

Biostage, Inc.
Form PRER14A
April 12, 2016

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

**SCHEDULE 14A
(Rule 14a-101)**

**INFORMATION REQUIRED IN PROXY STATEMENT
SCHEDULE 14A INFORMATION
Proxy Statement Pursuant to Section 14(a) of the
Securities Exchange Act of 1934
(Amendment No.)**

Filed by the Registrant x
Filed by a Party other than the Registrant o
Check the appropriate box:

x Preliminary Proxy Statement
 o Confidential, For Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
 o Definitive Proxy Statement
 o Definitive Additional Materials
 o Soliciting Material Pursuant to §240.14a-12

Biostage, Inc.

Payment of Filing Fee (Check the appropriate box):

x No fee required.

Edgar Filing: Biostage, Inc. - Form PRER14A

o 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:

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

(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):

(4) Proposed maximum aggregate value of transaction:

(5) Total fee paid:

o 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:

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

(3) Filing Party:

(4) Date Filed:

TABLE OF CONTENTS

BIOSTAGE, INC.
(formerly Harvard Apparatus Regenerative
Technology, Inc.)
84 October Hill Road, Suite 11
Holliston, Massachusetts 01746-1371

April 22, 2016

Dear Stockholder:

You are cordially invited to attend the Annual Meeting of Stockholders of Biostage, Inc. (the Annual Meeting) to be held on Thursday, May 26, 2016 at 11:00 a.m. Eastern Time at the offices of Burns & Levinson LLP, 125 Summer Street, Boston, Massachusetts 02110. At the meeting, we will be voting on the matters described in this Proxy Statement.

We are mailing the Proxy Statement and the Company's Annual Report on Form 10-K for the year ended December 31, 2015 (referred to herein collectively as the Proxy Materials) to shareholders on or about April 22, 2016.

If you are unable to attend the meeting, it is still important that your shares be represented and voted. To assure your representation at the meeting, regardless of the number of shares you own, please cast your vote online, by telephone or by completing, dating and signing and promptly returning the enclosed proxy card in the enclosed postage-paid envelope. Any shareholder who attends the meeting may vote in person, even if he or she has voted through the Internet, by telephone or by mail.

The Annual Meeting has been called for the following purposes:

- (1) to elect two Class III Directors, nominated by the Board of Directors, for a three-year term, such term to continue until the annual meeting of stockholders in 2019 or until such Directors' successors are duly elected and qualified or until their earlier resignation or removal;
- (2) to ratify the appointment of KPMG LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2016;
- (3) to approve the amendment of our Amended and Restated Certificate of Incorporation to increase the number of authorized shares of common stock to 60,000,000;
- (4) to approve the amendment of our Amended and Restated Certificate of Incorporation to increase the number of authorized shares of preferred stock to 4,000,000;
- (5) to approve the amendment of our 2013 Equity Incentive Plan (the 2013 Plan) to (i) increase the number of shares of our common stock available for issuance pursuant to the 2013 Plan by 2,000,000 shares, (ii) remove the evergreen provision from the 2013 Plan that increased the number of shares available for issuance under the 2013 Plan each year by a specified amount; and (iii) remove a provision from the 2013 Plan that gives our Board of Directors authority to increase the maximum number of shares available for issuance under the 2013 Plan in connection with

certain adjustment awards; and

(6) to consider and vote upon such other business as may properly come before the Annual Meeting and any adjournments or postponements thereof.

Our Board of Directors recommends that you vote FOR the election of the nominees of the Board of Directors as Directors of Biostage, Inc., FOR the proposal to ratify the appointment of KPMG LLP as our independent registered public accounting firm, FOR the proposal to approve the amendment of our Amended and Restated Certificate of Incorporation to increase the number of authorized shares of common stock to 60,000,000, FOR the proposal to approve the amendment of our Amended and Restated Certificate of Incorporation to increase the number of authorized shares of preferred stock to 4,000,000 and FOR the proposal to approve the amendment of the 2013 Plan.

The Board of Directors has fixed the close of business on April 5, 2016 as the record date for determination of stockholders entitled to notice of, and to vote at, the Annual Meeting and any adjournments or postponements thereof.

TABLE OF CONTENTS

YOUR VOTE IS IMPORTANT. WHETHER OR NOT YOU PLAN TO ATTEND THE ANNUAL MEETING, PLEASE CAST YOUR VOTE ONLINE, BY TELEPHONE OR BY COMPLETING, DATING, SIGNING AND PROMPTLY RETURNING THE ENCLOSED PROXY CARD OR VOTING INSTRUCTIONS CARD IN THE ENCLOSED POSTAGE-PAID ENVELOPE AS PROMPTLY AS POSSIBLE SO THAT YOUR SHARES ARE REPRESENTED AT THE ANNUAL MEETING. INSTRUCTIONS REGARDING THE METHODS OF VOTING ARE CONTAINED IN THE PROXY MATERIALS.

Sincerely,

James McGorry
President and Chief Executive Officer

TABLE OF CONTENTS

BIOSTAGE, INC.
84 October Hill Road, Suite 11
Holliston, Massachusetts 01746-1371
(774) 233-7300

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS
To Be Held on May 26, 2016

NOTICE IS HEREBY GIVEN that the Annual Meeting of Stockholders of Biostage, Inc. (the Company) will be held on Thursday, May 26, 2016, at 11:00 a.m. Eastern Time at the offices of Burns & Levinson LLP, 125 Summer Street, Boston, Massachusetts 02110 for the following purposes:

1. The election of the Director Nominees as Class III Directors, nominated by the Board of Directors, for a three-year term, such term to continue until the annual meeting of stockholders in 2019 or until such Directors' successors are duly elected and qualified or until their earlier resignation or removal;
2. The ratification of the appointment of KPMG LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2016;
3. To approve the amendment of the Company's Amended and Restated Certificate of Incorporation to increase the number of authorized shares of common stock to 60,000,000;
4. To approve the amendment of the Company's Amended and Restated Certificate of Incorporation to increase the number of authorized shares of preferred stock to 4,000,000;
5. To approve the amendment of the Company's 2013 Equity Incentive Plan (the 2013 Plan) to (i) increase the number of shares of the Company's common stock available for issuance pursuant to the 2013 Plan by 2,000,000 shares, (ii) remove the evergreen provision from the 2013 Plan that increased the number of shares available for issuance under the 2013 Plan each year by a specified amount; and (iii) remove a provision from the 2013 Plan that gives the Company's Board of Directors authority to increase the maximum number of shares available for issuance under the 2013 Plan in connection with certain adjustment awards; and
6. Such other business as may properly come before the Annual Meeting and any adjournments or postponements thereof.

The Board of Directors has fixed the close of business on April 5, 2016 as the record date for determination of stockholders entitled to notice of, and to vote at, the Annual Meeting and any adjournments or postponements thereof. Only holders of record of our Common Stock at the close of business on that date will be entitled to notice of, and to vote at, the Annual Meeting and any adjournments or postponements thereof. Each of the items of business listed above is more fully described in the proxy statement that accompanies this notice.

Edgar Filing: Biostage, Inc. - Form PRER14A

In the event there are not sufficient shares to be voted in favor of any of the foregoing proposals at the time of the Annual Meeting, the Annual Meeting may be adjourned in order to permit further solicitation of proxies.

The Board of Directors of Biostage, Inc. recommends that you vote FOR the election of the nominees of the Board of Directors as Directors of Biostage, Inc., FOR the proposal to ratify the appointment of KPMG LLP as the Company's independent registered public accounting firm, FOR the proposal to approve the amendment of the Company's Amended and Restated Certificate of Incorporation to increase the number of authorized shares of common stock to 60,000,000, FOR the proposal to approve the amendment of the Company's Amended and Restated Certificate of Incorporation to increase the number of authorized shares of preferred stock to 4,000,000 and FOR the proposal to approve the amendment of the 2013 Plan.

TABLE OF CONTENTS

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting to be Held on Thursday, May 26, 2016: The Proxy Statement and 2015 Annual Report to Stockholders, which includes the Annual Report on Form 10-K for the year ended December 31, 2015, are available at www.proxyvote.com. The Annual Report, however, is not part of the proxy solicitation material.

By Order of the Board of Directors,

James McGorry
President and Chief Executive Officer
Holliston, Massachusetts
April 22, 2016

YOUR VOTE IS IMPORTANT. WHETHER OR NOT YOU PLAN TO ATTEND THE ANNUAL MEETING, PLEASE CAST YOUR VOTE ONLINE, BY TELEPHONE OR BY COMPLETING, DATING, SIGNING AND PROMPTLY RETURNING THE ENCLOSED PROXY CARD OR VOTING INSTRUCTIONS CARD IN THE ENCLOSED POSTAGE-PAID ENVELOPE AS PROMPTLY AS POSSIBLE SO THAT YOUR SHARES ARE REPRESENTED AT THE ANNUAL MEETING. NO POSTAGE IS REQUIRED IF MAILED WITHIN THE UNITED STATES.

TABLE OF CONTENTS

Biostage, Inc.

**Notice of 2016 Annual Meeting of Stockholders,
Proxy Statement and Other Information**

Contents

	Page
<u>Proxy Statement</u>	1
<u>Proposal 1: Election of Directors</u>	4
<u>Information Regarding Directors</u>	4
<u>Information Regarding the Board of Directors and its Committees</u>	7
<u>Code of Business Conduct and Ethics</u>	10
<u>Report of the Audit Committee</u>	11
<u>Executive Compensation</u>	12
<u>Summary Compensation Table</u>	12
<u>Director Compensation</u>	20
<u>Outstanding Equity Awards at Fiscal Year-End 2015</u>	21
<u>Security Ownership of Certain Beneficial Owners and Management</u>	23
<u>Equity Compensation Plan Information</u>	24
<u>Transactions With Related Persons</u>	24
<u>Section 16(a) Beneficial Ownership Reporting Compliance</u>	25
<u>Expenses of Solicitation</u>	25
<u>Submission of Stockholder Proposals for the 2017 Annual Meeting</u>	26
<u>Submission of Securityholder Recommendations for Director Candidates</u>	26
<u>Stockholder Communications with the Board of Directors</u>	27
<u>Independent Registered Public Accounting Firm</u>	27
<u>Proposal 2: Ratification of Appointment of Independent Registered Public Accounting Firm</u>	28
<u>Proposal 3: Approval of the Amendment of the Amended and Restated Certificate of Incorporation to Increase the Number of Authorized Common Shares</u>	29
<u>Proposal 4: Approval of the Amendment of the Amended and Restated Certificate of Incorporation to Increase the Number of Authorized Preferred Shares</u>	31
<u>Proposal 5: Approval of the Amendment of the 2013 Equity Incentive Plan</u>	33
<u>Multiple Stockholders Sharing the Same Address</u>	39
<u>Other Matters</u>	40
<u>Appendix A Biostage, Inc. 2013 Equity Incentive Plan, as amended</u>	A-1

TABLE OF CONTENTS

BIOSTAGE, INC.
84 October Hill Road, Suite 11
Holliston, Massachusetts 01746-1371
(774) 233-7300

PROXY STATEMENT

**Annual Meeting of Stockholders to Be Held on
Thursday, May 26, 2016**

This Proxy Statement is furnished in connection with the solicitation of proxies by the Board of Directors of Biostage, Inc. (the Company or we) for use at the Annual Meeting of Stockholders of the Company to be held on May 26, 2016, at 11:00 a.m. Eastern Time at the offices of Burns & Levinson LLP, 125 Summer Street, Boston, Massachusetts 02110, and any adjournments or postponements thereof. You may obtain directions to the Annual Meeting at www.proxyvote.com. At the Annual Meeting, the stockholders of the Company will be asked to consider and vote upon:

1. The election of the Director Nominees as Class III Directors, nominated by the Board of Directors (or the Board), for a three-year term, such term to continue until the annual meeting of stockholders in 2019 or until such Directors successors are duly elected and qualified or until their earlier resignation or removal;
2. The ratification of the appointment of KPMG LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2016;
3. To approve the amendment of the Company's Amended and Restated Certificate of Incorporation to increase the number of authorized shares of common stock to 60,000,000;
4. To approve the amendment of the Company's Amended and Restated Certificate of Incorporation to increase the number of authorized shares of preferred stock to 4,000,000;
5. To approve the amendment of the Company's 2013 Equity Incentive Plan (the 2013 Plan) to (i) increase the number of shares of the Company's common stock available for issuance pursuant to the 2013 Plan by 2,000,000 shares, (ii) remove the evergreen provision from the 2013 Plan that increased the number of shares available for issuance under the 2013 Plan each year by a specified amount; and (iii) remove a provision from the 2013 Plan that gives the Company's Board of Directors authority to increase the maximum number of shares available for issuance under the 2013 Plan in connection with certain adjustment awards; and
6. Such other business as may properly come before the Annual Meeting and any adjournments or postponements thereof.

The Notice of Annual Meeting, Proxy Statement and Proxy Card are first being mailed to stockholders of the Company on or about April 22, 2016, in connection with the solicitation of proxies for the Annual Meeting. The

Board of Directors has fixed the close of business on April 5, 2016 as the record date for the determination of stockholders entitled to notice of, and to vote at, the Annual Meeting (the Record Date). Only holders of record of Common Stock, par value \$.01 per share, of the Company (the Common Stock) at the close of business on the Record Date will be entitled to notice of, and to vote at, the Annual Meeting. As of the Record Date, there were 14,110,540 shares of Common Stock outstanding and entitled to vote at the Annual Meeting. As of the Record Date, there were approximately 178 stockholders of record. Each holder of a share of Common Stock outstanding as of the close of business on the Record Date will be entitled to one vote for each share held of record with respect to each matter properly submitted at the Annual Meeting. As of the Record Date, there were no longer any shares of our Series B Convertible Preferred Stock outstanding and as such, there are no holders of the Series B Convertible Preferred Stock entitled to vote at the Annual Meeting.

TABLE OF CONTENTS

The presence, in person or by proxy, of holders of at least a majority of the total number of outstanding shares of Common Stock entitled to vote is necessary to constitute a quorum for the transaction of business at the Annual Meeting. Shares held of record by stockholders or their nominees who do not return a signed and dated proxy, properly deliver proxies via the Internet or telephone, or attend the Annual Meeting in person will not be considered present or represented at the Annual Meeting and will not be counted in determining the presence of a quorum.

Consistent with applicable law, we intend to count abstentions and broker non-votes only for the purpose of determining the presence or absence of a quorum for the transaction of business. A broker non-vote refers to shares held by a broker or nominee that does not have the authority, either express or discretionary, to vote on a particular matter. Applicable rules no longer permit brokers to vote in the election of Directors if the broker has not received instructions from the beneficial owner. Accordingly, it is important that beneficial owners instruct their brokers how they wish to vote their shares.

With respect to the election of Class III Directors in Proposal 1, such Directors are elected by a plurality of the votes cast if a quorum is present. Votes may be cast for the Directors or withheld. In a plurality election, votes may only be cast in favor of or withheld from the nominee; votes that are withheld will be excluded entirely from the vote and will have no effect. This means that the persons receiving the highest number of FOR votes will be elected as a Director.

Any shares not voted (whether by abstention, broker non-vote or otherwise) will have no impact on the election of Directors, except to the extent that the failure to vote for an individual results in another individual receiving a larger percentage of votes.

Approval of Proposal No. 2 regarding the ratification of KPMG LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2016 requires the affirmative vote of a majority of the votes cast at the Annual Meeting in person or by proxy. Any shares not voted (whether by abstention, broker non-vote or otherwise) will have no impact on this Proposal No. 2.

Approval of Proposal No. 3 regarding the approval of the proposed amendment of the Company's Amended and Restated Certificate of Incorporation to increase the number of authorized shares of common stock to 60,000,000 requires the affirmative vote of the majority of the outstanding shares of Common Stock entitled to vote on such amendment. Any shares not voted (whether by abstention, broker non-vote or otherwise) will have the same effect as a vote against this Proposal No. 3. Accordingly, it is important that beneficial owners instruct their brokers how they wish to vote their shares on this Proposal No 3.

Approval of Proposal No. 4 regarding the approval of the proposed amendment of the Company's Amended and Restated Certificate of Incorporation to increase the number of authorized shares of preferred stock to 4,000,000 requires the affirmative vote of the majority of the outstanding shares of Common Stock entitled to vote on such amendment. Any shares not voted (whether by abstention, broker non-vote or otherwise) will have the same effect as a vote against this Proposal No. 4. Accordingly, it is important that beneficial owners instruct their brokers how they wish to vote their shares on this Proposal No 4.

Approval of Proposal No. 5 regarding the approval of the proposed amendment of the Company's 2013 Equity Incentive Plan requires the affirmative vote of a majority of the votes cast at the Annual Meeting in person or by proxy. Any shares not voted (whether by abstention, broker non-vote or otherwise) will have no impact on this Proposal No. 5.

The corporate actions described in this Proxy Statement will not afford stockholders the opportunity to dissent from the actions described herein or to receive an agreed or judicially appraised value for their shares.

Edgar Filing: Biostage, Inc. - Form PRER14A

We encourage you to vote either online, by telephone or by completing, signing, dating and returning the enclosed proxy card or if you hold your shares through a brokerage firm, bank or other financial institution, by completing and returning a voting instruction form. This ensures that your shares will be voted at the Annual Meeting and reduces the likelihood that we will be forced to incur additional expenses soliciting proxies for the Annual Meeting.

Voting over the Internet, by telephone or mailing a proxy card will not limit your right to vote in person or to attend the Annual Meeting. Any record holder as of the Record Date may attend the Annual Meeting in person and may revoke the enclosed proxy at any time by: (i) executing and delivering a later-dated proxy to the corporate secretary at Biostage, Inc., 84 October Hill Road, Suite 11, Holliston, Massachusetts 01746-1371;

TABLE OF CONTENTS

(ii) delivering a written revocation to the corporate secretary at the address above before the meeting; or (iii) voting in person at the Annual Meeting.

Beneficial holders who wish to change or revoke their voting instructions should contact their brokerage firm, bank or other financial institution for information on how to do so. Beneficial holders who wish to attend the Annual Meeting and vote in person should contact their brokerage firm, bank or other financial institution holding shares of Common Stock on their behalf in order to obtain a legal proxy, which will allow them to vote in person at the meeting. Attendance at the Annual Meeting will not, by itself, revoke a proxy.

Our Board of Directors recommends an affirmative vote on all proposals specified in the notice for the Annual Meeting. Proxies will be voted as specified. If your proxy is properly submitted, it will be voted in the manner you direct. **If you do not specify instructions with respect to any particular matter to be acted upon at the meeting, proxies will be voted in favor of the Board of Directors' recommendations.**

The 2015 Annual Report to Stockholders of the Company, including consolidated financial statements for the year ended December 31, 2015, is being mailed to stockholders of the Company concurrently with this Proxy Statement. The Annual Report, however, is not a part of the proxy solicitation material.

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting to be Held on Thursday, May 26, 2016: The Proxy Statement and the Company's Annual Report on Form 10-K for the year ended December 31, 2015, are available at www.proxyvote.com.

The Solicitation Agent for the Annual Meeting is:

Morrow & Co., LLC
470 West Avenue 3rd Floor
Stamford, CT 06902

Banks and Brokerage Firms, please call (203) 658-9400

STOCKHOLDERS, PLEASE CALL TOLL-FREE (877) 749-5770

TABLE OF CONTENTS

PROPOSAL 1

ELECTION OF DIRECTORS

The Board of Directors of the Company currently consists of six members and is divided into three classes of Directors, with one Director in Class I, two Directors in Class II and three Directors in Class III. Directors serve for three-year terms with one class of Directors being elected by our stockholders at each annual meeting to succeed the Directors of the same class whose terms are then expiring.

At the Annual Meeting, two Class III Directors, nominated by the Board of Directors, will stand for re-election to serve until the 2019 annual meeting of stockholders or until their successors are duly elected and qualified or until their earlier resignation or removal. In addition to providing the required third independent director for our Audit Committee to ensure compliance with the applicable NASDAQ rules, Mr. Blaine H. McKee, Ph.D. was elected to the Board as a Class III Director to succeed David Green, who will not stand for re-election at the Annual Meeting. The Board of Directors has approved a reduction in the size of the Board of Directors from six members to five members, to become effective as of May 26, 2016.

At the recommendation of the Governance Committee, the Board of Directors has nominated Mr. John F. Kennedy and Mr. Blaine H. McKee, Ph.D. for election as the Class III Directors of the Company. Unless otherwise specified in the proxy, it is the intention of the persons named in the proxy to vote the shares represented by each properly executed proxy FOR the election of Mr. John F. Kennedy and Mr. Blaine H. McKee, Ph.D. The nominees have agreed to stand for re-election and, if re-elected, to serve as a Directors. However, if any such person nominated by the Board of Directors is unable to serve or will not serve, the proxies will be voted for the election of such other person or persons as the Governance Committee and the Board of Directors may recommend.

Vote Required

The affirmative vote of a plurality of the votes cast by holders of shares of Common Stock present or represented by proxy and entitled to vote on the matter at the Annual Meeting is required for the election of each of the nominees as a Class III Director of the Company.

OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE FOR THE ELECTION OF THE FOLLOWING NOMINEES OF THE BOARD OF DIRECTORS: MR. JOHN F. KENNEDY AND MR. BLAINE H. MCKEE, PH.D. PROPERLY AUTHORIZED PROXIES SOLICITED BY THE BOARD OF DIRECTORS WILL BE VOTED FOR THE NOMINEES UNLESS INSTRUCTIONS TO WITHHOLD OR TO THE CONTRARY ARE GIVEN.

INFORMATION REGARDING DIRECTORS

Set forth below is certain information regarding the Directors of the Company, including the Class III Directors who have been nominated for election at the Annual Meeting, based on information furnished to the Company by each Director. The biographical description below for each Director includes his age, all positions he holds with the Company, his principal occupation and business experience over the past five years, and the names of other publicly-held companies for which he currently serves as a director or has served as a director during the past five years. The biographical description below for each Director also includes the specific experience, qualifications,

attributes and skills that led to the conclusion by the Board of Directors that such person should serve as a director of the Company. In addition to such specific information, we also believe that all of our Directors have a reputation for integrity, honesty and adherence to high ethical standards. Further, they have each demonstrated business acumen and an ability to exercise sound judgment as well as a commitment of service to the Company and our Board.

The Board of Directors has determined that the Director nominees and all the incumbent Directors listed below are independent as such term is currently defined by applicable NASDAQ rules. Our director John F. Kennedy is currently a director of Harvard Bioscience, Inc. (Harvard Bioscience), our former parent company.

TABLE OF CONTENTS

The following information is current as of April 1, 2016, based on information furnished to the Company by each Director:

Directors of Biostage, Inc.

Name	Age	Position with the Company	Director Since
Class III Directors Term expires 2016 Nominated to Serve a Term Expiring 2019			
John F. Kennedy ^{*(1)(2)}	67	Chairman	2012
Blaine H. McKee, Ph.D. ^{*(1)}	51	Director	2016
Class III Director Term expires 2016			
David Green	51	Director	2012
Class I Director Term expires 2017			
James J. McGorry	60	President, CEO and Director	2013
Class II Directors Term expires 2018			
Thomas H. Robinson ⁽²⁾⁽³⁾	57	Director	2012
John J. Canepa ⁽¹⁾⁽³⁾	60	Director	2013

*

Nominee for election

(1)

Member of the Audit Committee

(2)

Member of the Compensation Committee

(3)

Member of the Governance Committee

Nominee for Election as Class III Directors Nominated to Serve a Term Expiring in 2019

John F. Kennedy Chairman

Mr. Kennedy has served as a member of our Board of Directors since December 3, 2012. From June 2006 until his retirement in October 2008, Mr. Kennedy served as President and Chief Financial Officer of Nova Ventures Corporation, the management company providing executive management services to the operating companies of Nova Holdings LLC, Nova Analytics Corporation and Nova Technologies Corporation. From 2002 to 2006, Mr. Kennedy served as the President and Chief Financial Officer of Nova Analytics Corporation, a worldwide supplier and integrator of analytical instruments. From 1999 to 2002, Mr. Kennedy served as the Senior Vice President, Finance, Chief Financial Officer and Treasurer of RSA Security Inc., an e-business security company. Prior to joining RSA Security, Mr. Kennedy was Chief Financial Officer of Decalog, NV, a developer of enterprise investment management software, from 1998 to 1999. From 1993 to 1998, Mr. Kennedy served as Vice President of Finance, Chief Financial Officer and Treasurer of Natural MicroSystems Corporation, a telecommunications company. Mr. Kennedy, a former CPA, also practiced as a public accountant at KPMG for six years. Mr. Kennedy currently serves on the Boards of Directors of Harvard Bioscience and Datacom Systems, Inc. Mr. Kennedy holds a B.S. in Mathematics from Lowell Technological Institute, now the University of Massachusetts Lowell, and an M.S.B.A. in Accounting from the University of Massachusetts Amherst. We believe Mr. Kennedy's qualifications to sit on our Board of Directors include his executive leadership experience, his significant operating, accounting and financial management expertise and the knowledge and understanding of our Company and industry that he has acquired over 13 years of service on the Board of Directors of Harvard Bioscience.

Blaine H. McKee, Ph.D. Director

Dr. McKee served as a member of our Board of Directors since March 10, 2016. Dr. McKee is the Senior Vice President, Head of Transactions at Shire PLC, a position he has held since July 2014. Prior to joining Shire, Dr. McKee served as Executive Vice President and Chief Business Officer of 480 Biomedical from 2011 to 2014, following 15 years at Genzyme Corporation from 1996 to 2011, where he most recently served as Senior Vice President of Strategic Development, leading global business development for the Organ Transplant, Oncology and Multiple Sclerosis business units. Dr. McKee currently serves on the Boards of

TABLE OF CONTENTS

ArmaGen, Inc., OrbiMed Israel and the New York Pharma Forum. Dr. McKee holds a B.S. in Chemistry with distinction from Colorado State University, a M.B.A. in Finance from MIT Sloan School of Management and a Ph.D. from Massachusetts Institute of Technology. We believe Dr. McKee's qualifications to sit on our Board of Directors include his extensive background in science, finance and strategy functions, including with respect to the life sciences industry.

Class III Director Term expires 2016

David Green Director

Mr. Green served as our President, Chief Executive Officer, and Chairman of our Board of Directors from May 3, 2012 until his resignation in April 2015, after which he remained a member of our Board of Directors. Mr. Green was also the President and a member of the Board of Directors of Harvard Bioscience from March 1996 and its CEO from May 2013, until the spin-off of our Company from Harvard Bioscience on November 1, 2013. Mr. Green remains a director of Harvard Bioscience but no longer holds an executive position at Harvard Bioscience. Mr. Green's previous experiences include working as a strategy consultant with Monitor Company, a strategy consulting company, in Cambridge, Massachusetts and Johannesburg, South Africa from June 1991 until September 1995 and a brand manager for household products with Unilever PLC, a packaged consumer goods company, in London from September 1985 to February 1989. Mr. Green currently sits on the Advisory Board of the Harvard Business School Healthcare Initiative. Mr. Green graduated from Oxford University with a B.A. Honors degree in physics and holds a M.B.A. degree with distinction from Harvard Business School. We believe Mr. Green's qualifications to sit on our Board of Directors include his executive leadership experience, his experience founding the regenerative medicine business at Harvard Bioscience, his significant operating and management expertise and the knowledge and understanding of our Company that he has acquired over 17 years of service as the President and a director of Harvard Bioscience.

Incumbent Class I Director Term expires 2017

James J. McGorry President, Chief Executive Officer and Director

Mr. McGorry has served as a member of our Board of Directors since February 25, 2013 and as our President and Chief Executive Officer since July 6, 2015. Mr. McGorry is a seasoned life science executive with over thirty years of leadership experience in both medical technology and biotechnology businesses. From September 2013 to July 2015, Mr. McGorry served as Executive Vice-President and General Manager of the Translational Oncology Solutions business of Champions Oncology, a personalized oncology firm. From 2011 to 2012, Mr. McGorry was Executive Vice-President of Accellent, a medical device contract-manufacturing firm. From 1998 to 2010, Mr. McGorry worked at Genzyme Corporation as a Senior Vice President in both BioSurgery and Oncology. At Genzyme Corporation, he was responsible for commercial operations resulting in global expansion, product extensions and profitable growth. From 1985 to 1996, Mr. McGorry worked at American Hospital Supply Corporation, which merged to form Baxter Healthcare. Mr. McGorry currently serves on the Board of Directors of ISTO Technologies, Inc. Mr. McGorry graduated from the United States Military Academy at West Point with a B.A. degree and holds an M.B.A. degree from Duke University Fuqua School of Business. We believe Mr. McGorry's qualifications to sit on our Board of Directors include his significant executive leadership, operating and management experience in, and knowledge of, the life sciences, medical technology and biotechnology industries.

Incumbent Class II Directors Term expires 2018

Thomas H. Robinson Director

Mr. Robinson has served as a member of our Board of Directors since December 3, 2012. Since September 2011, Mr.

Robinson has served as a partner with RobinsonButler, an executive search firm. In 2010, Mr. Robinson served as managing director at Russell Reynolds Associates. From 1998 to 2010, Mr. Robinson served as managing partner of the North American medical technology practice, which includes the medical device, hospital supply/distribution and medical software areas, of Spencer Stuart, Inc., a global executive search firm. From 2002 to 2010, Mr. Robinson was a member of Spencer Stuart's board services practice, which assists corporations to identify and recruit outside directors. From 1998 to 2000, Mr. Robinson headed Spencer Stuart's North American biotechnology specialty practice. From 1993 to 1997, Mr. Robinson

TABLE OF CONTENTS

served as president of the emerging markets business at Boston Scientific Corporation, a global medical devices manufacturer. From 1991 to 1993, Mr. Robinson also served as president and chief operating officer of Brunswick Biomedical, a cardiology medical device company. Mr. Robinson currently serves on the Board of Directors of Cynosure, Inc. He graduated from Brown University with a B.A. degree in mathematics and economics and holds an M.B.A. degree from Harvard Business School. We believe Mr. Robinson's qualifications to sit on our Board of Directors include his executive leadership experience in, and knowledge of, the medical device and regenerative medicine industries, and his significant expertise in the areas of public company corporate governance and operations.

John J. Canepa Director

Mr. Canepa has served as a member of our Board of Directors since August 14, 2013. Mr. Canepa is the Chief Operating Officer and Chief Financial Officer of Asterand Bioscience, Inc. (formerly known as Stemgent, Inc.) a leading global provider of high quality, well characterized human tissue and human tissue-based research solutions to drug discovery scientists. From August 2005, Mr. Canepa served as the President and Chief Executive Officer of PathoGenetix, Inc., a venture capital backed life science company focused on commercializing proprietary DNA optical mapping technology for pathogen detection and strain identification. From 2001 to 2003, Mr. Canepa served as the Chief Financial Officer at Winphoria Networks. From 1978 to 2001, Mr. Canepa was a Senior Audit Partner in Arthur Andersen's Boston Office Technology Practice with worldwide responsibility for Life Sciences Practice. Currently, Mr. Canepa is Co-Chairman of the Board of Trustees at Mt. Auburn Hospital and a member of the Board of Trustees and the Audit Committee at CareGroup. He graduated from Denison University with a B.A. degree and holds a Masters Degree in Finance from Michigan State University. We believe Mr. Canepa's qualifications to sit on our Board of Directors include his executive leadership experience, his significant operating, accounting and financial management expertise, including with respect to the life sciences, medical technology and biotechnology industries.

INFORMATION REGARDING THE BOARD OF DIRECTORS AND ITS COMMITTEES

During the year ended December 31, 2015, our Board of Directors held fifteen meetings. Each of the Directors attended at least 80% of the total number of meetings of the Board of Directors and of the committees of which he was a member. The Board of Directors encourages Directors to attend in person the Annual Meeting of Stockholders of the Company, or Special Meeting in lieu thereof, or, if unable to attend in person, to participate by other means, if practicable. In recognition of this policy, the Board of Directors typically schedules a regular meeting of the Board of Directors to be held on the date of, and immediately following, the Annual Meeting of Stockholders. Four of the five Directors in office at the time attended, in person or by telephone, the 2015 Annual Meeting of Stockholders held on May 21, 2015.

The non-employee Directors meet regularly in executive sessions outside the presence of management. Following the resignation of Mr. Green, our former Chairman, President and Chief Executive Officer, the Board of Directors appointed Mr. Kennedy as the Chairman of the Board in April 2015. Among other things, the Chairman provides feedback to the Chief Executive Officer on executive sessions and facilitates discussion among the independent directors outside of meetings of the Board of Directors. The Chief Executive Officer is responsible for the day-to-day management of our Company and the development and implementation of our Company's strategy. Our Board of Directors currently believes that separating the roles of Chief Executive Officer and Chairman contributes to an efficient and effective board. Our Board of Directors does not have a current requirement that the roles of Chief Executive Officer and Chairman of the Board be either combined or separated, because the Board currently believes it is in the best interests of our Company to make this determination based on the position and direction of our Company

and the constitution of the Board and management team. From time to time, the Board will evaluate whether the roles of Chief Executive Officer and Chairman of the Board should be combined or separated. The Board has determined that having separate roles of our Company's Chief Executive Officer and Chairman is in the best interest of our stockholders at this time.

The Board of Directors has established an Audit Committee (the Audit Committee), a Compensation Committee (the Compensation Committee) and a Governance Committee (the Governance Committee).

7

TABLE OF CONTENTS

Audit Committee

The Audit Committee currently consists of Messrs. Kennedy, Canepa and McKee. Mr. Kennedy serves as the Chairman. Dr. McKee was appointed to the Audit Committee in March 2016, as successor to Mr. McGorry who no longer could serve on the Audit Committee following his July 2015 appointment as our President and Chief Executive Officer. The Audit Committee is comprised entirely of independent Directors and it operates under a Board-approved charter that sets forth its duties and responsibilities. The Audit Committee met eight times during 2015.

Under its charter, the Audit Committee is responsible for, among other things:

reviewing with the independent registered public accounting firm and management the adequacy and effectiveness of internal controls over financial reporting and related matters;

reviewing and consulting with management and the independent registered public accounting firm on matters related to the annual audit, the annual and quarterly financial statements and related disclosures, earnings releases and related accounting principles, policies, practices and judgments;

making a recommendation to the Board as to whether our audited financial statements should be included in our Annual Report on Form 10-K;

appointing, retaining and terminating, and determining compensation of, the Company's independent auditors; assurance of the regular rotation of audit partners, including any lead and concurring partners, in accordance with applicable laws and regulations;

preparation of the Audit Committee report required to be included in our annual proxy statement; reporting matters that arise relating to quality or integrity of our financial statements, legal compliance, performance of the independent auditors and other matters, to the Board and reviewing such matters with the Board; and the oversight of the Company's independent auditors and the evaluation of the independent auditors' qualifications, performance and independence, including performance of the lead audit partner, and reporting of such evaluation to the Board.

The Audit Committee is responsible for reviewing and discussing with management our policies with respect to risk assessment and risk management. The Board and the Audit Committee discuss matters relating to risks that arise or may arise.

The Audit Committee is also responsible for, and has established policies and procedures with respect to, the pre-approval of all services provided by the independent auditors. When assessing the independence of our auditors, the Audit Committee considers the independent registered public accounting firm's provision of non-audit services to the Company.

The Audit Committee has also established procedures for the receipt, retention and treatment, on a confidential basis, of complaints received by the Company. The Board of Directors and the Audit Committee adopted a Code of Business Conduct and Ethics, a current copy of which is available on the Corporate Governance page in the Investor section of our website at www.biostage.com.

With respect to the Company's independent registered public accounting firm, currently KPMG, in accordance with SEC rules and KPMG policies, audit partners are subject to rotation requirements to limit the number of consecutive years an individual partner may provide service to our Company. For lead and concurring audit partners, the maximum number of consecutive years of service in that capacity is five years. Our Audit Committee is involved in the selection of the lead audit partner. The process for selection of our lead audit partner pursuant to this rotation policy involves a meeting between the Chairman of the Audit Committee and the candidate for the role, as well as discussion by the full Audit Committee and with management.

TABLE OF CONTENTS

The Board of Directors has determined that all members of the Audit Committee are independent as such term is currently defined by NASDAQ rules, meet the criteria for independence set forth under the rules of the Securities and Exchange Commission, and are able to read and understand fundamental financial statements. The Board of Directors has also determined that each of Messrs. Kennedy and Canepa qualifies as an audit committee financial expert under the rules of the Securities and Exchange Commission.

The Audit Committee Charter is available on the Corporate Governance page in the Investors section of our website at www.biostage.com. Please note that the information contained on the Company website is not incorporated by reference in, or considered to be a part of, this Proxy Statement.

Compensation Committee

The Compensation Committee currently consists of Messrs. Kennedy and Robinson. Mr. Robinson serves as the Chairman. The Compensation Committee is comprised entirely of independent Directors and it operates under a Board-approved charter that sets forth its duties and responsibilities. The Compensation Committee met three times during 2015.

The Compensation Committee determines and oversees the execution of our compensation philosophy and oversees the administration of our executive compensation programs. Its responsibilities also include overseeing the Company's compensation and benefit plans and policies, retaining or terminating committee advisors, independence evaluation of compensation advisors, administering its stock plans (including reviewing and approving equity grants) and reviewing and approving annually all compensation decisions for the Company's executive officers, including the President and Chief Executive Officer and the Chief Financial Officer.

The Board of Directors has determined that all members of the Compensation Committee are independent as such term is currently defined by NASDAQ rules.

The Compensation Committee Charter is available on the Corporate Governance page in the Investors section of our website at www.biostage.com. Please note that the information contained on the website is not incorporated by reference in, or considered to be a part of, this Proxy Statement.

Governance Committee

The current members of the Governance Committee are Messrs. Robinson and Canepa. Mr. Canepa replaced Mr. McGorry as Chairman of the Governance Committee in July 2015, in connection with Mr. McGorry's appointment as our President and Chief Executive Officer. The Governance Committee is comprised entirely of independent directors and it operates under a Board-approved charter that sets forth its duties and responsibilities. The Governance Committee met one time during 2015.

Under the terms of its charter, the Governance Committee is responsible for identifying individuals qualified to become Board members, consistent with criteria recommended by the Governance Committee and approved by the Board of Directors, and recommending that the Board of Directors select the director nominees for election at each annual meeting of stockholders. Its responsibilities also include recommending to the Board of Directors the criteria for membership on Board Committees. The Governance Committee is also responsible for reviewing all stockholder nominations and proposals submitted to the Company, determining whether such nominations or proposals were timely submitted and assisting the Board of Directors with such corporate governance matters as the Board of Directors may request.

In identifying and evaluating nominees for the Board of Directors, the Governance Committee may solicit recommendations from any or all of the following sources: non-management Directors, including our Chairman, the Chief Executive Officer, other executive officers, third-party search firms or any other source it deems appropriate. In addition, the Governance Committee has established a policy that it will review and consider any Director candidates who have been recommended by securityholders in compliance with certain procedures established by the Governance Committee. The procedures to be followed by securityholders in submitting such recommendations are described in the section entitled Submission of Securityholder Recommendations for Director Candidates included in this Proxy Statement. The Governance Committee will review and evaluate the qualifications of any such proposed Director candidate and conduct inquiries it deems appropriate.

TABLE OF CONTENTS

The Governance Committee will evaluate all such proposed Director candidates, including those recommended by securityholders in compliance with the procedures established by the Governance Committee, in the same manner, with no regard to the source of the initial recommendation of such proposed Director candidate. When considering a potential candidate for membership on the Board of Directors, the Governance Committee may consider, in addition to the minimum qualifications and other criteria for Board membership approved by the Board of Directors, all facts and circumstances that the Governance Committee deems appropriate or advisable, including, among other things, the skills of the proposed Director candidate, his or her availability, depth and breadth of business experience or other background characteristics, his or her independence and the needs of the Board of Directors. At a minimum, each nominee must have high personal and professional integrity, have demonstrated ability and judgment, and be effective, in conjunction with the other Directors and nominees, in collectively serving the long-term interests of the stockholders. In addition, the Governance Committee will recommend that the Board select persons for nomination to help ensure that a majority of the Board shall be independent in accordance with NASDAQ rules and each of its Audit, Compensation and Governance Committees shall be comprised entirely of independent directors; provided, however, in accordance with NASDAQ rules, under exceptional and limited circumstances, if a committee has at least three members, the Board may appoint one individual to such committee who does not satisfy the independence standards. Although there is no specific policy regarding the consideration of diversity in identifying director nominees, the Governance Committee may consider whether the nominee, if elected, assists in achieving a mix of Board members that represents a diversity of background and experience. The Governance Committee also may consider whether the nominee has direct experience in the biotechnology, pharmaceutical and/or life sciences industries or in the markets in which the Company operates.

The Board of Directors has determined that all members of the Governance Committee are independent as such term is currently defined by NASDAQ rules.

The Governance Committee Charter is available on the Corporate Governance page in the Investor section of our website at www.biostage.com. Please note that the information contained on the website is not incorporated by reference in, or considered to be a part of, this Proxy Statement.

The Board's Role in Risk Oversight

Risks to the Company are discussed by the Board of Directors during the year. Management is responsible for the day-to-day management of risks we face, while the Board, as a whole and through its Committees, oversees risk management. The Audit Committee is responsible for reviewing and discussing with management our policies with respect to risk assessment and risk management. The Board of Directors and the Audit Committee review and discuss, including with management, risks that arise or may arise. For example, the Audit Committee discusses financial risk, including with respect to financial reporting and internal controls, with management and our independent registered public accounting firm and the steps management has taken to minimize those risks. Our Board of Directors also administers its risk oversight function through the required approval by the Board (or a Committee of the Board) of significant transactions and other material decisions.

CODE OF BUSINESS CONDUCT AND ETHICS

The Board of Directors has adopted a Code of Business Conduct and Ethics, which applies to all Directors, officers and employees of our Company and its subsidiaries including, without limitation, the Chairman of the Board, the President and Chief Executive Officer, and the Chief Financial Officer. The Code of Business Conduct and Ethics is available on the Corporate Governance page in the Investor section of our website at www.biostage.com. We intend to post any amendments to or waivers from this Code of Business Conduct and Ethics at this location on its website.

Please note, however, that the information contained on the website is not incorporated by reference in, or considered a part of, this Proxy Statement.

10

TABLE OF CONTENTS

REPORT OF THE AUDIT COMMITTEE

Notwithstanding anything to the contrary set forth in any of the Company's previous or future filings under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, that might incorporate this Proxy Statement or any future filing with the Securities and Exchange Commission, in whole or in part, the following report shall not be deemed incorporated by reference into any such filing.

The undersigned members of the Audit Committee of the Board of Directors of the Company submit this report in connection with the committee's review of the financial reports of the Company for the fiscal year ended December 31, 2015 as follows:

1. The Audit Committee has reviewed and discussed with management the audited financial statements of the Company for the fiscal year ended December 31, 2015.
2. The Audit Committee has discussed with representatives of KPMG LLP the matters required to be discussed with them by applicable requirements of Public Company Accounting Oversight Board Auditing Standard No. 16.
3. The Audit Committee has received the written disclosures and the letter from the independent accountant required by the Public Company Accounting Oversight Board regarding the independent accountant's communications with the Audit Committee concerning independence, and has discussed with the independent accountant the independent accountant's independence.

Based on the review and discussions referred to above, the Audit Committee recommended to the Board of Directors that the audited financial statements be included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2015 for filing with the Securities and Exchange Commission.

Submitted by the Audit Committee:

John Kennedy, Chairman
John Canepa
James McGorry*
Blaine McKee, Ph.D.**

* Mr. McGorry resigned from the Audit Committee as of July 2015
** Dr. McKee joined the Audit Committee as of March 2016

TABLE OF CONTENTS**EXECUTIVE COMPENSATION**

We are an emerging growth company within the meaning of the Jumpstart Our Business Startups Act of 2012. As a result, we have elected to comply with the reduced disclosure requirements applicable to emerging growth companies in accordance with SEC rules. We have only three executive officers. James McGorry, our President and Chief Executive Officer, Thomas McNaughton, our Chief Financial Officer and Saverio LaFrancesca, M.D., our Chief Medical Officer, are named executive officers. David Green, our former President and Chief Executive Officer, was a named executive officer for a portion of 2015.

SUMMARY COMPENSATION TABLE

The table below summarizes the total compensation paid or earned by each of the named executive officers for services rendered in all capacities during the fiscal years ended December 31, 2014 and December 31, 2015, excluding the compensation Messrs. McGorry and Green received in 2015 as an independent directors as disclosed in the Director Compensation Table in this proxy statement.

Name and Principal Position	Year	Salary	Option Awards ⁽¹⁾	All Other Compensation	Total
James McGorry <i>President and Chief Executive Officer</i>	2015	\$173,077	615,204	\$4,327 ⁽²⁾	\$792,608
	2014	\$	\$	\$	\$
Thomas McNaughton <i>Chief Financial Officer</i>	2015	\$309,000	201,790	\$15,450 ⁽³⁾	\$526,240
	2014	\$309,000	\$	\$16,072 ⁽⁴⁾	\$325,072
Saverio LaFrancesca, M.D. <i>Chief Medical Officer</i>	2015	\$400,000	489,292	\$	\$889,292
	2014	\$276,923	573,220	\$	\$850,143
David Green <i>Former President and Chief Executive Officer</i>	2015	\$171,120		\$1,172,072 ⁽⁵⁾	\$1,343,192
	2014	\$504,700	\$	\$29,806 ⁽⁶⁾	\$534,506

Based on the aggregate grant date fair value computed in accordance with the provisions of FASB ASC 718, Compensation Stock Compensation, excluding the impact of estimated forfeitures. Assumptions used in the calculation of this amount are set forth under 2013 Plan Valuation and Expense Information under

- (1) Stock-Based-Payment Accounting in Note 13 to our audited financial statements for the fiscal year ended December 31, 2015, included in our Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 30, 2016.
- (2) Amount represents \$4,327 for matching contributions made by the Company to Mr. McGorry's tax-qualified 401(k) Savings Plan account.
- (3) Amount represents \$15,450 for matching contributions made by the Company to Mr. McNaughton's tax-qualified 401(k) Savings Plan.
- (4) Amount represents \$15,450 for matching contributions made by the Company to Mr. McNaughton's tax-qualified 401(k) Savings Plan account and premiums in the amount of \$622 for a life insurance policy.
- (5) Includes the following amounts received in connection with Mr. Green's resignation: \$14,406 of cash severance, and \$1,157,665 of fair value attributable to the extension of the exercise period on certain stock options as described in more detail in the description of employment agreements section of this proxy statement. The fair value was determined on the grant date of the respective options in accordance with ASC Topic 718 and, therefore, is not indicative of the value that would be ultimately realized upon exercise of these options. Excludes the accelerated vesting of options to purchase 290,252 shares and 2,377 restricted stock units that accelerated pursuant

to their terms upon Mr. Green's resignation.

(6) Includes \$10,980 for an automobile allowance (as calculated in accordance with Internal Revenue Service guidelines and included as compensation on the W-2), \$17,664 in matching contributions made by the Company to Mr. Green's tax-qualified 401(k) Savings Plan account and premiums in the amount of \$1,162 for life insurance policies.

12

TABLE OF CONTENTS**Discussion of Summary Compensation Table and Related Matters****2015 Executive Compensation****Salary and Bonus**

In the first quarter of 2015, the Compensation Committee reviewed the overall executive compensation of the Company's named executive officers. Based on a variety of factors, including the circumstances of the recent spin-off from Harvard Bioscience and limited operating history of the Company, with respect to the named executive officers, the Compensation Committee elected to not approve any salary increases or cash incentive compensation for 2015.

Long-Term Equity Incentive Compensation

In 2015, the Compensation Committee approved grants of long-term equity incentive awards in the form of stock options to executives as part of our total compensation package. The long-term equity incentive awards were granted in an effort to achieve certain key objectives, including (i) to attract and retain high performing and experienced executives, (ii) motivate and reward executives whose knowledge, skills and performance are critical to our success, and (iii) to align the interests of our executives and our stockholders by providing our executives with strong incentives to increase stockholder value and a significant reward for doing so. Our decisions regarding the amount and type of long-term equity incentive compensation and relative weighting of these awards among total executive compensation have also been based on our understanding of market practices of our peers and take into account additional factors such as level of individual responsibility, experience and performance. The long term incentive grant to Mr. McGorry in July 2015 was made in connection with our hiring of him as our President and Chief Executive Officer. The long term incentive grants made to our named executive officers during fiscal 2015 are described in the table below and exclude the option grants Mr. McGorry received in 2015 as an independent director prior to becoming our President and Chief Executive Officer:

	Stock Option Awards (#)
James McGorry <i>President and Chief Executive Officer</i>	671,400 ⁽¹⁾
Thomas McNaughton <i>Chief Financial Officer</i>	185,000 ⁽²⁾
Saverio LaFrancesca, Ph.D. <i>Chief Medical Officer</i>	300,000 ⁽³⁾

(1) These options vest in four equal installments on each of January 1, 2016, 2017, 2018 and 2019 and have a term of ten years from the date of grant, being July 6, 2015.

(2) These options vest in four equal installments on each of the first four anniversaries of the respective grant date and have a term of ten years from the respective date of grant, and are comprised of options to acquire (i) 85,000 shares granted on May 29, 2015, the fifth business day following our 2015 Annual Meeting of Stockholders, and (ii) 100,000 shares granted on August 31, 2015.

(3) These options vest in four equal installments on each of the first four anniversaries of the respective grant date and have a term of ten years from the respective date of grant, and are comprised of options to acquire (i) 100,000

shares granted on March 4, 2015, (ii) 40,000 shares granted on May 29, 2015, the fifth business day following our 2015 Annual Meeting of Stockholders, and (iii) 160,000 shares granted on August 31, 2015.

13

TABLE OF CONTENTS

Employment Agreements and Severance and Change in Control Benefits

Current Named Executive Officers

James McGorry

We entered into an employment agreement with Mr. McGorry dated as of June 23, 2015 and effective as of July 6, 2015, appointing Mr. McGorry as our President and Chief Executive Officer. Mr. McGorry's employment agreement has a term of three years, but will automatically renew for successive one year periods unless either party provides 90 days' notice that it does not wish to extend the agreement. Mr. McGorry's employment agreement provides for an annual base salary in the amount of three hundred seventy-five thousand dollars (\$375,000) which will be reevaluated on an annual basis by the Board of Directors or the compensation committee. Mr. McGorry also received an option to purchase 671,400 shares of our common stock upon the commencement of his employment, which vests in four equal installments on January 1 of 2016, 2017, 2018 and 2019. Mr. McGorry is eligible to receive cash incentive compensation as determined by the Board of Directors or the compensation committee, and is also eligible to participate in all of our employee benefit plans, including without limitation, retirement plans, stock option plans, stock purchase plans and medical insurance plans.

Mr. McGorry's employment agreement also provides for payments to be made to Mr. McGorry in the event of his termination under certain circumstances. If Mr. McGorry's employment is terminated by us without cause (as such term is defined in Mr. McGorry's employment agreement) or by Mr. McGorry for good reason (as such term is defined in Mr. McGorry's employment agreement), we are obligated to pay Mr. McGorry the sum of his average annual base salary for the prior three fiscal years or annual salary for the prior fiscal year, whichever is higher, and his average annual cash incentive compensation for the prior three fiscal years or annual cash incentive compensation for the prior fiscal year, whichever is higher. Such payment is conditioned upon Mr. McGorry's execution of a general release of claims against us. In addition, all of Mr. McGorry's stock options or stock-based awards that would otherwise vest within the 12 month period following such termination shall accelerate and become immediately exercisable. We shall continue to pay health insurance premiums for health insurance coverage for Mr. McGorry and his immediate family for a period of one year following his termination without cause or for good reason.

Mr. McGorry may also be entitled to certain payments in the event of a change in control of our Company. If Mr. McGorry's employment is terminated by us without cause or by Mr. McGorry for good reason within 18 months of a change in control of our Company, Mr. McGorry is entitled to receive a lump sum cash payment in an amount equal to the sum of Mr. McGorry's current or most recent annual salary and his most recent cash incentive compensation. In addition, in the event of a change in control, all of Mr. McGorry's stock options or stock-based awards shall accelerate and become immediately exercisable. We will continue to pay health insurance premiums for health insurance coverage for Mr. McGorry and his immediate family for a period of one year following his termination as a result of a change in control.

Mr. McGorry will not be entitled to severance payments unless mutually agreed upon in writing if Mr. McGorry is terminated for cause, due to death or disability, or he terminates his employment without good reason. In the event Mr. McGorry is terminated due to death or disability, we will continue to pay health insurance premiums for health insurance coverage for Mr. McGorry and his immediate family for a period of one year following his termination.

Pursuant to the terms of his employment agreement, Mr. McGorry is also subject to certain confidentiality, non-solicitation and non-competition obligations. The non-solicitation and non-competition obligations survive during the term of his agreement and for a period of 12 months thereafter.

For purposes of Mr. McGorry's employment agreement, cause means: (A) conduct by Mr. McGorry constituting a material act of willful misconduct in connection with the performance of his duties; (B) criminal or civil conviction of

Mr. McGorry, a plea of nolo contendere by Mr. McGorry or conduct by Mr. McGorry that would reasonably be expected to result in material injury to our reputation if he were retained in his position with us; (C) continued, willful and deliberate non-performance by Mr. McGorry of his duties; (D) a breach by Mr. McGorry of his confidentiality, non-solicitation and non-competition obligations to us; or (E) a material violation by Mr. McGorry of our employment policies.

TABLE OF CONTENTS

For purposes of Mr. McGorry's employment agreement, "good reason" means the occurrence of any of the following events: (A) a substantial diminution or other substantive adverse change, not consented to by Mr. McGorry, in his responsibilities, authorities, powers, functions or duties; (B) any removal of Mr. McGorry's title of President and/or Chief Executive Officer; (C) an involuntary reduction in Mr. McGorry's annual salary except for across-the-board reductions similarly affecting substantially all management employees; (D) a breach by us of any of our other material obligations under Mr. McGorry's employment agreement; (E) the involuntary relocation of our offices at which Mr. McGorry is principally employed to a location more than 30 miles from our current offices; or (F) our failure to obtain the agreement from any successor company to us to assume and agree to perform Mr. McGorry's employment agreement.

Thomas McNaughton

On October 31, 2013, we entered into an Employment Agreement with Mr. McNaughton. The term of this agreement commenced on November 1, 2013. Mr. McNaughton's employment agreement has a term of two years, but will automatically renew for successive two year periods unless either party provides 90 days' notice that it does not wish to extend the agreement. Mr. McNaughton's employment agreement provides for an annual base salary in the amount of three hundred nine thousand dollars (\$309,000) which will be reevaluated on an annual basis by the Board of Directors or the compensation committee. Mr. McNaughton is eligible to receive cash incentive compensation as determined by the Board of Directors or the compensation committee, and is also eligible to participate in all of our employee benefit plans, including without limitation, retirement plans, stock option plans, stock purchase plans and medical insurance plans.

Mr. McNaughton's employment agreement also provides for payments to be made to Mr. McNaughton in the event of his termination under certain circumstances. If Mr. McNaughton's employment is terminated by us without cause (as such term is defined in Mr. McNaughton's employment agreement) or by Mr. McNaughton for "good reason" (as such term is defined in Mr. McNaughton's employment agreement), we are obligated to pay Mr. McNaughton the sum of his average annual base salary for the prior three fiscal years or annual salary for the prior fiscal year, whichever is higher, and his average annual cash incentive compensation for the prior three fiscal years or annual cash incentive compensation for the prior fiscal year, whichever is higher. Such payment is conditioned upon Mr. McNaughton's execution of a general release of claims against us. In addition, all of Mr. McNaughton's stock options or stock-based awards that would otherwise vest within the 18 month period following such termination shall accelerate and become immediately exercisable. We shall continue to pay health insurance premiums for health insurance coverage for Mr. McNaughton and his immediate family for a period of one year following his termination without cause or for good reason.

Mr. McNaughton may also be entitled to certain payments in the event of a change in control of our Company. If Mr. McNaughton's employment is terminated by us without cause or by Mr. McNaughton for good reason within 18 months of a change in control of our Company, Mr. McNaughton is entitled to receive a lump sum cash payment in an amount equal to the sum of Mr. McNaughton's most recent annual salary and his most recent cash incentive compensation. In addition, in the event of a change in control, all of Mr. McNaughton's stock options or stock-based awards shall accelerate and become immediately exercisable. We will continue to pay health insurance premiums for health insurance coverage for Mr. McNaughton and his immediate family for a period of one year following his termination as a result of a change in control.

Mr. McNaughton will not be entitled to severance payments unless mutually agreed upon in writing if Mr. McNaughton is terminated for cause, due to death or disability, or he terminates his employment without good reason. In the event Mr. McNaughton is terminated due to death or disability, we will continue to pay health insurance

premiums for health insurance coverage for Mr. McNaughton and his immediate family for a period of one year following his termination.

Mr. McNaughton is also eligible to receive a gross up payment in the event that any amounts received pursuant to the terms of his employment agreement are subject to the excise tax imposed by Section 4999 of the Internal Revenue Code of 1986, as amended (the Code), or any interest or penalties on such excise tax are incurred by Mr. McNaughton. Such payment will be equal to the amount of (i) the excise tax, (ii) any federal, state or local tax resulting from the gross up payment and (iii) any interest and/or penalties assessed with respect to such excise tax. Pursuant to the terms of his employment agreement, Mr. McNaughton is also

TABLE OF CONTENTS

subject to certain confidentiality, non-solicitation and non-competition obligations. The non-solicitation and non-competition obligations survive during the term of his agreement and for a period of 12 months thereafter.

For purposes of Mr. McNaughton's employment agreement, *cause* means: (A) conduct by Mr. McNaughton constituting a material act of willful misconduct in connection with the performance of his duties; (B) criminal or civil conviction of Mr. McNaughton, a plea of *nolo contendere* by Mr. McNaughton or conduct by Mr. McNaughton that would reasonably be expected to result in material injury to our reputation if he were retained in his position with us; (C) continued, willful and deliberate non-performance by Mr. McNaughton of his duties; (D) a breach by Mr. McNaughton of his confidentiality, non-solicitation and non-competition obligations to us; or (E) a violation by Mr. McNaughton of our employment policies.

For purposes of Mr. McNaughton's employment agreement, *good reason* means the occurrence of any of the following events: (A) a substantial diminution or other substantive adverse change, not consented to by Mr. McNaughton, in his responsibilities, powers, or duties; (B) any removal of Mr. McNaughton's title of Chief Financial Officer; (C) an involuntary reduction in Mr. McNaughton's annual salary except for across-the-board reductions similarly affecting substantially all management employees; (D) a breach by us of any of our other material obligations under Mr. McNaughton's employment agreement; (E) the involuntary relocation of our offices at which Mr. McNaughton is principally employed to a location more than 30 miles from our current offices; or (F) our failure to obtain the agreement from any successor company to us to assume and agree to perform Mr. McNaughton's employment agreement.

Saverio LaFrancesca, M.D.

We entered into an employment agreement with Dr. LaFrancesca dated as of April 8, 2014 effective as of April 14, 2014, appointing Dr. LaFrancesca as our Chief Medical Officer. We entered into an amendment to Dr. LaFrancesca's employment agreement on March 24, 2016. Dr. LaFrancesca's employment agreement has a term of one year, but will automatically renew for successive one year periods unless either party provides 90 days' notice that it does not wish to extend the agreement. Dr. LaFrancesca's employment agreement provides for an annual base salary in the amount of four hundred thousand dollars (\$400,000) which will be reevaluated on an annual basis by the Board of Directors or the compensation committee. Dr. LaFrancesca also received an option to purchase 100,000 shares of our common stock upon the commencement of his employment, which vests in four equal installments on January 1 of 2015, 2016, 2017 and 2018. Dr. LaFrancesca is eligible to receive cash incentive compensation as determined by the Board of Directors or the compensation committee, and is also eligible to participate in all of our employee benefit plans, including without limitation, retirement plans, stock option plans, stock purchase plans and medical insurance plans.

Dr. LaFrancesca's employment agreement also provides for payments to be made to Dr. LaFrancesca in the event of his termination under certain circumstances. If Dr. LaFrancesca's employment is terminated by us without *cause* (as such term is defined in Dr. LaFrancesca's employment agreement) or by Dr. LaFrancesca for *good reason* (as such term is defined in Dr. LaFrancesca's employment agreement), we are obligated to pay Dr. LaFrancesca the sum of his average annual base salary for the prior three fiscal years or annual salary for the prior fiscal year, whichever is higher, and his average annual cash incentive compensation for the prior three fiscal years or annual cash incentive compensation for the prior fiscal year, whichever is higher. Such payment is conditioned upon Dr. LaFrancesca's execution of a general release of claims against us. In addition, all of Dr. LaFrancesca's stock options or stock-based awards that would otherwise vest within the 12 month period following such termination shall accelerate and become immediately exercisable. We shall continue to pay health insurance premiums for health insurance coverage for Dr. LaFrancesca and his immediate family for a period of one year following his termination without *cause* or for *good reason*.

Dr. LaFrancesca may also be entitled to certain payments in the event of a change in control of our Company. If Dr. LaFrancesca's employment is terminated by us without cause or by Dr. LaFrancesca for good reason within 18 months of a change in control of our Company, Dr. LaFrancesca is entitled to receive a lump sum cash payment in an amount equal to the sum of Mr. Dr. LaFrancesca's current or most recent annual salary and his most recent cash incentive compensation. In addition, in the event of a change in control, all of Dr. LaFrancesca's stock options or stock-based awards shall accelerate and become immediately exercisable. We will continue to pay health insurance premiums for health insurance coverage for Dr. LaFrancesca and his immediate family for a period of one year following his termination as a result of a change in control.

TABLE OF CONTENTS

Dr. LaFrancesca will not be entitled to severance payments unless mutually agreed upon in writing if Dr. LaFrancesca is terminated for cause, due to death or disability, or he terminates his employment without good reason. In the event Dr. LaFrancesca is terminated due to death or disability, we will continue to pay health insurance premiums for health insurance coverage for Dr. LaFrancesca and his immediate family for a period of one year following his termination.

Pursuant to the terms of his employment agreement, Dr. LaFrancesca is also subject to certain confidentiality, non-solicitation and non-competition obligations. The non-solicitation and non-competition obligations survive during the term of his agreement and for a period of 12 months thereafter.

For purposes of Dr. LaFrancesca's employment agreement, cause means: (A) conduct by Dr. LaFrancesca constituting a material act of willful misconduct in connection with the performance of his duties; (B) criminal or civil conviction of Dr. LaFrancesca, a plea of nolo contendere by Dr. LaFrancesca or conduct by Dr. LaFrancesca that would reasonably be expected to result in material injury to our reputation if he were retained in his position with us; (C) continued, willful and deliberate non-performance by Dr. LaFrancesca of his duties; (D) a breach by Dr. LaFrancesca of his confidentiality, non-solicitation and non-competition obligations to us; or (E) a violation by Dr. LaFrancesca of our employment policies.

For purposes of Dr. LaFrancesca's employment agreement, good reason means the occurrence of any of the following events: (A) a substantial diminution or other substantive adverse change, not consented to by Dr. LaFrancesca, in his responsibilities, authorities, powers, functions or duties; (B) any removal of Dr. LaFrancesca's title of Chief Medical Officer; (C) an involuntary reduction in Dr. LaFrancesca's annual salary except for across-the-board reductions similarly affecting substantially all management employees; (D) a breach by us of any of our other material obligations under Dr. LaFrancesca's employment agreement; (E) the involuntary relocation of our offices at which Dr. LaFrancesca is principally employed to a location more than 30 miles from our current offices; or (F) our failure to obtain the agreement from any successor company to us to assume and agree to perform Dr. LaFrancesca's employment agreement.

Former Named Executive Officer

David Green

On October 31, 2013, we entered into an Employment Agreement with Mr. Green. Mr. Green resigned from his position as our Chairman, Chief Executive Officer and President effective as of April 17, 2015. His employment agreement and related matters are described below. Mr. Green's employment agreement had a term of two years, with a provision to automatically renew for successive two year periods unless either party provides 90 days' notice that it did not wish to extend the agreement. Mr. Green's employment agreement provided for an annual base salary in the amount of five hundred four thousand seven hundred dollars (\$504,700) which would be reevaluated on an annual basis by the Board of Directors or the Compensation Committee. Mr. Green was eligible to receive cash incentive compensation as determined by the Board of Directors or the Compensation Committee, and was also eligible to participate in all of our employee benefit plans, including without limitation, retirement plans, stock option plans, and medical insurance plans. Mr. Green was also entitled to a car allowance.

Mr. Green's employment agreement also provided for payments to be made to Mr. Green in the event of his termination under certain circumstances. If Mr. Green's employment was terminated by us without cause (as such term was defined in Mr. Green's employment agreement) or by Mr. Green for good reason (as such term was defined in Mr. Green's employment agreement), we would be obligated to pay Mr. Green two times the sum of his average annual base salary for the prior three fiscal years or annual salary for the prior fiscal year, whichever is higher, and his

average annual cash incentive compensation for the prior three fiscal years or annual cash incentive compensation for the prior fiscal year, whichever is higher. Such payment would be conditioned upon Mr. Green's execution of a general release of claims against us. In addition, all of Mr. Green's stock options or stock-based awards that would otherwise vest within the 24 month period following such termination would accelerate and become immediately exercisable. We would continue to pay health insurance premiums for health insurance coverage for Mr. Green and his immediate family for a period of one year following his termination without cause or for good reason.

Mr. Green would have also been entitled to certain payments in the event of a change in control of our Company. If Mr. Green's employment was terminated by us without cause or by Mr. Green for good reason

TABLE OF CONTENTS

within 18 months of a change in control of our Company, Mr. Green would have been entitled to receive a lump sum cash payment in an amount equal to three times the sum of Mr. Green's most recent annual salary and his most recent cash incentive compensation. In addition, in the event of a change in control, all of Mr. Green's stock options or stock-based awards would accelerate and become immediately exercisable. We would continue to pay health insurance premiums for health insurance coverage for Mr. Green and his immediate family for a period of one year following his termination as a result of a change in control. Mr. Green would not be entitled to severance payments unless mutually agreed upon in writing if Mr. Green is terminated for cause, due to death or disability, or he terminated his employment without good reason. In the event Mr. Green was terminated due to death or disability, we would continue to pay health insurance premiums for health insurance coverage for Mr. Green and his immediate family for a period of one year following his termination. Mr. Green was also eligible to receive a gross up payment in the event that any amounts received pursuant to the terms of his employment agreement are subject to the excise tax imposed by Section 4999 of the Code or any interest or penalties on such excise tax were incurred by Mr. Green. Such payment would be equal to the amount of (i) the excise tax, (ii) any federal, state or local tax resulting from the gross up payment and (iii) any interest and/or penalties assessed with respect to such excise tax. Pursuant to the terms of his employment agreement, Mr. Green was also subject to certain confidentiality, non-solicitation and non-competition obligations. The non-solicitation and non-competition obligations survive during the term of his agreement and for a period of 12 months thereafter.

For purposes of Mr. Green's employment agreement, cause meant: (A) conduct by Mr. Green constituting a material act of willful misconduct in connection with the performance of his duties; (B) criminal or civil conviction of Mr. Green, a plea of nolo contendere by Mr. Green or conduct by Mr. Green that would reasonably be expected to result in material injury to our reputation if he were retained in his position with us; (C) continued, willful and deliberate non-performance by Mr. Green of his duties; (D) a breach by Mr. Green of his confidentiality, non-solicitation and non-competition obligations to us; or (E) a violation by Mr. Green of our employment policies. For purposes of Mr.

Green's employment agreement, good reason shall mean the occurrence of any of the following events: (A) a substantial diminution or other substantive adverse change, not consented to by Mr. Green, in his responsibilities, powers, or duties; (B) any removal of Mr. Green's title of President and Chief Executive Officer; (C) an involuntary reduction in Mr. Green's annual salary except for across-the-board reductions similarly affecting substantially all management employees; (D) a breach by us of any of our other material obligations under Mr. Green's employment agreement; (E) the involuntary relocation of our offices at which Mr. Green is principally employed to a location more than 30 miles from our current offices; or (F) our failure to obtain the agreement from any successor company to us to assume and agree to perform Mr. Green's employment agreement.

As of Mr. Green's resignation in April 2015, we and Mr. Green agreed to terminate his employment agreement with us. In connection with his resignation, we and Mr. Green agreed that in lieu of any severance that may have been required in connection with the termination of Mr. Green's employment agreement with us: (A) the vesting of Mr. Green's (i) unvested restricted stock units (2,377 shares); (ii) unvested options relating to his adjustment grants (4,572 shares) issued in connection with the spin-off of our Company from Harvard Bioscience; (iii) unvested options relating to his time-based separation option grant (290,252 shares) issued in connection with the spin-off of our Company from Harvard Bioscience and (iv) one half of the second tranche of unvested options related to his milestone-based option grant (48,375 shares) issued in connection with the Spin-Off, would be accelerated and deemed fully vested as of his resignation; (B) the accelerated options described in (iii) and (iv) above and the portions of such options that were already vested prior to such resignation would be exercisable for seven years following his resignation; and (C) the accelerated options described in (ii) above and the portions of such options that were already vested prior to such resignation would be exercisable until the earlier that Mr. Green no longer provides service to Harvard Bioscience or the respective scheduled expiration date of such options. The third tranche, and one half of the second tranche, of Mr. Green's unvested options related to his milestone-based option grant (145,126 shares) issued in connection with the spin-off of our Company from Harvard Bioscience expired and were forfeited following the

resignation.

TABLE OF CONTENTS

Retirement and Other Benefits

We have established a 401(k) tax-deferred savings plan, which permits participants, including our named executive officers, to make contributions by salary deduction pursuant to Section 401(k) of the Code. We are responsible for administrative costs of the 401(k) plan. We may, in our discretion, make matching contributions to the 401(k) plan. In addition, all full-time employees, including our named executive officers, may participate in our health and welfare benefit programs, including medical coverage, vision coverage, dental coverage, disability insurance, and life insurance.

REPORT OF THE COMPENSATION COMMITTEE

Under rules of the Securities and Exchange Commission, as a Smaller Reporting Company, we are not required to provide a report of the Compensation Committee.

TABLE OF CONTENTS**DIRECTOR COMPENSATION**

We use a combination of cash and stock-based incentive compensation to attract and retain qualified candidates to serve on our Board. In setting director compensation, the Board of Directors and the Compensation Committee consider the significant amount of time that Directors expend in fulfilling their duties to the Company as well as the skill-level required by the Company of members of the Board.

Directors who are also employees of the Company receive no additional compensation for service as a Director.

Each non-employee director that is elected to our Board of Directors will receive a non-qualified stock option to purchase 25,000 shares of our Common Stock vesting one year from the date of grant and granted on the fifth business day following his or her initial election to the Board of Directors. Each non-employee director also receives an annual retainer of \$30,000 paid in four equal quarterly installments. Each non-employee director is also entitled to receive a non-qualified stock option to purchase 25,000 shares of our Common Stock vesting one year from the date of grant and granted on the fifth business day following our annual meeting of stockholders. On March 15, 2016, upon the recommendation of the Compensation Committee, our Board of Directors voted to update the director compensation policy to grant such annual option awards to non-employee directors on the third business day following the issuance of our earnings release for year-end results, starting in 2016.

Non-employee Directors continue to be reimbursed for their expenses incurred in connection with attending Board and committee meetings.

Director Compensation Table

The following table presents the compensation provided by us to the non-employee Directors who served during the fiscal year ended December 31, 2015.

Name ⁽¹⁾	Fees earned or paid in cash (\$)	Option awards (\$) ⁽¹⁾⁽²⁾	Total (\$)
John J. Canepa	\$ 30,000	28,695	\$ 58,695
John F. Kennedy	\$ 30,000	28,695	\$ 58,695
James J. McGorry ⁽³⁾	\$ 15,000	28,695	\$ 43,695
Thomas H. Robinson	\$ 30,000	28,695	\$ 58,695
David Green ⁽⁴⁾	\$ 21,429	28,695	\$ 50,124

Based on the aggregate grant date fair value computed awards in accordance with the provisions of FASB ASC 718, Compensation Stock Compensation excluding the impact of estimated forfeitures. Assumptions used in the calculation of this amount are included under 2013 Plan Valuation and Expense Information under

(1) Share-Based-Payment Accounting in Note 13 to our audited financial statements for the fiscal year ended December 31, 2015, included in our Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 30, 2016.

(2) The aggregate number of option awards outstanding at our 2015 fiscal year end and held by the non-employee Directors were as follows: 50,000 for Mr. Canepa; 55,303 for Mr. Kennedy; 50,000 for Mr. Robinson; and 750,627

for Mr. Green. With respect to Mr. Kennedy, these holdings include grants of options to purchase 5,303 shares that were issued by our Company in connection with the required adjustment to the similar outstanding equity awards held by him and issued by Harvard Bioscience resulting from the impact of the spin-off of our Company by Harvard Bioscience.

James McGorry, our President and Chief Executive Officer and a Director, is included in this table as he was appointed as President and Chief Executive Officer effective as of July 6, 2015, and was eligible to receive (3) compensation as a non-employee director prior to that date. The compensation received by Mr. Green as an employee of the Company following his appointment as our President and Chief Executive Officer is shown in the Summary Compensation Table later in the proxy statement.

(4) David Green, our former Chairman of the Board, President and Chief Executive Officer, is included in this table as he resigned from his employment effective as of April 17, 2015 and was eligible to receive

20

TABLE OF CONTENTS

compensation as a non-employee director starting on that date. The compensation received by Mr. Green as an employee of the Company prior to April 17, 2015 is shown in the Summary Compensation Table later in the proxy statement.

OUTSTANDING EQUITY AWARDS AT FISCAL YEAR-END 2015

The following table sets forth information concerning the number and value of exercisable and unexercisable options to purchase Common Stock, and the number of restricted stock units held by our named executive officers as of December 31, 2015.

	Option Awards				Restricted
	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date	Stock Units Number of Securities Underlying Restricted Stock Units
James McGorry	25,000		\$ 4.29	11/18/2023	
		25,000 ⁽¹⁾	\$ 1.84	5/29/2025	
		671,400 ⁽²⁾	\$ 1.38	7/6/2025	
Thomas McNaughton		100,000 ⁽³⁾	\$ 1.40	9/1/2025	
		85,000 ⁽⁴⁾	\$ 1.84	5/29/2025	
	72,563	72,563 ⁽⁵⁾	\$ 4.29	11/18/2023	
	24,187	48,376 ⁽⁶⁾	\$ 4.29	11/18/2023	
	1,031	1030 ⁽⁷⁾	\$ 5.22	5/31/2023	535 ⁽⁹⁾
	3,287	1,096 ⁽⁸⁾	\$ 3.67	6/1/2022	570 ⁽¹⁰⁾
	2,769		\$ 5.79	6/2/2021	
	11,108		\$ 3.27	5/21/2019	
	5,544		\$ 2.90	11/14/2018	
Saverio LaFrancesca, M.D.	25,000	75,000 ⁽¹¹⁾	\$ 8.66	5/1/2024	
		100,000 ⁽¹²⁾	\$ 4.08	3/4/2025	
		40,000 ⁽¹³⁾	\$ 1.84	5/29/2025	
		160,000 ⁽¹⁴⁾	\$ 1.40	8/31/2025	
David Green	725,627		\$ 4.29	4/17/2022	
		25,000 ⁽¹⁾	\$ 1.84	5/30/2025	

(1) The option was granted on May 29, 2015 and, assuming continued service as a director with our Company, the unvested shares become exercisable on May 29, 2016.

(2) The option was granted on July 6, 2015 and, assuming continued employment with our Company, the unvested shares become exercisable in equal installments on January 1 of each of 2016, 2017, 2018 and 2019.

(3) The option was granted on August 31, 2015 and, assuming continued employment with our Company, the unvested shares become exercisable in equal installments on August 31 of each of 2016, 2017, 2018 and 2019.

(4) The option was granted on May 29, 2015 and, assuming continued employment with our Company, the unvested shares become exercisable in equal installments on May 29 of each of 2016, 2017, 2018 and 2019.

(5) The option was granted on November 1, 2013 and, assuming continued employment with our Company, the unvested shares become exercisable in equal installments on January 1, of each of 2016 and 2017.

(6) The option was granted on November 18, 2013 and, assuming continued employment with our Company, the unvested shares become exercisable in two equal increments subject to the achievement of certain milestone targets determined by our Board of Directors.

21

TABLE OF CONTENTS

- (7) The option was granted on November 1, 2013 and, assuming continued employment with our Company, the unvested shares become exercisable in equal installments on January 1, of each of 2016 and 2017.
- (8) The option was granted on November 1, 2013 and, assuming continued employment with our Company, the unvested shares become fully exercisable on January 1, 2016.
- (9) The restricted stock units were granted on November 1, 2013 and, assuming continued employment with our Company, these restricted stock units vest in equal installments on January 1 of each of 2016 and 2017.
- (10) The restricted stock units were granted on November 1, 2013 and, assuming continued employment with our Company, these restricted stock units fully vest on January 1, 2016.
- (11) The option was granted on May 1, 2014 and, assuming continued employment with our Company, the unvested shares become exercisable in equal installments on May 1 of each of 2015, 2016, 2017 and 2018.
- (12) The option was granted on March 4, 2015 and, assuming continued employment with our Company, the unvested shares become exercisable in equal installments on March 4 of each of 2016, 2017, 2018 and 2019.
- (13) The option was granted on May 29, 2015 and, assuming continued employment with our Company, the unvested shares become exercisable in equal installments on May 29 of each of 2016, 2017, 2018 and 2019.
- (14) The option was granted on August 31, 2015 and, assuming continued employment with our Company, the unvested shares become exercisable in equal installments on August 31 of each of 2016, 2017, 2018 and 2019.

22

TABLE OF CONTENTS**SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT**

The following table sets forth information regarding the beneficial ownership of our Common Stock as of March 30, 2016 by: (i) all persons known by us to own beneficially more than 5% of our voting securities; (ii) each of our Directors and nominees for Director; (iii) each of the named executive officers; and (iv) all of our Directors and executive officers as a group.

The number of shares beneficially owned by each stockholder is determined under rules issued by the SEC and includes voting or investment power with respect to securities. Under these rules, beneficial ownership includes any shares as to which the individual or entity has sole or shared voting power or investment power and includes any shares as to which the individual or entity has the right to acquire beneficial ownership within 60 days after March 30, 2016 through the exercise of any warrant, stock option or other right. The inclusion in this Proxy Statement of such shares, however, does not constitute an admission that the named stockholder is a direct or indirect beneficial owner of such shares. Common stock subject to options currently exercisable, or exercisable within 60 days after March 30, 2016, are deemed outstanding for the purpose of computing the percentage ownership of the person holding those options, but are not deemed outstanding for computing the percentage ownership of any other person.

Unless otherwise indicated below, to our knowledge, all persons named in the table have sole voting and investment power with respect to their shares of Common Stock, except to the extent spouses share authority under community property laws.

Name and Address of Beneficial Owner ⁽¹⁾	Common Stock Beneficially Owned	
	Shares	Percent ⁽²⁾
James J. McGorry	289,150	2.0 % ⁽³⁾
Thomas W. McNaughton	380,492	2.7 % ⁽⁴⁾
Saverio LaFrancesca, M.D.	128,998	* ⁽⁵⁾
John J. Canepa	50,000	* ⁽⁶⁾
David Green	1,288,886	8.7 % ⁽⁷⁾
John F. Kennedy	90,750	* ⁽⁸⁾
Thomas H. Robinson	50,000	* ⁽⁶⁾
Blaine H. McKee		*
All Executive Officers and Directors, as a group (8 persons)	2,278,276	14.7 % ⁽⁹⁾

* Represents less than 1% of all of the outstanding shares of Common Stock.

(1) Unless otherwise indicated, the address for all persons shown is c/o Biostage, Inc., 84 October Hill Road, Suite 11, Holliston, Massachusetts 01746.

(2) Based on 14,110,540 shares of Common Stock outstanding on March 30, 2016, together with the applicable options for each stockholder that become exercisable within 60 days.

(3) Includes options to acquire 217,850 shares exercisable within 60 days of March 30, 2016, and 71,300 shares.

(4) Includes options to acquire 179,631 shares exercisable within 60 days of March 30, 2016, and 200,861 shares.

(5) Includes options to acquire 85,000 shares exercisable within 60 days of March 30, 2016, and 43,998 shares.

(6) Includes options to acquire 50,000 shares exercisable within 60 days of March 30, 2016.

- (7) Includes options to acquire 750,627 shares that are exercisable within 60 days of March 30, 2016, and 538,259 shares.
- (8) Includes options to acquire 55,026 shares that are exercisable within 60 days of March 30, 2016, and 35,724 shares.
- (9) Includes options to acquire 1,388,134 shares that are exercisable within 60 days of March 30, 2016.

23

TABLE OF CONTENTS**EQUITY COMPENSATION PLAN INFORMATION**

The following table sets forth information as of December 31, 2015 concerning the number of shares of Common Stock issuable under our existing equity compensation plans.

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Restricted Stock Units, Warrants and Rights	Weighted Average Exercise Price of Outstanding Options, Warrants, and Rights	Number of Securities Remaining Available For Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
	(a)	(b)	(c)
Equity compensation plans approved by security holders ⁽¹⁾	3,254,223	\$ 3.29	338,681 ⁽²⁾
Equity compensation plans not approved by security holders			
Total	3,254,223	\$ 3.29	338,681

(1) Consists of our 2013 Equity Incentive Plan, or 2013 Plan, and our Employee Stock Purchase Plan.

(2) Includes 235,771 shares available for future issuance under our 2013 Plan and 102,910 shares available for future issuance under our Employee Stock Purchase Plan.

TRANSACTIONS WITH RELATED PERSONS

The Audit Committee charter sets forth the standards, policies and procedures that we follow for the review, approval or ratification of any related person transaction that we are required to report pursuant to Item 404(a) of Regulation S-K promulgated by the Securities and Exchange Commission. Under the Audit Committee charter, which is in writing, the Audit Committee must conduct an appropriate review of these related person transactions on an ongoing basis, and the approval of the Audit Committee is required for all such transactions. The Audit Committee relies on management to identify related person transactions and bring them to the attention of the Audit Committee. We do not have any formal policies and procedures regarding the identification by management of related person transactions.

During the 2014 and 2015 fiscal years, we were not a participant in any related person transactions that required disclosure under this heading except as it relates to (i) our engagement of, and payment during 2014 of \$99,165 to, RobinsonButler, an executive recruiting consultancy firm where Thomas Robinson, a Member of our Board of Directors, is a partner, to complete the search for our Chief Medical Officer, (ii) our engagement of, and payment during 2015 of \$166,645 to, RobinsonButler to complete the search for our President and Chief Executive Officer, and (iii) our commercial agreements with Harvard Bioscience that were entered into in connection with the spin-off of our Company. Harvard Bioscience remained a related party during a portion of 2015, due in part to Mr. Green, our former Chairman and CEO, also being a director of Harvard Bioscience. Since Mr. Green resigned from the positions of

Chairman and CEO of HART on April 17, 2015, Harvard Bioscience is no longer considered a related party. These commercial agreements with Harvard Bioscience include: (i) a Separation and Distribution Agreement to effect the separation and spin-off distribution and provide other agreements to govern our relationship with Harvard Bioscience after the spin-off; (ii) an Intellectual Property Matters Agreement, which governs various intellectual property related arrangements between our Company and Harvard Bioscience, including the separation of intellectual property rights between us and Harvard Bioscience, as well as certain related cross-licenses between the two companies; (iii) a Product Distribution Agreement, which provides that each company will become the exclusive distributor for the other party for products such other party develops for sale in the markets served by the other; (iv) a Tax Sharing Agreement, which governs the parties respective rights, responsibilities and obligations with respect to tax liabilities and benefits, tax attributes, the preparation and filing of tax returns, the control of audits and other tax proceedings and other matters regarding taxes for periods before, during and after the spin-off; (v) a Transition Services Agreement, which provided for certain services to be performed on a transitional basis by Harvard Bioscience to facilitate our transition into a separate public reporting company for time frames of limited length, which expired in 2014; and (vi) a Sublease of

TABLE OF CONTENTS

approximately 17,000 square feet of mixed use space of the facility located at 84 October Hill Road, Suite 11, Holliston, Massachusetts, which is our corporate headquarters.

As part of the Transition Services Agreement, and for up to one year following the spin-off date, Harvard Bioscience provided certain support services to us, including, among others, accounting, payroll, human resources and information technology services, with the charges for the transition services generally intended to allow Harvard Bioscience to fully recover the costs directly associated with providing the services, plus all out-of-pocket costs and expenses. In connection with the spin-off and in accordance with these agreements, Harvard Bioscience contributed capital of approximately \$15.0 million to us to fund our operations, and transferred to us approximately \$0.8 million in assets, made up primarily of property, plant and equipment. As these agreements evidence ongoing commercial arrangements which may involve varying amounts over time, we are unable to provide an approximate dollar value of the amount involved in the transaction. In fiscal 2014 and fiscal 2015, we paid approximately \$0.3 million and \$0.2 million, respectively, to Harvard Bioscience with respect to the Transition Services Agreement, Sublease and related cost, and research and development supplies. With respect to such approximate amount paid during fiscal 2015, approximately \$50,000 was paid during the period that Harvard Bioscience continued to be a related party. Neither Mr. Green nor Mr. McNaughton receive any amounts from the transactions with Harvard Bioscience relating to their roles as current or former executive officers, and a Director as to Mr. Green, of our Company, and it is our understanding that neither Mr. Green nor Mr. McNaughton receive any direct amounts from such agreements and the transactions in relation to their former roles as executive officers of Harvard Bioscience, and Mr. Green's continued role as a director of such company, and their interest is limited to benefits they may receive solely relating to their ongoing roles as executive officer, as to Mr. McNaughton, and Director, as to Mr. Green, and stockholders of our Company. As a non-employee Director of Harvard Bioscience, Mr. Green also is entitled to receive Director compensation that all non-employee Directors are entitled to receive under Harvard Bioscience's director compensation programs.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Our executive officers, Directors and beneficial owners of more than 10% of our Common Stock are required under Section 16(a) of the Securities Exchange Act of 1934 to file reports of ownership and changes in ownership with the Securities and Exchange Commission. Copies of those reports must also be furnished to us.

Based solely on a review of the copies of the reports furnished to us, and written representations from certain reporting persons that no other reports were required, we believe that during the year ended December 31, 2015, the reporting persons complied on a timely basis with all Section 16(a) filing requirements applicable to them, except for Mr. Kennedy, one of our Directors, who had one late filing of a Form 4 related to one option exercise, and Dr. LaFrancesca, our Chief Medical Officer, who had one late filing of a Form 4 related to one acquisition of shares under our Employee Stock Purchase Plan.

EXPENSES OF SOLICITATION

Morrow & Co., LLC, 470 West Avenue, Stamford, Connecticut 06902, has been retained by the Company to assist in the solicitation of proxies, for a fee of \$8,000 plus reimbursement of reasonable out-of-pocket expenses.

We will pay the entire expense of soliciting proxies for the Annual Meeting. In addition to solicitations by mail, certain of our Directors, officers and employees (who will receive no compensation for their services other than their regular compensation) may solicit proxies by telephone, telegram, personal interview, facsimile, e-mail or other means of electronic communication. Banks, brokerage houses, custodians, nominees and other fiduciaries have been requested to forward proxy materials to the beneficial owners of shares of Common Stock held of record by them as of the Record Date, and such custodians will be reimbursed for their expenses.

TABLE OF CONTENTS

SUBMISSION OF STOCKHOLDER PROPOSALS FOR THE 2017 ANNUAL MEETING

Stockholder proposals intended to be presented at our 2017 annual meeting of stockholders must be received by us on or before December 23, 2016 in order to be considered for inclusion in our proxy statement and form of proxy for that meeting. These proposals must also comply with the rules of the Securities and Exchange Commission governing the form and content of proposals in order to be included in our proxy statement and form of proxy and should be mailed to: Secretary, Biostage, Inc., 84 October Hill Road, Suite 11, Holliston, Massachusetts 01746.

Our By-laws provide that any stockholder of record wishing to have a stockholder proposal that is not included in our proxy statement considered at an annual meeting must provide written notice of such proposal and appropriate supporting documentation, as set forth in the By-laws, to our Secretary at our principal executive office not less than 90 days or not more than 120 days prior to the first anniversary of the date of the preceding year's annual meeting. In the event, however, that the annual meeting is scheduled to be held more than 30 days before such anniversary date or more than 60 days after such anniversary date, notice must be delivered not earlier than 120 days prior to the date of such meeting and not later than the later of (i) 10 days following the date of public announcement of the date of such meeting or (ii) 90 days prior to the date of such meeting. Proxies solicited by the Board of Directors will confer discretionary voting authority on the proxy holders with respect to these proposals, subject to rules of the Securities and Exchange Commission governing the exercise of this authority.

SUBMISSION OF SECURITYHOLDER RECOMMENDATIONS FOR DIRECTOR CANDIDATES

All securityholder recommendations for Director candidates must be submitted in writing to our Chief Financial Officer at Biostage, Inc., 84 October Hill Road, Suite 11, Holliston, Massachusetts 01746, who will forward all recommendations to the Governance Committee. All securityholder recommendations for Director candidates must be submitted to us not less than 120 calendar days prior to the anniversary of the date on which our proxy statement was released to securityholders in connection with the previous year's annual meeting. All securityholder recommendations for Director candidates must include:

the name and address of record of the securityholder,
a representation that the securityholder is a record holder of our securities, or if the securityholder is not a record holder, evidence of ownership in accordance with Rule 14a-8(b)(2) of the Securities Exchange Act of 1934,
the name, age, business and residential address, educational background, public company directorships, current principal occupation or employment, and principal occupation or employment for the preceding five full fiscal years of the proposed Director candidate,
a description of the qualifications and background of the proposed director candidate which addresses the minimum qualifications and other criteria for Board membership approved by the Board of Directors and set forth in the Governance Committee Charter,
a description of all arrangements or understandings between the securityholder and the proposed Director candidate, the consent of the proposed Director candidate to be named in the proxy statement, to have all required information regarding such Director candidate included in the proxy statement, and to serve as a Director if elected, and
any other information regarding the proposed Director candidate that is required to be included in a proxy statement filed pursuant to the rules of the Securities and Exchange Commission.

TABLE OF CONTENTS

STOCKHOLDER COMMUNICATIONS WITH THE BOARD OF DIRECTORS

Stockholders wishing to communicate with the Board of Directors may do so by sending a written communication to any Director at the following address: Biostage, Inc., 84 October Hill Road, Suite 11, Holliston, Massachusetts 01746.

The mailing envelope should contain a notation indicating that the enclosed letter is a Stockholder-Board Communication . All such letters should clearly state whether the intended recipients are all members of the Board of Directors or certain specified individual Directors. Our Secretary or his designee will make a copy of any stockholder communication so received and promptly forward it to the Director or Directors to whom it is addressed.

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Fees for professional services provided by KPMG LLP, our independent registered public accounting firm, during the fiscal years ended December 31, 2014 and December 31, 2015, in each of the following categories is as set forth in the table below.

	2014	2015
Audit Fees ⁽¹⁾	\$ 85,000	\$ 275,814
Tax Fees ⁽²⁾	\$ 8,000	\$ 8,000
All Other Fees	\$ 0	\$ 1,650
Total Fees	\$ 93,000	\$ 285,464

Audit Fees included fees associated with the annual audit of our consolidated financial statements, the reviews of (1) our quarterly report on Form 10-Q, accounting consultations and fees relating to filings of the Registration Statement on Form S-1 and Registration Statement on Form S-3.

(2) Tax Fees included domestic and international tax compliance, tax advice and tax planning.

(3) All other fees included fees paid for the accounting research online software tool.

All of the services performed in the years ended December 31, 2014 and December 31, 2015 were pre-approved by the Audit Committee. It is the Audit Committee's policy to pre-approve all audit and permitted non-audit services to be provided to us by the independent registered public accounting firm. The Audit Committee's authority to pre-approve non-audit services may be delegated to one or more members of the Audit Committee, who shall present all decisions to pre-approve an activity to the full Audit Committee at its first meeting following such decision. The Audit Committee has delegated this pre-approval authority to its Chairman for non-audit services with aggregate fees of \$10,000 or less. In addition, the Audit Committee has considered whether the provision of the non-audit services above is compatible with maintaining the independent registered public accounting firm's independence.

TABLE OF CONTENTS

PROPOSAL 2

RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Audit Committee of the Board of Directors has appointed KPMG LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2016. KPMG LLP has served as our independent registered public accounting firm since our Company's formation. The Audit Committee is responsible for the appointment, retention, termination, compensation and oversight of the work of our independent registered public accounting firm for the purpose of preparing or issuing an audit report or related work. To execute this responsibility, the Audit Committee engages in a comprehensive annual evaluation of the independent auditor's qualifications, performance and independence and whether the independent registered public accounting firm should be rotated, and considers the advisability and potential impact of selecting a different independent registered public accounting firm.

Although ratification of the appointment of our independent registered public accounting firm is not required by our By-laws or otherwise, the Board is submitting the appointment of KPMG LLP to our stockholders for ratification because we value the views of our stockholders. In the event that our stockholders fail to ratify the appointment of KPMG LLP, the Audit Committee will reconsider the appointment of KPMG LLP. Even if the appointment is ratified, the ratification is not binding and the Audit Committee may in its discretion select a different independent registered public accounting firm at any time during the year if it determines that such a change would be in the best interests of the Company and our stockholders.

A representative of KPMG LLP is expected to be present at the Annual Meeting. He or she will have an opportunity to make a statement, if he or she desires to do so, and will be available to respond to appropriate questions.

Vote Required

The affirmative vote of a majority of the votes cast by holders of shares of Common Stock present or represented by proxy and entitled to vote on the matter at the Annual Meeting is required for the ratification of the appointment of KPMG LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2016.

OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE FOR THE RATIFICATION OF THE APPOINTMENT OF KPMG LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING DECEMBER 31, 2016. PROPERLY AUTHORIZED PROXIES SOLICITED BY THE BOARD OF DIRECTORS WILL BE VOTED FOR THE RATIFICATION OF THE APPOINTMENT OF KPMG LLP UNLESS INSTRUCTIONS TO THE CONTRARY ARE GIVEN.

TABLE OF CONTENTS

PROPOSAL 3

**APPROVAL OF THE AMENDMENT OF THE
AMENDED AND RESTATED CERTIFICATE OF
INCORPORATION
TO INCREASE THE NUMBER OF AUTHORIZED
SHARES
OF COMMON STOCK TO 60,000,000**

Our Amended and Restated Certificate of Incorporation currently authorizes the issuance of 30,000,000 shares of Common Stock, par value \$0.01 per share. On March 15, 2016, our Board of Directors approved a proposal to amend our Amended and Restated Certificate of Incorporation to increase the number of shares of Common Stock that we are authorized to issue from 30,000,000 shares to 60,000,000 shares, subject to stockholder approval.

Our Board of Directors believes the proposed amendment to be advisable and in the best interests of the Company and our stockholders and is accordingly submitting the proposed amendment to be voted on by the stockholders in order to give the Company more flexibility in considering the planning for and responding quickly to future corporate needs, including, but not limited to, capital raising transactions, grants under equity compensation plans, stock splits, potential strategic transactions, including mergers, acquisitions, stock dividends and other general corporate transactions. If the authorization of an increase in the available Common Stock is not approved, the delay and expense incident to obtaining future approval of stockholders could impair our ability to address those corporate needs.

As of March 31, 2016, of the 30,000,000 currently authorized shares of Common Stock, 18,057,500 were either issued or reserved for issuance. Shares reserved for issuance include 3,844,050 shares under our 2013 Equity Incentive Plan and 102,910 under our Employee Stock Purchase Plan. If Proposal 5 is approved at the Annual Meeting, an additional 2,000,000 shares will be reserved under our 2013 Equity Incentive Plan.

Based on these issued and reserved shares of Common Stock, we currently have approximately 11,942,500 shares of Common Stock remaining available for issuance in the future for other corporate purposes.

Since inception, the Company has issued approximately 14,110,540 shares of Common Stock.

Text of the Amendment

Our Board of Directors proposes to amend the first sentence of Article IV of our Amended and Restated Certificate of Incorporation so that it would read in its entirety as follows:

The total number of shares of capital stock which the Corporation shall have authority to issue is sixty-two million (62,000,000) shares, of which (i) sixty million (60,000,000) shares shall be a class designated as common stock, par value \$0.01 per share (the Common Stock), and (ii) two million (2,000,000) shares shall be a class designated as undesignated preferred stock, par value \$0.01 per share (the Undesignated Preferred Stock).

If we also receive stockholder approval for Proposal 4, then the first sentence of Article IV of our Amended and Restated Certificate of Incorporation will be amended so that it would read in its entirety as follows:

The total number of shares of capital stock which the Corporation shall have authority to issue is sixty- four million (64,000,000) shares, of which (i) sixty million (60,000,000) shares shall be a class designated as common stock, par value \$0.01 per share (the Common Stock), and (ii) four million (4,000,000) shares shall be a class designated as undesignated preferred stock, par value \$0.01 per share (the Undesignated Preferred Stock).

Neither Proposal 3 nor Proposal 4 are conditioned upon stockholder approval of the other.

Purpose of the Amendment

Our Board of Directors is recommending this increase in the authorized Common Stock primarily to have additional shares available for use as our Board of Directors deems appropriate or necessary. As such, the primary purpose of the proposed amendment is to provide us with greater flexibility with respect to managing our Common Stock in connection with such corporate purposes as may, from time to time, be considered advisable by our Board of Directors.

TABLE OF CONTENTS

The newly authorized shares of Common Stock would be issuable for any proper corporate purpose including flexibility in considering the planning for future corporate needs, including, but not limited to, capital raising transactions, grants under equity compensation plans, stock splits, potential strategic transactions, including mergers, acquisitions, stock dividends and other general corporate transactions.

Our Board of Directors has determined that having an increased number of authorized but unissued shares of Common Stock would allow us to take prompt action with respect to corporate opportunities that develop, without the delay and expense of convening a special meeting of stockholders for the purpose of approving an increase in our capitalization.

Rights of Additional Authorized Shares

Any authorized shares of Common Stock, if and when issued, would be part of the Company's existing class of Common Stock and would have the same rights and privileges as the shares of Common Stock currently outstanding.

Current stockholders do not have pre-emptive rights with respect to Common Stock, nor do they have cumulative voting rights. Should the Board of Directors issue additional shares of Common Stock, existing Stockholders would not have any preferential rights to purchase any of such shares, and their percentage ownership of the Company's then outstanding Common Stock could be reduced.

Potential Adverse Effects of Amendment

Future issuances of Common Stock could have a dilutive effect on the Company's earnings per share, book value per share and the voting power and interest of current Stockholders. In addition, the availability of additional shares of Common Stock for issuance could, under certain circumstances, discourage or make more difficult any efforts to obtain control of the Company. The Board of Directors is not aware of any attempt, or contemplated attempt, to acquire control of the Company, nor is this Proposal being presented with the intent that it be used to prevent or discourage any acquisition attempt. However, nothing would prevent the Board from taking any such actions that it deems to be consistent with its fiduciary duties.

Effectiveness of Amendment

If the proposed amendment is adopted, it will become effective upon the filing of a certificate of amendment to our Amended and Restated Certificate of Incorporation with the Secretary of State of the State of Delaware, which the Company expects to file promptly after the Annual Meeting. If the proposed amendment is not approved by the Company's Stockholders, the number of authorized shares of Common Stock will remain unchanged.

Vote Required

The affirmative vote of the majority of the outstanding shares of Common Stock entitled to vote on such amendment is required for the approval of the proposed Amendment to our Amended and Restated Certificate of Incorporation.

OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE FOR THE APPROVAL OF THE PROPOSED AMENDMENT TO OUR AMENDED AND RESTATED CERTIFICATE OF INCORPORATION TO INCREASE THE NUMBER OF AUTHORIZED SHARES OF COMMON STOCK TO 60,000,000. PROPERLY AUTHORIZED PROXIES SOLICITED BY THE BOARD OF DIRECTORS WILL BE VOTED FOR THE APPROVAL OF THE PROPOSED AMENDMENT UNLESS INSTRUCTIONS TO THE CONTRARY ARE GIVEN.

TABLE OF CONTENTS

PROPOSAL 4

**APPROVAL OF THE AMENDMENT OF THE
AMENDED AND RESTATED CERTIFICATE OF
INCORPORATION
TO INCREASE THE NUMBER OF AUTHORIZED
SHARES
OF PREFERRED STOCK TO 4,000,000**

Our Amended and Restated Certificate of Incorporation currently authorizes the issuance of 2,000,000 shares of preferred stock, par value \$0.01 per share (the Preferred Stock). On March 15, 2016, our Board of Directors approved a proposal to amend our Amended and Restated Certificate of Incorporation to increase the number of shares of Preferred Stock that we are authorized to issue from 2,000,000 shares to 4,000,000 shares, subject to stockholder approval.

Our Board of Directors believes the proposed amendment to be advisable and in the best interests of the Company and our stockholders and is accordingly submitting the proposed amendment to be voted on by the stockholders in order to give the Company more flexibility in considering the planning for and responding quickly to future corporate needs, including, but not limited to, capital raising transactions, grants under equity compensation plans, stock splits, potential strategic transactions, including mergers, acquisitions, stock dividends and other general corporate transactions. If the authorization of an increase in the available Preferred Stock is not approved, the delay and expense incident to obtaining future approval of stockholders could impair our ability to address those corporate needs.

As of March 31, 2016, of the 2,000,000 currently authorized shares of Preferred Stock, none were issued and we currently have reserved 5,000 shares for issuance in relation to our Series A Junior Participating Cumulative Preferred Stock pertaining to our shareholder rights plan, and 1,000,000 shares for issuance in relation to our Series B Convertible Preferred Stock.

We currently have 2,000,000 shares of Preferred Stock remaining available for issuance in the future for other corporate purposes, including the 5,000 and 1,000,000 shares currently reserved for issuance as noted above.

Text of the Amendment

Our Board of Directors proposes to amend the first sentence of Article IV of our Amended and Restated Certificate of Incorporation so that it would read in its entirety as follows:

The total number of shares of capital stock which the Corporation shall have authority to issue is thirty-four million (34,000,000) shares, of which (i) thirty million (30,000,000) shares shall be a class designated as common stock, par value \$0.01 per share (the Common Stock), and (ii) four million (4,000,000) shares shall be a class designated as undesignated preferred stock, par value \$0.01 per share (the Undesignated Preferred Stock).

If we also receive stockholder approval for Proposal 3, then the first sentence of Article IV of our Amended and Restated Certificate of Incorporation will be amended so that it would read in its entirety as follows:

The total number of shares of capital stock which the Corporation shall have authority to issue is sixty-four million (64,000,000) shares, of which (i) sixty million (60,000,000) shares shall be a class designated as common stock, par value \$0.01 per share (the Common Stock), and (ii) four million (4,000,000) shares shall be a class designated as undesignated preferred stock, par value \$0.01 per share (the Undesignated Preferred Stock).

Neither Proposal 3 nor Proposal 4 are conditioned upon stockholder approval of the other.

Purpose of the Amendment

Our Board of Directors is recommending this increase in the authorized Preferred Stock primarily to have additional shares available for use as our Board of Directors deems appropriate or necessary. As such, the primary purpose of the proposed amendment is to provide us with greater flexibility with respect to managing our Preferred Stock in connection with such corporate purposes as may, from time to time, be considered advisable by our Board of Directors.

TABLE OF CONTENTS

The newly authorized shares of Preferred Stock would be issuable for any proper corporate purpose including flexibility in considering the planning for future corporate needs, including, but not limited to, capital raising transactions, grants under equity compensation plans, stock splits, potential strategic transactions, including mergers, acquisitions, stock dividends and other general corporate transactions.

Our Board of Directors has determined that having an increased number of authorized but unissued shares of Preferred Stock would allow us to take prompt action with respect to corporate opportunities that develop, without the delay and expense of convening a special meeting of stockholders for the purpose of approving an increase in our capitalization.

Rights of Additional Authorized Shares

Any Preferred Stock issued in the future will have the rights and preferences designated by our Board of Directors which may exceed the current rights and preferences of the Common Stock.

Potential Adverse Effects of Amendment

Future issuances of Preferred Stock could have a dilutive effect on the Company's earnings per share, book value per share and the voting power and interest of current Stockholders. In addition, the availability of additional shares of Preferred Stock for issuance could, under certain circumstances, discourage or make more difficult any efforts to obtain control of the Company. The Board of Directors is not aware of any attempt, or contemplated attempt, to acquire control of the Company, nor is this Proposal being presented with the intent that it be used to prevent or discourage any acquisition attempt. However, nothing would prevent the Board from taking any such actions that it deems to be consistent with its fiduciary duties.

Effectiveness of Amendment

If the proposed amendment is adopted, it will become effective upon the filing of a certificate of amendment to our Amended and Restated Certificate of Incorporation with the Secretary of State of the State of Delaware, which the Company expects to file promptly after the Annual Meeting. If the proposed amendment is not approved by the Company's Stockholders, the number of authorized shares of Preferred Stock will remain unchanged.

Vote Required

The affirmative vote of the majority of the outstanding shares of Common Stock entitled to vote on such amendment is required for the approval of the proposed Amendment to our Amended and Restated Certificate of Incorporation.

OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE FOR THE APPROVAL OF THE PROPOSED AMENDMENT TO OUR AMENDED AND RESTATED CERTIFICATE OF INCORPORATION TO INCREASE THE NUMBER OF AUTHORIZED SHARES OF PREFERRED STOCK TO 4,000,000. PROPERLY AUTHORIZED PROXIES SOLICITED BY THE BOARD OF DIRECTORS WILL BE VOTED FOR THE APPROVAL OF THE PROPOSED AMENDMENT UNLESS INSTRUCTIONS TO THE CONTRARY ARE GIVEN.

TABLE OF CONTENTS

PROPOSAL 5

**APPROVAL OF THE AMENDMENT OF THE BIOSTAGE,
INC.
2013 STOCK EQUITY INCENTIVE PLAN**

We are proposing that our stockholders approve the amendment of the Biostage, Inc. 2013 Equity Incentive Plan (as amended, the 2013 Plan and such amendment, the Plan Amendment) to increase by 2,000,000 shares the number of authorized shares of Common Stock available for issuance under the 2013 Plan from 3,960,000 shares to 5,960,000 shares. Our Board of Directors believes that our continued growth and success depends, in large part, on our ability to maintain a competitive position by attracting, retaining and motivating key employees with experience and ability, which is vital to our future success, and to align our employees' compensation with building shareholder value. Our 2013 Plan is an integral part of this strategy. An increase in shares available under the 2013 Plan is necessary not only to retain current employees but also to attract new talent as we grow. During the next few years we plan to expand our headcount significantly to the extent we are able to grow from a development company to a commercial organization manufacturing and selling products approved by regulatory agencies. We anticipate that the shares currently available under our 2013 Plan will be insufficient to meet our future needs, thus potentially impairing our ability to attract and retain key employees through the grant of stock-based awards.

The Plan Amendment will remove (i) the 2013 Plan's evergreen provision and (ii) the ability of our Board of Directors to increase the maximum number of shares of stock available for grant and issuance under the 2013 Plan in connection with adjustment awards issued in connection with the spin-off of our Company by Harvard Bioscience. The 2013 Plan is designed to attract, motivate and retain employees, directors and consultants of the Company and to further the growth and financial success of the Company by aligning the interests of such persons through ownership with the interests of our stockholders.

The 2013 Plan currently authorizes the grant of stock options and other stock-based awards to officers, employees, non-employee directors and other key persons of the Company and its subsidiaries. Currently, 3,844,050 shares of Common Stock are reserved for issuance pursuant to awards granted under the 2013 Plan. As of March 31, 2016, 179,120 shares remained available for grant under the 2013 Plan. On March 28, 2016, the Board of Directors approved the Plan Amendment, subject to stockholder approval. On March 31, 2016, we amended the 2013 Plan, pursuant to approval by our Board of Directors, to reflect our name change to Biostage, Inc.

Prior to the Plan Amendment, the 2013 Plan currently includes an evergreen provision. Under the evergreen provision, the maximum number of shares of stock available for grant and issuance under the 2013 Plan is increased on January 1 of each year during the term of the plan by 4% of the number of shares issued and outstanding on the date of adoption of the 2013 Plan. In addition, our Board of Directors has the express authority to increase the maximum number of shares of stock available for grant and issuance under the 2013 Plan in an amount equal to that number which enables us to issue the full amount of adjustment awards to be issued in connection with the spin-off of our company by Harvard Bioscience, provided that in no event shall the maximum aggregate number of shares of stock available for grant and issuance under the 2013 Plan, taking into account the total number of such adjustment awards issued, exceed forty percent (40%) of the number of shares issued and outstanding as of the date of adoption of the 2013 Plan. The Plan Amendment will remove both of these provisions from the 2013 Plan, as they will no longer be necessary once the number of shares available for issuance under the 2013 Plan is increased pursuant to the Plan

Amendment.

Our Board of Directors believes that the proposed amendment of the 2013 Plan is in the best interests of, and will provide long-term advantages to, us and our stockholders and recommends the approval by our stockholders of the proposed amendment. Stock options and other stock-based incentive awards are given to the employees, officers, directors and other key persons of our Company upon whose judgment, initiative and efforts we largely depend for the successful conduct of our business. These incentives provide our employees with a proprietary interest in our Company, thereby stimulating their commitment on our behalf and strengthening their desire to remain with us. Our Board of Directors anticipates that this direct stake in the future success of our Company also assures a closer alignment of the interests of employees with those of our stockholders. Our Board of Directors believes that the number of shares of Common Stock currently available for issuance under our 2013 Plan is insufficient in view of our anticipated growth, compensation structure, and

TABLE OF CONTENTS

strategy. If we cannot increase the amount of shares of Common Stock available for issuance pursuant to the proposed amendment, it could have a negative impact on our ability to retain and attract key employees. Accordingly, we are seeking stockholder approval of the Plan Amendment. In the event that the Plan Amendment is not approved by stockholders, the 2013 Plan will continue in effect without the amendment described above.

Based solely on the closing price of our Common Stock as reported on the NASDAQ Capital Market on March 31, 2016, the maximum aggregate market value of the 2,000,000 additional shares that could potentially be issued under the 2013 Plan, as amended, is approximately \$3.6 million. The shares available for issuance by us under the 2013 Plan will be authorized but unissued shares.

As of March 31, 2016: (i) 179,120 shares of our Common Stock remained available for future awards under our 2013 Plan; (ii) 268 shares of our Common Stock were subject to unvested deferred stock awards of restricted stock units under our 2013 Plan; and (iii) 3,735,198 shares of our Common Stock were subject to outstanding options under our 2013 Plan (with the outstanding options having a weighted average exercise price of \$2.97 per share and a weighted average term to scheduled expiration of 8.38 years). During fiscal 2015, our Board of Directors approved the grant of options to purchase 1,855,916 shares of Common Stock under our 2013 Plan, and did not approve the grant any shares of restricted stock or restricted stock units under such plan.

A summary of the material terms of the 2013 Plan, reflecting the changes pertaining to the Plan Amendment, is included below. Stockholders are urged to read the actual text of the 2013 Plan, as proposed to be amended, which is set forth as Appendix A to this Proxy Statement and incorporated herein by reference.

Vote Required

The affirmative vote of a majority of the votes cast by holders of shares of Common Stock present or represented by proxy and entitled to vote on the matter at the Annual Meeting is required for approval of the amendment of the 2013 Plan as set forth in the Plan Amendment.

OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE FOR THE PROPOSAL TO APPROVE THE AMENDMENT TO THE BIOSTAGE, INC. 2013 EQUITY INCENTIVE PLAN. PROPERLY AUTHORIZED PROXIES SOLICITED BY THE BOARD OF DIRECTORS WILL BE VOTED FOR THE APPROVAL OF THE PROPOSED AMENDMENT UNLESS INSTRUCTIONS TO THE CONTRARY ARE GIVEN.

Summary of the 2013 Plan, as Amended

The following description of certain features of the 2013 Plan, as amended by the Plan Amendment, is intended to be a summary only. The summary is qualified in its entirety by the full text of the 2013 Plan, as proposed to be amended, that is attached hereto as Appendix A.

Shares Available. The maximum number of shares authorized for issuance under the 2013 Plan is 5,960,000 shares of common stock, which reflects (i) 3,000,000 shares of common stock originally reserved under the 2013 Plan, (ii) 960,000 shares of common stock previously added to the 2013 Plan pursuant to the evergreen provision, which is being removed by the Plan Amendment, and (iii) 2,000,000 shares that are being added pursuant to the Plan Amendment. The shares underlying any awards that are forfeited, canceled or are otherwise terminated (other than by exercise) under the 2013 Plan will be added back to the shares authorized for issuance under the 2013 Plan. Shares tendered or held back upon exercise of an option or settlement of an award to cover the exercise price or tax

withholding are not available for future issuance under the 2013 Plan. In addition, upon exercise of stock appreciation rights, the gross number of shares exercised shall be deducted from the total number of shares remaining available for issuance under the 2013 Plan.

Plan Administration. The 2013 Plan is administered by the compensation committee of the Board of Directors. The administrator of the 2013 Plan has full power and authority to select the participants to whom awards will be granted, to make any combination of awards to participants, to accelerate the exercisability or vesting of any award, subject to limitations, and to determine the specific terms and conditions of each award,

TABLE OF CONTENTS

subject to the provisions of the 2013 Plan. The administrator may delegate to the Chief Executive Officer the authority to grant awards to employees, other than our executive officers, provided that the administrator includes a limitation as to the number of shares that may be awarded and provides specific guidelines regarding such awards.

Eligibility and Limitations on Grants. All full-time and part-time officers, employees, non-employee directors and other key persons, including consultants, are eligible to participate in the 2013 Plan, subject to the discretion of the administrator. Approximately 76 individuals are currently eligible to participate in the 2013 Plan.

Performance-Based Compensation. To ensure that certain awards granted under the 2013 Plan, including awards of restricted stock, deferred stock, cash-based awards or performance shares to a Covered Employee (as defined in the Code) qualify as performance-based compensation under Section 162(m) of the Code, the 2013 Plan provides that the compensation committee may require that the vesting of such awards be conditioned on the satisfaction of performance criteria including: (1) return on equity, assets, capital or investment; (2) pre-tax or after-tax profit levels; (3) cash flow, funds from operations or similar measure; (4) total shareholder return; (5) changes in the market price of the our common stock; (6) revenues, sales or market share; (7) net income (loss) or earnings per share; (8) expense margins or operating efficiency (including budgeted spending limits) or (9) project development milestones, any of which may be measured either in absolute terms or as compared to any incremental increase or as compared to results of a peer group and, for financial measures, may be based on numbers calculated in accordance with U.S. generally accepted accounting principles or on an as adjusted basis. These performance criteria may be expressed in terms of overall company performance or the performance of a division, business unit, or an individual. The compensation committee will select the particular performance criteria within 90 days following the commencement of a performance cycle, and each performance cycle must be at least three months long. Subject to adjustments for stock splits and similar events, the maximum award of restricted stock or deferred stock or performance shares (or combination thereof) granted to any one individual that is intended to qualify as performance-based compensation under Section 162(m) of the Code will not exceed 1,000,000 shares, or \$2,000,000 in the case of a performance-based award that is a cash-based award for any performance cycle, and options or stock appreciation rights with respect to no more than 1,000,000 shares may be granted to any one individual during any calendar year period.

Stock Options. The exercise price of stock options awarded under the 2013 Plan may not be less than the fair market value of the common stock on the date of the option grant. The term of each stock option may not exceed ten years from the date of grant. The administrator will determine at what time or times each option may be exercised and, subject to the provisions of the 2013 Plan, the period of time, if any, after retirement, death, disability or termination of employment during which options may be exercised.

To qualify as incentive stock options, stock options must meet additional federal tax requirements, including a \$100,000 limit on the value of shares subject to incentive stock options which first become exercisable in any one calendar year, and a shorter term and higher minimum exercise price in the case of certain stockholders that hold more than ten percent of the combined voting power of all classes of our stock.

Automatic Grants to Non-Employee Directors. The 2013 Plan provides for the automatic grant of a non-qualified stock option to purchase shares of common stock to non-employee directors. Each non-employee director who is first elected to serve as a director shall be granted, on the fifth business day after such election, an option to acquire 25,000 shares of common stock. The exercise price of the automatically granted stock options is equal to 100% of the fair market value of the common stock on the date of grant and, unless otherwise provided by the administrator, shall vest and be exercisable as to all of the shares of stock covered thereby as of the first anniversary of the grant date. The automatically granted stock options expire ten years after the date of grant.

Stock Appreciation Rights. The administrator may award a stock appreciation right independently of a stock option. The administrator may award stock appreciation rights subject to such conditions and restrictions as the administrator may determine, provided that the exercise price may not be less than the fair market value of the common stock on the date of grant and no stock appreciation right may be exercisable more than

TABLE OF CONTENTS

ten years after the date of grant. Additionally, during the participant's lifetime, all stock appreciation rights are exercisable only by the participant or the participant's legal representative.

Restricted Stock. The administrator may award shares to participants subject to such conditions and restrictions as the administrator may determine. These conditions and restrictions may include the achievement of certain performance goals and/or continued employment with our company through a specified restricted period. However, in the event these awards to employees have a performance-based goal, the restriction period will be at least one year, and in the event these awards to employees have a time-based restriction, the restriction period will be at least three years.

Deferred Stock. The administrator may award phantom stock units to participants subject to such conditions and restrictions as the administrator may determine. These conditions and restrictions may include the achievement of certain performance goals and/or continued employment with our company through a specified restricted period. However, in the event these awards to employees have a performance-based goal, the restriction period will be at least one year, and in the event these awards to employees have a time-based restriction, the restriction period will be at least three years. At the end of the deferral period, the participants shall be paid, to the extent vested, in shares.

Unrestricted Stock. The administrator may grant shares (at par value or for a purchase price determined by the administrator) that are free from any restrictions under the 2013 Plan. Unrestricted stock may be issued to participants in recognition of past services or other valid consideration, and may be issued in lieu of cash compensation to be paid to such individuals.

Performance Shares. The administrator may grant performance share awards that entitle the recipient to acquire shares of common stock upon the attainment of specified performance goals. The administrator determines the performance goals, performance periods and other terms of any such awards. However, performance share awards to employees will have a restriction period of at least one year.

Cash-Based Awards. Each cash-based award shall specify a cash-denominated payment amount, formula or payment ranges as determined by the administrator. Payment, if any, with respect to a cash-based award may be made in cash or in shares of common stock, as the administrator determines.

Dividend Equivalent Rights. The administrator may award dividend equivalent rights under the 2013 Plan subject to such conditions and restrictions as the administrator may determine, provided that dividend equivalent rights may only be granted in tandem with restricted stock awards, deferred stock awards, performance share awards or unrestricted stock awards. Dividend equivalents credited to the holder may be paid currently or may be deemed to be reinvested in additional shares of stock, which may thereafter accrue additional equivalents.

Tax Withholding. Participants in the 2013 Plan are responsible for the payment of any federal, state or local taxes that we are required by law to withhold upon any option exercise or vesting of other awards. Subject to approval by the administrator, participants may elect to have the minimum tax withholding obligations satisfied either by authorizing us to withhold shares to be issued pursuant to an option exercise or other award, or by transferring to us shares having a value equal to the amount of such taxes.

Change of Control Provisions. In the event of a merger, sale or dissolution of our company, or a similar sale event (as defined in the 2013 Plan) and upon a change of control all outstanding awards under the 2013 Plan, unless otherwise provided for in a particular award agreement, all stock options and stock appreciation rights will automatically become fully exercisable and all other awards with conditions and restrictions relating solely to the passage of time will become fully vested and non-forfeitable as of the effective time of the sale event or change of control, except as may be otherwise provided in the relevant award agreement. The term change of control is defined in the 2013 Plan

and generally refers to any person becoming the beneficial owner of more than twenty five percent voting power of our securities having the right to vote in an election of our Board of Directors, our Board of Directors at the time of the effectiveness of the 2013 Plan (or those added by approval of such directors) ceasing for any reason to constitute at least a majority of our board of directors, the consummation of a consolidation, merger or consolidation or sale or other disposition of all or substantially all of our assets, and/or the approval by our stockholders of any plan or proposal for the liquidation or dissolution of us. In addition, upon a sale event, all outstanding awards

TABLE OF CONTENTS

under the 2013 Plan will terminate unless the parties to the transaction, in their discretion, provide for assumption, continuation or appropriate substitutions or adjustments of such awards. In the event of such termination in connection with a sale event, each holder of an option or a stock appreciation right will be permitted to exercise such award for a specified period prior to the consummation of the sale event. The administrator may also provide for a cash payment with respect to outstanding options and stock appreciation rights in exchange for the cancellation of such awards.

Term. No awards of incentive stock options may be granted under the 2013 Plan after the 10-year anniversary of the date that the 2013 Plan was approved by the Board of Directors. No other awards may be granted under the 2013 Plan after the 10-year anniversary of the date that the 2013 Plan was approved by stockholders.

Amendments. Stockholder approval will be required to amend the 2013 Plan if the administrator determines that this approval is required to ensure that incentive stock options qualify as such under the Code, or that compensation earned under awards qualifies as performance-based compensation under the Code or as required under the applicable securities exchange or market system rules. Otherwise, the Board of Directors may amend or discontinue the 2013 Plan at any time, and the administrator may amend or cancel any outstanding award for the purpose of satisfying changes in law or for any other lawful purpose, provided that no such amendment may adversely affect the rights under any outstanding award without the holder's consent.

Repricing. Other than in the event of a necessary adjustment in connection with a change in our stock or a merger or similar transaction, the administrator may not reprice or otherwise reduce the exercise price of outstanding stock options or stock appreciation rights without stockholder approval.

Effective Date of the 2013 Plan. On October 11, 2013, the Board of Directors approved the 2013 Plan, which was approved by Harvard Bioscience, the Company's sole stockholder at the time, on October 31, 2013.

Tax Aspects Under the Code

The following is a summary of the principal federal income tax consequences of certain transactions under the 2013 Plan, as amended by the Plan Amendment. It does not describe all federal tax consequences under the 2013 Plan, nor does it describe state or local tax consequences.

Incentive Options. No taxable income is generally realized by the optionee upon the grant or exercise of an incentive option. If shares issued to an optionee pursuant to the exercise of an incentive option are sold or transferred after two years from the date of grant and after one year from the date of exercise, then (1) upon sale of such shares, any amount realized in excess of the option price (the amount paid for the shares) will be taxed to the optionee as a long-term capital gain, and any loss sustained will be a long-term capital loss, and (2) there will be no deduction for us for federal income tax purposes. The exercise of an incentive option will give rise to an item of tax preference that may result in alternative minimum tax liability for the optionee.

If shares acquired upon the exercise of an incentive option are disposed of prior to the expiration of the two-year and one-year holding periods described above (a disqualifying disposition), generally (a) the optionee will realize ordinary income in the year of disposition in an amount equal to the excess (if any) of the fair market value of the shares at exercise (or, if less, the amount realized on a sale of such shares) over the option price thereof, and (b) we will be entitled to deduct such amount. Special rules will apply where all or a portion of the exercise price of the incentive option is paid by tendering shares.

If an incentive option is exercised at a time when it no longer qualifies for the tax treatment described above (e.g., if the holding periods described above are not satisfied), the option is treated as a non-qualified option. In addition, an incentive option will not be eligible for the tax treatment described above if it is exercised more than three months following termination of employment (or one year in the case of termination of employment by reason of disability).

In the case of termination of employment by reason of death, the three-month rule does not apply.

Non-Qualified Options. No income is realized by the optionee at the time the option is granted. Generally (i) at exercise, ordinary income is realized by the optionee in an amount equal to the difference between the option price and the fair market value of the shares on the date of exercise, and we receive a tax

TABLE OF CONTENTS

deduction for the same amount, and (ii) at disposition, appreciation or depreciation after the date of exercise is treated as either short-term or long-term capital gain or loss depending on how long the shares have been held. Special rules will apply where all or a portion of the exercise price of the non-qualified option is paid by tendering shares. Upon exercise, the optionee will also be subject to Social Security taxes on the excess of the fair market value over the exercise price of the option.

Stock Appreciation Rights. The recipient of a grant of stock appreciation rights will not realize taxable income and we will not be entitled to a deduction with respect to such grant on the date of such grant. Upon the exercise of a stock appreciation rights, the recipient will realize ordinary income equal to the amount of cash (including the amount of any taxes withheld) and the fair market value of any shares received at the time of exercise. In general, we will be entitled to a corresponding deduction, equal to the amount of income realized.

Restricted Stock. A participant who receives a grant of restricted stock will not recognize any taxable income at the time of the award, provided the shares are subject to restrictions (that is, they are nontransferable and subject to a substantial risk of forfeiture). A participant's rights in restricted stock awarded under the plan are subject to a substantial risk of forfeiture if the rights to full enjoyment of the shares are conditioned, directly or indirectly, upon the future performance of substantial services by the participant. However, the participant may elect under Section 83(b) of the Code to recognize compensation income in the year of the award in an amount equal to the fair market value of the shares on the date of the award, determined without regard to the restrictions. If the participant does not make a Section 83(b) election within 30 days of receipt of the restricted shares, the fair market value of the shares on the date the restrictions lapse, less any amount paid by the participant for such shares, will be treated as compensation income to the participant and will be taxable in the year the restrictions lapse. We generally will be entitled to a compensation deduction for the amount of compensation income the participant recognizes.

Restricted Stock Units. A participant will not recognize income, and our Company is not entitled to a deduction, upon a grant of restricted stock units. Upon the delivery to a participant of Common Stock or cash in respect of restricted stock units, a participant generally recognizes ordinary compensation income equal to the fair market value of the shares as of the date of delivery or the cash amount less the purchase price (if any) paid by the participant. When the participant recognizes ordinary income, generally we will be entitled to a tax deduction in the same amount. Upon disposition of any shares acquired through a restricted stock unit award, the participant will recognize long-term or short-term capital gain or loss depending upon the sale price and holding period of the shares.

Performance Share Awards. A participant will not recognize income, and our Company is not entitled to a deduction, upon a grant of a performance share award. At the time a performance share award is settled, following the determination that the performance targets have been achieved, the fair market value of the stock delivered on that date, plus any cash that is received, constitutes ordinary income, and generally we will be entitled to a deduction for that amount. Upon disposition of any shares acquired through a performance share award, the participant will recognize long-term or short-term capital gain or loss depending upon the sale price and holding period of the shares.

Other Types of Awards. With respect to other awards under the 2013 Plan generally when the participant receives payment with respect to an award, the amount of cash and fair market value the stock or of any other property received will be ordinary income to the participant, and the Company generally will be entitled to a tax deduction in the same amount.

Parachute Payments. The vesting of any portion of an option or other award that is accelerated due to the occurrence of a change in control may cause a portion of the payments with respect to such accelerated awards to be treated as parachute payments as defined in the Code. Any such parachute payments may be non-deductible to us, in whole or in part, and may subject the recipient to a non-deductible 20% federal excise tax on all or a portion of such payment (in

addition to other taxes ordinarily payable).

Limitation on the Company's Deductions. As a result of Section 162(m) of the Code, our deduction for certain awards under the 2013 Plan may be limited to the extent that the Chief Executive Officer or other executive officer whose compensation is required to be reported in the summary compensation table receives

TABLE OF CONTENTS

compensation in excess of \$1 million a year (other than performance-based compensation that otherwise meets the requirements of Section 162(m) of the Code). The 2013 Plan is structured to allow grants to qualify as performance-based compensation.

New Plan Benefits

No grants have been issued with respect to the additional shares to be reserved for issuance under the 2013 Plan, as amended by the Plan Amendment. The number of shares that may be granted to our Chief Executive Officer, executive officers, non-employee directors (other than the automatically granted awards) and non-executive officers under the 2013 Plan, as amended by the Plan Amendment, is not determinable at this time, as such grants are subject to the discretion of the Compensation Committee. Information about the non-qualified stock options automatically granted to non-employee directors can be found herein under the heading Automatic Grants to Non-Employee Directors. The following table provides information with respect to the number of shares granted under the 2013 Plan for the fiscal year ended December 31, 2015 to our executive officers, directors who are not executive officers, and employees. Information about the number of shares granted to our Chief Executive Officer and other named executive officers can be found herein under the heading Outstanding Equity Awards at Fiscal Year-End 2015.

Name and Position	Number of Shares Underlying Awards
James McGorry <i>President and Chief Executive Officer</i>	696,400 ⁽¹⁾
Thomas McNaughton <i>Chief Financial Officer</i>	185,000
Saverio LaFrancesca, M.D. <i>Chief Medical Officer</i>	300,000
David Green <i>Former President, Chief Executive Officer and Chairman</i>	25,000 ⁽²⁾
All executive officers as a group	1,206,400
All directors who are not executive officers, as a group	75,000 ⁽³⁾
Employees as a group (excluding executive officers)	524,000
Totals	1,805,400

Mr. McGorry was appointed as President and Chief Executive Officer on July 6, 2015. This number includes an (1) option to acquire 25,000 shares that was granted to Mr. McGorry prior to that date in connection with his service as a non-employee director.

Mr. Green resigned as our Chairman, President and Chief Executive Officer effective as of April 17, 2015. This (2) award consists of an option to acquire 25,000 shares that was granted to Mr. Green after to that date in connection with his service as a non-employee director.

(3) Consists of options to acquire 75,000 shares. Excludes 25,000 shares granted to each of Messrs. McGorry and Green during periods of 2015 when they were non-employee directors.

Reference is hereby made to the Equity Compensation Plan Information table on page 24 of this Proxy Statement which is incorporated by reference into this Proposal 5 and provides certain details on our current plans.

MULTIPLE STOCKHOLDERS SHARING THE SAME ADDRESS

Owners of Common Stock in street name may receive a notice from their broker or bank stating that only one annual report or proxy statement will be delivered to multiple stockholders sharing an address. This practice, known as householding, is designed to reduce printing and postage costs. However, if any stockholder residing at such an address wishes to receive a separate annual report or proxy statement, we will promptly deliver a separate copy to any stockholder upon written or oral request to our investor relations department at Biostage, Inc., 84 October Hill Road, Suite 11, Holliston, Massachusetts 01746-1371 or by telephone at (774) 233-7300. In addition, any stockholder who receives multiple copies at the same address can request delivery of a single copy by notifying our investor relations department pursuant to the contact information provided above.

TABLE OF CONTENTS

OTHER MATTERS

The Board of Directors does not know of any matters, other than those described in this Proxy Statement that will be presented for action at the Annual Meeting. If other matters are duly presented, proxies will be voted in accordance with the best judgment of the proxy holders.

YOUR VOTE IS IMPORTANT. WHETHER OR NOT YOU PLAN TO ATTEND THE ANNUAL MEETING, PLEASE CAST YOUR VOTE ONLINE, BY TELEPHONE OR BY COMPLETING, DATING, SIGNING AND PROMPTLY RETURNING THE ENCLOSED PROXY CARD OR VOTING INSTRUCTIONS CARD IN THE ENCLOSED POSTAGE-PAID ENVELOPE AS PROMPTLY AS POSSIBLE SO THAT YOUR SHARES ARE REPRESENTED AT THE ANNUAL MEETING.

THIS PROXY STATEMENT IS ACCOMPANIED BY THE COMPANY'S ANNUAL REPORT TO STOCKHOLDERS FOR THE YEAR ENDED DECEMBER 31, 2015. THE COMPANY WILL FURNISH, WITHOUT CHARGE, A COPY OF ITS ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2015 AND ANY EXHIBITS THERETO TO ANY STOCKHOLDER, UPON WRITTEN REQUEST TO BIOSTAGE, INC., 84 OCTOBER HILL ROAD, SUITE 11, HOLLISTON, MASSACHUSETTS 01746-1371. A LIST OF STOCKHOLDERS ENTITLED TO VOTE AT THE ANNUAL MEETING WILL BE AVAILABLE FOR INSPECTION BY STOCKHOLDERS DURING REGULAR BUSINESS HOURS AT OUR OFFICES AND THE OFFICES OF OUR TRANSFER AGENT DURING THE TEN DAYS PRIOR TO THE ANNUAL MEETING AS WELL AS AT THE ANNUAL MEETING.

TABLE OF CONTENTS

Appendix A

BIOSTAGE, INC.

2013 EQUITY INCENTIVE PLAN

(marked to show proposed amendments)

1. *GENERAL PURPOSE OF THE PLAN; DEFINITIONS*

The name of the plan is the Biostage, Inc. 2013 Equity Incentive Plan (the *Plan*). The purpose of the Plan is to encourage and enable the officers, employees, Non-Employee Directors, and other key persons (including consultants) of Biostage, Inc. (the *Company*) and its Subsidiaries upon whose judgment, initiative and efforts the Company largely depends for the successful conduct of its business to acquire a proprietary interest in the Company. It is anticipated that providing such persons with a direct stake in the Company's welfare will assure a closer identification of their interests with those of the Company, thereby stimulating their efforts on the Company's behalf and strengthening their desire to remain with the Company. In addition, the issuance of Awards in partial substitution of equity awards that cover shares of the common stock of Harvard Bioscience, Inc. (*HBIO*) immediately prior to the spin-off of the Company by HBIO are authorized to be issued under this Plan.

The following terms shall be defined as set forth below:

Act means the Securities Act of 1933, as amended, and the rules and regulations thereunder.

Adjustment Awards is defined in Section 4.

Administrator is defined in Section 2(a).

Award or *Awards*, except where referring to a particular category of grant under the Plan, shall include Incentive Stock Options, Non-Qualified Stock Options, Stock Appreciation Rights, Deferred Stock Awards, Restricted Stock Awards, Unrestricted Stock Awards, Performance Share Awards and Dividend Equivalent Rights.

Board means the Board of Directors of the Company.

Cash-Based Award means an Award entitling the recipient to receive a cash-denominated payment.

Change of Control is defined in Section 19.

Code means the Internal Revenue Code of 1986, as amended, and any successor Code, and related rules, regulations and interpretations.

Committee means the Compensation Committee of the Board or a similar committee performing the functions of the Compensation Committee and that is comprised of not less than two Independent Directors.

Covered Employee means an employee who is a *Covered Employee* within the meaning of Section 162(m) of the Code.

Deferred Stock Award means Awards granted pursuant to Section 8.

Distribution Date means the date that HBIO distributes to holders of shares of its outstanding common stock, through a spin-off, at least 50% of the outstanding shares of the Company's common stock (the "Spin-Off").

Dividend Equivalent Right means Awards granted pursuant to Section 13.

Effective Date shall have the meaning specified in Section 21 hereof.

Exchange Act means the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder.

Fair Market Value of the Stock on any given date means the fair market value of the Stock determined in good faith by the Administrator; provided, however, that if the Stock is traded on a national securities exchange the Fair Market Value of the Stock will equal the closing sales price as reported on the principal

A-1

TABLE OF CONTENTS

exchange or market for the Stock on such date, provided further that with respect to the Separation Grants and the initial Non-Employee Director grants described in Section 5(b)(i)(1), the Fair Market Value on the date of grant for such grants shall mean the arithmetic average of the daily dollar volume-weighted average price of the Stock (during the period beginning at 9:30:01 a.m., New York time, and ending at 4:00:00 p.m., New York time) for each of the ten (10) Trading Days immediately preceding the date of grant. If there is no trading on such date, the determination shall be made by reference to the last date preceding such date for which there was trading.

HBIO Award shall have the meaning specified in Section 4 hereof.

Incentive Stock Option means any Stock Option designated and qualified as an incentive stock option as defined in Section 422 of the Code.

Independent Director means a member of the Board who is not also an employee of the Company or any Subsidiary and who is independent.

Non-Employee Director means a member of the Board who is not also an employee of the Company or any Subsidiary.

Non-Qualified Stock Option means any Stock Option that is not an Incentive Stock Option.

Option or *Stock Option* means any option to purchase shares of Stock granted pursuant to Section 5.

Parent means Harvard Bioscience, Inc., a Delaware corporation that, as of the Effective Date is the parent of the Company. If at any time Harvard Bioscience, Inc. ceases to hold stock representing more than 50% of the Voting Securities of the Company, it shall no longer be treated as the Parent.

Performance Share Award means Awards granted pursuant to Section 11.

Performance Cycle means one or more periods of time, which may be of varying and overlapping durations, as the Administrator may select, over which the attainment of one or more performance criteria will be measured for the purpose of determining a grantee's right to and the payment of a Performance Share Award, Restricted Stock Award or Deferred Stock Award. Each such period shall not be less than three months.

Restricted Stock Award means Awards granted pursuant to Section 7.

Section 409A means Section 409A of the Code and the regulations and other guidance promulgated thereunder.

Separation Grants means the initial Stock Options granted by the Company to certain executives and employees of the Company in connection with the Spin-Off which shall be granted on the eleventh Trading Day after the Distribution Date (with the first Trading Day being the Trading Day immediately after the Distribution Date).

Spin-Off shall have the meaning specified in the definition of Distribution Date.

Stock means the Common Stock, par value \$.01 per share, of the Company, subject to adjustments pursuant to Section 3.

Stock Appreciation Right means any Award granted pursuant to Section 6.

Subsidiary means any corporation or other entity (other than the Company) in any unbroken chain of corporations or other entities beginning with the Company if each of the corporations or entities (other than the last corporation or entity in the unbroken chain) owns stock or other interests possessing 50 percent or more of the economic interest or the total combined voting power of all classes of stock or other interests in one of the other corporations or entities in the chain.

Trading Day means any day on which the Stock is traded on a national securities exchange, or, if a national securities exchange is not the principal trading market for the Stock, then on the principal securities exchange or securities market on which the Stock is then traded, provided that *Trading Day* shall not include any day on which the Stock is scheduled to trade on such exchange or market for less than 4.5 hours

A-2

TABLE OF CONTENTS

or any day that the Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York time).

Unrestricted Stock Award means any Award granted pursuant to Section 9.

2. ADMINISTRATION OF PLAN; ADMINISTRATOR AUTHORITY TO SELECT GRANTEES AND DETERMINE AWARDS

(a) *Committee*. The Plan shall be administered by either the Board or the Committee (in either case, the *Administrator*).

(b) *Powers of Administrator*. The Administrator shall have the power and authority to grant Awards consistent with the terms of the Plan, including the power and authority:

(i) to select the individuals to whom Awards may from time to time be granted;

(ii) to determine the time or times of grant, and the extent, if any, of Incentive Stock Options, Non-Qualified Stock Options, Stock Appreciation Rights, Restricted Stock Awards, Deferred Stock Awards, Unrestricted Stock Awards, Performance Share Awards and Dividend Equivalent Rights, or any combination of the foregoing, granted to any one or more grantees;

(iii) to determine the number of shares of Stock to be covered by any Award;

(iv) to determine and modify from time to time the terms and conditions, including restrictions, not inconsistent with the terms of the Plan, of any Award, which terms and conditions may differ among individual Awards and grantees, and to approve the form of written instruments evidencing the Awards;

(v) to accelerate at any time the exercisability or vesting of all or any portion of any Award; provided that, other than by reason of, or in connection with, any death, disability, retirement, employment termination (without cause or by the employee for good reason), Sale Event or Change of Control, the Administrator shall not accelerate or waive any restriction period applicable to any outstanding Restricted Stock Award, Deferred Stock Award or Performance Share Award granted to an employee beyond the minimum restriction periods set forth in Section 7(d), Section 8(a) and Section 11(a), respectively, or accelerate the exercisability or vesting of unvested Stock Options which in the aggregate, when combined with the aggregate number of shares of Stock issued pursuant to Section 9, exceed ten percent (10%) of the maximum number of shares of stock reserved and available for issuance under the Plan pursuant to Section 3(a);

(vi) subject to the provisions of Section 5(a)(ii), to extend at any time the period in which Stock Options may be exercised; and

(vii) at any time to adopt, alter and repeal such rules, guidelines and practices for administration of the Plan and for its own acts and proceedings as it shall deem advisable; to interpret the terms and provisions of the Plan and any Award (including related written instruments); to make all determinations it deems advisable for the administration of the Plan; to decide all disputes arising in connection with the Plan; and to otherwise supervise the administration of the Plan.

All decisions and interpretations of the Administrator shall be binding on all persons, including the Company and Plan grantees.

(c) *Delegation of Authority to Grant Awards.* The Administrator, in its discretion, may delegate to the Chief Executive Officer of the Company all or part of the Administrator's authority and duties with respect to the granting of Awards at Fair Market Value, to individuals who are not subject to the reporting and other provisions of Section 16 of the Exchange Act or covered employees within the meaning of Section 162(m) of the Code. Any such delegation by the Administrator shall include a limitation as to the amount of Awards that may be granted during the period of the delegation and shall contain guidelines as to the determination of the exercise price of any Stock Option or Stock Appreciation Right, the conversion ratio or price of other

A-3

TABLE OF CONTENTS

Awards and the vesting criteria. The Administrator may revoke or amend the terms of a delegation at any time but such action shall not invalidate any prior actions of the Administrator's delegate or delegates that were consistent with the terms of the Plan.

(d) *Indemnification.* Neither the Board nor the Committee, nor any member of either or any delegatee thereof, shall be liable for any act, omission, interpretation, construction or determination made in good faith in connection with the Plan, and the members of the Board and the Committee (and any delegatee thereof) shall be entitled in all cases to indemnification and reimbursement by the Company in respect of any claim, loss, damage or expense (including, without limitation, reasonable attorneys' fees) arising or resulting therefrom to the fullest extent permitted by law and/or under the Company's organizational documents or any directors' and officers' liability insurance coverage which may be in effect from time to time and/or any indemnification agreement between such individual and the Company.

3. *STOCK ISSUABLE UNDER THE PLAN; MERGERS; SUBSTITUTION*

(a)(1) *Stock Issuable.* Subject to adjustment as provided in Section 3(b), the last paragraph of this Section 3(a) and any other applicable provisions hereof, the maximum number of shares of Stock reserved and available for issuance under the Plan shall be Five Million Nine Hundred Sixty Thousand (5,960,000) three million (3,000,000) shares of Stock, which includes (i) the 3,000,000 shares of Stock originally reserved and available for issuance under the Plan, plus (ii) 960,000 shares of Stock previously added through March 31, 2016 in accordance with the evergreen provision of Section 3(a)(2) of the Plan, plus (iii) an additional 2,000,000 shares of Stock reserved and available for issuance under the Plan in accordance with an amendment dated as of May 26, 2016. To the extent an Award (including any Adjustment Awards) expires or terminates or is surrendered or forfeited (other than by exercise), in whole or in part, the shares subject to such Award or portion thereof so forfeited, expired, terminated or surrendered again will become available for future grant or sale under the Plan. Should the exercise price of an Option be paid with shares underlying such Option, then the authorized reserve of shares under the Plan shall be reduced by the gross number of shares for which that Option is exercised, and not by the net number of shares issued under the exercised Option. If shares otherwise issuable under the Plan are withheld by the Company in satisfaction of the withholding taxes incurred in connection with an Award, then the number of shares available for issuance under the Plan shall be reduced by the gross number of shares issuable under the Award, calculated in each instance prior to any such share withholding. In addition, upon exercise of Stock Appreciation Rights, the gross number of shares exercised shall be deducted from the total number of shares remaining available for issuance under the Plan. Shares of Stock may be issued up to such maximum number pursuant to any type or types of Award; provided, however, that Stock Options or Stock Appreciation Rights with respect to no more than 1,000,000 shares of Stock may be granted to any one individual grantee during any one calendar year period. The shares available for issuance under the Plan may be authorized but unissued shares of Stock or shares of Stock reacquired by the Company and held in its treasury.

(a)(2) *Automatic Share Reserve Increase.* [Reserved]. The maximum number of shares of Stock available for grant and issuance under the Plan shall be increased on January 1, of each of the ten (10) calendar years during the term of the Plan, by four percent (4.0%) of the number of Shares issued and outstanding on the date of adoption of the Plan.

(a)(3) *Adjustment Awards Increase.* [Reserved.] Additionally, the Board shall have the express authority, without any further approval required by the stockholders of the Company, to increase the maximum number of shares of Stock available for grant and issuance under the Plan in an amount equal to that number which enables the Company to issue the full, amount of Adjustment Awards described in Section 4 hereof, provided that in no event shall the maximum aggregate number of shares of Stock available for grant and issuance under the Plan, taking into account the total number of Adjustment Awards issued, exceed forty percent (40.0%) of the number of Shares issued and outstanding as of the date of adoption of the Plan.

(b) *Changes in Stock.* Subject to Section 3(c) hereof, if, as a result of any reorganization, recapitalization, reclassification, stock dividend, stock split, reverse stock split or other similar change in the Company's capital stock, the outstanding shares of Stock are increased or decreased or are exchanged for a different number or kind of shares or other securities of the Company, or additional shares or new or different shares or

A-4

TABLE OF CONTENTS

other securities of the Company or other non-cash assets are distributed with respect to such shares of Stock or other securities, or, if, as a result of any merger or consolidation, sale of all or substantially all of the assets of the Company, the outstanding shares of Stock are converted into or exchanged for a different number or kind of securities of the Company or any successor entity (or a parent or subsidiary thereof), the Administrator shall make an appropriate or proportionate adjustment in (i) the maximum number of shares reserved for issuance under the Plan, including the maximum number of shares that may be issued in the form of Unrestricted Stock Awards, Restricted Stock Awards or Performance Share Awards, (ii) the number of Stock Options or Stock Appreciation Rights that can be granted to any one individual grantee and the maximum number of shares that may be granted under a Performance-based Award, (iii) the number and kind of shares or other securities subject to any then outstanding Awards under the Plan, (iv) the repurchase price per share subject to each outstanding Restricted Stock Award, and (v) the price for each share subject to any then outstanding Stock Options and Stock Appreciation Rights under the Plan, without changing the aggregate exercise price (i.e., the exercise price multiplied by the number of Stock Options and Stock Appreciation Rights) as to which such Stock Options and Stock Appreciation Rights remain exercisable in a manner that will trigger tax under Section 409A. The adjustment by the Administrator shall be final, binding and conclusive. No fractional shares of Stock shall be issued under the Plan resulting from any such adjustment, but the Administrator in its discretion may make a cash payment in lieu of fractional shares.

The Administrator shall also adjust the number of shares subject to outstanding Awards and the exercise price and the terms of outstanding Awards to take into consideration material changes in accounting practices or principles, extraordinary dividends, acquisitions or dispositions of stock or property or any other event if it is determined by the Administrator that such adjustment is appropriate to avoid distortion in the operation of the Plan, provided that no such adjustment shall be made in the case of an Incentive Stock Option, without the consent of the grantee, if it would constitute a modification, extension or renewal of the Option within the meaning of Section 424(h) of the Code.

(c) *Mergers and Other Transactions.* In the case of and subject to the consummation of (i) the dissolution or liquidation of the Company, (ii) the sale of all or substantially all of the assets of the Company on a consolidated basis to an unrelated person or entity, (iii) a merger, reorganization or consolidation in which the outstanding shares of Stock are converted into or exchanged for a different kind of securities of the successor entity and the holders of the Company's outstanding voting power immediately prior to such transaction do not own a majority of the outstanding voting power of the successor entity immediately upon completion of such transaction, or (iv) the sale of all of the Stock of the Company to an unrelated person or entity (in each case, a *Sale Event*), all Options and Stock Appreciation Rights that are not exercisable immediately prior to the effective time of the Sale Event shall become fully exercisable as of the effective time of the Sale Event and all other Awards with conditions and restrictions relating solely to the passage of time and continued employment shall become fully vested and nonforfeitable as of the effective time of the Sale Event, except as the Administrator may otherwise specify with respect to particular Awards. Upon the effective time of the Sale Event, the Plan and all outstanding Awards granted hereunder shall terminate, unless provision is made in connection with the Sale Event in the sole discretion of the parties thereto for the assumption or continuation of Awards theretofore granted by the successor entity, or the substitution of such Awards with new Awards of the successor entity or parent thereof, with appropriate adjustment as to the number and kind of shares and, if appropriate, the per share exercise prices, as such parties shall agree (after taking into account any acceleration hereunder). In the event of such termination, each grantee shall be permitted, within a specified period of time prior to the consummation of the Sale Event as determined by the Administrator, to exercise all outstanding Options and Stock Appreciation Rights held by such grantee, including those that will become exercisable upon the consummation of the Sale Event; provided, however, that the exercise of Options and Stock Appreciation Rights not exercisable prior to the Sale Event shall be subject to the consummation of the Sale Event.

Notwithstanding anything to the contrary in this Section 3(c), in the event of a Sale Event pursuant to which holders of the Stock of the Company will receive upon consummation thereof a cash payment for each share surrendered in the

Sale Event, the Company shall have the right, but not the obligation, to make or provide for a cash payment to the grantees holding Options and Stock Appreciation Rights, in exchange for the cancellation thereof, in an amount equal to the difference between (A) the value as determined by the

A-5

TABLE OF CONTENTS

Administrator of the consideration payable per share of Stock pursuant to the Sale Event (the Sale Price) times the number of shares of Stock subject to outstanding Options and Stock Appreciation Rights (to the extent then exercisable at prices not in excess of the Sale Price) and (B) the aggregate exercise price of all such outstanding Options and Stock Appreciation Rights.

(d) *Substitute Awards.* The Administrator may grant Awards under the Plan in substitution for stock and stock based awards held by employees, directors or other key persons of another corporation in connection with the merger or consolidation of the employing corporation with the Company or a Subsidiary or the acquisition by the Company or a Subsidiary of property or stock of the employing corporation. The Administrator may direct that the substitute awards be granted on such terms and conditions as the Administrator considers appropriate in the circumstances. Any substitute Awards granted under the Plan shall not count against the share limitation set forth in Section 3(a).

4. *ELIGIBILITY*

Grantees under the Plan will be such full or part-time officers and other employees, Non-Employee Directors and key persons (including consultants and prospective employees) of the Company and its Subsidiaries as are selected from time to time by the Administrator in its sole discretion.

Additionally, the Company is authorized to issue Awards (Adjustment Awards) under the Plan in connection with the equitable adjustment by HBIO of certain stock options, deferred stock awards, restricted stock awards, performance share awards and other equity-based awards previously granted by HBIO (collectively, the HBIO Awards) to reflect the Company stock dividend on HBIO Awards. Notwithstanding any other provision of the Plan to the contrary, the number of shares subject to an Adjustment Award and other terms and conditions relating thereto, including, but not limited to option exercise prices, shall be equitable and determined by the Committee (a) in accordance with the provisions and formulas for the equity adjustment of HBIO Awards that are set forth in the Separate and Distribution Agreement entered into by and between the Company and HBIO; and (b) in an amount that will not cause the aggregate number of shares of Stock available for grant and issuance under the Plan (as set forth in Section 3(a)(3) hereof) to be exceeded.

Notwithstanding anything to the contrary contained herein or in any Award (including any Adjustment Award), for purposes of exercisability, vesting and the post-termination exercise periods applicable to the Adjustment Awards, continued employment with, or service to, HBIO (or its subsidiaries) or the Company (or its subsidiaries) is considered to be continued employment with, and service to, the other, provided that the failure to exercise Incentive Stock Options within the applicable deadline following any separation from service from the Company shall cause such options to be treated thereafter as Non-Qualified Stock Options.

5. *STOCK OPTIONS*

Any Stock Option granted under the Plan shall be in such form as the Administrator may from time to time approve.

Stock Options granted under the Plan may be either Incentive Stock Options or Non-Qualified Stock Options. Incentive Stock Options may be granted only to employees of the Company or any Subsidiary that is a subsidiary corporation within the meaning of Section 424(f) of the Code. To the extent that any Option does not qualify as an Incentive Stock Option, it shall be deemed a Non-Qualified Stock Option.

(a) *Stock Options Granted to Employees and Key Persons.* The Administrator in its discretion may grant Stock Options to eligible employees and key persons of the Company or any Subsidiary. Stock Options granted pursuant to this Section 5(a) shall be subject to the following terms and conditions and shall contain such additional terms and

conditions, not inconsistent with the terms of the Plan, as the Administrator shall deem desirable. If the Administrator so determines, Stock Options may be granted in lieu of cash compensation at the optionee's election, subject to such terms and conditions as the Administrator may establish.

(i) *Exercise Price.* The exercise price per share for the Stock covered by a Stock Option granted pursuant to this Section 5(a) shall be determined by the Administrator at the time of grant but shall not be less than 100 percent of the Fair Market Value on the date of grant. If an employee owns or is

A-6

TABLE OF CONTENTS

deemed to own (by reason of the attribution rules of Section 424(d) of the Code) more than 10 percent of the combined voting power of all classes of stock of the Company or any parent or subsidiary corporation and an Incentive Stock Option is granted to such employee, the option price of such Incentive Stock Option shall be not less than 110 percent of the Fair Market Value on the grant date.

(ii) *Option Term.* The term of each Stock Option shall be fixed by the Administrator, but no Stock Option shall be exercisable more than 10 years after the date the Stock Option is granted. If an employee owns or is deemed to own (by reason of the attribution rules of Section 424(d) of the Code) more than 10 percent of the combined voting power of all classes of stock of the Company or any parent or subsidiary corporation and an Incentive Stock Option is granted to such employee, the term of such Stock Option shall be no more than five years from the date of grant.

(iii) *Exercisability; Rights of a Stockholder.* Stock Options shall become exercisable at such time or times, whether or not in installments, as shall be determined by the Administrator at or after the grant date. Subject to Section 2(b)(v), the Administrator may at any time accelerate the exercisability of all or any portion of any Stock Option. An optionee shall have the rights of a stockholder only as to shares acquired upon the exercise of a Stock Option and not as to unexercised Stock Options.

(iv) *Method of Exercise.* Stock Options may be exercised in whole or in part, by giving written notice of exercise to the Company, specifying the number of shares to be purchased. Payment of the purchase price may be made by one or more of the following methods to the extent provided in the Option Award agreement:

(1) In cash, by certified or bank check or other instrument acceptable to the Administrator;

(2) Through the delivery (or attestation to the ownership) of shares of Stock that have been purchased by the optionee on the open market or that have been beneficially owned by the optionee for at least six months and are not then subject to restrictions under any Company plan. Such surrendered shares shall be valued at Fair Market Value on the exercise date; or

(3) By the optionee delivering to the Company a properly executed exercise notice together with irrevocable instructions to a broker to promptly deliver to the Company cash or a check payable and acceptable to the Company for the purchase price; provided that in the event the optionee chooses to pay the purchase price as so provided, the optionee and the broker shall comply with such procedures and enter into such agreements of indemnity and other agreements as the Administrator shall prescribe as a condition of such payment procedure.

Payment instruments will be received subject to collection. The transfer to the optionee on the records of the Company or of the transfer agent of delivery of certificates representing the shares of Stock to be purchased pursuant to the exercise of a Stock Option will be contingent upon receipt from the optionee (or a purchaser acting in his stead in accordance with the provisions of the Stock Option) by the Company of the full purchase price for such shares and the fulfillment of any other requirements contained in the Option Award agreement or applicable provisions of laws (including the satisfaction of any withholding taxes that the Company is obligated to withhold with respect to the optionee). In the event an optionee chooses to pay the purchase price by previously-owned shares of Stock through the attestation method, the number of shares of Stock transferred to the optionee upon the exercise of the Stock Option shall be net of the number of attested shares. In the event that the Company establishes, for itself or using the services of a third party, an automated system for the exercise of Stock Options, such as a system using an internet website or interactive voice response, then the paperless exercise of Stock Options may be permitted through the use of such an automated system.

(v) *Annual Limit on Incentive Stock Options.* To the extent required for incentive stock option treatment under Section 422 of the Code, the aggregate Fair Market Value (determined as of the time of grant) of the shares of Stock with respect to which Incentive Stock Options granted under this Plan and any other plan of the Company or its parent and subsidiary corporations become exercisable for the first time by an optionee during any calendar year shall not exceed \$100,000. To the extent that any Stock Option exceeds this limit, it shall constitute a Non-Qualified Stock Option.

A-7

TABLE OF CONTENTS

(b) *Stock Options Granted to Non-Employee Directors.*

(i) *Automatic and Other Grant of Options.*

(1) Each person who is a Non-Employee Director on the Distribution Date shall be granted, on the eleventh Trading Day after the Distribution Date (with the first Trading Day being the Trading Day immediately after the Distribution Date), a Non-Qualified Stock Option to acquire 25,000 shares of Stock.

(2) Each Non-Employee Director who is first elected to serve as a Director after the Distribution Date, shall be granted, on the fifth business day after such election, a Non-Qualified Stock Option to acquire 25,000 shares of Stock (provided that if such election is made prior to the fifth Trading Day after the Distribution Date, then such grant date shall be the eleventh Trading Day after the Distribution Date).

(3) The exercise price per share for the Stock covered by a Stock Option granted under this Section 5(b) shall be equal to the Fair Market Value of the Stock on the date the Stock Option is granted.

(4) The Administrator, in its discretion, may also grant additional Non-Qualified Stock Options to Non-Employee Directors. Any such grant may vary among individual Non-Employee Directors.

(ii) *Exercise; Termination.*

(1) Unless otherwise determined by the Administrator, an Option granted under Section 5(b) shall vest and be exercisable as to all of the shares of Stock covered thereby as of the first anniversary of the grant date. An Option issued under this Section 5(b) shall not be exercisable after the expiration of ten years from the date of grant.

(2) Options granted under this Section 5(b) may be exercised only by written notice to the Company specifying the number of shares to be purchased. Payment of the full purchase price of the shares to be purchased may be made by one or more of the methods specified in Section 5(a)(iv). An optionee shall have the rights of a stockholder only as to shares acquired upon the exercise of a Stock Option and not as to unexercised Stock Options.

(c) *Non-transferability of Options.* No Stock Option shall be transferable by the optionee otherwise than by will or by the laws of descent and distribution and all Stock Options shall be exercisable, during the optionee's lifetime, only by the optionee, or by the optionee's legal representative or guardian in the event of the optionee's incapacity.

Notwithstanding the foregoing, the Administrator, in its sole discretion, may provide in the Award agreement regarding a given Option that the optionee may transfer his Non-Qualified Stock Options to members of his immediate family, to trusts for the benefit of such family members, or to partnerships in which such family members are the only partners; provided that the transferee agrees in writing with the Company to be bound by all of the terms and conditions of this Plan and the applicable Option.

6. *STOCK APPRECIATION RIGHTS.*

(a) *Nature of Stock Appreciation Rights.* A Stock Appreciation Right is an Award entitling the recipient to receive shares of Stock having a value equal to the excess of the Fair Market Value of the Stock on the date of exercise over the exercise price Stock Appreciation Right, which price shall not be less than 100 percent of the Fair Market Value of the Stock on the date of grant multiplied by the number of shares of Stock with respect to which the Stock Appreciation Right shall have been exercised.

- (b) *Grant and Exercise of Stock Appreciation Rights.* Stock Appreciation Rights may be granted by the Administrator independently of any Stock Option granted pursuant to Section 5 of the Plan.
- (c) *Terms and Conditions of Stock Appreciation Rights.* Stock Appreciation Rights shall be subject to such terms and conditions as shall be determined from time to time by the Administrator; provided that during the grantee's lifetime all Stock Appreciation Rights shall be exercisable only by the grantee or the grantee's legal representative.

A-8

TABLE OF CONTENTS

(d) *Stock Appreciation Rights Term.* The term of each Stock Appreciation Right shall be fixed by the Administrator, but no Stock Appreciation Right shall be exercisable more than ten years after the date the Stock Appreciation Right is granted.

7. RESTRICTED STOCK AWARDS

(a) *Nature of Restricted Stock Awards.* A Restricted Stock Award is an Award entitling the recipient to acquire, at such purchase price as determined by the Administrator, shares of Stock subject to such restrictions and conditions as the Administrator may determine at the time of grant (Restricted Stock). Conditions may be based on continuing employment (or other service relationship) and/or achievement of pre-established performance goals and objectives. The grant of a Restricted Stock Award is contingent on the grantee executing the Restricted Stock Award agreement. The terms and conditions of each such agreement shall be determined by the Administrator, and such terms and conditions may differ among individual Awards and grantees.

(b) *Rights as a Stockholder.* Upon execution of a written instrument setting forth the Restricted Stock Award and payment of any applicable purchase price, a grantee shall have the rights of a stockholder with respect to the voting of the Restricted Stock, subject to such conditions contained in the written instrument evidencing the Restricted Stock Award. Unless the Administrator shall otherwise determine, (i) uncertificated Restricted Stock shall be accompanied by a notation on the records of the Company or the transfer agent to the effect that they are subject to forfeiture until such Restricted Stock are vested as provided in Section 7(d) below, and (ii) certificated Restricted Stock shall remain in the possession of the Company until such Restricted Stock is vested as provided in Section 7(d) below, and the grantee shall be required, as a condition of the grant, to deliver to the Company a stock power endorsed in blank.

(c) *Restrictions.* Restricted Stock may not be sold, assigned, transferred, pledged or otherwise encumbered or disposed of except as specifically provided herein or in the Restricted Stock Award agreement. If a grantee's employment (or other service relationship) with the Company and its Subsidiaries terminates for any reason, any Restricted Stock that has not vested at the time of termination shall automatically and without any requirement of notice to such grantee from or other action by or on behalf of, the Company be deemed to have been reacquired by the Company at its original purchase price (if any) from such grantee or such grantee's legal representative simultaneously with such termination of employment (or other service relationship), and thereafter shall cease to represent any ownership of the Company by the grantee or rights of the grantee as a stockholder. Following such deemed reacquisition of unvested Restricted Stock that are represented by physical certificates, a grantee shall surrender such certificates to the Company upon request without consideration.

(d) *Vesting of Restricted Stock.* The Administrator at the time of grant shall specify the date or dates and/or the attainment of pre-established performance goals, objectives and other conditions on which the non-transferability of the Restricted Stock and the Company's right of repurchase or forfeiture shall lapse. Notwithstanding the foregoing, in the event that any such Restricted Stock granted to an employee shall have a performance-based goal, the restriction period with respect to such shares shall not be less than one year, and in the event any such Restricted Stock granted to an employee shall have a time-based restriction, the restriction period with respect to such shares shall not be less than three years; provided, however, that Restricted Stock with a time-based restriction may become vested incrementally over such three-year period. The minimum vesting requirements set forth in the foregoing sentence will not apply to Restricted Stock granted to a Non-Employee Director. Subsequent to such date or dates and/or the attainment of such pre-established performance goals, objectives and other conditions, the shares on which all restrictions have lapsed shall no longer be Restricted Stock and shall be deemed vested. Except as may otherwise be provided by the Administrator either in the Award agreement or, subject to Section 17 below, in writing after the Award agreement is issued, a grantee's rights in any shares of Restricted Stock that have not vested shall automatically terminate upon the grantee's termination of employment (or other service relationship) with the Company and its Subsidiaries and such

shares shall be subject to the Company's right of repurchase as provided in Section 7(c) above.

A-9

TABLE OF CONTENTS

(e) *Waiver, Deferral and Reinvestment of Dividends.* The Restricted Stock Award agreement may require or permit the immediate payment, waiver, deferral or investment of dividends paid on the Restricted Stock.

8. *DEFERRED STOCK AWARDS*

(a) *Nature of Deferred Stock Awards.* A Deferred Stock Award is an Award of phantom stock units to a grantee, subject to restrictions and conditions as the Administrator may determine at the time of grant. Conditions may be based on continuing employment (or other service relationship) and/or achievement of pre-established performance goals and objectives. The grant of a Deferred Stock Award is contingent on the grantee executing the Deferred Stock Award agreement. The terms and conditions of each such agreement shall be determined by the Administrator, and such terms and conditions may differ among individual Awards and grantees. Notwithstanding the foregoing, in the event that any such Deferred Stock Award granted to an employee shall have a performance-based goal, the restriction period with respect to such award shall not be less than one year, and in the event any such Deferred Stock Award granted to an employee shall have a time-based restriction, the restriction period with respect to such award shall not be less than three years; provided, however, that any such Deferred Stock Award with a time-based restriction may become vested incrementally over such three-year period. The minimum vesting requirements set forth in the foregoing sentence will not apply to Deferred Stock Awards granted to Non-Employee Directors. At the end of the deferral period, the Deferred Stock Award, to the extent vested, shall be paid to the grantee in the form of shares of Stock. To the extent that a Deferred Stock Award is subject to Section 409A, it may contain such additional terms and conditions as the Administrator shall determine in its sole discretion in order for such Award to comply with the requirements of Section 409A.

(b) *Election to Receive Deferred Stock Awards in Lieu of Compensation.* The Administrator may, in its sole discretion, permit a grantee to elect to receive a portion of the cash compensation or Restricted Stock Award otherwise due to such grantee in the form of a Deferred Stock Award. Any such election shall be made in writing and shall be delivered to the Company no later than the date specified by the Administrator and in accordance with Section 409A and such other rules and procedures established by the Administrator. Any such future cash compensation that the grantee elects to defer shall be converted to a fixed number of phantom stock units based on the Fair Market Value of Stock on the date the compensation would otherwise have been paid to the grantee if such payment had not been deferred as provided herein. The Administrator shall have the sole right to determine whether and under what circumstances to permit such elections and to impose such limitations and other terms and conditions thereon as the Administrator deems appropriate.

(c) *Rights as a Stockholder.* During the deferral period, a grantee shall have no rights as a stockholder; provided, however, that the grantee may be credited with Dividend Equivalent Rights with respect to the phantom stock units underlying his Deferred Stock Award, subject to such terms and conditions as the Administrator may determine.

(d) *Restrictions.* A Deferred Stock Award may not be sold, assigned, transferred, pledged or otherwise encumbered or disposed of during the deferral period.

(e) *Termination.* Except as may otherwise be provided by the Administrator either in the Award agreement or, subject to Section 17 below, in writing after the Award agreement is issued, a grantee's right in all Deferred Stock Awards that have not vested shall automatically terminate upon the grantee's termination of employment (or cessation of service relationship) with the Company and its Subsidiaries for any reason.

9. *UNRESTRICTED STOCK AWARDS*

The Administrator may, in its sole discretion, grant (or sell at par value or such higher purchase price determined by the Administrator) an Unrestricted Stock Award to any grantee pursuant to which such grantee may receive shares of Stock free of any restrictions (Unrestricted Stock) under the Plan. Unrestricted Stock Awards may be granted in respect of past services or other valid consideration, or in lieu of cash compensation due to such grantee. The aggregate number of shares of Stock issuable pursuant to this Section 9, when combined with the number of shares of underlying unvested Stock Options accelerated pursuant to Section 2(b)(v) other than by reason of, or in connection with, any death, disability, retirement, employment termination (without cause or by the employee for good reason), Sale Event or Change of

A-10

TABLE OF CONTENTS

Control, is limited to ten percent (10%) of the maximum number of shares of Stock reserved and available for issuance under the Plan pursuant to Section 3(a).

10. *CASH-BASED AWARDS*

The Administrator may, in its sole discretion, grant Cash-Based Awards to any grantee in such number or amount and upon such terms, and subject to such conditions, as the Administrator shall determine at the time of grant. The Administrator shall determine the maximum duration of the Cash-Based Award, the amount of cash to which the Cash-Based Award pertains, the conditions upon which the Cash-Based Award shall become vested or payable, and such other provisions as the Administrator shall determine. Each Cash-Based Award shall specify a cash-denominated payment amount, formula or payment ranges as determined by the Administrator. Payment, if any, with respect to a Cash-Based Award shall be made in accordance with the terms of the Award and, if such Award is deemed deferred compensation, Section 15 hereof, and may be made in cash or in shares of Stock, as the Administrator determines.

11. *PERFORMANCE SHARE AWARDS*

(a) *Nature of Performance Share Awards.* A Performance Share Award is an Award entitling the recipient to acquire shares of Stock upon the attainment of specified performance goals. The Administrator may make Performance Share Awards independent of or in connection with the granting of any other Award under the Plan. The Administrator in its sole discretion shall determine whether and to whom Performance Share Awards shall be made, the performance goals, the periods during which performance is to be measured, and all other limitations and conditions. Notwithstanding the foregoing, any Performance Share Award granted to an employee shall have a restriction period of not less than one year. The minimum vesting requirements set forth in the foregoing sentence will not apply to Performance Share Awards granted to Non-Employee Directors.

(b) *Rights as a Stockholder.* A grantee receiving a Performance Share Award shall have the rights of a stockholder only as to shares actually received by the grantee under the Plan and not with respect to shares subject to the Award but not actually received by the grantee. A grantee shall be entitled to receive a stock certificate evidencing the acquisition of shares of Stock under a Performance Share Award only upon satisfaction of all conditions specified in the Performance Share Award agreement (or in a performance plan adopted by the Administrator).

(c) *Termination.* Except as may otherwise be provided by the Administrator either in the Award agreement or, subject to Section 17 below, in writing after the Award agreement is issued, a grantee's rights in all Performance Share Awards shall automatically terminate upon the grantee's termination of employment (or cessation of service relationship) with the Company and its Subsidiaries for any reason.

12. *PERFORMANCE-BASED AWARDS TO COVERED EMPLOYEES*

Notwithstanding anything to the contrary contained herein, if any Restricted Stock Award, Deferred Stock Award, Cash-Based Award or Performance Share Award granted to a Covered Employee is intended to qualify as Performance-based Compensation under Section 162(m) of the Code and the regulations promulgated thereunder (a *Performance-Based Award*), such Award shall comply with the provisions set forth below:

(a) *Performance Criteria.* The Administrator shall define in an objective fashion the manner of calculating the Performance Criteria it selects to use for any Performance Cycle. Depending on the Performance Criteria used to establish such Performance Goals, the Performance Goals may be expressed in terms of overall Company performance or the performance of a division, business unit, or an individual. The Administrator, in its discretion, may adjust or modify the calculation of Performance Goals for such Performance Cycle in order to prevent dilution or

enlargement of the rights of an individual (x) in the event of, or in anticipation of, any unusual or extraordinary corporate item, transaction, event or development, (y) in recognition of, or in anticipation of, any either unusual or nonrecurring events affecting the Company, or the financial statements of the Company, or (z) in response to, or in anticipation of, changes in applicable laws, regulations, accounting principles, or business conditions provided however, that the Administrator may not exercise such discretion in a manner that would increase the Performance-Based Award granted to a Covered

A-11

TABLE OF CONTENTS

Employee. The performance criteria used in performance goals governing Performance-based Awards granted to Covered Employees may include any or all of the following: (i) return on equity, assets, capital or investment; (ii) pre-tax or after-tax profit levels; (iii) cash flow, funds from operations or similar measure; (iv) total shareholder return; (v) changes in the market price of the Stock; (vi) revenues, sales or market share; (vii) net income (loss) or earnings per share; (viii) expense margins or operating efficiency (including budgeted spending limits) or (ix) project development milestones, any of which may be measured either in absolute terms or as compared to any incremental increase or as compared to results of a peer group and, for financial measures, may be based on numbers calculated in accordance with U.S. generally accepted accounting principles or on an as adjusted basis.

(b) *Grant of Performance-based Awards.* With respect to each Performance-based Award granted to a Covered Employee, the Committee shall select, within the first 90 days of a Performance Cycle (or, if shorter, within the maximum period allowed under Section 162(m) of the Code) the performance criteria for such grant, and the achievement targets with respect to each performance criterion (including a threshold level of performance below which no amount will become payable with respect to such Award). Each Performance-based Award will specify the amount payable, or the formula for determining the amount payable, upon achievement of the various applicable performance targets. The performance criteria established by the Committee may be (but need not be) different for each Performance Cycle and different goals may be applicable to Performance-based Awards to different Covered Employees.

(c) *Payment of Performance-based Awards.* Following the completion of a Performance Cycle, the Committee shall meet to review and certify in writing whether, and to what extent, the performance criteria for the Performance Cycle have been achieved and, if so, to also calculate and certify in writing the amount of the Performance-based Awards earned for the Performance Cycle. The Committee shall then determine the actual size of each Covered Employee's Performance-based Award, and, in doing so, may reduce or eliminate the amount of the Performance-based Award for a Covered Employee if, in its sole judgment, such reduction or elimination is appropriate.

(d) *Maximum Award Payable.* The maximum Performance-based Award payable to any one Covered Employee under the Plan for a Performance Cycle is 1,000,000 Shares (subject to adjustment as provided in Section 3(b) hereof) or \$2,000,000 in the case of a Performance-based Award that is a Cash-Based Award; provided, however, that such limits shall not otherwise limit the Administrator's ability to grant awards not intended to qualify as Performance-based Awards.

13. *DIVIDEND EQUIVALENT RIGHTS*

(a) *Dividend Equivalent Rights.* A Dividend Equivalent Right is an Award entitling the grantee to receive credits based on cash dividends that would have been paid on the shares of Stock specified in the Dividend Equivalent Right (or other award to which it relates) if such shares had been issued to and held by the grantee. A Dividend Equivalent Right may be granted hereunder to any grantee only as a component of Unrestricted Stock Awards, Restricted Stock Awards, Deferred Stock Awards or Performance Share Awards. The terms and conditions of Dividend Equivalent Rights shall be specified in the Award agreement. Dividend equivalents credited to the holder of a Dividend Equivalent Right may be paid currently or may be deemed to be reinvested in additional shares of Stock, which may thereafter accrue additional equivalents. Any such reinvestment shall be at Fair Market Value on the date of reinvestment or such other price as may then apply under a dividend reinvestment plan sponsored by the Company, if any. Dividend Equivalent Rights may be settled in cash or shares of Stock or a combination thereof, in a single installment or installments. A Dividend Equivalent Right granted as a component of another Award may provide that such Dividend Equivalent Right shall be settled upon exercise, settlement, or payment of, or lapse of restrictions on, such other award, and that such Dividend Equivalent Right shall expire or be forfeited or annulled under the same conditions as such other award. A Dividend Equivalent Right granted as a component of another Award may also

contain terms and conditions different from such other award.

A-12

TABLE OF CONTENTS

(b) *Interest Equivalents.* Any Award under this Plan that is settled in whole or in part in cash on a deferred basis may provide in the grant for interest equivalents to be credited with respect to such cash payment. Interest equivalents may be compounded and shall be paid upon such terms and conditions as may be specified by the grant.

(c) *Termination.* Except as may otherwise be provided by the Administrator either in the Award agreement or, subject to Section 17 below, in writing after the Award agreement is issued, a grantee's rights in all Dividend Equivalent Rights or interest equivalents shall automatically terminate upon the grantee's termination of employment (or cessation of service relationship) with the Company and its Subsidiaries for any reason.

14. *TAX WITHHOLDING*

(a) *Payment by Grantee.* Each grantee shall, no later than the date as of which the value of an Award or of any Stock or other amounts received thereunder first becomes includable in the gross income of the grantee for Federal income tax purposes, pay to the Company, or make arrangements satisfactory to the Administrator regarding payment of, any Federal, state, or local taxes of any kind required by law to be withheld by the Company with respect to such income. The Company and its Subsidiaries shall, to the extent permitted by law, have the right to deduct any such taxes from any payment of any kind otherwise due to the grantee. The Company's obligation to deliver evidence of book entry (or stock certificates) to any grantee is subject to and conditioned on tax withholding obligations being satisfied by the grantee.

(b) *Payment in Stock.* Subject to approval by the Administrator, a grantee may elect to have the Company's minimum required tax withholding obligation satisfied, in whole or in part, by (i) authorizing the Company to withhold from shares of Stock to be issued pursuant to any Award a number of shares with an aggregate Fair Market Value (as of the date the withholding is effected) that would satisfy the withholding amount due, or (ii) transferring to the Company shares of Stock owned by the grantee with an aggregate Fair Market Value (as of the date the withholding is effected) that would satisfy the withholding amount due.

15. *SECTION 409A AWARDS.*

To the extent that any Award is determined to constitute nonqualified deferred compensation within the meaning of Section 409A (a *409A Award*), the Award shall be subject to such additional rules and requirements as specified by the Administrator from time to time in order to comply with Section 409A. In this regard, if any amount under a 409A Award is payable upon a separation from service (within the meaning of Section 409A) to a grantee who is then considered a specified employee (within the meaning of Section 409A), then no such payment shall be made prior to the date that is the earlier of (i) six months and one day after the grantee's separation from service, or (ii) the grantee's death, but only to the extent such delay is necessary to prevent such payment from being subject to interest, penalties and/or additional tax imposed pursuant to Section 409A. Further, the settlement of any such Award may not be accelerated except to the extent permitted by Section 409A.

16. *TRANSFER, LEAVE OF ABSENCE, ETC.*

For purposes of the Plan, the following events shall not be deemed a termination of employment:

(a) a transfer to the employment of the Company from a Subsidiary or from the Company to a Subsidiary, or from one Subsidiary to another; or

(b) an approved leave of absence for military service or sickness, or for any other purpose approved by the Company, if the employee's right to re-employment is guaranteed either by a statute or by contract or under the policy pursuant to

which the leave of absence was granted or if the Administrator otherwise so provides in writing.

17. AMENDMENTS AND TERMINATION

The Board may, at any time, amend or discontinue the Plan and the Administrator may, at any time, amend or cancel any outstanding Award for the purpose of satisfying changes in law or for any other lawful

A-13

TABLE OF CONTENTS

purpose, but no such action shall adversely affect rights under any outstanding Award without the holder's consent. Except as provided in Section 3(b) or 3(c), in no event may the Administrator exercise its discretion to reduce the exercise price of outstanding Stock Options or Stock Appreciation Rights or effect repricing through cancellation and re-grants or by exchanging a Stock Option or Stock Appreciation Right for any other Award, without stockholder approval. If and to the extent determined by the Administrator to be required by the Code to ensure that Incentive Stock Options granted under the Plan are qualified under Section 422 of the Code or to ensure that compensation earned under Awards qualifies as performance-based compensation under Section 162(m) of the Code, if and to the extent intended to so qualify, and to the extent required under the applicable rules of The NASDAQ Stock Market, or such other securities exchange or market system on which the Stock is then principally listed, Plan amendments shall be subject to approval by the Company stockholders entitled to vote at a meeting of stockholders. Nothing in this Section 17 shall limit the Administrator's authority to take any action permitted pursuant to Section 3(c).

18. *STATUS OF PLAN*

With respect to the portion of any Award that has not been exercised and any payments in cash, Stock or other consideration not received by a grantee, a grantee shall have no rights greater than those of a general creditor of the Company unless the Administrator shall otherwise expressly determine in connection with any Award or Awards. In its sole discretion, the Administrator may authorize the creation of trusts or other arrangements to meet the Company's obligations to deliver Stock or make payments with respect to Awards hereunder, provided that the existence of such trusts or other arrangements is consistent with the foregoing sentence.

19. *CHANGE OF CONTROL PROVISIONS*

Upon the occurrence of a Change of Control as defined in this Section 19:

- (a) Except as otherwise provided in the applicable Award agreement, each outstanding Stock Option and Stock Appreciation Right shall automatically become fully exercisable.
- (b) Except as otherwise provided in the applicable Award Agreement, conditions and restrictions on each outstanding Restricted Stock Award, Deferred Stock Award and Performance Share Award which relate solely to the passage of time and continued employment will be removed. Performance or other conditions (other than conditions and restrictions relating solely to the passage of time and continued employment) will continue to apply unless otherwise provided in the applicable Award agreement.
- (c) *Change of Control* shall mean the occurrence of any one of the following events:
 - (i) any Person, as such term is used in Sections 13(d) and 14(d) of the Act (other than the Parent, the Company, any of its Subsidiaries, or any trustee, fiduciary or other person or entity holding securities under any employee benefit plan or trust of the Company or any of its Subsidiaries), together with all affiliates and associates (as such terms are defined in Rule 12b-2 under the Exchange Act) of such person, shall become the beneficial owner (as such term is defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of securities of the Company representing twenty five percent (25%) or more of the combined voting power of the Company's then outstanding securities having the right to vote in an election of the Company's Board of Directors (*Voting Securities*) (in such case other than as a result of an acquisition of securities directly from the Company); or
 - (ii) persons who, as of the Effective Date, constitute the Company's Board of Directors (the *Incumbent Directors*) cease for any reason, including, without limitation, as a result of a tender offer, proxy contest, merger or similar transaction, to constitute at least a majority of the Board; provided that any person becoming a director of the

Company subsequent to the Effective Date shall be considered an Incumbent Director if such person's election was approved by or such person was nominated for election by either (A) a vote of at least a majority of the Incumbent Directors or (B) a vote of at least a majority of the Incumbent Directors who are members of a nominating committee comprised, in the majority, of Incumbent Directors; but provided further, that any such person whose initial assumption of office is in connection with an actual or threatened election contest relating to the election of members of the Board

A-14

TABLE OF CONTENTS

of Directors or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board, including by reason of agreement intended to avoid or settle any such actual or threatened contest or solicitation, shall not be considered an Incumbent Director; or

(iii) the consummation of a consolidation, merger or consolidation or sale or other disposition of all or substantially all of the assets of the Company (a *Corporate Transaction*); excluding, however, a Corporate Transaction in which the stockholders of the Company immediately prior to the Corporate Transaction, would, immediately after the Corporate Transaction, beneficially own (as such term is defined in Rule 13d-3 under the Act), directly or indirectly, shares representing in the aggregate more than 50 percent of the voting shares of the corporation issuing cash or securities in the Corporate Transaction (or of its ultimate parent corporation, if any); or

(iv) the approval by the stockholders of any plan or proposal for the liquidation or dissolution of the Company.

Notwithstanding the foregoing, a *Change of Control* shall not be deemed to have occurred for purposes of the foregoing clause (i) solely as the result of an acquisition of securities by the Company which, by reducing the number of shares of Voting Securities outstanding, increases the proportionate number of shares of Voting Securities beneficially owned by any person to 25 percent or more of the combined voting power of all then outstanding Voting Securities; *provided, however*, that if any person referred to in this sentence shall thereafter become the beneficial owner of any additional shares of Voting Securities (other than pursuant to a stock split, stock dividend, or similar transaction or as a result of an acquisition of securities directly from the Company) and immediately thereafter beneficially owns 25 percent or more of the combined voting power of all then outstanding Voting Securities, then a *Change of Control* shall be deemed to have occurred for purposes of the foregoing clause (i).

20. *GENERAL PROVISIONS*

(a) *No Distribution; Compliance with Legal Requirements.* The Administrator may require each person acquiring Stock pursuant to an Award to represent to and agree with the Company in writing that such person is acquiring the shares without a view to distribution thereof.

No shares of Stock shall be issued pursuant to an Award until all applicable securities law and other legal and stock exchange or similar requirements have been satisfied. The Administrator may require the placing of such stop-orders and restrictive legends on certificates for Stock and Awards as it deems appropriate.

The Plan, the granting and exercising of Awards hereunder, and any obligations of the Company under the Plan, shall be subject to all applicable federal, state and foreign country laws, rules and regulations, and to such approvals by any regulatory or governmental agency as may be required, and to any rules or regulations of any exchange on which the Stock is listed. The Company, in its discretion, may postpone the granting and exercising of Awards, the issuance or delivery of Stock under any Award or any other action permitted under the Plan to permit the Company, with reasonable diligence, to complete such stock exchange listing or registration or qualification of such Stock or other required action under any federal, state or foreign country law, rule or regulation and may require any grantee to make such representations and furnish such information as it may consider appropriate in connection with the issuance or delivery of Stock in compliance with applicable laws, rules and regulations. The Company shall not be obligated by virtue of any provision of the Plan to recognize the exercise of any Award or to otherwise sell or issue Stock in violation of any such laws, rules or regulations, and any postponement of the exercise or settlement of any Award under this provision shall not extend the term of such Awards. Neither the Company nor its directors or officers shall have any obligation or liability to a grantee with respect to any Award (or Stock issuable thereunder) that shall lapse because of such postponement.

(b) *Delivery of Stock Certificates.* Stock certificates to grantees under this Plan shall be deemed delivered for all purposes when the Company or a stock transfer agent of the Company shall have mailed such certificates in the United States mail, addressed to the grantee, at the grantee's last known address on file with the Company. Uncertificated Stock shall be deemed delivered for all purposes when the Company or a Stock transfer agent of the Company shall have given to the grantee by electronic mail (with proof of receipt) or by

A-15

TABLE OF CONTENTS

United States mail, addressed to the grantee, at the grantee's last known address on file with the Company, notice of issuance and recorded the issuance in its records (which may include electronic book entry records). Notwithstanding anything herein to the contrary, the Company shall not be required to issue or deliver any certificates evidencing shares of Stock pursuant to the exercise of any Award, unless and until the Administrator has determined, with advice of counsel (to the extent the Administrator deems such advice necessary or advisable), that the issuance and delivery of such certificates is in compliance with all applicable laws, regulations of governmental authorities and, if applicable, the requirements of any exchange on which the shares of Stock are listed, quoted or traded. All Stock certificates delivered pursuant to the Plan shall be subject to any stop-transfer orders and other restrictions as the Administrator deems necessary or advisable to comply with federal, state or foreign jurisdiction, securities or other laws, rules and quotation system on which the Stock is listed, quoted or traded. The Administrator may place legends on any Stock certificate to reference restrictions applicable to the Stock. In addition to the terms and conditions provided herein, the Administrator may require that an individual make such reasonable covenants, agreements, and representations as the Administrator, in its discretion, deems necessary or advisable in order to comply with any such laws, regulations, or requirements. The Administrator shall have the right to require any individual to comply with any timing or other restrictions with respect to the settlement or exercise of any Award, including a window-period limitation, as may be imposed in the discretion of the Administrator.

(c) *Stockholder Rights.* Until Stock is deemed delivered in accordance with Section 20(b), and subject to the provisions of the applicable Award contained in the Plan and in an agreement evidencing such Award, no right to vote or receive dividends or any other rights of a stockholder will exist with respect to shares of Stock to be issued in connection with an Award, notwithstanding the exercise of a Stock Option or any other action by the grantee or any permitted transferee or designated beneficiary with respect to an Award.

(d) *Other Compensation Arrangements; No Employment Rights.* Nothing contained in this Plan shall prevent the Board from adopting other or additional compensation arrangements, including trusts, and such arrangements may be either generally applicable or applicable only in specific cases. The adoption of this Plan and the grant of Awards do not confer upon any employee any right to continued employment with the Company or any Subsidiary.

(e) *Trading Policy Restrictions.* Option exercises and other Awards under the Plan shall be subject to such Company's insider trading policy, as in effect from time to time.

(f) *Forfeiture of Awards under Sarbanes-Oxley Act.* If the Company is required to prepare an accounting restatement due to the material noncompliance of the Company, as a result of misconduct, with any financial reporting requirement under the securities laws, then, to the extent required by law, any grantee who is one of the individuals subject to automatic forfeiture under Section 304 of the Sarbanes-Oxley Act of 2002 shall reimburse the Company for the amount of any Award received by such individual under the Plan during the 12-month period following the first public issuance or filing with the United States Securities and Exchange Commission, as the case may be, of the financial document embodying such financial reporting requirement.

(g) *Designation of Beneficiary.* Each grantee to whom an Award has been made under the Plan may designate a beneficiary or beneficiaries to exercise any Award or receive any payment under any Award payable on or after the grantee's death. Any such designation shall be on a form provided for that purpose by the Administrator and shall not be effective until received by the Administrator. If no beneficiary has been designated by a deceased grantee, or if the designated beneficiaries have predeceased the grantee, the beneficiary shall be the grantee's estate.

(h) *No Constraint on Corporate Action.* Nothing in this Plan shall be construed (i) to limit, impair or otherwise affect the Company's right or power to make adjustments, reclassifications, reorganizations or changes of its capital or business structure, or to merge or consolidate, or dissolve, liquidate, sell or transfer all or any part of its business or

assets, or (ii) to limit the right or power of the Company, or any Subsidiary, to take any action which such entity deems to be necessary or appropriate.

A-16

TABLE OF CONTENTS

21. *EFFECTIVE DATE OF PLAN*

This Plan shall become effective on the later of the approval by the holders of a majority of the votes cast at a meeting of stockholders at which a quorum is present or by written consent of the stockholders, or the Distribution Date immediately after the Distribution (the Effective Date). Subject to such approval by the stockholders and to the requirement that no Stock may be issued hereunder prior to such approval, Stock Options and other Awards may be granted hereunder on and after adoption of this Plan by the Board. No Incentive Stock Options may be granted under the Plan after the 10-year anniversary of the Effective Date or of the most recent prior date on which the Plan was approved by the Board (provided that the Plan was approved by stockholders within one year of such date) and no other Award may be granted under the Plan after the 10-year anniversary of the most recent prior date on which the Plan was approved by stockholders.

22. *GOVERNING LAW*

This Plan and all Awards and actions taken hereunder shall be governed by, and construed in accordance with, the laws of the State of Delaware, applied without regard to conflict of law principles.

DATE APPROVED BY BOARD OF DIRECTORS: October 11, 2013

DATE APPROVED BY STOCKHOLDERS: October 31, 2013

DATE FIRST AMENDMENT TO THE PLAN
APPROVED BY BOARD OF DIRECTORS: March 28, 2016

DATES SECOND AMENDMENT TO THE
BIOSTAGE, INC. 2013 EQUITY INCENTIVE PLAN
APPROVED: (I) BY BOARD OF DIRECTORS: March 28, 2016
AND (II) BY STOCKHOLDERS: _____

A-17

TABLE OF CONTENTS

TABLE OF CONTENTS
