered, and the holding period for the Common Stock received should include the holding period for the Common Stock surrendered.

#### ***Non-U.S. Holders***

The discussion in this section is addressed to “non-U.S. holders.” A non-U.S. holder includes a beneficial owner of our Common Stock that is a foreign corporation or who is a non-resident alien individual. Generally, non-U.S. holders will not recognize any gain or loss upon the reverse stock split.

**Each stockholder should consult his, her or its own tax advisers concerning the particular U.S. federal tax consequences of the reverse stock split, as well as the consequences arising under the laws of any other taxing jurisdiction, including any state, local or foreign income tax consequences.**

**To ensure compliance with Treasury Department Circular 230, each holder of Common Stock is hereby notified that: (a) any discussion of U.S. federal tax issues in this proxy statement is not intended or written to be used, and cannot be used, by such holder for the purpose of avoiding penalties that may be imposed on such holder under the Internal Revenue Code of 1986, as amended; (b) any such discussion has been included by the Company in furtherance of the reverse stock split on the terms described herein; and (c) each such holder should seek advice based on its particular circumstances from an independent tax advisor.**

Vote Required

The affirmative vote of the holders of a majority of the shares of the Company’s Common Stock issued and outstanding and entitled to vote is required to approve the amendment of our Articles of Organization to effect a reverse stock split of the Common Stock in the range of 1:2 to 1:4.

#### **Board Recommendation**

The Board of Directors unanimously recommends that stockholders vote “FOR” Proposal No. 4, the approval of the amendment to our Articles of Organization to effect a reverse stock split.

**THE BOARD OF DIRECTORS RECOMMENDS A VOTE “FOR” PROPOSAL NO. 4.**

**PROPOSAL NO. 5**

**RATIFICATION OF THE APPOINTMENT OF THE  
INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

You are being asked to ratify the Board of Directors' appointment of Marcum LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2011. Marcum LLP, and its predecessor UHY LLP, has served as the Company's independent registered public accounting firm since September 14, 2006. A representative of Marcum LLP is expected to attend the Meeting and will have an opportunity to make a statement and respond to appropriate questions. Refer to the Audit Committee Report and the information under the heading "Independent Registered Public Accounting Firm" in this proxy statement for information regarding services performed by, and fees paid to, Marcum LLP during the years 2009 and 2010.

Our Bylaws do not require that our stockholders ratify the appointment of Marcum LLP as our independent registered public accounting firm. However, we are submitting the proposal for ratification as a matter of good corporate governance. If our stockholders do not ratify the appointment, the Audit Committee will reconsider whether or not to retain Marcum LLP. Even if the appointment is ratified, the Audit Committee, at its discretion, may change the appointment at any time during the year if the Audit Committee determines that such a change would be in the best interests of the Company and its stockholders.

**Vote Required**

The affirmative vote of the holders of a majority of the votes cast at the Meeting is required for the approval of Proposal No. 5.

**Board Recommendation**

The Board of Directors unanimously recommends that stockholders vote "FOR" Proposal No. 5, the ratification of the appointment of the independent registered public accounting firm.

**THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" PROPOSAL NO. 5.**

## **PROPOSAL NO. 6**

### **THE ADJOURNMENT PROPOSAL**

The Meeting may be adjourned to another time or place, if necessary or appropriate, to solicit additional proxies if there are not sufficient votes at the time of the Meeting to approve any of Proposal Nos. 1 through 4. The Meeting may be adjourned from time to time to a date that is not more than 120 days after the original record date for the Meeting.

If, at the Meeting, the number of shares of Common Stock present or represented and voting in favor of the approval of any of Proposal Nos. 1 through 4 is not sufficient to approve that proposal, we currently intend to move to adjourn the Meeting in order to enable our Board of Directors to solicit additional proxies for the approval of any of Proposal Nos. 1 through 4. In that event, we will ask our stockholders to vote only upon the adjournment proposal, and not upon any of Proposal Nos. 1 through 4.

In this proposal, we are asking our stockholders to authorize the holder of any proxy solicited by our Board of Directors to vote in favor of granting discretionary authority to the proxy holders, and each of them individually, to adjourn the Meeting to another time and place for the purpose of soliciting additional proxies. If the stockholders approve the adjournment proposal, we could adjourn the Meeting and any adjourned session of the Meeting and use the additional time to solicit additional proxies, including the solicitation of proxies from stockholders who have previously voted.

#### **Vote Required for Approval**

If the proposal to adjourn the Meeting for the purpose of soliciting additional proxies is submitted to the stockholders for approval, such proposal will be approved by the affirmative vote of a majority of the votes cast at the Meeting.

#### **Recommendation of the Board**

The Board of Directors unanimously recommends that stockholders vote "FOR" Proposal No. 6, as to the adjournment of the Meeting if necessary or appropriate to solicit additional proxies in favor of the approval of any of Proposal Nos. 1 through 4.

**THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" PROPOSAL NO. 6.**

## OTHER MATTERS

### Transactions with Related Persons

In June 2010, the Board of Directors extended the engagement of Mr. Wayne Fritzsche, the Company's Chairman, as an investor relations consultant to the Company, with an increase of annual cash compensation to \$110,000. In connection with this engagement, Mr. Fritzsche has not been on the Company's Audit Committee since April 1, 2009.

On November 18, 2009, pursuant to the terms of a Securities Purchase Agreement entered into as of November 18, 2009, the Company sold an aggregate of 62,039 units (the "Series B Units") for a purchase price of \$18.80 per unit, resulting in gross proceeds of \$1,166,333. This was the first tranche of a private placement (the "Series B Private Placement"). We closed the second tranche of the Series B Private Placement on March 18, 2010 with the sale of an additional 26,672 Series B Units with gross proceeds of \$501,434. Each Series B Unit consisted of (i) one share of Series B Convertible Preferred Stock convertible into 10 shares of our Common Stock and (ii) a warrant to purchase one share of Series B Convertible Preferred Stock at an exercise price equal to \$23.80 per share for the warrants issued in November 18, 2009 and at an exercise price equal to \$28.80 per share for the warrants issued in March 2010, in each case with a term originally expiring on August 11, 2011 ("Series B Warrant"). The Series B Warrants have since been amended as to the exercise price and the securities for which they are exercisable. Mr. Gregory G. Freitag, one of the Company's directors participated in the Series B Private Placement on the same terms as the other investors. Mr. Freitag received 2,664 Series B Units for a purchase price of \$50,083.20.

On April 8, 2011 and April 12, 2011, we completed the first tranche of a private placement, pursuant to which we sold an aggregate of 55,048 units for a purchase price of \$15.00 per unit, resulting in gross proceeds to us of \$825,720 (the "Series C Private Placement"). This was the first tranche of the Series C Private Placement. In connection with the second tranche, the purchase price was reduced to \$12.50 per unit and we issued an additional 11,011 units to the purchasers who participated in the first tranche, without any additional gross proceeds to us. The second tranche closed on June 20, 2011 for the sale of 22,039 units for a purchase price of \$12.50 per unit with gross proceeds of \$275,485. Each unit consisted of (i) one share of Series C Preferred Stock convertible into 10 shares of our Common Stock (subject to adjustment for stock splits, stock dividends, recapitalization, etc.) and (ii) a three-year warrant to purchase 10 shares of our Common Stock at a per share exercise price equal to the sum of (a) the Common Stock equivalent of the Series C Purchase Price (b) plus \$0.88 (the "Series C Warrant"). The Series C Warrants have since been amended as to the exercise price. Mr. Richard T. Schumacher, the Company's Chief Executive Officer, participated in the Series C Private Placement on the same terms as the other investors. Mr. Schumacher received 6,021 Series C Units for a purchase price of \$75,262.50.

On September 7, 2011, the Company received a loan in the amount of \$100,000 from the Company's Chief Executive Officer, Richard T. Schumacher. The loan was made pursuant to a Promissory Note (the "Note") with a maturity date of March 7, 2012, which may be extended with mutual consent of the parties. The interest rate under the Note is 20% per annum. The Note may be repaid, at the election of the holder (i) in cash, (ii) by conversion into that number of securities issued in the next financing completed by the Company having an aggregate purchase price equal to the then outstanding principal amount of the Note, together with any accrued and unpaid interest due at the time of conversion or (iii) conversion into shares of Common Stock of the Company at a conversion price of \$1.00 per share. In connection with the loan, the Company issued warrants to Mr. Schumacher to purchase 12,048 shares of the Company's Common Stock, at an exercise price of \$0.83 per share, and warrants to purchase 105,882 shares of the Company's Common Stock, at an exercise price of \$0.85 per share, both sets of warrants are exercisable on or after March 07, 2012 and expire on September 7, 2014.

### Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires the Company's executive officers and directors, and persons who own more than 10% of the Company's Common Stock, to file reports of ownership and changes in ownership on Forms 3, 4 and 5 with the SEC.

Based solely on the Company's review of the copies of such Forms and written representations from certain reporting persons, the Company believes that all filings required to be made by the Company's Section 16(a) reporting persons during the Company's fiscal year ended December 31, 2010 were made on a timely basis, except as follows: Each of Messrs. Payne, Potter, Lawrence, Lazarev, Schumacher and Ting did not timely file one Form 4 with respect to one transaction. Each of Messrs. Fritzsche and Rosenson did not timely file two Form 4s with respect to two transactions.

#### **Other Proposed Action**

The Board of Directors knows of no matters which may come before the Meeting other than the matters described in this proxy statement. However, if any other matters should properly be presented to the Meeting, the persons named as proxies shall have discretionary authority to vote the shares represented by the accompanying proxy in accordance with their own judgment.

#### **Stockholder Proposals**

Proposals which stockholders intend to present at the Company's 2012 Annual Meeting of Stockholders ("2012 Annual Meeting") and wish to have included in the Company's proxy materials pursuant to Rule 14a-8 promulgated under the Exchange Act, must be received by the Company no later than September 1, 2012 (assuming the meeting is held on December 29, 2012). If the date of next year's annual meeting is moved by more than 30 days before or after the anniversary date of this year's annual meeting, then the deadline for inclusion of a stockholder proposal in the Company's proxy materials is instead a reasonable time before the Company begins to print and send its proxy materials for that meeting.

Stockholders who wish to make a proposal at the Company's 2012 Annual Meeting, other than one that will be included in the Company's proxy materials, should notify the Company no later than November 15, 2012 (assuming the meeting is held on December 29, 2012), unless the date of next year's annual meeting is moved by more than 30 days before or after the anniversary date of this year's annual meeting, in which case the notice must be received a reasonable time before the Company sends its proxy materials for that meeting. If a proponent who wishes to present such a proposal at the 2012 Annual Meeting fails to notify the Company by the proper date, the proxies solicited by the Board of Directors, with respect to such 2012 Annual Meeting, may grant discretionary authority to the proxies named therein, to vote with respect to such matter if such matter is properly brought before the 2012 Annual Meeting. If a stockholder makes a timely notification, the proxies may still exercise discretionary authority under circumstances consistent with the proxy rules of the SEC.

Stockholders may make recommendations to the Nominating Committee of candidates for its consideration as nominees for director at the 2012 Annual Meeting by submitting the name, qualifications, experience, and background of such person, together with a statement signed by the nominee in which he or she consents to act as such, to the Nominating Committee, c/o Clerk, Pressure BioSciences, Inc., 14 Norfolk Avenue, South Easton, MA 02375. Generally, under the Company's Bylaws, notice of such recommendations must be submitted in writing not later than 90 days prior to the anniversary date of the immediately preceding annual meeting or special meeting in lieu thereof and must contain specified information and conform to certain requirements set forth in the Company's Bylaws. The Company will accept from stockholders recommendations for nominees for director to be considered in connection with the 2012 Annual Meeting no later than October 1, 2012 (assuming the meeting is held on December 29, 2012). In addition, any persons recommended should at a minimum meet the criteria and qualifications referred to in the Nominating Committee's charter, a copy of which may be obtained from the Company by written request sent to its principal executive offices. The Nominating Committee may refuse to acknowledge the nomination of any person not made in compliance with the procedures set forth herein or in the Company's Bylaws.

#### **Incorporation by Reference**

To the extent that this Proxy Statement has been or will be specifically incorporated by reference into any filing by the Company under the Securities Act of 1933, as amended, or the Exchange Act, the section of the Proxy Statement entitled "Audit Committee Report" shall not be deemed to be so incorporated, unless specifically otherwise provided in any such filing.

Annual Report on Form 10-K

Additional copies of the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2010, as amended, and as filed with the SEC, are available to stockholders without charge upon written request addressed to Clerk, Pressure BioSciences, Inc., 14 Norfolk Avenue, South Easton, MA 02375.

**Annex A**

**Form of Amendment to**

**Article IV of Articles of Organization**

**to Effect Reverse Stock Split**

That, the Corporation's Restated Articles of Organization, as amended, be further amended by inserting the following in Article IV:

Upon the filing (the "Effective Time") of these Articles of Amendment with the Secretary of the Commonwealth of the Commonwealth of Massachusetts pursuant to the Massachusetts Business Corporation Act, each \_\_\_\_\_ (\_\_\_\_\_) shares of the Corporation's common stock, \$.01 par value per share, issued and outstanding immediately prior to the Effective Time (the "Old Common Stock") shall automatically without further action on the part of the Corporation or any holder of Old Common Stock, be reclassified, combined, converted and changed into one (1) fully paid and nonassessable share of common stock, \$.01 par value per share (the "New Common Stock"), subject to the treatment of fractional share interests as described below (the "Reverse Stock Split"). The conversion of the Old Common Stock into New Common Stock will be deemed to occur at the Effective Time. From and after the Effective Time, certificates representing the Old Common Stock shall represent the number of shares of New Common Stock into which such Old Common Stock shall have been converted pursuant to these Articles of Amendment. No certificates representing fractional shares of New Common Stock will be issued in connection with the Reverse Stock Split. Holders who otherwise would be entitled to receive fractional share interests of New Common Stock because they hold a number of shares not evenly divisible by the Reverse Stock Split ratio will automatically be entitled to receive an additional fraction of a share of New Common Stock to round up to the next whole share of New Common Stock in lieu of any fractional share created as a result of such Reverse Stock Split.

**PROXY**

**PRESSURE BIOSCIENCES, INC.**

The undersigned hereby appoints Richard T. Schumacher and Joseph Damasio, acting singly, with full power of substitution, attorneys and proxies to represent the undersigned at the Special Meeting in Lieu of Annual Meeting of Stockholders of Pressure BioSciences, Inc. to be held on December 29, 2011 and at any adjournment(s) or postponement(s) thereof, with all power which the undersigned would possess if personally present, and to vote all shares of stock which the undersigned may be entitled to vote at said meeting upon the matters set forth in the Notice of and Proxy Statement for the Meeting in accordance with the following instructions and with discretionary authority upon such other matters as may come before the Meeting. All previous proxies are hereby revoked.

**THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS. IT WILL BE VOTED AS DIRECTED BY THE UNDERSIGNED AND IF NO DIRECTION IS INDICATED, IT WILL BE VOTED FOR THE ELECTION OF THE NOMINEES AS DIRECTOR AND FOR EACH OF PROPOSAL NOS. 2 -6, AS MORE SPECIFICALLY DESCRIBED IN THE PROXY STATEMENT.**

(IMPORTANT - TO BE SIGNED AND DATED ON THE REVERSE SIDE)



Please indicate your vote below, as in this example.

The Board of Directors recommends a vote FOR the election of the nominees as directors, and FOR each of Proposal No. 2 through 6.

1. To elect the following nominees as Class III Directors:

01 -	Richard T. Schumacher	For	Withhold	
		<input type="checkbox"/>	<input type="checkbox"/>	
02 -	Alan I. Goldberg	For	Withhold	
		<input type="checkbox"/>	<input type="checkbox"/>	
03 -	Gregory G. Freitag	For	Withhold	
		<input type="checkbox"/>	<input type="checkbox"/>	

2. To approve the issuance of units consisting of Series D Convertible Preferred Stock and warrants to purchase shares of our common stock, in accordance with applicable Nasdaq Listing Rules.

FOR  AGAINST  ABSTAIN

3. To approve an amendment to the Company's articles of organization to increase the number of authorized shares of common stock from 20,000,000 to 50,000,000, as described in the proxy statement.

FOR  AGAINST  ABSTAIN

4. To approve an amendment to the Company's articles of organization to effect a reverse stock split of the Company's common stock by a ratio of not less than one-for-two and not more than one-for-four at any time within twelve months following the Meeting, with the decision of whether or not to implement a reverse stock split and the exact ratio to be set at a whole number within this range to be made by the Company's Board of Directors in its sole discretion, as described in the proxy statement.

FOR  AGAINST  ABSTAIN

5. To ratify the appointment of Marcum LLP as the Company's independent registered public accounting firm for 2012.

FOR  AGAINST  ABSTAIN

6. To consider and vote on a proposal to approve the adjournment of the Meeting, if necessary or appropriate, to solicit additional proxies, in the event that there are not sufficient votes at the time of such adjournment to approve any of Proposal Nos. 1 through 4.

FOR  AGAINST  ABSTAIN

MARK HERE FOR ADDRESS CHANGE AND NOTE SUCH CHANGE AT LEFT

(Signatures should be the same as the name printed hereon. Executors, administrators, trustees, guardians, attorneys, and officers of corporations should add their titles when signing).

Signature: Title: Date:

Signature: Title: Date: