

INVIVO THERAPEUTICS HOLDINGS CORP.
Form PRE 14A
April 13, 2017

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

SCHEDULE 14A

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

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material under §240.14a-12

InVivo Therapeutics Holdings Corp.

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

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- No fee required.
- Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
 - (1) Title of each class of securities to which transaction applies:
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(3) Filing Party:

(4) Date Filed:

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**One Kendall Square, Suite B14402
Cambridge, MA 02139**

April , 2017

Dear InVivo Stockholder:

I am pleased to invite you to attend the 2017 Annual Meeting of Stockholders (the "Annual Meeting") of InVivo Therapeutics Holdings Corp., to be held on Tuesday, May 30, 2017 at 9 a.m., local time, at the Massachusetts Biotechnology Council, 1 Cambridge Center, Cambridge, Massachusetts.

Specific details regarding admission to the Annual Meeting and the business to be conducted at the Annual Meeting are more fully described in the accompanying Notice of Annual Meeting and proxy statement. We encourage you to carefully read these materials, as well as the enclosed Annual Report for the fiscal year ended December 31, 2016.

Your vote is very important. Whether or not you plan to attend the Annual Meeting, I hope you will vote as soon as possible. You may vote via the Internet, by telephone, or if you received a paper copy of the proxy card, by completing and returning it in the envelope provided. Voting via the Internet, by telephone or by written proxy will ensure your representation at the Annual Meeting if you do not attend in person. Please review the instructions on the proxy card regarding each of these voting options.

Thank you for your continued support.

Sincerely,

Mark D. Perrin
Chief Executive Officer and Chairman of the Board

YOUR VOTE IS EXTREMELY IMPORTANT!

To ensure your representation at the Annual Meeting, please submit your proxy and voting instructions by completing, signing and dating the proxy card as promptly as possible and returning it in the enclosed envelope (to which no postage needs to be affixed if mailed in the United States), or by using one of the voting methods set forth in the attached proxy statement.

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INVIVO THERAPEUTICS HOLDINGS CORP.

**One Kendall Square, Suite B14402
Cambridge, MA 02139**

**NOTICE OF 2017 ANNUAL MEETING OF STOCKHOLDERS
To Be Held On Tuesday, May 30, 2017**

To Our Stockholders:

Notice is hereby given that the 2017 Annual Meeting of Stockholders (the "Annual Meeting") of InVivo Therapeutics Holdings Corp., a Nevada corporation, will be held on Tuesday, May 30, 2017 at 9 a.m., local time, at the Massachusetts Biotechnology Council, 1 Cambridge Center, Cambridge, Massachusetts, for the following purposes:

- (1) to elect three Class III directors, each for a three-year term, and one Class II director for a two-year term;
- (2) to approve the amendment of the corporation's Articles of Incorporation;
- (3) to ratify the selection by the Audit Committee of RSM US LLP as the corporation's independent registered public accounting firm for the fiscal year ending December 31, 2017; and
- (4) to transact such other business as may properly come before the meeting or any adjournment thereof.

The Board of Directors has fixed Thursday, April 13, 2017, as the record date for the determination of stockholders entitled to notice of, and to vote at, the Annual Meeting. Accordingly, only stockholders of record at the close of business on the record date will be entitled to notice of, and to vote at, the Annual Meeting, or any adjournments thereof.

All of our stockholders are cordially invited and encouraged to attend the Annual Meeting in person. To ensure your representation at the Annual Meeting, you are urged to vote your shares of common stock using one of the voting methods set forth in the attached proxy statement. Any stockholder attending the Annual Meeting may vote in person even if he or she previously submitted a proxy card. If your shares of common stock are held by a bank, broker, or other agent, please follow the instructions from your bank, broker, or other agent to have your shares voted.

By order of the Board of Directors,

Mark D. Perrin
Chief Executive Officer and Chairman of the Board

Cambridge, Massachusetts
April , 2017

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting: This proxy statement, the Notice of Meeting and our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 (the "Annual Report"), are available on the Internet, free of charge, at <http://www.cstproxy.com/invivotherapeutics/2017>. On this website, you will be able to access this proxy statement, our Annual Report and any amendments or supplements to the foregoing materials that are required to be furnished to stockholders.

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INVIVO THERAPEUTICS HOLDINGS CORP.

PROXY STATEMENT

**FOR THE ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD ON TUESDAY, MAY 30, 2017**

This proxy statement is being furnished to you in connection with the solicitation by the Board of Directors (the "Board") of InVivo Therapeutics Holdings Corp. (the "company," "we," "us," or "our") of proxies, in the accompanying form, to be used at our 2017 Annual Meeting of Stockholders (the "Annual Meeting") to be held on Tuesday, May 30, 2017 at 9 a.m., local time, at the Massachusetts Biotechnology Council, 1 Cambridge Center, Cambridge, Massachusetts, and any adjournment or postponement thereof. This proxy statement and the accompanying form of proxy are being mailed to stockholders on or about April 20, 2017.

Questions and Answers about Voting at the Annual Meeting and Related Matters

What am I voting on?

At the Annual Meeting, you will be asked to vote on the following three proposals. Our Board recommendation for each proposal is set forth below.

Proposal	Board Recommendation
(1) to elect three Class III directors, each to serve a three-year term expiring at the 2020 annual meeting, and one Class II director to serve a two-year term expiring at the 2019 annual meeting	FOR each Director Nominee
(2) to approve the amendment to our Articles of Incorporation	FOR
(3) to ratify the selection by the Audit Committee of RSM US LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2017	FOR

If other matters properly come before the Annual Meeting, the proxy holders will have the authority to vote on those matters on your behalf at their discretion. As of the date of this proxy statement, we are not aware of any matters that will come before the Annual Meeting other than those disclosed in this proxy statement.

Who can vote?

Holders of record of our common stock at the close of business on April 13, 2017, are entitled to vote at the Annual Meeting. As of April 13, 2017, there were _____ shares of our common stock issued and outstanding. Each share of common stock issued and outstanding is entitled to one vote.

What constitutes a quorum, and why is a quorum required?

We are required to have a quorum of stockholders present to conduct business at the Annual Meeting. The presence, in person or by proxy, of stockholders, holding a majority of the shares of our common stock issued and outstanding and entitled to vote at the Annual Meeting constitutes a quorum, permitting us to transact business at the Annual Meeting. Abstentions and broker non-votes are counted as present for purposes of determining a quorum. If we do not have a quorum, we will be forced to adjourn the Annual Meeting to a later date.

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What is the difference between a stockholder of record and a beneficial owner?

If your shares are registered directly in your name with our transfer agent, Continental Stock Transfer & Trust Company, you are considered the "stockholder of record" with respect to those shares.

If your shares are held by a brokerage firm, bank, trustee or other nominee, you are considered the "beneficial owner" of shares held in street name. This proxy statement and our Annual Report have been forwarded to you by your nominee who is considered the "stockholder of record" with respect to those shares. As the beneficial owner, you have the right to direct your nominee how to vote your shares by using the voting instruction form included in the mailing.

How do I vote my shares?

Stockholder of Record

If your shares are registered directly in your name, you may vote:

By mail. Complete and mail the enclosed proxy card in the enclosed postage-prepaid envelope. Your proxy will be voted in accordance with your instructions. If you sign the proxy card but do not specify how you want your shares voted, they will be voted as recommended by our Board. Your proxy card must be mailed by the date shown on the proxy card to be counted.

Via the Internet. You may vote via the Internet by going to <http://www.cstproxyvote.com> and following the on-screen instructions. Please have your proxy card available when you access the web page. Your vote must be received by 7:00 p.m., Eastern Daylight Time, on May 29, 2017, to be counted.

By Telephone. You may vote over the telephone by calling toll-free 1-866-894-0537 in the U.S. or Canada and following the recorded instructions. Please have your proxy card available when you call. Your vote must be received by 7:00 p.m., Eastern Daylight Time, on May 29, 2017, to be counted.

In Person at the Annual Meeting. If you attend the Annual Meeting, you may deliver your completed proxy card in person, or you may vote by completing a ballot, which will be available at the Annual Meeting.

Beneficial Owner of Shares Held in Street Name

If you hold shares in street name, the organization holding your account is considered the stockholder of record for purposes of voting at the Annual Meeting. The stockholder of record will provide you with instructions on how to vote your shares. Internet and telephone voting will be offered to stockholders owning shares through most banks and brokers. Additionally, if you would like to vote in person at the Annual Meeting, contact the broker or other nominee who holds your shares to obtain a legal proxy from the broker or other nominee, and bring it with you to the Annual Meeting. Please contact your broker or other nominee for instructions regarding obtaining a legal proxy. You will not be able to vote at the Annual Meeting if you hold shares in street name unless you have obtained a legal proxy from your broker.

What vote is required to approve each proposal?

The affirmative vote of the holders of a plurality of the votes cast at the Annual Meeting is required for Proposal No. 1, the election of the Class II and Class III directors. The affirmative vote of the holders of a majority of the voting rights of our outstanding common stock is required for Proposal No. 2, the approval of an amendment to our Articles of Incorporation. For Proposal No. 3, the ratification of RSM US LLP as our independent registered public accounting firm, the number of votes

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cast at the Annual Meeting in favor of the proposal must exceed the number of votes cast in opposition to such proposal in order for the proposal to be approved.

What if I sign and return my proxy without making any selections?

If you sign and return your proxy without making any selections, your shares will be voted as recommended by the Board. If other matters properly come before the Annual Meeting, the proxy holders will have the authority to vote on those matters for you at their discretion. As of the date of this proxy statement, we are not aware of any matters that will come before the meeting other than those disclosed in this proxy statement.

What if I am a beneficial owner and I do not give the nominee voting instructions?

Brokerage firms have the authority to vote shares for which their customers do not provide voting instructions on certain "routine" matters. A broker non-vote occurs when a nominee who holds shares for another does not vote on a particular item because the nominee does not have discretionary voting authority for that item and has not received instructions from the beneficial owner of the shares. Broker non-votes are included in the calculation of the number of votes considered to be present at the Annual Meeting for purposes of determining the presence of a quorum but are not counted as shares present and entitled to be voted with respect to a matter on which the nominee has expressly not voted. Other than Proposal No. 1, the election of the Class II and Class III directors, all of the proposals described in this proxy statement relate to "routine" matters. As a result, without your voting instructions, a broker will be able to vote your shares with respect to Proposals 2 and 3, but will not be able to vote your shares with respect to Proposal 1.

What if I abstain or withhold authority to vote on a proposal?

On Proposal No. 1, the election of the Class II and Class III directors, votes withheld for a particular director nominee will have no effect on the outcome of the election of directors because directors are elected by a plurality of the votes cast. On Proposal No. 2, the approval of an amendment to our Articles of Incorporation, if you sign and return your proxy marked "ABSTAIN," it will have the same effect as a vote "AGAINST" the proposal, because the proposal requires the affirmative vote of a majority of the voting rights of our outstanding common stock. On Proposal No. 3, if you sign and return your proxy marked "ABSTAIN", your shares will not be voted on that proposal and will not be counted as votes cast with regard to that proposal and, accordingly, will have no effect on the voting on the ratification of our independent registered public accounting firm.

What does it mean if I receive more than one proxy card?

If you receive more than one proxy card, it means that you hold shares of our common stock in more than one account. To ensure that all your shares are voted, sign and return each proxy card. Alternatively, if you vote by telephone or via the Internet, you will need to vote once for each proxy card you receive.

Can I change my vote after I have mailed a signed proxy card?

If you are the stockholder of record, you can change your vote at any time before your proxy is voted at the Annual Meeting by the following means:

You can send the company's Secretary a written notice stating that you revoke your earlier-dated proxy.

If you signed and returned a proxy card by mail and want to change your vote, you can complete, sign, date and deliver a new proxy card, dated a later date than the first proxy card.

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If you submitted your proxy by telephone or via the Internet, you may change your vote or revoke your proxy with a later telephone or Internet proxy, as the case may be. Your new vote must be received by 7:00 p.m., Eastern Daylight Time, on May 29, 2017, to be counted.

You can attend the Annual Meeting and vote in person. Your attendance at the Annual Meeting will not, however, by itself revoke your proxy. ***Even if you plan to attend the Annual Meeting, we recommend that you also submit your proxy or voting instructions or vote by telephone or via the Internet so that your vote will be counted if you later decide not to attend the Annual Meeting.***

If you hold your shares in "street name" and have instructed your broker, bank, or other agent to vote your shares for you, you must follow directions received from your broker, bank, or another agent to change those instructions.

Who can attend the Annual Meeting?

Only stockholders and our invited guests are invited to attend the Annual Meeting. To gain admittance, you must bring a form of personal identification to the meeting, where your name will be verified against our stockholder list. If a broker or other nominee holds your shares and you plan to attend the Annual Meeting, you should bring a recent brokerage statement showing your ownership of the shares as of the record date or a letter from the broker or other nominee confirming such ownership, and a form of personal identification.

If I plan to attend the Annual Meeting, should I still vote by proxy?

Yes. Casting your vote in advance does not affect your right to attend the Annual Meeting. If you vote in advance and also attend the Annual Meeting, you do not need to vote again at the Annual Meeting unless you want to change your vote. Written ballots will be available at the meeting for stockholders of record. Beneficial owners who wish to vote in person must request a legal proxy from the broker or other nominee and bring that legal proxy to the Annual Meeting.

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PROPOSAL NO. 1

ELECTION OF DIRECTORS

Our Board currently consists of seven directors serving on a classified board, consisting of three classes. The directors in each class serve a three-year term. The terms of each class expire at successive annual meetings so that the stockholders elect one class of directors at each annual meeting. Directors appointed due to an increase in the size of the Board may be filled by the Board for a term of office continuing only until the next election of directors by the company's stockholders. Ms. Morrison was elected to our Board in 2016 in connection with an increase in the size of our Board and therefore is a nominee for election at this Annual Meeting and will serve until the end of the Class II term in 2019 or until her successor is duly elected and qualified.

Upon the recommendation of the Nominating and Corporate Governance Committee of the Board, the Board has nominated each of Mark D. Perrin, C. Ann Merrifield and Jeffrey S. Hatfield for election as a Class III director, and Christina Morrison for election as a Class II director. Each of Messrs. Perrin and Hatfield and Meses. Merrifield and Morrison have agreed to stand for election and to serve if elected. If any of Messrs. Perrin or Hatfield or Meses. Merrifield or Morrison should become unable to accept election, the persons named on the proxy card as proxies may vote for another person selected by the Board. Management has no reason to believe that any of Messrs. Perrin or Hatfield or Mss. Merrifield or Morrison will be unable to serve. Each nominee for election at the Annual Meeting is a current member of our Board of Directors.

Biographical and certain other information concerning our director nominees and our directors continuing in office is set forth below. No director or executive officer is related by blood, marriage or adoption to any other director or executive officer.

Information as to our Board of Directors and Nominees

Nominee for Class II Director with Term to Expire at the 2019 Annual Meeting

Christina Morrison, 50, has served as a director of our company since June 2016. Ms. Morrison most recently served as the Senior Vice President of Finance of Aramark, a foodservice, facilities and uniform services provider, from June 2013 until July 2016. Prior to joining Aramark, Ms. Morrison was Senior Vice President of Business and Financial Planning at Merck & Co., Inc., a publicly traded pharmaceutical company, from November 2009 to June 2013. Before that, Ms. Morrison spent five years at Wyeth Pharmaceuticals, a publicly traded pharmaceutical company, serving in a number of leadership roles including Senior Vice President and Chief Financial Officer of the pharmaceutical division. Ms. Morrison holds an M.B.A. from the Tuck School of Business at Dartmouth College and a B.S. in Economics from the Wharton School at the University of Pennsylvania. Ms. Morrison brings to our Board significant financial experience and a decade of experience in the pharmaceutical industry.

Nominees for Class III Directors with Terms to Expire at the 2020 Annual Meeting

Mark D. Perrin, 60, has served as a director of our company and our Chief Executive Officer since January 2014 and was appointed Chairman of the Board in February 2015. Prior to joining our company, Mr. Perrin served as President of Dennon Consulting, a biotech consulting firm, from June 2012 to December 2013. From November 2005 to October 2010, Mr. Perrin was President and Chief Executive Officer of ConjuChem Biotechnologies, Inc., a company developing long-acting conjugated peptide therapeutics. In 2010, ConjuChem filed a voluntary assignment in bankruptcy under the Canadian Bankruptcy and Insolvency Act in order to effect an orderly liquidation of its assets, property, and operations. Prior to joining ConjuChem, Mr. Perrin was Executive Vice President and Chief Commercial Officer of Orphan Medical, Inc. from 2002 to 2005, when it was acquired by Jazz Pharmaceuticals. From 1995 to 2001, he was Executive Vice President, Commercial Operations of

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COR Therapeutics, Inc., where he created and developed sales, marketing, and manufacturing functions for the emerging company. Before that, he served as Vice President of Marketing and Sales for Burroughs Wellcome Company where he headed all commercial operations in the United States from 1992 to 1995. Mr. Perrin holds an M.B.A. in Marketing and International Business from the Kellogg Graduate School of Management at Northwestern University and a B.S. in Economics from Fordham University. Mr. Perrin brings to the Board extensive management experience in the biotechnology industry and, as our Chief Executive Officer, he provides the Board with insight into the day-to-day operations of our company.

C. Ann Merrifield, 65, has been a director of our company since November 2014. She also serves as a director of Flexion Therapeutics, a public biotechnology company and Juniper Pharmaceuticals, a specialty pharmaceutical company. Ms. Merrifield most recently served as President, Chief Executive Officer, and a director of PathoGenetix, Inc.; a genomics company focused on developing an automated system for rapid bacterial identification, from 2012 until July 2014 when the company filed for Chapter 7 bankruptcy. Prior to then, she spent 18 years at Genzyme Corporation, serving in a number of leadership roles including President of Genzyme Biosurgery, President of Genzyme Genetics and Senior Vice President, Business Excellence. Ms. Merrifield also serves as trustee and director on several boards including Partners Continuing Care, the post-acute care services division of Partners HealthCare; the YMCA of Greater Boston; and MassMutual Premier, MML, and Select/MML II Funds. She holds a B.A. in zoology and a Master of Education from the University of Maine, and an M.B.A. from the Tuck School of Business at Dartmouth College. Ms. Merrifield brings to our Board an invaluable amount of experience and expertise over her long career in the life sciences industry.

Jeffrey S. Hatfield, 59, has been a director of our company since November 2016. He most recently served as President, Chief Executive Officer and Board Member of Vitae Pharmaceuticals, Inc., a pharmaceutical company. He served in those capacities from March 2004 until September 2016, when Allergan Plc entered into a definitive agreement to purchase Vitae Pharmaceuticals. Prior to joining Vitae Pharmaceuticals, Mr. Hatfield worked at Bristol-Myers Squibb, a biopharmaceutical company, which he joined in 1985. While at Bristol-Myers Squibb, Mr. Hatfield held a variety of executive positions, including Senior Vice President of Bristol-Myers Squibb's Virology and Immunology Divisions from 2000 to 2004; President and General Manager, Canada from 1997 to 2000; and Vice President, U.S. Managed Health Care from 1996 to 1997. In 2014, Mr. Hatfield became a director of Ambit Biosciences, a biopharmaceutical company. Mr. Hatfield holds an M.B.A. from The Wharton School, University of Pennsylvania and received a bachelor's degree in Pharmacy from Purdue University. Mr. Hatfield brings to our Board extensive experience in general management and over 30 years of experience in the biopharmaceutical industry.

Continuing Class II Director with Term Expiring at the 2019 Annual Meeting

Daniel R. Marshak, Ph.D., 60, has been a director of our company since September 2014. He most recently served as Senior Vice President and Chief Scientific Officer for PerkinElmer, Inc., a human and environmental health company, until September 2014. Prior to joining PerkinElmer in 2006, Dr. Marshak was Vice President and Chief Technology Officer, Biotechnology, for Cambrex Corporation. Dr. Marshak has received numerous awards for scientific and academic achievements and is named as inventor on six issued U.S. patents. He currently serves on the International Society for Stem Cell Research Global Advisory Council and served on its board of directors from July 2008 to June 2014. Dr. Marshak is the author of more than 100 scientific publications, including one textbook, and has been the editor of five monographs. He recently held an appointment as Adjunct Associate Professor at the Johns Hopkins University School of Medicine and previously taught graduate biochemistry as an Assistant Professor at the State University of New York. Dr. Marshak received his B.A. degree in biochemistry and molecular biology from Harvard University, and he holds a Ph.D. in biochemistry and cell biology from The Rockefeller University. Dr. Marshak brings to our Board

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extensive industry experience and a deep understanding of the science and technology behind our business.

Continuing Class I Directors with Terms Expiring at the 2018 Annual Meeting

Kenneth DiPietro, 58, has been a director of our company since December 2012. Mr. DiPietro has served as Executive Vice President, Human Resources of Biogen, Inc., a publicly-traded biotechnology company, since January 2012. Mr. DiPietro joined Biogen from Lenovo Group, where he served as Senior Vice President, Human Resources from May 2005 until June 2011. From 2003 to 2005, he served as Corporate Vice President, Human Resources at Microsoft Corporation, and as Vice President, Human Resources at Dell Inc. from 1999 to 2002. Prior to that, he spent 17 years at PepsiCo, serving in a range of human resource and general management positions. Mr. DiPietro holds a B.S. degree in Industrial and Labor Relations from Cornell University. As a human resources senior executive, Mr. DiPietro brings broad cultural transformation, organizational development and corporate re-engineering experience to our Board.

Richard J. Roberts, Ph.D., 73, has been a director of our company since October 2010 and a director of InVivo Therapeutics Corporation, our wholly-owned subsidiary, since November 2008. Dr. Roberts initially joined InVivo Therapeutics Corporation's Scientific Advisory Board in June 2007 and continued as a member of our Scientific Advisory Board. He has served as Chief Scientific Officer at New England Biolabs, a life sciences company, since February 2007. Dr. Roberts was awarded the 1993 Nobel Prize in Physiology of Medicine along with Phillip Allen Sharp for the discovery of introns in eukaryotic DNA and the mechanism of gene-splicing. He holds a B.Sc. in Chemistry and a Ph.D. in Organic Chemistry from the University of Sheffield, U.K. Dr. Roberts brings the Board his significant experience and understanding of the science and technology involved in our business.

Vote Required

The affirmative vote of a plurality of the votes cast by the holders of our common stock, present or represented by proxy at the Annual Meeting and entitled to vote, is required for the election of our director nominees.

OUR BOARD UNANIMOUSLY RECOMMENDS A VOTE "FOR" THE ELECTION OF EACH OF THE CLASS II AND CLASS III DIRECTOR NOMINEES.

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CORPORATE GOVERNANCE

Director Independence

Rule 5605 of the NASDAQ Listing Rules requires a majority of a listed company's board of directors to be comprised of independent directors within one year of listing. In addition, the NASDAQ Listing Rules require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominating and corporate governance committees be independent, that audit committee members also satisfy independence criteria set forth in Rule 10A-3 under the Securities Exchange Act of 1934, as amended (the "Exchange Act") and that compensation committee members also satisfy heightened independence requirements contained in the NASDAQ Listing Rules as well as Rule 10C-1 under the Exchange Act. Under Rule 5605(a)(2), a director will only qualify as an "independent director" if, in the opinion of our Board, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In order to be considered independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the Board, or any other Board committee, accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries or otherwise be an affiliated person of the listed company or any of its subsidiaries. When determining the independence of the members of our compensation committee under the heightened independence requirements contained in the NASDAQ Listing Rules and Rule 10C-1, our Board is required to consider all factors specifically relevant to determining whether a director has a relationship with us that is material to that director's ability to be independent from management in connection with the duties of a compensation committee member, including, but not limited to: (1) the source of compensation of that director, including any consulting, advisory or other compensatory fee paid by us to that director; and (2) whether that director is affiliated with our company, a subsidiary of our company or an affiliate of a subsidiary of our company.

Our Board has reviewed the composition of our Board and its committees and the independence of each director. Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, including family relationships, our Board has determined that each of our directors, other than Mr. Perrin, is an "independent director" as defined under Rule 5605(a)(2) of the NASDAQ Listing Rules. Our Board reached a similar determination with respect to John A. McCarthy, Jr., who served as a director until May 2016.

Our Board also determined that Ms. Morrison, Mr. Hatfield, Dr. Marshak, and Ms. Merrifield, who comprise our audit committee, and Mr. DiPietro, Mr. Hatfield, Dr. Marshak and Dr. Roberts, who comprise our compensation committee, satisfy the independence standards for such committees established by the Securities and Exchange Commission ("SEC") and the NASDAQ Listing Rules, as applicable. In making such determinations, our Board considered the relationships that each such non-employee director has with our company and all other facts and circumstances our Board deemed relevant in determining independence, including the beneficial ownership of our capital stock by each non-employee director.

Board Meetings and Attendance

The Board held nine meetings during 2016. Each director attended at least 75% of the total (i) regular Board meetings held during the period for which he or she was a director and (ii) meetings of the committee(s) of our Board on which he or she served (during the periods that he or she served). Our directors are encouraged, but not required, to attend our Annual Meeting of Stockholders. All of our directors then serving on the Board were in attendance at our 2016 Annual Meeting of Stockholders. We expect that all of our directors will attend this Annual Meeting.

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Board Leadership Structure

Our Chief Executive Officer, Mr. Perrin, also serves as the Chairman of the Board. Mr. Perrin has served as our Chief Executive Officer since January 2014 and was appointed Chairman of the Board in February 2015. The Board believes this leadership structure is currently serving our company well and intends to maintain the combined roles of Chairman and Chief Executive Officer, along with a lead independent director, where appropriate and practicable. The decision to combine the positions of Chief Executive Officer and Chairman of the Board was made to promote consistent and unified leadership, timely decision-making, strategy development, and execution. In June 2015, our Board appointed Ms. Merrifield as our independent Lead Director.

Our Board believes that the independent directors provide effective oversight of management. Moreover, in addition to feedback provided during the course of Board meetings, the independent directors have regular executive sessions. Our independent Lead Director acts as a liaison between the independent directors and the Chairman regarding any specific feedback or issues, provides the Chairman with input regarding agenda items for Board and committee meetings and coordinates with the Chairman regarding information to be provided to the independent directors in performing their duties. Our Board believes that this approach complements the combined Chairman/Chief Executive Officer structure.

The Board does not have a formal policy on whether the positions of Chairman and Chief Executive Officer should be separate and continues to believe that there is no uniform solution for a board leadership structure. The company has at times separated the positions of Chairman and Chief Executive Officer and at times combined the two. Our Board will periodically review the optimal leadership structure of the Board and believes that the right structure should be informed by the needs and circumstances of our company, the Board and our stockholders.

Board Committees

The Board has designated three principal standing committees: the Audit Committee, the Nominating and Corporate Governance Committee, and the Compensation Committee.

Audit Committee

The Audit Committee assists the Board in fulfilling its responsibilities concerning our financial reporting and internal controls. The Audit Committee facilitates open communication among the Audit Committee, the Board, our independent auditor, and management. The Audit Committee discusses with management and our independent auditor the financial information developed by us, our systems of internal controls and our audit process. The Audit Committee is solely and directly responsible for appointing, evaluating, retaining, and, where necessary, terminating the engagement of our independent auditor. The independent auditor meets with the Audit Committee (both with and without the presence of our management) to review and discuss various matters pertaining to the audit, including our financial statements and its report on the company's financial statements and internal controls, as well as the scope and terms of the work of our independent auditor and its recommendations concerning the financial practices, controls, procedures and policies employed by our company. The current members of our Audit Committee are Ms. Morrison (Chairwoman), Mr. Hatfield, Dr. Marshak, and Ms. Merrifield. The Audit Committee held four meetings in 2016.

The Audit Committee pre-approves all audit services to be provided to us by our independent auditor and all other services (including reviewing, attestation and non-audit services) to be provided to us by the independent auditor.

The Audit Committee is also charged with establishing procedures for (i) the receipt, retention, and treatment of complaints received by us regarding accounting, internal accounting controls or

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auditing matters; and (ii) the confidential, anonymous submission by our employees of concerns regarding questionable accounting or auditing matters. The Audit Committee reviews and oversees all related party transactions on an ongoing basis. The Audit Committee is authorized, without further action by the Board, to engage independent professional advisers and counsel as it deems necessary or appropriate to carry out its responsibilities. The Board has adopted a written charter for the Audit Committee, which is reviewed annually and a copy of which is available on the "Corporate Governance" page of the "Investor Relations" section of our website at www.invivotherapeutics.com.

The Board has determined that Ms. Morrison is an "audit committee financial expert," as defined in Item 407(d)(5) of Regulation S-K.

Nominating and Corporate Governance Committee

The Nominating and Corporate Governance Committee is charged with the responsibility of reviewing our corporate governance policies, overseeing the annual review of succession planning by the Board and with proposing potential director nominees to the Board for consideration. The Board has adopted a written charter for the Nominating and Corporate Governance Committee, which is reviewed annually and a copy of which is available on the "Corporate Governance" page of the "Investor Relations" section of our website at www.invivotherapeutics.com.

The current members of our Nominating and Corporate Governance Committee are Ms. Merrifield (Chairwoman), Mr. DiPietro, Dr. Roberts and Ms. Morrison. The Nominating and Corporate Governance Committee held four meetings in 2016.

Process for Stockholder Nominations

The Nominating and Corporate Governance Committee will consider director nominees recommended by security holders pursuant to our company's Policy Governing Director Nominations and Stockholder-Board Communications, which policy is reviewed by the Nominating and Corporate Governance Committee annually, a copy of which is available on the "Corporate Governance" page of the "Investor Relations" section of our website. To recommend a nominee, please write to the Nominating and Corporate Governance Committee, InVivo Therapeutics Holdings Corp., One Kendall Square, Suite B14402 Cambridge, MA 02139, Attn: Chair, Nominating and Corporate Governance Committee.

The Nominating and Corporate Governance Committee has established a set of criteria by which it will seek to evaluate candidates to serve on our Board. The evaluation includes selection based on criteria including factors such as experience and ability to exercise sound judgments in matters that relate to the current and long-term objectives of the company, high standards of personal and professional integrity, demonstrated business judgment, complimentary skill sets that can add to the functionality and collaboration with the current Board members, independence, knowledge of our company generally, age and dedication to the success of the company. While the value of diversity is considered, it would not be weighted any more or less in any evaluation process than any other criteria. The Nominating and Corporate Governance Committee will assess all director nominees using the same criteria and does not distinguish Board candidates based on whether the candidate is recommended by a stockholder of the company. In 2016, we retained a third-party search firm to assist in the identification and evaluation of potential Board members. Ms. Morrison and Mr. Hatfield were each recommended as a director candidate to the Nominating and Corporate Governance Committee by the search firm. The Nominating and Corporate Governance Committee conducted an evaluation of each of Ms. Morrison and Mr. Hatfield and recommended their selection to the Board. During 2016, we did not receive any director nominee suggestions from stockholders. Stockholder recommendations for nomination must be in writing and include the following:

the name and address of the stockholder making the recommendation;

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the number of shares of our common stock that such stockholder owns beneficially and holds of record;

the name and address of the individual recommended for consideration as a director nominee;

the principal occupation and experience of the director nominee;

the total number of shares of our common stock that the stockholder making the recommendation will vote for the director nominee;

a written statement from the stockholder making the recommendation stating whether the director nominee has indicated his or her willingness to serve if elected and why such recommended candidate would be able to fulfill the duties of a director; and

any other information regarding the director nominee that is required to be included in a proxy statement filed pursuant to the rules of the SEC.

Compensation Committee

The Compensation Committee reviews and recommends compensation arrangements for our directors, management, and employees and also assists the Board in reviewing and approving matters such as company benefits and insurance plans, including monitoring the performance thereof, as discussed in more detail below under "Compensation Discussion and Analysis." The Board has adopted a written charter for the Compensation Committee, which is reviewed annually and a copy of which is available on the "Corporate Governance" page of the "Investor Relations" section of our website at www.invivotherapeutics.com.

The Compensation Committee is authorized under its charter to retain consultants to assist it in the evaluation of executive compensation and to approve the fees and other retention terms for its consultants. The Compensation Committee has retained Pearl Meyer & Partners ("Pearl Meyer") as a compensation consultant to review our compensation programs and provide advice to the Compensation Committee with respect to executive compensation. Pearl Meyer does not provide any other services to InVivo. The Committee annually reviews the independence of the consultant's work under rules adopted by the SEC and NASDAQ and found no conflicts. As appropriate, the Compensation Committee also looks to our human resources department to support the Compensation Committee in its work and to provide necessary information.

The current members of our Compensation Committee are Mr. DiPietro (Chairman), Mr. Hatfield and Drs. Marshak and Roberts. The Compensation Committee held six meetings in 2016.

Compensation Committee Interlocks and Insider Participation

None of the members of the Compensation Committee was at any time during 2016 or at any other time an officer or employee of our company. None of our executive officers serves as a member of the board of directors or compensation committee of any other entity that has one or more executive officers serving as a member of our Board or the Compensation Committee.

Risk Management Oversight

The Board takes an active role, as a whole and at the committee level, in overseeing management of our company's risks. Generally, the Board, with the assistance of its committees, is involved in overseeing our major risk exposures and monitors and assesses those risks in reviews with management and with our outside advisors and independent registered public accounting firm. The Audit Committee reviews regulatory risk, operational risk, and enterprise risk, particularly as they relate to financial reporting, on a regular basis with management and our independent registered public accounting firm. The Nominating and Corporate Governance Committee oversees the Board's annual review of our

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succession planning. The Compensation Committee monitors compensation policies and compensation-related risks by review with management and outside advisors.

Code of Business Conduct and Ethics

We have adopted a Code of Business Conduct and Ethics, as amended, that applies to all employees, officers, and directors of our company, including our principal executive officer, principal financial officer and principal accounting officer or controller, or persons performing similar functions. Our Code of Business Conduct and Ethics is available on the "Corporate Governance" page of the "Investor Relations" section of our website at www.invivotherapeutics.com. A copy of our Code of Business Conduct and Ethics can also be obtained free of charge by contacting our Secretary, c/o InVivo Therapeutics Holdings Corp., One Kendall Square, Suite B14402, Cambridge, MA 02139. We intend to satisfy the disclosure requirement under Item 5.05 of Form 8-K regarding any amendment to, or waiver from, a provision of our Code of Business Conduct and Ethics by posting such information on our website.

Stockholder Communications to the Board

All communications to our Board, our Board committees or any individual director, must be in writing and addressed to our Secretary, c/o InVivo Therapeutics Holdings Corp., One Kendall Square, Suite B14402, Cambridge, MA 02139. All communications will be reviewed by the Secretary and, unless otherwise indicated in such communication, submitted to the Board or an individual director, as appropriate.

Table of Contents**DIRECTOR COMPENSATION**

Our director compensation policy in place in 2016 provided for the following compensation to our non-employee directors:

an annual retainer of \$35,000 per year, paid quarterly, to each non-employee director;

an annual retainer of \$15,000, paid quarterly, to the Audit Committee chairperson, and an annual retainer of \$7,500, paid quarterly, to each member of the Audit Committee of the Board;

an annual retainer of \$10,000, paid quarterly, to the Compensation Committee chairperson, and an annual retainer of \$5,000, paid quarterly, to each member of the Compensation Committee of the Board;

an annual retainer of \$7,500, paid quarterly, to the Nominating and Corporate Governance Committee chairperson, and an annual retainer of \$3,750, paid quarterly, to each member of the Nominating and Corporate Governance Committee of the Board; and

an annual retainer to be paid to the independent Lead Director of \$15,000, paid quarterly.

Non-employee directors are reimbursed for reasonable travel expenses in connection with attendance at meetings of the Board or any of its committees that are conducted in person and other activities directly related to the service to the company.

Each non-employee director also receives an annual grant of a stock option to purchase 12,500 shares of our common stock at an exercise price equal to the closing price of our common stock on the date of grant. The options vest in 12 equal installments on each monthly anniversary of the date of grant until fully vested on the first anniversary of the date of grant, provided that such director remains a director of our company on each such vesting date. The 2016 annual grant to each non-employee director was made on January 18, 2017. In addition, each newly elected or appointed non-employee director receives an initial grant of an option to purchase 25,000 shares of the company's common stock at an exercise price equal to the closing price of our common stock on the date of grant, in the Board's discretion. The option vests in 24 equal installments on each monthly anniversary of the date of grant until fully vested on the second anniversary of the date of grant, provided that such director remains a director of our company on each such vesting date.

2016 Director Compensation

The following table sets forth the compensation of our non-employee directors for 2016. Mr. Perrin, as an employee, does not receive any compensation as a director. For information on Mr. Perrin's compensation, see "Executive Compensation" below.

Name	Fees Earned or Paid in Cash (\$)	Option Awards (\$)(1)(2)	Total (\$)
Kenneth DiPietro	48,314		48,314
Daniel Marshak	45,500		45,500
C. Ann Merrifield	63,000		63,000
John McCarthy(3)	20,754		20,754
Richard Roberts	43,939		43,939
Christina Morrison(4)	29,167	136,809	165,976
Jeffrey Hatfield(5)	7,329	84,526	91,855

(1)

The amounts shown in this column represent the aggregate grant date fair value of the option awards computed in accordance with Financial Accounting Standards Board

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("FASB") Accounting Standards Codification 718, not the actual amounts paid to or realized by the director during 2016. The assumptions used in determining grant date fair value of these awards are set forth in Note 13 to our Consolidated Financial Statements appearing in our Annual Report filed with the SEC on March 10, 2017.

- (2) As of December 31, 2016, the aggregate number of options to purchase shares of our common stock outstanding for each director listed above, including both vested and unvested shares, was as follows: Mr. DiPietro, 62,500 shares; Dr. Marshak, 37,500 shares; Ms. Merrifield, 37,500 shares; Mr. McCarthy, 62,500 shares; Dr. Roberts, 281,887 shares; Ms. Morrison, 25,000 shares; and Mr. Hatfield, 25,000 shares.
- (3) Mr. McCarthy did not stand for re-election at the 2016 Annual Meeting of Stockholders.
- (4) Ms. Morrison was appointed to the Board and Chairwoman of the Audit Committee on June 7, 2016.
- (5) Mr. Hatfield was appointed to the Board on November 1, 2016.

EXECUTIVE OFFICERS

Our executive officers as of April 1, 2017 are as follows:

Mark D. Perrin is our Chief Executive Officer and Chairman of the Board. Please see Proposal No. 1 Election of Directors "Information as to our Board of Directors and Nominees" above for biographical information regarding Mr. Perrin.

Christopher McNulty, 40, has served as our Chief Financial Officer since March 2017. Prior to being appointed Chief Financial Officer, Mr. McNulty served as our Senior Vice President, Business Development & Investor Relations. In that role, he has led the company's business development and partnering activities as well as corporate communications, including investor relations and public relations. From June 2014 to August 2015, he served as the company's Vice President, Business Development and Investor Relations, and from November 2013 to July 2014, he served as the company's Vice President, Business Development. Prior to joining the company, Mr. McNulty served at Repligen Corporation, a pharmaceutical and bioprocessing company, from 2010 to 2013, most recently as Senior Director of Business Development. From 2009 to 2010, he was Director of Corporate Development at Seventh Sense Biosystems, Inc., a medical device company. From 2006 to 2009, Mr. McNulty served at Genzyme Corporation, a biotechnology company, most recently as Associate Director of Alliance Management and Business Development. Before joining Genzyme, Mr. McNulty held technical roles at Transform Pharmaceuticals, Inc. from 2000 to 2004 and at Cereon Genomics, LLC from 1998 to 2000. Mr. McNulty received his B.S. and M.Eng. degrees in electrical engineering and computer science from the Massachusetts Institute of Technology. He also holds an M.B.A. from Harvard Business School.

Thomas Ulich, M.D., 63, has served as our Chief Scientific Officer since February 2014. Prior to joining our company following an extended sabbatical, Dr. Ulich served as Executive Vice President of Research and Development of ConjuChem Biotechnologies, Inc. from 2006 to July 2010. In 2010, ConjuChem filed a voluntary assignment in bankruptcy under the Canadian Bankruptcy and Insolvency Act in order to effect an orderly liquidation of its assets, property, and operations. Prior to 2006, he served as Senior Vice President of Research and Development for Alnylam Pharmaceuticals, Inc. from 2003 to 2004. He was Vice President of Preclinical Development at Protein Therapeutics from 2001 to 2003 and was Vice President of Preclinical Development at Amgen, Inc. from 1993 to 2001. While at Amgen, he was responsible for the Departments of Pharmacology, Toxicology, Preclinical and Clinical Pharmacokinetics, Protein and Small Molecule Formulation Development, Clinical Immunology, GLP Quality, and Protein Sciences. Dr. Ulich has a B.A. from Dartmouth College, an M.D. and A.P./C.P. Pathology Residency from UCLA Medical School, and completed his post-doctoral fellowships at the

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Scripps Institute for Immunology in La Jolla, CA. He has medical board certification from the American Board of Anatomic Pathology, the American Board of Clinical Pathology, and the American Board of Immunopathology. Dr. Ulich was a Professor of Pathology at the University of California from 1984 to 1993, and at Wayne State University from 2005 to 2006.

Pamela J. Stahl, 51, has served as our Chief Commercial Officer since September of 2016. Before joining our company, Ms. Stahl served as Chief Executive Officer, Community Health Plan of Wisconsin at UnitedHealthcare from December of 2014 to September 2016. While at UnitedHealthcare she was responsible for the largest Medicaid business in the state, providing healthcare benefits and services for over 160,000 Wisconsin residents. Ms. Stahl's career at UnitedHealthcare spanned 11 years during which she held a number of executive level positions that included leading corporate Consumer Strategy, establishing the Women's Health Line of Service, reorganizing and leading Sales Operations and Organizational Effectiveness for key accounts and small business, and leading Consumer and Physician Marketing. Prior to UnitedHealthcare, Ms. Stahl worked for Orphan Medical, Inc. from October 2001 until January 2006 as Vice President, Sales and Commercial Operations. Before that, she was Vice President of Sales and Marketing for American TeleCare, Inc. Ms. Stahl worked at AstraZeneca from 1992-2000 and held various leadership positions including Regional Sales Director, Product Optimization Leader for Prilosec®, Customer Unit Director, Account Team Leader, and Regional Marketing Manager. She started her career at Merck & Co., Inc. as a Sales Representative and Regional Sales Trainer. Ms. Stahl received her Bachelors of Arts degree in Biology from St. Olaf College.

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COMPENSATION DISCUSSION AND ANALYSIS

Executive Summary

This Compensation Discussion and Analysis explains our compensation philosophy, objectives, policies, and practices with respect to our Chief Executive Officer and our other named executive officers. For 2016, our named executive officers are:

Mark D. Perrin, our Chief Executive Officer and Chairman of the Board;

Steven F. McAllister, our former Chief Financial Officer, who resigned from the company effective December 31, 2016;

Thomas Ulich, M.D., our Chief Scientific Officer;

Lorianne K. Masuoka, M.D., our former Chief Medical Officer, who retired from the company effective January 2, 2017;
and

Pamela Stahl, our Chief Commercial Officer.

Company Performance in 2016. 2016 was an exciting year for our company. We made important progress and achievements toward our goal of improving the quality-of-life, and redefining life, for the spinal cord injury patients we serve. In 2016, we:

received approval for converting the *Neuro-Spinal Scaffold* pilot study to the pivotal INSPIRE study;

received approval to initiate The INSPIRE Study in Canada (1st global step for InVivo);

added 13 new clinical sites, including our first ex-U.S. sites (both in Canada);

enrolled eight new patients, with three subjects achieving the primary endpoint of conversion to partial paralysis by six months post-injury;

continued our spinal cord injury (SCI) thought leadership by attending and presenting at international conferences, where we presented 13 scientific abstracts to renowned leaders within the neurosurgical, neuroscience, and SCI communities;

raised \$32 million (gross), which is the company's largest fundraising to date;

successfully developed a preclinical prototype of the TrailMaker for the chronic spinal cord injury market and filed two patent applications;

hired a Chief Commercial Officer, Pamela Stahl, whose experience and expertise will greatly support our efforts toward commercialization while complementing the invaluable skills of our existing management team; and

continued to make great strides in strengthening our research and intellectual property portfolio.

Executive Compensation Actions in 2016. In 2016, the Compensation Committee continued to compensate our executive officers based on achievement of certain key company objectives, as well as individual objectives, with our annual bonus program, and also undertook a review of the total compensation paid to our executive officers to better align our company's executive compensation programs with those of our peer group companies. Based on the achievements of our company in 2016, our named executive officers received payouts ranging between 50% and 115% of their target opportunities under our annual bonus program, as further described below. Our annual equity grants to named executive officers, awarded in January 2017, were also designed to further align the total compensation paid to our named executive officers with that of our peers.

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Compensation Philosophy and Objectives

The primary objectives of our executive compensation program are to attract, motivate, retain and reward high-quality executives, to compensate our executives for meeting performance-based goals and to align the interests of our executives with our stockholders by having equity-based compensation as an important portion of our executives' total compensation.

As part of our overall compensation philosophy, we target the 25th percentile of our peer group companies for target cash compensation to our executive officers, and the median of our peer group companies for their total direct compensation (cash plus equity-based compensation). Our annual bonus program is based on the achievement of certain corporate performance goals and, in the case of our named executive officers other than our Chief Executive Officer, individual performance goals. This program enables us to deploy more of our cash resources to advancing our clinical development programs while providing executives with strong equity opportunities, further linking their interests with those of our stockholders. In addition to aligning our compensation practices for our named executive officers with comparable companies in our industry, we also seek to have an executive compensation structure that is fair relative to other professionals within our company. Our objective is to foster a performance-oriented culture, where individual performance is aligned with business objectives and the creation of long-term stockholder value.

Role of the Compensation Committee

The Compensation Committee determines or recommends to the Board for approval the compensation of our Chief Executive Officer and all other executive officers, administers our incentive compensation and stock plans and oversees our employee benefit plans. Our Compensation Committee is appointed by the Board and consists entirely of directors who are "independent" under the NASDAQ Listing Rules, "outside directors" for purposes of Section 162(m) of the Internal Revenue Code and "non-employee directors" for purposes of Rule 16b-3 under the Exchange Act. Our Compensation Committee is currently composed of Messrs. DiPietro and Hatfield and Drs. Marshak and Roberts.

Our Compensation Committee was formed in June 2015, when our Governance, Nominating & Compensation ("GNC") Committee recommended to the Board, and the Board approved, the separation of the GNC Committee into two standing committees: the Nominating and Corporate Governance Committee and the Compensation Committee. Prior to then, the GNC Committee was responsible for approving and administering our executive compensation and benefits policies. For purposes of this Compensation Discussion and Analysis, references to the "Compensation Committee" include its predecessor, the GNC Committee.

Compensation-Setting Process

The Compensation Committee reviews and recommends to our Board the compensation of our Chief Executive Officer, and reviews and determines, with input from management, the compensation of our other executive officers, including our named executive officers. This review is based on an evaluation of each officer's performance, corporate goals and objectives, and such other information as the Compensation Committee may request, including surveys of executive compensation practices at comparable companies.

Role of our Management

Our Chief Executive Officer and our human resources and finance departments work together to develop and prepare materials requested by and to be presented to the Compensation Committee, including analyses of financial data, peer data comparisons, and other briefing materials. Our Chief Executive Officer and our Vice President, Human Resources present the compensation proposals for

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our named executive officers (other than our Chief Executive Officer), along with any background information, to the Compensation Committee for review and consideration. The Compensation Committee may approve, modify, or reject those proposals, or may request additional information from management on those matters. Our Chief Executive Officer does not attend any portion of meetings at which his compensation is determined.

Role of Independent Compensation Consultant

Pursuant to its charter, the Compensation Committee has the authority to select and retain independent compensation consultants or advisors, at our expense, to assist it in carrying out its duties and responsibilities. In 2016 the Compensation Committee engaged Pearl Meyer to perform duties requested by the committee including:

providing recommendations on the composition of the Peer Group described under Competitive Market Assessment below;

analyzing executive compensation in comparison to market benchmarks;

updating the Compensation Committee on executive compensation market trends; and

advising the Committee on the 2016 short-term and long-term incentive designs.

The consultant spoke with the chair of the Compensation Committee, as well as with management, in preparing for committee meetings, regularly attended committee meetings and met from time to time in executive session with the Compensation Committee without the presence of management.

Competitive Market Assessment

On an annual basis, the Compensation Committee reviews, with its compensation consultant, relevant market benchmarks for the company's executive compensation. The Compensation Committee uses this information to ensure that it is acting on an informed basis and to establish points of reference to determine whether and to what extent it is establishing competitive levels of compensation for our named executive officers.

For 2016 compensation decisions, the Compensation Committee considered compensation information of peer group public companies in the biotechnology and pharmaceutical industries. The criteria for selection of the companies in the peer group included the size of a company, its business development stage, and how recently a company had become publicly owned. All companies in the peer group have less than 300 employees and a primary industry focus of pharmaceutical products, diagnostic substances, or therapeutic preparations, with most peers having products in the preclinical to phase II product development stages. Companies were selected with various revenue sizes because we are recruiting from and competing for executive talent with companies that are generating revenue. For 2016, the peer group companies consisted of:

Accelaron Pharma, Inc.
Agenus Inc.
Akebia Therapeutics, Inc.
AxoGen Inc.
Cerulean Pharma Inc.
Curis, Inc.
Dicerna Pharmaceuticals, Inc.
Dimension Therapeutics Inc.
Eleven Biotherapeutics, Inc.
Enanta Pharmaceuticals, Inc.

Epizyme, Inc.
Flexion Therapeutics, Inc.
Genocea Biosciences, Inc.
Idera Pharmaceuticals, Inc.
Organovo Holdings Inc.
OvaScience, Inc.
Sarepta Therapeutics, Inc..
Verastem, Inc..
ZIOPHARM Oncology, Inc.

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The Compensation Committee also considered market data compiled by Pearl Meyer from the Radford Global Life Sciences Survey, employing the appropriate headcount and executive role perspectives, as an additional market check.

Elements of Executive Compensation Program

Generally, our executive compensation program consists of five components: base salary, annual bonus incentives, long-term equity incentives, benefits, and severance or termination protection.

Base Salary. Base salary is the primary fixed component of our executive compensation program. The Compensation Committee believes that a competitive base salary is necessary to attract and subsequently retain a management team with the requisite skills to lead our company. The Compensation Committee typically reviews salaries for potential adjustments in January of each fiscal year and may make adjustments at other times as needed. Generally, our Compensation Committee believes that adjustments to base salary should reflect the responsibilities of the executive, the executive's performance for the preceding year, demand in the market for the particular executive position, and the pay of the other members of the executive team, as well as targeting our cash compensation at the 25th percentile of our peer group companies. Base salaries for our named executive officers are further described below.

Annual Incentive Bonus Plan. Our annual incentive bonus plan provides performance-based incentives that motivate and reward achievement of corporate and individual performance goals. Under the annual incentive bonus plan, goals are set at the beginning of each year that are appropriate in light of our business plans and take into consideration our financial, operational and strategic priorities. Currently, payouts under our annual incentive bonus plan to our Chief Executive Officer are based on the achievement of corporate objectives, and for other named executive officers, payouts are based on a combination of corporate objectives and individual performance goals. Corporate objectives are determined by the Board. Individual performance goals for our named executive officers, other than our Chief Executive Officer, are determined by the Compensation Committee with input from our Chief Executive Officer and are intended to measure our executive officers' achievement of specific projects. At the end of each year, the Compensation Committee determines the degree to which individual performance goals have been met. The Board determines the degree to which corporate performance objectives have been met and the associated payouts to each named executive officer. The Compensation Committee may grant bonuses that are above, at, or below the individual target bonus for named executive officers, except the Chief Executive Officer, based on the level of achievement if it determines that such bonuses are warranted and are in the best interests of our company and our stockholders. The Board may grant the Chief Executive Officer a bonus that is above, at, or below the corporate objectives based on the level of achievement if it determines that such bonus is warranted and is in the best interests of the company and our stockholders. Goals, results and approved payouts under our annual incentive plan for 2016 are further described below.

Long-Term Equity Incentives. Consistent with the practices of peer group companies, we provide equity incentive compensation to our named executive officers. These awards aim to align the interests of our executive officers with those of our stockholders to create long-term stockholder value, as well as motivate and retain talented executives.

Our named executive officers are eligible to receive annual equity awards, although an annual award is not guaranteed. Individual equity award determinations for named Executive Officers, except the Chief Executive Officer, are made by the Compensation Committee with respect to the frequency and size of the equity award to be recommended or to be granted to the named executive officers. The determination for equity awards for the Chief Executive Officer is recommended by the Compensation Committee to the Board and approved by the Board, with respect to the frequency and size of the equity award to be recommended or to be granted to the Chief Executive Officer. In making these

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determinations, the Compensation Committee considers performance relative to the strategic and financial objectives of our company and the individual performance of each named executive officer. Our equity awards generally vest over a four-year period, with 25% vesting on the first anniversary of the date of grant and thereafter on a monthly basis in 36 equal installments. At the time of hire, we provide our named executive officers with an equity incentive award in the form of stock options.

We currently grant stock options and not other forms of equity because we believe stock options are consistent with the risk profile of a pre-commercial company. We review our program annually to determine the appropriate form and terms of awards given the business strategy.

Benefits and Perquisites. We provide the following benefits to our named executive officers generally on the same basis as the benefits provided to all employees: medical, dental and vision insurance, including an flexible spending account option, life insurance, short and long-term disability, and certain commuting expenses. We also match, in the form of shares of our common stock, contributions to our 401(k) profit sharing plan, in amounts up to 5% of each named executive officer's annual compensation. Our matching contributions become 100% vested after the employee has been employed by us for four years. In addition, in 2015 we adopted, and our stockholders approved, an employee stock purchase plan to allow our employees to purchase shares of our common stock at a discount using after-tax payroll deductions. We may also provide additional benefits or perquisites under contractual agreements to our named executive officers, including housing allowances and commuting expenses.

Severance/Termination Benefits. Under contractual agreements with our named executive officers, we have agreed to provide severance payments in connection with the termination of the executive, including in connection with a change in control. These arrangements are described in the Executive Compensation section under "Potential Payments upon Termination or Change in Control."

Compensation Decisions for 2016

Base Salaries. The initial base salaries of our named executive officers were determined upon each officer's hire based on such officer's industry experience, expertise, and demand within our industry, and may be adjusted from time to time following hiring. Please see the Summary Compensation Table below for the actual amounts paid to our named executive officers in 2016.

Named Executive Officer	2015 Salary (\$)	Increase %	2016 Salary (\$)
Mark Perrin	430,000	3.5	445,050
Steven McAllister	285,000	3.5	294,975
Thomas Ulich	325,000	3.5	336,375
Lorianne Masuoka	325,000	3.5	336,375
Pamela J Stahl(1)	n/a	n/a	335,000

(1)

Ms. Stahl joined our company as our Chief Commercial Officer effective September 14, 2016.

Annual Incentive Bonuses. All of our named executive officers were eligible to participate in our 2016 incentive bonus plan, which consisted of corporate objectives and, for our named executive officers other than our Chief Executive Officer, individual objectives. For each of our executive officers, the Compensation Committee sets a target bonus amount expressed as a percentage of base salary. For 2016, the target bonus amount was set at 50% of base salary for our Chief Executive Officer and 35% of base salary for our other named executive officers, other than Ms. Stahl whose bonus for 2016 was guaranteed pursuant to her employment agreement.

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For our named executive officers other than our Chief Executive Officer, Ms. Masuoka and Ms. Stahl, the 2016 incentive bonus was weighted 75% to achievement of corporate objectives and 25% to achievement of individual objectives. For our Chief Executive Officer and Ms. Masuoka, the 2016 bonus was weighted 100% to achievement of corporate objectives. The 2016 corporate objectives and weightings recommended by the Compensation Committee and approved by the Board in 2016, and the actual weightings achieved as determined by the Board for 2016 performance, were as follows:

Objective	Target Weighting	Credit Received
1. 20 patients implanted with <i>Neuro-Spinal Scaffold</i> TM implant in probable benefit pivotal thoracic SCI clinical study	30%	0%
2. Initiate cervical SCI study by the end of Q-2	15%	0%
3. Execute a strategic development business transaction by Q-4	10%	0%
4. Identify neural stem cell program profile sufficient for pre-IND package	10%	20%
5. Submit burden of illness paper for publication by the end of Q-3	10%	10%
6. Maintain sufficient financial resources to support company operations	25%	20%
Total	100%	50%

The corporate objectives were set with a reasonable level of difficulty that required our named executive officers to perform at a high level to meet the objectives, and the likelihood of attaining the objectives was not assured. The Board has full discretion with respect to the amount and payment of bonuses, including adjustments to the objectives, weightings and actual amounts, and payout terms of the annual bonuses. This discretion is communicated to the executives. In January 2017, the Compensation Committee reviewed and discussed the company's performance with our Chief Executive Officer, carefully evaluated the results relative to the objectives, and recommended the levels of attainment for each objective as shown above, which was subsequently approved by the Board.

In January 2017, the Compensation Committee additionally assessed the degree to which individual objectives under the 2016 bonus plan were achieved, with input from the Chief Executive Officer with respect to the other named executive officers. Based on its review, the Compensation Committee (and the Board, in the case of the Chief Executive Officer) awarded the following bonus payments:

Name and Principal Position	Target Bonus (%)	Target Bonus (\$)	Corporate			Individual			Aggregate Bonus (%)	Aggregate Bonus (\$)
			Weighting (%)	Achievement (%)	Payout (%)	Weighting (%)	Achievement (%)	Payout (%)		
Mark Perrin	50	222,525	100	50	50			50	111,263	
Steven McAllister	35	103,241	75	50	38	25	85	21	59	60,654
Lorianne Masuoka	35	117,731	100	50	50				50	58,866
Thomas Ulich	35	117,731	75	50	38	25	115	29	66	77,997

In accordance with the employment agreement we entered into with Ms. Stahl, she received a guaranteed bonus for 2016 of \$117,250. As a result, Ms. Stahl did not participate in our 2016 incentive bonus plan. However, in January 2017 the Compensation Committee assessed the degree to which she achieved her individual performance objectives and found that she had achieved 100% of her individual goals for 2016.

Long-Term Equity Incentive Awards. We use equity awards to reward long-term value creation and as a retention tool. The size of the equity awards approved by our Compensation Committee for each named executive officer reflects individual contributions to company performance and competitive positioning relative to the market. In 2016, we opted to shift the timing of our annual equity awards

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from December to January, in part so that our determination might consider full year performance for 2016. Consequently, no annual award was made during calendar year 2016. The long-term equity awards granted in January 2017 to our named executive officers were comprised of stock option awards.

In September 2016, the Compensation Committee granted Ms. Stahl a stock option award to purchase 188,200 shares of common stock in connection with her initial hire, as further described below. The award to Ms. Stahl vests over a four-year period, with 25% vesting on the first anniversary of the grant date and the remainder vesting monthly in 36 equal installments until fully vested on the fourth anniversary of the grant date, provided that Ms. Stahl remains continually employed by the company on each such vesting date.

Annual equity awards were made in January 2017, based on company and individual performance in 2016, expected future individual performance, retention considerations, and market data provided by our compensation consultant. In January 2017, the Compensation Committee awarded stock options to our named executive officers, other than our Chief Executive Officer, and the Board awarded stock options to our Chief Executive Officer, as follows:

Named Executive Officer	Stock Options (#)
Mark Perrin	320,000
Steven McAllister	0
Thomas Ulich	150,000
Lorianne Masuoka	0
Pamela J. Stahl(1)	35,000

- (1) The number of options granted was pro-rated based on Ms. Stahl's appointment as Chief Commercial Officer on September 14, 2016.

Compensation Practices and Risk

The Compensation Committee has reviewed our compensation policies as generally applicable to our employees and believes that our policies do not encourage excessive and unnecessary risk-taking, and that the level of risk that they do encourage is not reasonably likely to have a material adverse effect on the company. In making this determination, the Compensation Committee considered the following:

Our salaries, annual bonuses and annual equity grants are largely determined based on comparisons with peer companies, and annual incentive bonuses are based on financial and/or operational performance goals and business criteria such as capital raising, regulatory filings/approvals, progress in pre-clinical and clinical trials, intellectual property filings or issuances, and business development transactions, and individual performance objectives, set by the Committee.

The Committee has discretion to modify amounts awarded under our programs, and our system of internal control over financial reporting and code of business conduct and ethics reduce the likelihood of manipulation of our financial performance to enhance payments under any of our incentive plans.

There is balance between short-term (bonus measures) and long-term (stock options with service-based vesting) performance focus.

Our severance benefits neither insulate management from risky business strategies nor provide an enticement to pursue risky strategies.

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Arrangements with Named Executive Officers

Mark Perrin, Chief Executive Officer. Under our employment agreement with Mr. Perrin, Mr. Perrin receives an annual base salary, subject to adjustment from time to time, and is eligible to receive an annual cash bonus equal to 50% of his annual salary, subject to his performance of specified objectives to be established by the Board (or a designated Board committee) each year. Mr. Perrin is eligible to receive all medical, dental and other benefits to the same extent as provided to other senior management employees. In connection with his relocation to the Boston area, we agreed to arrange up to 12 months of corporate housing for Mr. Perrin, and we extended this corporate housing benefit through January 2017, such amount to be subject to a tax gross-up. We also reimbursed Mr. Perrin \$20,000 for moving expenses. Mr. Perrin is currently eligible for certain severance benefits under his employment agreement. In July 2015, we amended our agreement with Mr. Perrin with respect to severance, as described in more detail under the heading "Potential Payments Upon Termination or Change of Control."

Steven McAllister, Chief Financial Officer. In conjunction with his transition into a permanent role with our company in June 2014, we entered into a second amended and restated employment agreement with Mr. McAllister, which replaced the prior employment agreement between the company and Mr. McAllister and was subsequently amended in 2015. Under the terms of his agreement as amended, Mr. McAllister received an annual base salary, subject to adjustment from time to time, and was eligible to receive benefits to the same extent as provided to our other senior management employees, including medical and dental benefits. In addition, Mr. McAllister was eligible to receive an annual target bonus equal to 35% of his annual salary, subject to his performance of specified objectives to be established by our Chief Executive Officer each year. Mr. McAllister terminated his employment with the company effective December 31, 2016.

Thomas Ulich, Chief Scientific Officer. We entered into an employment agreement with Dr. Ulich in July 2015, which replaced the terms of an offer letter dated February 20, 2014, which previously governed the terms of Dr. Ulich's employment with the company. Under the terms of his agreement, Dr. Ulich receives an annual base salary, subject to adjustment from time to time, and is eligible to receive benefits to the same extent as provided to our other senior management employees, including medical and dental benefits. We agreed to reimburse Dr. Ulich for commuting expenses related to travel between his home in New York and our headquarters. In addition, Dr. Ulich is eligible to receive an annual target bonus equal to 35% of his annual salary, subject to his performance of specified objectives to be established by our Chief Executive Officer each year. Dr. Ulich is currently eligible for certain severance benefits as described in more detail under the heading "Potential Payments Upon Termination or Change of Control."

Lorianne Masuoka, Chief Medical Officer. We entered into an employment agreement with Dr. Masuoka in January 2015 and amended the agreement in July 2015. Under the terms of her agreement as amended, Dr. Masuoka received an annual base salary, subject to adjustment from time to time, and was eligible to receive benefits to the same extent as provided to our other senior management employees, including medical and dental benefits. In addition, Dr. Masuoka was eligible to receive an annual target bonus equal to 35% of her annual salary, subject to her performance of specified objectives to be established by our Chief Executive Officer each year. Dr. Masuoka resigned as Chief Medical Officer effective January 2, 2017. Dr. Masuoka is currently eligible for certain severance benefits, which are described in more detail below under "Potential Payments Upon Termination or Change in Control."

Pamela J. Stahl, Chief Commercial Officer. We entered into an employment agreement with Ms. Stahl in August 2016. Under the terms of her agreement, Ms. Stahl receives an initial annual base salary, subject to adjustment from time to time, and is eligible to receive benefits to the same extent as provided to our other senior management employees, including medical and dental benefits. In

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connection with her relocation to the Boston area, we agreed to provide Ms. Stahl with a one-time housing reimbursement payment of \$25,180 and to provide her with temporary living and relocation expenses estimated at \$60,000. We also agreed to provide Ms. Stahl with a cash payment of \$348,712 for the value of the shares of her former employer that she forfeited when she resigned to join the company. In addition, under the agreement, Ms. Stahl is eligible to receive an annual target bonus equal to 35% of her annual salary, subject to her performance of specified objectives to be established by our Chief Executive Officer each year. For 2016, we agreed, pursuant to her employment agreement, to provide Ms. Stahl a guaranteed bonus equal to \$117,250. Upon her hire, she also received a stock option grant to purchase 188,200 shares of our common stock. This option has a ten-year term and vests over a four-year period, with 25% vesting on the first anniversary of the grant date and the remainder vesting monthly in 36 equal installments until fully vested on the fourth anniversary of the grant date, provided that Ms. Stahl remains continuously employed by us on each such vesting date. Ms. Stahl is currently eligible for certain severance benefits under her employment agreement as described in more detail under the heading "Potential Payments Upon Termination or Change of Control."

COMPENSATION COMMITTEE REPORT

The Compensation Committee has reviewed and discussed with management the Compensation Discussion and Analysis included in this proxy statement. Based on those reviews and discussions, the Compensation Committee has recommended to the Board that the Compensation Discussion and Analysis be included in this proxy statement for filing with the Securities and Exchange Commission.

By the Compensation Committee of the Board of Directors of InVivo
Therapeutics Holdings Corp.

Kenneth DiPietro, Chairman
Jeffrey Hatfield
Daniel Marshak
Richard Roberts

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Set forth below is information regarding the compensation of (i) all persons serving as our Chief Executive Officer or Chief Financial Officer at any time during 2016 and (ii) our other most highly compensated executive officers at the end of 2016. Such officers are collectively referred to as our "named executive officers."

Summary Compensation Table

The following table sets forth information regarding the compensation awarded to, earned by, or paid to the named executive officers.

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)(1)	Option Awards (\$)(1)	Non-Equity	All Other Compensation (\$)	Total (\$)
						Incentive Plan Compensation (\$)		
Mark Perrin	2016	445,050				111,263	185,623(2)	741,936
Chief Executive Officer and Chairman of the Board	2015	421,395			1,083,088	215,000	200,618	1,920,101
	2014	392,308		60,000	4,628,496	140,000	161,557	5,382,361
Steven McAllister	2016	311,993				60,654	16,864(4)	389,511
Chief Financial Officer(3)	2015	277,992			452,319	99,750	13,531	843,592
	2014	262,692		19,875	305,300	106,375	12,850	707,092
Lorianne Masuoka	2016	336,375				58,866	14,417(6)	409,658
Chief Medical Officer(5)	2015	269,807			2,032,874	91,232	13,622	2,407,534
Thomas Ulich	2016	336,375				77,997	48,907(7)	463,279
Chief Scientific Officer	2015	318,643			722,345	118,016	68,505	1,227,509
	2014	201,231		22,500	1,015,924	52,500	47,431	1,339,586
Pamela J. Stahl	2016	92,202	465,962		1,020,056		102,776(9)	1,680,996
Chief Commercial Officer(8)								

- (1) The amounts shown in these columns represent the aggregate grant date fair value of awards computed in accordance with FASB Accounting Standards Codification Topic 718, not the actual amounts paid or realized by the named executive officer during 2016. The assumptions used in determining grant date fair value of these awards are set forth in Note 13 to our Consolidated Financial Statements appearing in our Annual Report filed with the SEC on March 10, 2017.
- (2) Represents (i) \$76,092 in housing expenses (rent and furniture); (ii) \$83,933 for a tax gross-up for housing expenses; (iii) \$22,178 in 401(k) company stock matching contributions under our 401(k) profit sharing plan; and (iv) \$3,420 in commuting expenses.
- (3) Mr. McAllister resigned from his position as Chief Financial Officer effective December 31, 2016.
- (4) Represents (i) \$13,222 in 401(k) company stock matching contributions under our 401(k) profit sharing plan; and (ii) \$3,642 in commuting expenses.
- (5) Dr. Masuoka resigned from her position as Chief Medical Officer effective January 2, 2017.
- (6) Represents (i) \$10,997 in 401(k) company stock matching contributions under our 401(k) profit sharing plan; and (ii) \$3,420 in commuting expenses.

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- (7) Represents \$48,907 in commuting expenses.
- (8) Ms. Stahl joined our company as our Chief Commercial Officer effective September 14, 2016. The amount earned under "salary" in 2016 was prorated based on her base salary of \$335,000 per year.
- (9) Represents (i) \$48,599 in relocation and temporary housing expenses; (ii) \$53,607 for a tax gross-up; and (iii) \$570 in commuting expenses.

Grants of Plan-Based Awards

The following table provides information regarding grants of plan-based awards to our named executive officers during 2016.

Name	Grant Date	Estimated Future Payouts Under Non-Equity Incentive Plan Awards(1)			All Other Option Awards: Number of Securities Underlying Options (#)(2)	Exercise or Base Price of Option Awards (\$/Sh)	Grant Date Fair Value of Stock and Option Awards (\$)(3)
		Threshold (\$)	Target (\$)	Maximum (\$)			
Mark Perrin			222,525				
Steven McAllister			103,241				
Lorianne Masuoka			117,731				
Thomas Ulich			117,731				
Pamela J. Stahl	9/14/2016				188,200	6.47	1,020,056

- (1) There were no set "Threshold" or "Maximum" performance bonus amounts established with respect to our 2016 incentive bonus plan. The actual amounts paid to each of the executive officers for 2016 are set forth in the Summary Compensation Table under the column entitled "Non-equity Incentive Plan Compensation."
- (2) Each option award vests as to 25% of the total underlying shares on the first anniversary of the grant date and the remainder vests monthly in 36 equal monthly installments until fully vested on the fourth anniversary of the grant date.
- (3) The amounts shown in this column represents the aggregate grant date fair value of the option awards computed in accordance with FASB Accounting Standards Codification Topic 718, not the actual amounts paid to or realized by the named executive officer in 2016. The assumptions used in determining grant date fair value of these awards are set forth in Note 13 to our Consolidated Financial Statements appearing in our Annual Report filed with the SEC on March 10, 2017.

Option Exercises and Stock Vested Table

None of our named executive officers exercised stock options or had stock awards vest during the fiscal year ended December 31, 2016.

Outstanding Equity Awards at Fiscal Year End

The following table summarizes the equity awards made to our named executive officers that were outstanding at December 31, 2016. Each option award reflected in the below table vests as to 25% of

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the total underlying shares on the first anniversary of the grant date and the remainder vests monthly in 36 equal monthly installments until fully vested on the fourth anniversary of the grant date.

Name	Award Grant Date	Option Awards		Option Exercise Price (\$)	Option Expiration Date
		No. of Securities Underlying Unexercised Options (#) Exercisable	No. of Securities Underlying Unexercised Options (#) Unexercisable		
Mark Perrin	01/6/2014	364,591	135,409	9.40	1/6/2024
	12/10/2014	62,506	62,494	4.20	12/10/2024
	12/10/2015	43,142	129,428	7.37	12/10/2025
Steven McAllister	6/19/2014	39,067	23,433	4.52	6/19/2024
	12/10/2014	7,819	7,806	4.20	12/10/2024
	12/10/2015	17,975	53,925	7.37	12/10/2025
Lorianne Masuoka	3/02/2015	54,692	70,309	12.08	3/02/2025
	12/10/2015	28,762	86,288	7.37	12/10/2025
Thomas Ulich	2/24/2014	61,981	25,519	9.32	2/24/2024
	12/10/2014	40,629	40,621	4.20	12/10/2024
	12/10/2015	28,762	86,288	7.37	12/10/2025
Pamela J. Stahl	9/14/2016		188,200	6.47	9/14/2026

Pension Benefits

We do not offer to our executive officers or employees any pension plan or similar plan that provides for payments or other benefits at, following or in connection with retirement.

Non-Qualified Deferred Compensation

We do not offer to our executive officers or employees any defined contribution or similar plan that provides for the deferral of compensation on a basis that is not tax-qualified. We offer a 401(k) profit sharing plan to all of our employees eligible to participate. We make matching contributions on behalf of participating employees, in the form of shares of our common stock, up to a maximum of 5% of the employee's annual compensation. Our matching contributions become 100% vested after the employee has been employed by us for four years. Any company matching contributions made to our named executive officers are reflected in the "All Other Compensation" column of the Summary Compensation Table above.

Potential Payments Upon Termination or Change in Control

Certain of our named executive officers are entitled to payments upon a termination of employment or a change in control.

Mark Perrin, Chief Executive Officer. Under our employment agreement with Mr. Perrin, as amended, if his employment is terminated by us without cause, or by Mr. Perrin for "good reason," in the absence of a "change in control" (as defined in our 2015 Equity Incentive Plan) then (i) we are obligated to pay severance (consisting of base salary in effect at the time of termination) to Mr. Perrin for a period of 18 months, plus continued health insurance benefits for a period of 6 months and (ii) the unvested portion of any stock options held by him will vest fully. If Mr. Perrin's employment is terminated by us without cause, or by Mr. Perrin for "good reason" within 12 months of a "change in control," then (a) we are obligated to pay severance (consisting of 2.0 times base salary in effect at the time of termination and 100% of his target annual bonus) to Mr. Perrin, plus continued health insurance benefits for a period of one year, and (b) the unvested portion of any stock options held by

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him will vest fully. The severance payments and the accelerated vesting of options are contingent on execution of a general release of claims against our company and are in addition to any accrued obligations to Mr. Perrin unpaid by us prior to the time of termination.

Steven McAllister, Chief Financial Officer. Under our employment agreement with Mr. McAllister, as amended, if his employment had been terminated by us without cause, or by Mr. McAllister for "good reason," in the absence of a "change in control" (as defined in our 2015 Equity Incentive Plan) then we would have been obligated to pay severance (consisting of base salary in effect at the time of termination) to Mr. McAllister for a period of one year, plus continued health insurance benefits for a period of 6 months. If Mr. McAllister's employment had been terminated by us without cause, or by Mr. McAllister for "good reason" within 12 months following a "change in control," then (i) we would have been obligated to pay severance (consisting of 1.5 times base salary in effect at the time of termination and 100% of his target annual bonus) to Mr. McAllister, plus continued health insurance benefits for a period of one year, and (ii) the unvested portion of any stock options held by him would have vested fully. The severance payments and the accelerated vesting of options would have been contingent upon execution of a general release of claims against our company and are in addition to any accrued obligations to Mr. McAllister unpaid by us prior to the date of termination. Mr. McAllister terminated employment with the company effective December 31, 2016.

Thomas Ulich, Chief Scientific Officer. Under our employment agreement with Dr. Ulich, if his employment is terminated by us without cause, or by Dr. Ulich for "good reason," in the absence of a "change in control" (as defined in our 2015 Equity Incentive Plan) then we are obligated to pay severance (consisting of base salary in effect at the time of termination) to Dr. Ulich for a period of one year, plus continued health insurance benefits for a period of 6 months. If Dr. Ulich's employment is terminated by us without cause, or by Dr. Ulich for "good reason" within 12 months following a "change in control," then (i) we are obligated to pay severance (consisting of 1.5 times base salary in effect at the time of termination and 100% of his target annual bonus) to Dr. Ulich, plus continued health insurance benefits for a period of one year, and (ii) the unvested portion of any stock option held by him will vest fully. The severance payments and the accelerated vesting of options are contingent upon execution of a general release of claims against our company and are in addition to any accrued obligations to Dr. Ulich unpaid by us prior to the date of termination.

Lorianne Masuoka, Chief Medical Officer. Under our agreement with Dr. Masuoka, if her employment had been terminated by us without cause, or by Dr. Masuoka for "good reason," in the absence of a "change in control" (as defined in our 2015 Equity Incentive Plan) then we would have been obligated to pay severance (consisting of base salary in effect at the time of termination) to Dr. Masuoka for a period of one year, plus continued health insurance benefits for a period of 6 months. If Dr. Masuoka's employment had been terminated by us without cause, or by Dr. Masuoka for "good reason" within 12 months following a "change in control," then (i) we would have been obligated to pay severance (consisting of 1.5 times base salary in effect at the time of termination and 100% of her target annual bonus) to Dr. Masuoka, plus continued health insurance benefits for a period of one year, and (ii) the unvested portion of any stock option held by her would have vested fully. The severance payments and the accelerated vesting of options would have been contingent upon execution of a general release of claims against our company and are in addition to any accrued obligations to Dr. Masuoka unpaid by us prior to the date of termination. Dr. Masuoka resigned as Chief Medical Officer effective January 2, 2017.

In October 2016, we entered into a separation agreement with Dr. Masuoka in connection with her resignation as Chief Medical Officer. The separation agreement provides that, in return for a release of claims, Dr. Masuoka is entitled to certain payments and benefits. Pursuant to the separation agreement, we agreed to (i) pay Dr. Masuoka her base salary for 12 months following the separation date, (ii) continue to pay the company's portion of her medical and dental insurance premiums for six

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months following the separation date, (iii) pay her 2016 cash bonus weighted 100% on the achievement of the 2016 corporate objectives, as determined by our Board of Directors for all employees (i.e. without any weighting to her individual objectives), (iv) extend the exercise period for all her options until January 2, 2018, and (v) pay her earned but unpaid regular wages and accrued but unused vacation through the separation date.

Pamela J. Stahl, Chief Commercial Officer. Under our agreement with Ms. Stahl, if her employment is terminated by us without cause, or by Ms. Stahl for "good reason," in the absence of a "change in control" (as defined in our 2015 Equity Incentive Plan) then we are obligated to pay severance (consisting of base salary in effect at the time of termination) to Ms. Stahl for a period of one year, plus continued health insurance benefits for a period of 6 months. If Ms. Stahl's employment is terminated by us without cause, or by Ms. Stahl for "good reason" within 12 months following a "change in control," then (i) we are obligated to pay severance (consisting of 1.5 times base salary in effect at the time of termination and 100% of her target annual bonus) to Ms. Stahl, plus continued health insurance benefits for a period of one year, and (ii) the unvested portion of any stock option held by her will vest fully. The severance payments and the accelerated vesting of options are contingent upon execution of a general release of claims against our company and are in addition to any accrued obligations to Ms. Stahl unpaid by us prior to the date of termination.

Equity Compensation Plan Information

The following table provides certain information about shares of our common stock that may be issued under our existing equity compensation plan as of December 31, 2016, which consists of our 2007 Equity Incentive Plan, 2010 Equity Incentive Plan, 2015 Equity Incentive Plan, and Employee Stock Purchase Plan.

Plan Category	(a) Number of securities to be issued upon the exercise of outstanding options, warrants and rights	(b) Weighted-average exercise price of outstanding options, warrants and rights	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders	3,193,785	\$ 7.52	3,042,345
Equity compensation plans not approved by security holders			
Total	3,193,785	\$ 7.52	3,042,345

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The following table sets forth certain information as of March 31, 2017, with respect to the beneficial ownership of our common stock by:

each of our directors;

each of our named executive officers;

all of our executive officers and directors as a group; and

each person that is known by us to beneficially own more than 5% of the outstanding shares of our common stock.

Unless otherwise indicated in the footnotes to the following table, each person named in the table has sole voting and investment power, and his or her address is c/o InVivo Therapeutics Holdings Corp., One Kendall Square, Suite B14402, Cambridge, MA 02139. Shares of our common stock subject to options or warrants currently exercisable or exercisable within 60 days of March 31, 2017 are deemed outstanding for computing the share ownership and percentage of the person holding such options and warrants, but are not deemed outstanding for computing the percentage of any other person. The percentage ownership of our common stock of each person or entity named in the following table is based on 32,123,392 shares of our common stock outstanding as of March 31, 2017.

Directors and Officers

Name of Beneficial Owner	Number of Shares of Common Stock Beneficially Owned	Percentage of Common Stock Beneficially Owned
Mark Perrin	571,879(1)	1.8%
Steven McAllister	5,265(2)	*
Lorianne Masuoka	87,137(3)	*
Thomas Ulich	167,372(4)	*
Pamela Stahl	(5)	*
Kenneth DiPietro	66,667(6)	*
Daniel Marshak	41,667(7)	*
C. Ann Merrifield	43,667(8)	*
Richard Roberts	308,554(9)	1.0%
Christina Morrison	15,625(10)	*
Jeffrey Hatfield	6,250(11)	*
All directors and executive officers as a group (10 persons)	1,283,057(12)	3.9%

*

Percentage of shares beneficially owned does not exceed one percent.

(1) Includes 553,319 shares issuable upon the exercise of stock options within 60 days of March 31, 2017.

(2) All of Mr. McAllister's stock options expired on March 31, 2017.

(3) Includes 86,058 shares issuable upon the exercise of stock options within 60 days of March 31, 2017.

(4)

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Includes 160,936 shares issuable upon the exercise of stock options within 60 days of March 31, 2017.

(5)

None of Ms. Stahl's stock options will become issuable within 60 days of March 31, 2017.

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- (6) Represents 66,667 shares issuable upon the exercise of stock options within 60 days of March 31, 2017.
- (7) Represents 41,667 shares issuable upon the exercise of stock options within 60 days of March 31, 2017.
- (8) Includes 41,667 shares issuable upon the exercise of stock options within 60 days of March 31, 2017.
- (9) Includes 122,651 shares issuable upon the exercise of stock options within 60 days of March 31, 2017.
- (10) Represents 15,625 shares issuable upon the exercise of stock options within 60 days of March 31, 2017.
- (11) Represents 6,250 shares issuable upon the exercise of stock options within 60 days of March 31, 2017.
- (12) Includes an aggregate of 1,069,236 shares issuable upon the exercise of stock options within 60 days of March 31, 2017.

Stockholders Known by Us to Own 5% or More of Our Common Stock

Name of Beneficial Owner	Number of Shares of Common Stock Beneficially Owned	Percentage of Common Stock Beneficially Owned
Robert S. Langer(1)	1,637,395	5.1%
BlackRock, Inc.(2)	1,972,410	6.1%

(1) Dr. Langer's address is Langer Lab, 77 Massachusetts Avenue, Room 76-661, Cambridge, Massachusetts, 02139.

(2) The amount shown and the following information is derived from a Schedule 13G/A filed on January 25, 2017 by BlackRock, Inc., which sets forth its beneficial ownership as of December 31, 2016. Of the shares above, BlackRock, Inc. reported to have sole dispositive power with respect to 1,972,410 shares and sole voting power with respect to 1,935,976 shares. BlackRock, Inc.'s address is 55 East 52nd Street, New York, NY 10055.

SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Exchange Act requires our directors and executive officers and persons who own more than 10% of a registered class of our equity securities to file reports of beneficial ownership and changes in beneficial ownership with the SEC. To our knowledge, based solely on a review of copies of such reports furnished to us by our officers and directors, we believe that, during the fiscal year ended December 31, 2016, no person required to file reports under Section 16(a) of the Exchange Act failed to file such reports on a timely basis during such fiscal year.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Related Party Transaction Policy

Our board of directors has adopted written policies and procedures for the review of related party transactions. The Audit Committee reviews and oversees all related party transactions on an ongoing basis. A "related party transaction" is a transaction that meets the minimum

threshold for disclosure in the proxy statement under applicable SEC rules (generally, transactions involving amounts exceeding

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\$120,000 in which a "related person" or entity has a direct or indirect material interest). "Related persons" include our executive officers, directors, beneficial owners of 5% or more of our common stock, immediate family members of these persons and entities in which one of these persons has a direct or indirect material interest. When a potential related party transaction is identified, management presents it to the Audit Committee to determine whether to approve or ratify it.

The Audit Committee reviews the material facts of any related party transaction and either approves or disapproves of entering into the transaction. In the course of reviewing the related party transaction, the Audit Committee considers whether (i) the transaction is fair and reasonable to our company, (ii) the transaction is in, or not inconsistent with, our company's best interests under all possible circumstances, and (iii) the transaction will be on terms no less favorable to our company than we could have obtained in an arm's-length transaction with an unrelated third party. If advance approval of a related party transaction is not feasible, then the transaction will be considered and, if the Audit Committee determines it to be appropriate, ratified by the Audit Committee. No director may participate in the approval of a transaction for which he or she is a related party. When a related party transaction is ongoing, any amendments or changes are reviewed, and the transaction is reviewed annually for reasonableness and fairness to our company.

Related Party Transactions

We have entered into a consulting agreement with Dr. Robert Langer, a member of our Scientific Advisory Board and a holder of over 5% of our common stock, for certain consulting services. Dr. Langer was one of the original co-founders of our company. Pursuant to the terms of the agreement, we have agreed to pay Dr. Langer \$250,000 per year in consulting fees.

AUDIT COMMITTEE REPORT

The Audit Committee has reviewed our audited financial statements for the fiscal year ended December 31, 2016 and discussed them with our management and RSM US LLP, our registered public accounting firm.

The Audit Committee has also discussed with RSM US LLP the matters required to be discussed by AS 1301: *Communications with Audit Committees*, as adopted by the Public Company Accounting Oversight Board.

The Audit Committee has received the written disclosures and the letter from our registered public accounting firm required by applicable requirements of the Public Company Accounting Oversight Board regarding the registered public accounting firm's communications with the Audit Committee concerning independence, and has discussed with our registered public accounting firm their independence.

Based on the review and discussions referred to above, the Audit Committee recommended to the Board that the audited financial statements of InVivo Therapeutics Holdings Corp. be included in our Annual Report on Form 10-K for the year ended December 31, 2016, which has been filed with the SEC.

By the Audit Committee of the Board of Directors of
InVivo Therapeutics Holdings Corp.

Christina Morrison, Chairwoman
Jeffrey Hatfield
Daniel Marshak
C. Ann Merrifield

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**PROPOSAL NO. 2
APPROVAL OF AMENDMENT TO ARTICLES OF INCORPORATION**

At our 2016 Annual Meeting of Stockholders, our stockholders approved an amendment to our Articles of Incorporation to increase the number of shares of authorized common stock from 50,000,000 to 100,000,000 shares (the "Amendment"). Following stockholder approval of the Amendment, a Certificate of Amendment to our Articles of Incorporation was filed with the Secretary of State of Nevada on May 26, 2016 (the "2016 Amendment"), at which time the Amendment became effective. Approval of the Amendment was a "routine" matter, and as such, brokerage firms had the authority to vote shares held in "street name" on the Amendment even if their customers did not provide voting instructions on the matter. The disclosure in our 2016 proxy statement, however, characterized the Amendment as a "non-routine" matter on which brokers would not have authority to vote shares held in "street name" absent an instruction from the beneficial owner of the shares. Despite our shareholders voting to approve the 2016 Amendment, we have not issued or reserved for issuance any of the shares subject to the 2016 Amendment. In order to eliminate any potential that a question would arise about the proxy disclosure and its impact on the 2016 Amendment, our Board of Directors has adopted a resolution (i) re-approving an amendment to Article IV of our Articles of Incorporation that would increase the number of authorized shares of common stock from 50,000,000 to 100,000,000 shares and (ii) directing that the Amendment be submitted to the stockholders for re-approval at the Annual Meeting. We are requesting your continued support for this 2016 Amendment by asking for your vote FOR the Amendment.

The Proposed Amendment

If the proposed Amendment is re-approved by our stockholders and subsequently re-filed with the Nevada Secretary of State, Article IV of the Articles of Incorporation would be amended and restated in its entirety to read:

"The total number of shares that this corporation is authorized to issue is One Hundred Million (100,000,000) shares of Common Stock having a par value of \$0.00001 per share."

Only the number of shares of common stock the company is authorized to issue would be affected by this Amendment. Except for this change, the proposed Amendment would not affect any other provision of the Articles of Incorporation. If re-approved by a majority of holders of our outstanding shares of common stock entitled to vote as of the record date, we will refile the Amendment, in substantially the form attached hereto as Appendix A, with the Nevada Secretary of State.

Reasons for the Amendment

Our Board believes that an increase in the number of authorized shares of the company's common stock from 50,000,000 to 100,000,000 shares is in the best interests of our stockholders. Increasing the number of authorized shares of common stock will enable us to engage in capital raising transactions and other strategic transactions involving the issuance of equity securities. We have limited capital, and in order for us to execute on our business plan and remain viable as a going concern, we must have the flexibility to engage in capital raising transactions until we are able to generate sufficient revenue and cash flow. Investors in prior transactions have purchased our common stock or our derivative securities, such as warrants, for which we must reserve unissued common stock.

As discussed in more detail below in the section titled "Number of Shares of Common Stock Currently Outstanding or Subject to Issuance," we have nearly reached our limit of authorized common stock. We are therefore limited in future capital raising opportunities that would require the issuance of shares of our common stock. Increasing the number of authorized shares of common stock will enable us to issue common stock or securities convertible or exercisable into common stock to investors and other strategic partners. These transactions, if they can be successfully negotiated and consummated,

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will help us fund our business plan, including the funding of our clinical trials. You should be aware that these potential capital raising transactions or other strategic transactions involving the issuance of additional shares of common stock will have a dilutive effect on our existing stockholders, as further described in the section below titled "Effects of Increase."

If the increase is not approved, we will be limited in our efforts to raise additional capital. In such event, our operations, financial condition and our ability to continue as a going concern may be materially and adversely affected.

Number of Shares of Common Stock Currently Outstanding and Subject to Issuance

As of March 31, 2017, we had the following shares of common stock issued and outstanding and shares of common stock reserved for issuance under the following securities convertible or exercisable into common stock:

32,123,392 shares of our common stock issued and outstanding;

3,391,439 shares of our common stock issuable upon exercise of outstanding warrants;

4,031,756 shares of our common stock issuable upon exercise of outstanding stock options;

2,394,957 shares of our common stock reserved for future issuance under our incentive compensation plans and 401(k) plan;
and

262,785 shares of common stock reserved for future sale under our employee stock purchase plan.

Effects of Increase

The additional authorized but unissued shares of common stock may generally be issued from time to time for such proper corporate purposes as may be determined by our Board or, as required by law or the rules of NASDAQ, with the approval and authorization of our stockholders. Our Board does not intend to solicit further stockholder approval prior to the issuance of additional shares of common stock, except as may be required by applicable law or by the rules of NASDAQ.

The possible future issuance of shares of our common stock or securities convertible or exercisable into our common stock could affect our current stockholders in a number of ways. The issuance of new shares of common stock will cause immediate dilution of the ownership interests and the voting power of our existing stockholders. New issuances of common stock may also affect a number of dividends, if any, paid to such stockholders and may reduce the share of the proceeds that they would receive upon the future liquidation, if any, of the company.

In addition, the future issuance of shares of our common stock or securities convertible or exercisable into shares of our common stock could:

dilute the market price of our common stock, to the extent that the shares of common stock are issued and sold at prices below current trading prices, or, if the issuance consists of securities convertible or exercisable into common stock, to the extent that the securities provide for the conversion or exercise into common stock at prices that could be below current trading prices of the common stock, which dilution, in each case, may increase the volatility and affect the market value of our trading securities;

dilute the earnings per share, if any, and book value per share of the outstanding shares of our common stock; and

make the payment of dividends on common stock, if any, potentially more expensive.

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Anti-Takeover Effects

Although the Amendment is not motivated by anti-takeover concerns and is not considered by our Board to be an anti-takeover measure, the availability of additional authorized shares of common stock could enable the Board to issue shares defensively in response to a takeover attempt or to make an attempt to gain control of our company more difficult or time-consuming. For example, shares of common stock could be issued to purchasers who might side with management in opposing a takeover bid that the Board determines is not in the best interests of our stockholders, thus diluting the ownership and voting rights of the person seeking to obtain control of our company. In certain circumstances, the issuance of common stock without further action by the stockholders may have the effect of delaying or preventing a change in control of the company, may discourage bids for our common stock at a premium over the prevailing market price and may adversely affect the market price of our common stock. As a result, increasing the authorized number of shares of our common stock could render more difficult and less likely a hostile takeover of our company by a third-party, or a tender offer or proxy contest, assumption of control by a holder of a large block of our stock, and the possible removal of our incumbent management. We are not aware of any proposed attempt to take over the company or of any present attempt to acquire a large block of our common stock.

Vote Required

The affirmative vote of stockholders that represent a majority of the voting power entitled to vote on the Amendment is required to approve the Amendment. If you mark "ABSTAIN" on your proxy for this Proposal, it will have the effect of a vote "AGAINST" this Proposal.

OUR BOARD RECOMMENDS A VOTE "FOR" THE APPROVAL OF THE AMENDMENT.

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**PROPOSAL NO. 3
RATIFICATION OF THE APPOINTMENT OF
INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The Audit Committee has selected RSM US, LLP ("RSM") as our independent registered public accounting firm to audit our financial statements for the fiscal year ending December 31, 2017. The Board is asking our stockholders to ratify the appointment of RSM as our independent registered public accounting firm. Although stockholder approval of our Audit Committee's appointment of RSM as our independent registered public accounting firm for the year ended December 31, 2017 is not required, we believe that it is advisable to give stockholders an opportunity to ratify this appointment. If the stockholders do not ratify the appointment of RSM as our independent registered public accounting firm, the Audit Committee may reconsider its appointment. Even if the appointment is ratified, the Audit Committee, in its discretion, may direct the appointment of a different independent registered public accounting firm at any time during the year if the Audit Committee determines that such a change would be in the best interests of our company and stockholders. A representative of RSM is expected to be present at the Annual Meeting and will have the opportunity to make a statement if he or she desires to do so and will be available to respond to appropriate questions from stockholders.

Effective August 7, 2015, our Audit Committee dismissed Wolf & Company, P.C. ("Wolf & Co.") as our independent registered public accounting firm, and approved the engagement of RSM as our independent registered public accounting firm.

The reports of Wolf & Co. on the company's consolidated financial statements for the fiscal years ended December 31, 2013, and December 31, 2014, did not contain an adverse opinion or disclaimer of opinion, nor were they qualified or modified as to uncertainty, audit scope, or accounting principles, except that the report for the fiscal year ended December 31, 2013, contained an explanatory paragraph with respect to substantial doubt as to the company's ability to continue as a going concern. During the company's fiscal years ended December 31, 2013 and December 31, 2014, and the subsequent interim period through the date of dismissal of Wolf & Co., (i) there were no disagreements with Wolf & Co. on any matter of accounting principles or practices, financial statement disclosure, or auditing scope and procedure, which disagreements, if not resolved to the satisfaction of Wolf & Co., would have caused Wolf & Co. to make reference to the subject matter of the disagreement in connection with its reports on the consolidated financial statements for such years, and (ii) there were no "reportable events," as that term is defined in Item 304(a)(1)(v) of Regulation S-K.

During the company's fiscal years ended December 31, 2013 and December 31, 2014, and the subsequent interim period of January 1, 2015 through the engagement of RSM on August 7, 2015, neither the company, nor anyone on its behalf, consulted with RSM regarding either (i) the application of accounting principles to a specified transaction, either completed or proposed, or the type of audit opinion that might be rendered on the company's consolidated financial statements, and neither a written report nor oral advice was provided to the company that RSM concluded was an important factor considered by the company in reaching a decision as to the accounting, auditing or financial reporting issue, or (ii) any matter that was either the subject of a "disagreement," as defined in Item 304(a)(1)(iv) of Regulation S-K and the related instructions, or a "reportable event," as that term is defined in Item 304(a)(1)(v) of Regulation S-K.

Table of Contents**Independent Registered Public Accounting Firm Fees***Audit Fees*

Firm	Year	Fees \$(1)
RSM US, LLP	2016	205,800
	2015	195,000
WOLF & COMPANY, P.C.	2016	8,300
	2015	41,525

- (1) Audit fees in each of 2016 and 2015 consisted of fees incurred for professional services rendered for the audit of consolidated financial statements and internal control over financial reporting and for reviews of our interim consolidated financial statements included in our quarterly reports on Form 10-Q.

Audit-Related Fees

Firm	Year	Fees \$(1)
RSM US, LLP	2016	111,921
	2015	31,200
WOLF & COMPANY, P.C.	2016	10,670
	2015	31,620

- (1) Audit-related fees in 2016 paid to RSM consisted of fees related to the delivery of a comfort letter in conjunction with a common stock financing and fees related to a Form S-3. Audit-related fees in 2015 paid to RSM consisted of fees related to the delivery of a comfort letter in conjunction with the ATM. Audit-related fees in 2016 paid to Wolf & Co. consisted of fees related to consents provided in connection with a Form S-3 filing and a common stock financing. Audit-related fees in 2015 paid to Wolf & Co. consisted of fees related to consents provided in connection with a Form S-8 filing, delivery of a comfort letter, due diligence services and accounting consultations in connection with internal control reviews.

Tax Fees

There were no fees paid to RSM or Wolf & Company, P.C. for any tax-related services in 2016 or 2015.

All Other Fees

There were no other fees paid to RSM or Wolf & Company, P.C. in 2016 or 2015.

Policy on Audit Committee Pre-Approval of Audit and Permissible Non-Audit Services

Our Audit Committee is responsible for pre-approving all services provided by our independent registered public accounting firm. All of the above services and fees were reviewed and approved by the Audit Committee before the services were rendered. The Audit Committee has considered the nature and amount of fees billed by RSM and believes that the provision of services for activities unrelated to the audit is compatible with maintaining RSM's independence.

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Vote Required

The affirmative vote of the majority of votes cast by the holders of our common stock, present or represented by proxy at the Annual Meeting and entitled to vote, is required to ratify the appointment of RSM as our independent registered public accounting firm for the fiscal year ending December 31, 2017.

OUR BOARD UNANIMOUSLY RECOMMENDS A VOTE "FOR" THE RATIFICATION OF THE APPOINTMENT OF RSM US, LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING DECEMBER 31, 2017.

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OTHER MATTERS

Householding Information

Some banks, brokers and other nominee record holders may participate in the practice of "householding" proxy statements and annual reports. This means that only one copy of our proxy statement and Annual Report may have been sent to multiple stockholders in your household. We will promptly deliver a separate copy of the proxy statement and the Annual Report to any beneficial owner at a shared address to which a single copy of any of those documents was delivered if you write or call us at the following address or telephone number: InVivo Therapeutics Holdings Corp., One Kendall Square, Suite B14402, Cambridge, MA 02139, Attn: Secretary, telephone: (617) 863-5500. If you want to receive separate copies of the proxy statement and the annual report in the future, or if you are receiving multiple copies and would like to receive only one copy for your household, you should contact your bank, broker, or other nominee record holder, or you may contact us at the above address and telephone number.

Expenses of Proxy Solicitation

The solicitation of proxies will be conducted by telephone or mail, and we will bear all attendant expenses. These expenses will include the expense of preparing and mailing proxy materials for the Annual Meeting. Brokerage firms and other custodians, nominees and fiduciaries will be requested to forward the proxy materials to beneficial owners and to obtain authorization for the execution of proxies, and we will reimburse such brokerage firms, other custodians, nominees and fiduciaries for reasonable expenses incurred in sending proxy materials to beneficial owners of our common stock. We may conduct further solicitation personally or telephonically through our directors, officers, and employees, none of whom will receive additional compensation for assisting with the solicitation. We have retained the services of Laurel Hill Advisory Group, LLC, to assist in the solicitation of proxies at the cost of approximately \$3,000, plus reimbursement of certain expenses.

Stockholder Proposals

Stockholder proposals for inclusion in our proxy statement: If a stockholder wishes to present a proposal to be included in our proxy statement and form of proxy for the 2018 annual meeting of stockholders, the proposal must be received by our Secretary c/o InVivo Therapeutics Holdings Corp., One Kendall Square, Suite B14402, Cambridge, MA 02139, no later than the close of business on December 15, 2017. Such proposal must comply with the applicable rules of the SEC in order to be included in our proxy statement and proxy relating to the 2018 annual meeting of stockholders. If the date of next year's annual meeting is changed by more than 30 days from the anniversary date of the Annual Meeting, then the deadline to submit a proposal for inclusion in our proxy statement is a reasonable time before we begin to print and mail proxy materials.

Other stockholder proposals: A stockholder proposal not included in our proxy statement for the 2018 annual meeting of stockholders, including proposed nominations for director, will not be eligible for presentation at the 2018 annual meeting unless the stockholder gives timely notice of the proposal in writing to our Secretary at our principal executive offices and otherwise complies with the provisions of our amended and restated bylaws. To be timely, the stockholder is required to give written notice to our Secretary c/o InVivo Therapeutics Holdings Corp., One Kendall Square, Suite B14402, Cambridge, MA 02139, of his or her proposed director nomination or the proposal of other business to be considered by the stockholders. Such written notice must be made in accordance with Article II, Section 13 of our amended and restated bylaws, which require appropriate notice to us of a director nomination or proposal of other business for consideration not less than 60 days nor more than 90 days prior to the date of the first anniversary of this Annual Meeting. If, however, the 2018 annual meeting of stockholders is more than 30 days before, or more than 60 days after, such anniversary date, then to

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be timely notice must be provided not earlier than the close of business the 90th day prior to the 2018 annual meeting of stockholders and not later than the close of business on the later of the 60th day prior to the 2018 annual meeting of stockholders or the 10th day following the day on which public announcement of the date of the 2018 annual meeting of stockholders is first made by us. Assuming that the 2018 annual meeting is held on schedule, we must receive written notice of a proposal to nominate a director or proposal of other business for consideration no earlier than the close of business on March 1, 2018 and no later than the close of business on March 31, 2018.

The notice must also meet all other requirements contained in our amended and restated bylaws, including the requirement to contain specified information about the stockholder making the proposal and the proposed business to be brought before the meeting or the director nominee.

Other Business

As of the date of this proxy statement, we do not know of any matters to be presented at the Annual Meeting other than those described in this proxy statement. If any other matters should properly come before the Annual Meeting, proxies in the enclosed form will be voted on those matters in accordance with the judgment of the person or persons voting the proxies, unless otherwise specified.

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Appendix A

**CERTIFICATE OF AMENDMENT
TO
ARTICLES OF INCORPORATION
FOR NEVADA PROFIT CORPORATIONS
(Pursuant to NRS 78.385 and 78.390).**

First: The name of the Corporation is InVivo Therapeutics Holdings Corp. (the "Corporation")

Second: The Corporation's Articles of Incorporation (the "Articles") shall be amended by replacing Article IV with the following:

FOURTH

The total number of shares that this corporation is authorized to issue is One Hundred Million (100,000,000) shares of Common Stock having a par value of \$0.00001 per share.

Third: The vote by which the stockholders holding shares in the Corporation entitling them to exercise a least a majority of the voting power, or such greater proportion of the voting power as may be required in the case of a vote by classes or series, or as may be required by the provisions of the Articles have voted in favor of the amendment is .

Effective as of .

INVIVO THERAPEUTICS HOLDINGS CORP.

By: _____

Christopher McNulty,
Chief Financial Officer

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YOUR VOTE IS IMPORTANT. PLEASE VOTE TODAY.

Vote by Internet or Telephone - QUICK * EASY**

IMMEDIATE - 24 Hours a Day, 7 Days a Week or by Mail

INVIVO THERAPEUTICS HOLDINGS CORP.

Your phone or internet vote authorizes the named proxies to vote your shares in the same manner as if you marked, signed and returned the proxy card. Votes submitted electronically over the Internet or by telephone must be received by 7:00 p.m., Eastern Time, on May 29, 2017.

INTERNET/MOBILE

www.cstproxyvote.com

Use the Internet to vote your proxy. Have your proxy card available when you access the above website. Follow the prompts to vote your shares.

PHONE 1 (866) 894-0537

Use a touch-tone telephone to vote your proxy. Have your proxy card available when you call. Follow the voting instructions to vote your shares.

PLEASE DO NOT RETURN THE PROXY CARD IF YOU ARE VOTING ELECTRONICALLY OR BY PHONE.

MAIL Mark, sign and date your proxy card and return it in the postage-paid envelope provided.

FOLD HERE • DO NOT SEPARATE • INSERT IN ENVELOPE PROVIDED

PROXY

Please mark your votes like this x

THE BOARD OF DIRECTORS RECOMMENDS A VOTE FOR THE ELECTION OF EACH OF THE NOMINEES FOR DIRECTOR AND FOR PROPOSALS 2 AND 3.

1. ELECTION OF DIRECTORS. The election of three Class III directors, each to serve a three-year term expiring at the 2020 annual meeting, and one Class II director to serve a two-year term expiring at the 2019 annual meeting.

Class II Nominee

(01) Christina Morrison

FOR NOMINEE o

WITHHOLD AUTHORITY o

Class III Nominees

(02) Mark D. Perrin	FOR NOMINEE <input type="radio"/>	WITHHOLD AUTHORITY <input type="radio"/>
(03) C. Ann Merrifield	FOR NOMINEE <input type="radio"/>	WITHHOLD AUTHORITY <input type="radio"/>
(04) Jeffrey S. Hatfield	FOR NOMINEE <input type="radio"/>	WITHHOLD AUTHORITY <input type="radio"/>

	FOR	AGAINST	ABSTAIN
2. APPROVAL OF AMENDMENT. To approve the amendment to our Articles of Incorporation to increase the authorized shares of common stock from 50,000,000 to 100,000,000.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	FOR	AGAINST	ABSTAIN
3. RATIFICATION OF AUDITORS. To ratify the appointment of RSM US, LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2017.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

THIS PROXY, WHEN PROPERLY EXECUTED, WILL BE VOTED AS INDICATED. IF NO CONTRARY INDICATION IS MADE, THIS PROXY WILL BE VOTED FOR THE ELECTION OF THE DIRECTOR NOMINEES, FOR PROPOSALS 2 AND 3 AND IN ACCORDANCE WITH THE DISCRETION OF THE PERSONS NAMED AS PROXIES HEREIN ON ANY OTHER MATTERS THAT MAY PROPERLY COME BEFORE THE ANNUAL MEETING.

COMPANY ID:

PROXY NUMBER:

ACCOUNT NUMBER:

Signature

Signature

Date , 2017.

NOTE: Please sign exactly as your name or names appear hereon. When shares are held by joint owners, both must sign. When signing as attorney, executor, administrator, trustee or guardian, please give title as such. If a corporation, please sign in full corporate name by president or other authorized officer. If a partnership, please sign in partnership name by authorized person.

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting of Stockholders to be held on May 30, 2017

To access the Company's Proxy Statement for the 2017

Annual Meeting of Stockholders and the Company's 2016

Annual Report, visit:

<http://www.cstproxy.com/invivotherapeutics/2017>

FOLD HERE • DO NOT SEPARATE • INSERT IN ENVELOPE PROVIDED

PROXY

**THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS
ANNUAL MEETING OF STOCKHOLDERS MAY 30, 2017**

INVIVO THERAPEUTICS HOLDINGS CORP.

The undersigned hereby appoints Mark D. Perrin and Tamara L. Joseph, and each of them severally, as proxies of the undersigned, each with full power to appoint his or her substitute, to represent the undersigned at the 2017 Annual Meeting of Stockholders (the "Annual Meeting") of InVivo Therapeutics Holdings Corp. (the "Company") to be held at the Massachusetts Biotechnology Council, 1 Cambridge Center, Cambridge, Massachusetts, 02139 on May 30, 2017 at 9:00 a.m., local time, or at any adjournments or postponements thereof, and to vote thereat all shares of common stock of the Company held of record by the undersigned at the close of business on April 13, 2017 in accordance with the instructions set forth on this proxy card and, in their discretion, to vote such shares on any other business as may properly come before the Annual Meeting and on matters incident to the conduct of the Annual Meeting. Any proxy heretofore given by the undersigned with respect to such stock is hereby revoked.

PLEASE DO NOT RETURN THE PROXY CARD IF YOU ARE VOTING ELECTRONICALLY OR BY PHONE.

(Continued, and to be marked, dated and signed, on the other side)