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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)

Payment of Filing Fee (Check the appropriate box):

- ☐ No fee required.
- ☐ Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
  - (1) Title of each class of securities to which transaction applies: \_\_\_\_\_
  - (2) Aggregate number of securities to which transaction applies: \_\_\_\_\_
  - (3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined): \_\_\_\_\_
  - (4) Proposed maximum aggregate value of transaction: \_\_\_\_\_
  - (5) Total fee paid: \_\_\_\_\_
- ☐ Fee paid previously with preliminary materials.
- ☐ Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.
  - (1) Amount Previously Paid: \_\_\_\_\_
  - (2) Form, Schedule or Registration Statement No.: \_\_\_\_\_
  - (3) Filing Party: \_\_\_\_\_
  - (4) Date Filed: \_\_\_\_\_

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**One Kendall Square, Building 1400 East, 4th Floor  
Cambridge, MA 02139**

June 13, 2014

Dear InVivo Stockholder:

I am pleased to invite you to attend the 2014 Annual Meeting of Stockholders (the "Annual Meeting") of InVivo Therapeutics Holdings Corp., to be held on Wednesday, July 30, 2014 at 10:00 a.m., local time, at the Boston Marriott Cambridge, located at Two Cambridge Center, 50 Broadway, Cambridge, Massachusetts 02142.

Specific details regarding admission to the Annual Meeting and the business to be conducted at the Annual Meeting are included in the Notice of Annual Meeting of Stockholders and Proxy Statement. We encourage you to carefully read these materials, as well as the enclosed Annual Report to Stockholders for the fiscal year ended December 31, 2013, as amended. Our Board of Directors recommends that you vote in favor of the Board's Class III director nominee and for each other proposal set forth in the Notice of Annual Meeting and Proxy Statement.

Your vote is very important! Whether or not you plan to attend the Annual Meeting, please vote as soon as possible. As an alternative to voting in person at the Annual Meeting, you may vote by completing and returning the enclosed proxy card in the enclosed postage-paid envelope, or if applicable, submit your proxy via telephone or the Internet. This will ensure your representation at the Annual Meeting.

Thank you for your continued support.

Sincerely,

A handwritten signature in black ink, appearing to read "John A. McCarthy, Jr.", written in a cursive style.

John A. McCarthy, Jr.  
*Chairman of the Board*

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**INVIVO THERAPEUTICS HOLDINGS CORP.**

**One Kendall Square, Building 1400 East, 4th Floor  
Cambridge, MA 02139**

**NOTICE OF ANNUAL MEETING OF STOCKHOLDERS  
To Be Held On Wednesday, July 30, 2014**

To Our Stockholders:

Notice is hereby given that the 2014 Annual Meeting of Stockholders (the "Annual Meeting") of InVivo Therapeutics Holdings Corp., a Nevada corporation, will be held on Wednesday, July 30, 2014 at 10:00 a.m., local time, at the Boston Marriott Cambridge, located at Two Cambridge Center, 50 Broadway, Cambridge, Massachusetts 02142, for the following purposes:

1. To consider and vote upon a proposal to elect a Class III director of the company to hold office for a three-year term ending at the annual meeting of stockholders in 2017 and until his successor is duly elected and qualified;
2. To consider and vote upon a proposal to ratify the appointment of Wolf & Company, P.C., an independent registered public accounting firm, as the independent auditor of our company for the fiscal year ending December 31, 2014; and
3. To transact such other business as may properly come before the Annual Meeting or any adjournments or postponements thereof.

Only stockholders of record as of the close of business on Thursday, June 12, 2014 are entitled to notice of, and to vote at, the Annual Meeting.

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,



John A. McCarthy, Jr.  
*Chairman of the Board*

Cambridge, Massachusetts  
June 13, 2014

**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 using one of the voting methods set forth in the attached proxy statement. Please refer to the section entitled "How does the Board recommend that I vote on the proposals?" in the attached proxy statement for a description of the Board's voting recommendations.**

**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, 2013, as amended, are available on the Internet, free of charge, at <http://www.cstproxy.com/invivotherapeutics/2014>. On this web site, you will be able to access this proxy statement, our Annual Report on Form 10-K, as amended, and any amendments or supplements to the foregoing material that is required to be furnished to stockholders.

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# INVIVO THERAPEUTICS HOLDINGS CORP.

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## PROXY STATEMENT

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### FOR THE ANNUAL MEETING OF STOCKHOLDERS

To Be Held On Wednesday, July 30, 2014

#### INFORMATION ABOUT THE 2014 ANNUAL MEETING

This proxy statement is being furnished to the stockholders of InVivo Therapeutics Holdings Corp., a Nevada corporation ("we" or "our company"), in connection with the solicitation of proxies by and on behalf of the company's Board of Directors, or the Board, for use at the company's 2014 Annual Meeting of Stockholders (the "Annual Meeting") to be held on Wednesday, July 30, 2014, at 10:00 a.m., local time, at the Boston Marriott Cambridge, located at Two Cambridge Center, 50 Broadway, Cambridge, Massachusetts 02142, or at any adjournment or postponement thereof.

#### What is the purpose of the Annual Meeting?

At the Annual Meeting, stockholders will consider and vote upon the following matters:

- The election of a Class III director of the company to hold office for a three-year term ending at the annual meeting of stockholders in 2017 and until his successor is duly elected and qualified;
- The ratification of the appointment of Wolf & Company, P.C., an independent registered public accounting firm, as the independent auditor of our company for the fiscal year ending December 31, 2014; and
- To transact such other business as may properly come before the Annual Meeting or any adjournments or postponements thereof.

We are sending you these proxy materials because the Board is requesting that you allow your shares to be represented at the Annual Meeting by the proxy-holders named on the enclosed proxy card. This proxy statement contains information that we are required to provide you under the rules of the U.S. Securities and Exchange Commission, or SEC, and is designed to provide you with information to assist you in voting your shares. On or about June 17, 2014, we will begin mailing these proxy materials to all of the company's stockholders of record at the close of business on June 12, 2014.

#### How does the Board recommend that I vote on the proposals?

If no instructions are indicated on your signed proxy card, the proxy-holders will vote in accordance with the recommendations of the Board. The Board recommends an affirmative vote:

- **"FOR"** the election of Mark D. Perrin, the director nominee nominated by our Board, whose name appears on the proxy card and whose biography is listed in this proxy statement below under the caption: "Proposal No. 1—Election of Class III Director"; and
- **"FOR"** the ratification of the appointment of Wolf & Company, P.C. as the independent auditor of our company for the fiscal year ending December 31, 2014.

If any other business is properly brought before the Annual Meeting or any adjournment or postponement thereof, the proxy-holders will vote as recommended by the Board, or if no recommendation is given, in their own discretion, unless you direct otherwise with your proxy instructions.

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## Who is entitled to vote at the Annual Meeting?

Holders of record of our common stock at the close of business on June 12, 2014 are entitled to vote at the Annual Meeting. As of June 12, 2014, there were 93,022,289 shares of our common stock issued and outstanding. Stockholders are entitled to cast one vote per share on each matter presented for consideration and action at the Annual Meeting.

## How do I vote my shares?

***Your vote is extremely important!*** Stockholders can vote in person at the Annual Meeting or by proxy. If you vote by proxy, the individuals named on the proxy card as your representatives will vote your shares in the manner you indicate. You may specify whether your shares should be voted "FOR" the nominee for Class III director, or you may indicate that you "WITHHOLD" your vote with respect to the nominee. You may also specify whether your shares should be voted "FOR" or "AGAINST," or whether you "ABSTAIN" from voting on, the proposal to ratify the appointment of Wolf & Company, P.C., an independent registered public accounting firm, as the independent auditor of our company for the fiscal year ending December 31, 2014. You may vote your shares of common stock by any of the following methods:

***By Mail***—Stockholders who receive a proxy card may vote by mail and should complete, sign and date their proxy cards and mail them in the pre-addressed envelopes that accompany the delivery of proxy cards. Proxy cards submitted by mail must be mailed by the date shown on the proxy card or the deadline imposed by your bank, broker or other agent for your shares to be voted.

***By Telephone or the Internet***—We have established telephone and Internet voting procedures for shareholders of record. These procedures are designed to authenticate your identity, to allow you to give your voting instructions and to confirm that those instructions have been properly recorded. You can vote by calling the toll-free telephone number on your proxy card. Please have your proxy card handy when you call. Easy-to-follow voice prompts will allow you to vote your shares and confirm that your instructions have been properly recorded. The website for Internet voting is <http://www.cstproxy.com>. Please have your proxy card handy when you go to the website. As with telephone voting, you can confirm that your instructions have been properly recorded. If you vote on the Internet, you also can request electronic delivery of future proxy materials. Telephone and Internet voting facilities for shareholders of record will be available 24 hours a day until 7:00 p.m., Eastern Daylight Time, on July 29, 2014. The availability of telephone and Internet voting for beneficial owners will depend on the voting processes of your broker, bank or other holder of record. We therefore recommend that you follow the voting instructions in the materials you receive. If you vote by telephone or on the Internet, you do not have to return your proxy or voting instruction card.

***In Person***—Shares held in your name as the stockholder of record may be voted by you in person at the Annual Meeting. Shares held in "street name" may be voted by you in person at the Annual Meeting only if you obtain a "legal proxy" from the bank, broker or other agent that holds your shares, which "legal proxy" grants you the right to vote the shares. You must present that "legal proxy" to attend the Annual Meeting and to be entitled to vote in person shares that are held for you in "street name."

## If my shares are held in "street name" by my broker, will my broker vote my shares for me?

Brokers, banks and other agents who have record ownership of shares that they hold in "street name" for their clients have the discretion to vote such shares on "routine" matters, such as ratification of independent registered public accounting firms. Brokers, banks and other agents holding shares in "street name" for their clients do not have the ability to cast votes with respect to director elections or other "non-routine" matters unless they have received express instructions from the beneficial owner of

the shares. It is therefore extremely important that you provide instructions to your broker, bank or other agent if your shares are held by a broker, bank or other agent so that your vote with respect to the election of the Class III director is counted.

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

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.
- If you submitted your proxy by telephone or the Internet, you may change your vote or revoke your proxy with a later telephone or Internet proxy, as the case may be.
- 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 the Internet so that your vote will be counted if you later decide not to attend the meeting.***

**\*\*\* Only the latest dated proxy card you submit will be counted by the inspectors of election at the Annual Meeting and any proxy card may be revoked at any time prior to its use at the Annual Meeting as described above. \*\*\***

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 other agent to change those instructions.

### **What quorum votes are needed to hold 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 will constitute a quorum for the transaction of business at the Annual Meeting. For purposes of determining whether a quorum is present, abstentions and "broker non-votes" (that is, shares held of record in "street name" as to which brokers, banks and other agents do not receive voting instructions from their beneficial owner-clients) are counted as present at the Annual Meeting.

### **What vote is required to approve each proposal?**

- Proposal No. 1—Election of Class III Director: The affirmative vote of a plurality of the shares of common stock present or represented and entitled to vote at the Annual Meeting, in person or by proxy, is required for the election of the Class III director nominee. Thus, assuming a quorum is present at the Annual Meeting, the nominee who receives the most affirmative votes will be elected as a Class III director.
- Proposal No. 2—Ratification of the Appointment of Independent Registered Public Accounting Firm: The affirmative vote of the holders of a majority of shares of common stock present in person or represented by proxy at the Annual Meeting and entitled to vote on this proposal is required to ratify the appointment of Wolf & Company, P.C., an independent registered public accounting firm, as the independent auditor of our company for the fiscal year ending December 31, 2014.



The affirmative vote of the holders of a majority of shares of common stock present in person or represented by proxy at the Annual Meeting and entitled to vote is required to approve any other proposals properly brought before the Annual Meeting, or any adjournment or postponement thereof.

**What is the effect of abstentions and broker non-votes?**

Abstentions and broker non-votes will not be counted as votes cast and will have no effect on the result of the vote in connection with the election of the Class III director. Abstentions are excluded but, because the ratification of the appointment of an independent auditor is considered a "routine matter," broker non-votes will be counted as votes cast in connection with the ratification of the appointment of Wolf & Company, P.C., an independent registered public accounting firm, as the independent auditor of our company for the fiscal year ending December 31, 2014.

**PROPOSAL NO. 1**  
**ELECTION OF CLASS III DIRECTOR**

Our Board of Directors currently consists of four directors serving on a classified board, consisting of two Class I directors (term expiring at the 2015 annual meeting), one Class II director (term expiring at the 2016 annual meeting) and one Class III director (term expiring at this Annual Meeting). At each annual meeting of our stockholders, directors are elected for a full term of three years to succeed those whose terms are expiring, unless a director is elected to a class which has a term expiring.

Upon the recommendation of the Governance, Nominating and Compensation Committee of the Board, the Board has nominated Mark D. Perrin for election at the Annual Meeting as a Class III director, to serve a three-year term until the company's 2017 annual meeting of stockholders and until his successor is duly elected and qualified. Unless otherwise instructed, the persons named as proxies in the enclosed proxy card will vote to elect Mr. Perrin as a Class III director. Mr. Perrin has agreed to stand for election and to serve if elected. Assuming Mr. Perrin is elected, following the Annual Meeting, there will be four directors and one Class II director vacancy on our Board of Directors.

Biographical and certain other information concerning Mark D. Perrin, the nominee for Class III director and our other directors is set forth below. Information with respect to the number of shares of common stock beneficially owned by each director, as of May 31, 2014, appears in the section entitled "Security Ownership of Certain Beneficial Owners and Management." No director or executive officer is related by blood, marriage or adoption to any other director or executive officer.

**Information Regarding Directors**

**Nominee for Class III Director**

**Mark D. Perrin**, 57, has served as a director of our company and our Chief Executive Officer since January 2014. Most recently, Mr. Perrin served as President of Dennen 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 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 US from 1992 to 1995. Mr. Perrin holds an MBA in Marketing and International Business from the Kellogg Graduate School of Management at Northwestern University and a BS in Economics from Fordham University. In determining to nominate Mr. Perrin for re-election to our Board, the Board considered Mr. Perrin's extensive management experience in the biotechnology industry and that, as our Chief Executive Officer, he provides our Board with insight into the day-to-day operations of our company.

**Class I Directors**

**Richard J. Roberts, Ph.D.**, 70, 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 joined InVivo Therapeutics Corporation's Scientific Advisory Board in June 2007. Dr. Roberts has served as Chief Scientific Officer at New England Biolabs since February 2007. He 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 to our Board his significant experience and understanding of the science and technology involved in our business.

**Kenneth DiPietro**, 55, has been a director of our company since December 2012. Since February 2012, Mr. DiPietro has served as Executive Vice President of Human Resources of Biogen Idec, Inc., a publicly-traded biotechnology company. Mr. DiPietro joined Biogen Idec 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.

## **Class II Director**

**John A. McCarthy, Jr.**, 55, has been a director of our company since April 2013 and non-executive Chairman of the Board since September 2013. Since December 2012, Mr. McCarthy has served as Chief Executive Officer of CryoXtract Instruments, LLC, a developer of unique automation solutions for the global life sciences industry. Prior to joining CryoXtract, Mr. McCarthy served as President and Chief Executive Officer of Qteros, Inc., an alternative energy company, from December 2009 to December 2011. During 2009, he served as Senior Vice President, Chief Financial Officer and Chief Business Officer at Microbia, Inc., a subsidiary of Ironwood Pharmaceuticals. From 2006 to 2008, he served as Executive Vice President and Chief Financial Officer at Verenum Corporation, a publicly traded, alternative energy company. From 2005 to 2006, Mr. McCarthy served as Senior Vice President and Chief Financial Officer of Xanthus Pharmaceuticals, Inc. From 2004 to 2005, he served as Senior Vice President Corporate Development and Chief Financial Officer of Synta Pharmaceuticals Corp., and from 2000 to 2004, he served as Executive Vice President and Chief Financial Officer of Exact Sciences Corporation, a publicly-traded developer of proprietary DNA-based diagnostic assays for the early detection of cancer. He holds an M.B.A. degree from the Harvard Business School and a B.S. degree in finance from Lehigh University. Mr. McCarthy brings to our Board his significant financial and business experience as an executive officer of private and public companies, including biotechnology companies.

## **Vote Required**

The affirmative vote of a plurality of the shares of common stock present or represented and entitled to vote at the Annual Meeting, in person or by proxy, is required for the election of the Class III director nominee. Thus, assuming a quorum is present at the Annual Meeting, the nominee who receives the most affirmative votes will be elected as a Class III director.

***Our Board unanimously recommends a vote FOR the election of Mark D. Perrin as a Class III director.***

## **Independence of Members of the Board**

We are not currently listed on any national securities exchange or quoted on an inter-dealer quotation system that has a requirement that the Board of Directors be independent. However, in evaluating the independence of the members and the composition of the committees of our Board of Directors, the Board of Directors utilizes the definition of "independence" as that term is defined by the listing standards of the Nasdaq Stock Market and applicable SEC rules, including the rules relating to the independence standards of an audit committee and the non-employee director definition of

Rule 16b-3 promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Using these standards, the Board of Directors has determined that Dr. Roberts and Messrs. McCarthy and DiPietro are currently "independent" directors. The Board of Directors has determined that Mr. Perrin is not independent as a result of his employment relationship with our company.

### **Board Meetings and Attendance**

The Board of Directors held six meetings during fiscal year 2013. All directors then in office attended more than seventy-five percent of the meetings. All directors attended in excess of 75% of the meetings of the committees of our Board of Directors on which they served. Our directors are encouraged, but not required, to attend our annual meeting of stockholders. All of our directors attended our 2013 annual meeting of stockholders, and we expect that all of our directors will attend this Annual Meeting.

### **Board Leadership Structure**

The Board of Directors does not have a policy on whether the offices of Chairman and Chief Executive Officer should be separate and, if they are to be separate, whether the Chairman should be selected from among the independent directors or should be an employee of our company. In the event the Chairman is not an independent director, the Board of Directors may designate a lead independent director.

In September 2013, following the resignation of its then Chairman, Frank Reynolds, the Board appointed Mr. McCarthy as non-executive Chairman of the Board. The Chairman of the Board acts as an advisor to our Chief Executive Officer, presides at meetings of the stockholders and the Board of Directors and has such other duties as may be assigned to him from time to time by the Board of Directors. The Board's determination to separate the offices of Chairman of the Board and Chief Executive Officer is expected to enhance board independence and oversight, and to allow the Chief Executive Officer to better focus on his responsibilities of managing the company, enhancing stockholder value and expanding and strengthening our business while allowing the Chairman of the Board to lead the Board in its fundamental role of providing advice to and independent oversight of management.

### **Committees of the Board**

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

### ***Audit Committee***

Our Board of Directors has a standing Audit Committee established in accordance with Section 3(a)(58)(A) of the Exchange Act. The Audit Committee assists the Board of Directors in fulfilling its responsibilities to stockholders concerning our financial reporting and internal controls. The Audit Committee facilitates open communication among the Audit Committee, the Board of Directors, 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, the report of the independent registered public accounting firm on the results, scope and terms of their work, and their recommendations concerning the financial practices, controls, procedures and policies employed by us. The current members of our Audit Committee are John A. McCarthy, Jr., Chairman, Kenneth DiPietro and Dr. Richard J. Roberts. The Audit Committee held five meetings in fiscal year 2013.

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

The Audit Committee is charged with establishing procedures for (i) the receipt, retention and treatment of complaints received by us regarding accounting, internal accounting controls or 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 of Directors, to engage independent legal, accounting and other advisors as it deems necessary or appropriate to carry out its responsibilities. The Board of Directors has adopted a written charter for the Audit Committee, a copy of which is available in the "Investor Relations" section of our website, [www.invivotherapeutics.com](http://www.invivotherapeutics.com).

The Board of Directors has determined that all of the members of the Audit Committee are independent (as defined by the listing standards of the Nasdaq Stock Market and the applicable SEC rules), and that the Audit Committee members meet the independence requirements contemplated by Rule 10A-3 under the Exchange Act. The Board has determined that John A. McCarthy, Jr. is an "audit committee financial expert" (as defined in Item 407(d)(5) of Regulation S-K).

### ***Governance, Nominating and Compensation ("GNC") Committee***

The GNC Committee assists the Board in fulfilling its responsibilities relating to (i) compensation of our Chief Executive Officer, the company's other executive officers and non-employee directors, (ii) overseeing the annual evaluation of our executive officers, (iii) monitoring corporate governance matters, including reviewing and assessing our company's corporate governance guidelines and code of ethics, and (iv) reviewing stockholder proposals and the director nomination process. The Board of Directors has adopted a written charter for the GNC Committee, a copy of which is available in the "Investor Relations" section of our website, [www.invivotherapeutics.com](http://www.invivotherapeutics.com). The Board of Directors has determined that all of the members of the GNC Committee are independent (as defined by the listing standards of the NASDAQ Stock Market and the applicable SEC rules). The current members of our GNC Committee are Kenneth DiPietro, Chairman, John A. McCarthy, Jr. and Dr. Richard J. Roberts. The GNC Committee held seven meetings in fiscal year 2013.

### *Compensation Responsibilities*

The GNC Committee determines salaries, incentives and other forms of compensation for our Chief Executive Officer and our other executive officers, and reviews and makes recommendations to the Board with respect to director compensation. The GNC Committee annually reviews and approves the corporate goals and objectives relevant to the compensation of the Chief Executive Officer, evaluates the Chief Executive Officer's performance in light of these goals and objectives, and sets the Chief Executive Officer's compensation level based on this evaluation. The GNC Committee meets without the presence of executive officers when approving or deliberating on executive officer compensation, but may invite the Chief Executive Officer to be present during the approval of, or deliberations with respect to, other executive officer compensation. The GNC Committee reviews and approves the terms of any and all offer letters, employment agreements, severance agreements, change-in-control agreements, indemnification agreements and other material agreements between us and our executive officers. In addition, the GNC Committee administers our equity incentive compensation plans, and the GNC Committee may delegate to one or more executive officers the power to grant options or other stock awards pursuant to our equity incentive compensation plans to the extent permitted by the plan or by applicable law. Additionally, the GNC Committee is responsible for overseeing our employee benefit plans and reviewing and discussing with management the annual Compensation and Analysis Disclosure and any other reports required by the SEC.

In carrying out its duties, the GNC Committee may delegate authority to one or more subcommittees and may, in its sole discretion without Board or management approval, retain advice of any consultant, legal counsel (other than in-house counsel) or other advisor as it deems necessary. The GNC Committee is directly responsible for appointment, compensation and oversight of such consultant. In selecting consultants, the GNC Committee must consider (i) whether the consultant's employer provides other services to our company, (ii) fees received by the consultant's employer from our company for the consultant as a percentage of total revenue received by such consultant's employer, (iii) policies and procedures designed to prevent conflicts of interest and (iv) business or personal relationship between the consultant with any members of the GNC Committee or any executive officer.

### *Governance and Nominating Responsibilities*

The GNC Committee is responsible for the periodic review and assessment of the adequacy of and compliance with our company's corporate governance guidelines and code of ethics, and the corporate governance requirements of the SEC and any exchange on which our common stock is listed, and for overseeing an annual self-evaluation by the Board and each committee. The GNC Committee also makes recommendations to the Board regarding succession planning, including suggestions for transitional Board or senior executive leadership in the event of an unplanned vacancy. The GNC Committee is also responsible for reviewing any stockholder proposals submitted to our company, including nominations for director as noted below.

The GNC Committee makes recommendations to the Board of Directors concerning all facets of the director nominee selection process. Generally, the GNC Committee identifies candidates for director nominees in consultation with management and the independent members of the Board of Directors, through the use of search firms or other advisers, through the recommendations submitted by stockholders or through such other methods as the GNC Committee deems to be helpful to identify candidates. Once candidates have been identified, the GNC Committee confirms that the candidates meet the independence requirements and qualifications for director nominees established by the Board of Directors. The GNC Committee may gather information about the candidates through interviews, questionnaires, background checks, or any other means that the GNC Committee deems to be helpful in the evaluation process. The GNC Committee meets to discuss and evaluate the qualities and skills of each candidate, both on an individual basis and taking into account the overall composition and needs

of the Board of Directors. Upon selection of a qualified candidate, the GNC Committee would recommend the candidate for consideration by the full Board of Directors.

In considering whether to include any particular candidate in the slate of recommended director nominees, the Board of Directors will consider the candidate's integrity, education, business acumen, knowledge of our business and industry, experience, diligence, conflicts of interest and the ability to act in the interests of all stockholders. As a matter of practice, the Board of Directors considers the diversity of the backgrounds and experience of prospective directors as well as their personal characteristics (e.g., gender, ethnicity, age, etc.) in evaluating and making decisions regarding board composition in order to facilitate deliberations that reflect a broad range of perspectives. The Board of Directors does not assign specific weights to particular criteria and no particular criterion is a prerequisite for each prospective nominee. We believe that the backgrounds and qualifications of our directors, considered as a group, should provide a composite mix of experience, knowledge and abilities that will allow our Board of Directors to fulfill its responsibilities.

### **Procedure for Recommending Director Candidates**

The GNC Committee will consider director candidates who are recommended by our stockholders. Such recommendation for nomination must be in writing and include the following:

- the name and address of the stockholder making the recommendation;
- 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.

Nominations must be sent to the GNC Committee by U.S. mail, courier or expedited delivery service to InVivo Therapeutics Holdings Corp., One Kendall Square, Building 1400 East, 4th Floor, Cambridge, Massachusetts 02139, Attn: Secretary. The Secretary will then provide the nomination to the GNC Committee for consideration. Assuming that the required material has been provided on a timely basis, the GNC Committee will evaluate stockholder-recommended candidates by following substantially the same process, and applying substantially the same criteria, as it follows for candidates submitted by others.

### **Compensation Committee Interlocks and Insider Participation**

None of the members of the GNC Committee was at any time during 2013 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 GNC Committee.

## Our Board's Role in Risk Oversight

We are a development stage company and as such have not yet developed a risk management policy or procedure. Generally, the entire Board of Directors, the Audit Committee and the GNC Committee are involved in overseeing our major risk exposures and monitor and assess 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 GNC Committee monitors our governance and succession risk and our compensation policies and such related risks by review with management and outside advisors.

## DIRECTOR COMPENSATION

The Board of Directors has adopted a compensation policy for non-employee directors. Members of our Board of Directors who are employees of the company do not receive any compensation for their service on our Board of Directors. The policy provides that each non-employee director shall be paid an annual retainer of \$25,000 per year (paid quarterly and delivered at each regularly scheduled quarterly Board meeting). In addition, the policy provides that the lead independent director (if one is selected), chairman of the GNC Committee and the chairman of the Audit Committee shall each receive an additional annual fee of \$5,000 (paid annually and delivered at first regularly scheduled quarterly Board meeting of the year), and that the non-executive Chairman of the Board receive an additional annual fee of \$5,000 (paid quarterly). Each non-employee director shall also receive \$1,000 for each in-person board meeting attended, \$500 for each telephonic board meeting attended, and \$500 for each board committee meeting attended. Each non-employee director will also receive an annual grant, on December 10 of each calendar year, of a nonqualified stock option under our 2010 Equity Incentive Plan to purchase up to 50,000 shares of our common stock at an exercise price equal to the closing price of our common stock on the date of grant, and that such option shall be exercisable as to 1/12 of the original number of shares subject to the option on the one-month anniversary of the grant date and shall be exercisable as to an additional 1/12 of the original number of shares subject to the option each monthly anniversary thereafter until fully vested on the 12-month anniversary of the grant date, provided that such director remains a director of our company on each such vesting date.

The following table sets forth compensation earned and paid to each individual who served as a non-employee director during 2013.

Name	Fees Earned or Paid in Cash (\$)	Stock Awards (\$)	Option Awards \$(1)(2)	All Other Compensation (\$)	Total (\$)
Kenneth DiPietro	\$ 38,000	—	\$ 70,610	—	\$ 108,610
John A. McCarthy, Jr.(3)	\$ 34,250	—	\$ 190,610	—	\$ 224,860
George Nolen(4)	\$ 28,500	—	—	—	\$ 28,500
Dr. Richard J. Roberts	\$ 38,000	—	\$ 70,610	—	\$ 108,610
Adam Stern(5)	\$ 14,000	—	—	—	\$ 14,000

- (1) The amounts shown in this column represent the aggregate grant date fair value of the awards computed in accordance with Financial Accounting Standards Board Accounting Standards Codification 718, not the actual amounts paid to or realized by the director during 2013. 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 on Form 10-K for the year ended December 31, 2013 filed with the SEC on March 17, 2014.
- (2) As of December 31, 2013, the aggregate number of vested and unvested options to purchase shares of our common stock outstanding for each current and former director listed above was as follows:



Mr. DiPietro, 100,000 shares; Mr. McCarthy, 100,000 shares; Mr. Nolen, 273,935 shares; Dr. Roberts, 1,067,547 shares; and Mr. Stern, 150,000 shares.

- (3) Mr. McCarthy joined the Board of Directors in April 2013 and was appointed non-executive Chairman of the Board in September 2013.
- (4) Mr. Nolen's term as a director expired on May 23, 2013.
- (5) Mr. Stern's term as a director expired on May 23, 2013.

## Scientific Advisory Board

In addition to our executive officers and directors, we also have a Scientific Advisory Board that provides guidance to our company. The Scientific Advisory Board reviews the progress of our company's product development and provides input to management regarding scientific issues relating to our product and potential markets. The Scientific Advisory Board is advisory only and does not have the power to make decisions on behalf of our company, and may but is not required to include officers, directors or employees of our company. We do not pay members of our advisory board any cash compensation and have compensated members of the advisory board through the issuance of stock options.

The following persons are the current members of our Scientific Advisory Board.

**Richard J. Roberts, PhD**, has been a director of our company since October 2010 and joined the Scientific Advisory Board of InVivo Therapeutics Corporation, our wholly-owned subsidiary, in June 2007. Additional biographical information concerning Dr. Roberts may be found above under "Information Regarding Directors."

**Robert S. Langer, ScD**, is the David H. Koch Institute Professor at the Massachusetts Institute of Technology (MIT). Dr. Langer has written over 1,250 articles. He also has approximately 2,050 issued and pending patents worldwide. Dr. Langer's patents have been licensed or sublicensed to over 250 pharmaceutical, chemical, biotechnology and medical device companies. He received his Bachelor's Degree from Cornell University in 1970 and his Sc.D. from the Massachusetts Institute of Technology in 1974, both in Chemical Engineering. He served as a member of the United States Food and Drug Administration's SCIENCE Board from 1995 - 2002 and as its Chairman from 1999-2002. Dr. Langer has received over 220 major awards including the 2006 United States National Medal of Science, the Charles Stark Draper Prize and the 2008 Millennium Prize. In 1989, Dr. Langer was elected to the Institute of Medicine of the National Academy of Sciences, and in 1992, he was elected to both the National Academy of Engineering and to the National Academy of Sciences. Dr. Langer has received honorary doctorates from 22 national and international universities.

**V. Reggie Edgerton, PhD**, has been the Director of U.C.L.A.'s Edgerton Neuromuscular Research Lab since 1968 and is a professor in the Departments of Physiological Sciences, Neurobiology and Neurosurgery at U.C.L.A. His research is focused on neural control of movement and how this neural control adapts to altered use and after spinal cord injury. He completed his Ph.D. under the direction of Drs. Wayne Van Huss, Rex Carrow, and William Heusner at Michigan State University. Dr. Edgerton served on the Scientific Advisory Board of The Christopher Reeves Foundation (CDRF) and his laboratory is one of eight laboratories in the world receiving funding from the CDRF. Dr. Edgerton has co-authored two books and is the author of approximately 400 research papers. He is the recent recipient of the 2012 J. Allyn Taylor International Prize in Medicine and the Reeve-Irvine Research Award for his work in spinal cord injury.

**Jonathan R. Slotkin, MD**, is a clinical neurosurgeon and research scientist. Clinically, Dr. Slotkin has expertise in complex spinal surgery, minimally invasive spinal surgery, spinal oncology surgery and brain tumor surgery. Dr. Slotkin completed residency training in neurosurgery at Harvard Medical

School, Brigham and Women's Hospital. He performed a fellowship in complex spinal surgery with Dr. Eric J. Woodard. He is the co-editor of a two-volume publication on spinal surgery. Dr. Slotkin is currently the Director of Spinal Surgery, Geisinger Neurosurgeries Institute, and Director of Spinal Cord Research at Geisinger Health System. Dr. Slotkin has authored or co-authored several peer-reviewed scientific publications in the areas of repair after spinal cord injury in animal models, and in vivo quantum dot labeling of neural stem cells.

**Eric J. Woodard, MD**, is a clinical neurosurgeon and research scientist. Dr. Woodard is currently Chief of the Section of Neurosurgery at New England Baptist Hospital. Dr. Woodard received his medical degree from Pennsylvania State University and completed his residency in neurological surgery at Emory University. Following residency, Dr. Woodard completed a fellowship in complex spinal surgery at the Medical College of Wisconsin under Dr. Sanford Larsen. He is a member of numerous professional societies including the American Association of Neurological Surgeons, the Congress of Neurological Surgeons, and the joint section of the AANS/CNS for spine and peripheral nerve. He has also served extensively over the last 18 years as faculty, Board member, foundation trustee, and Chairman of the board of AOSpine North America. Dr. Woodard has been a member of the editorial board for the Journal of Spinal Disorders & Techniques and Spine Universe, and is a reviewer for The New England Journal of Medicine and Neurosurgery.

## EXECUTIVE OFFICERS AND COMPENSATION

### Executive Officers

**Mark D. Perrin** is our Chief Executive Officer and President. Please see "Proposal No. 1—Election of Class III Director" above for biographical information regarding Mr. Perrin.

**Steven F. McAllister**, 56, has served as our Interim Chief Financial Officer since December 2013. Prior to joining our company, Mr. McAllister served as Vice President of Finance and Administration for the Spine and Bone Healing Technologies division of Biomet, Inc. from September 2007 to March 2013. While at Biomet, he was responsible for all accounting, finance, IT, facilities and insurance operations activities in addition to leading the company's strategic planning initiatives. Previous to Biomet, Mr. McAllister worked for DePuy, Inc., a Johnson & Johnson Company, from 1999 to 2007, in various capacities of increasing responsibility including Controller—Marketing Finance, Director of Finance—Worldwide Spine, and Director of Finance—Worldwide Operations. Prior to DePuy, Mr. McAllister held various financial roles with Pfizer's medical device business from 1984 to 1999. Mr. McAllister holds a BS in Accounting from Fairleigh Dickinson University.

**Tamara Joseph**, 51, has served as our Senior Vice President, General Counsel and Chief Compliance Officer since March 2014, after beginning to work as an independent consultant to our company in September 2013. Ms. Joseph was appointed as an independent director of the public health non-profit PHFE in February 2013. She is the incoming Vice Chair of PHFE's Board of Directors and is a member of its Audit Committee and its Governance and Nominating Committee. She previously served as Senior Vice President, General Counsel of Cubist Pharmaceuticals, Inc. from April 2008 to October 2012, where she was responsible for the law, compliance, risk management and government affairs departments. Prior to that, she served as Executive Vice President, General Counsel of Mayne Pharma Ltd., from 2006 to 2008. Before that, Ms. Joseph served as Vice President, General Counsel of Transkaryotic Therapies, Inc., and from 1998 to 2005, Ms. Joseph led the Biogen Idec legal department's operations outside the United States as Vice President, International Legal. Ms. Joseph began her legal career as a litigator with Fried, Frank, Harris, Shriver & Jacobson and later with Morrison & Foerster. Ms. Joseph has an AB in Economics from Duke University, a JD from University of Michigan Law School, an LLM degree in European Community Law from the College of Europe in Belgium and an LLM degree in Civil Law from the University of Paris.

**Thomas Ulich, MD**, 60, has served as our Chief Scientific Officer since February 2014. Prior to joining our company, 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 that, 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 BA from Dartmouth College, an MD and AP/CP Pathology Residency from UCLA Medical School, and completed his post-doctoral fellowships at the 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.

## **Compensation Discussion and Analysis**

This Compensation Discussion and Analysis explains our compensation philosophy, objectives, policies and practices with respect to our Chief Executive Officer and our other executive officers, and the compensation of our named executive officers in place in 2013.

### ***Overview***

The primary objectives of our executive compensation program are to attract, motivate, retain and reward high-quality executives and to align the interests of our executives with our stockholders by having a "pay-for-performance" philosophy, tying a portion of our executive officers and senior management's compensation to our overall company business goals and individual performance goals.

Historically, the GNC Committee combined short and long-term incentives to achievement of specified corporate and individual performance objectives. As we further develop our compensation practices to align them with comparable companies, we will continue to focus on improving our internal process for determining and reviewing compensation of all of our employees, including our executive officers. Our executive compensation structure not only aims to be competitive in our industry, but also to be fair relative to compensation paid to other professionals within our organization. As our business evolves, we seek to foster a performance-oriented culture, where individual performance is aligned with organizational objectives.

### ***Role of the Compensation Committee***

The GNC Committee approves, administers and interprets our executive compensation and benefits policies. Our GNC Committee is appointed by the Board of Directors, and consists entirely of directors who are "independent" under the NASDAQ 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 GNC Committee is currently composed of Mr. DiPietro, who serves as Chairman, Mr. McCarthy and Dr. Roberts.

Our GNC Committee reviews and makes recommendations to the Board of Directors with respect to our executive compensation and benefit program to ensure alignment with our compensation philosophy, and, subject to the approval of our Board, is responsible for establishing the compensation packages offered to our executive officers.

### ***Compensation-Setting Process***

On an annual basis, the GNC Committee reviews and determines the compensation of our Chief Executive Officer and, 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 and financial or other information as the GNC Committee may request, including surveys of executive compensation practices at comparable companies. Our GNC Committee makes all determinations regarding executive compensation and our Chief Executive Officer does not attend any portion of meetings at which his compensation is discussed.

The GNC Committee may in its sole discretion retain, at our company's expense, an independent counsel and other advisors it deems necessary or appropriate to carry out its duties. Historically, in making compensation decisions, the GNC Committee generally has not used the services of a compensation consultant, nor does it utilize competitive analysis comparisons such as benchmarking or peer group target percentiles. However, the GNC Committee does draw upon the geography-specific business knowledge of our management and our Board of Directors to form a general understanding of how local market practices may impact our ability to hire and retain executives and general surveys of executive compensation practices of comparable companies. The GNC Committee did not retain any

outside compensation consultants in connection with its 2013 executive compensation decision-making process. In 2014, the GNC Committee retained Towers Watson to review named executive officer compensation and our outside director compensation program.

### ***Compensation Risk Assessment***

In reviewing our compensation policy and practices for our named executive officers as well as for other employees, the GNC Committee evaluated whether any unnecessary risk-taking was associated with our compensation policies. The GNC Committee did not identify any risks arising from our compensation policies and practices reasonably likely to have a material adverse effect on our company.

### ***Stockholder Advisory Vote on Executive Compensation***

Our Board and GNC Committee and management value the opinions of our stockholders, including their advisory votes regarding the compensation paid to our named executive officers, which are often referred to as "Say-on-Pay" votes. At our 2013 annual meeting, a majority of votes were cast, on an advisory basis, in favor of holding Say-on-Pay votes every three years. Accordingly we will include in our proxy materials an advisory Say-on-Pay proposal every three years until the next required vote on the frequency of advisory Say-on-Pay votes. At our 2013 annual meeting, we asked our stockholders to approve, on an advisory basis, the 2012 compensation of our named executive officers as disclosed in our 2013 proxy statement. Over 98.5% of votes cast approved the 2012 compensation of our named executive officers.

The GNC Committee took into account the results of this advisory vote when making compensation decisions through the remainder of 2013. The advisory vote affected the GNC Committee's executive compensation decisions and policies by reaffirming our compensation policies, and the GNC Committee will continue to take these policies and past practice into consideration in determining future compensation decisions. The GNC Committee will continue to consider the results of the advisory vote on executive compensation in future executive compensation policies and decisions.

### ***Executive Compensation Program***

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

**Base Salary.** The GNC Committee reviews the individual salaries of our executive officers on an annual basis. The base salary for each executive is based on consideration of internal factors, such as the individual's experience, skills and performance and the pay of other members of the executive team, as well as information on executive compensation practices at comparable companies. When determining the base salary of any executive, we also consider business requirements for certain skill sets, individual experience, and the responsibilities of the executive and other factors. The GNC 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.

**Annual Cash Incentive Bonus Plan.** In 2012, the GNC Committee established an annual cash incentive bonus plan for executive officers as a means of providing performance-based incentives that motivate and reward superior managerial performance. The plan outlines general performance goals and business criteria upon which each executive officer's performance will be evaluated. The target bonus and the specific performance goals and business criteria with respect to a particular plan year will be approved each year by the GNC Committee. Performance will be measured against these specific performance goals and business criteria. Generally, performance will be evaluated based on financial and operational performance goals and business criteria. Financial performance goals and business criteria include targets tied to capital raising, stock price, trading volume, research coverage

and institutional ownership. Operational performance goals and business criteria include targets tied to regulatory filings and approvals, pre-clinical and clinical trials and related results, publications, intellectual property, joint ventures and joint developments, product development, and manufacturing capabilities. The GNC Committee also has discretion to grant bonuses in excess of the bonus calculated based on the level of achievement and in excess of the target bonus if it determines that such bonuses are warranted under the circumstances and are in the best interests of our company and our stockholders.

For 2013, Mr. Reynolds, our former Chief Executive Officer and Chief Financial Officer, was the only executive officer eligible to participate in the annual cash incentive bonus plan. In November 2012, the GNC Committee set financial, operational and "stretch" goals for Mr. Reynolds. However, because Mr. Reynolds resigned from our company in August 2013, no bonus was earned for 2013 performance.

*Long-Term Equity Incentives.* The GNC Committee awards equity incentive compensation in the form of stock options to our executive officers, consistent with the practices of peer organizations. These awards reflect a "pay-for-performance" principle and align the interests of our executive officers to the interest of our stockholders in building long-term value in our company.

Our executive officers are eligible to receive annual awards of stock options, although an annual stock option grant is not guaranteed. Individual determinations are made by the GNC Committee with respect to the frequency and number of stock options to be recommended to be granted to the executive officers. In making these determinations, the GNC Committee considers performance relative to the strategic and financial objectives of our company, the previous year's individual performance of each executive officer and recommendations of management with respect to executive officers other than our Chief Executive Officer. We also typically award long-term incentive grants in the form of stock options to key new hires.

Our stock options 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. The exercise price of these options are at the fair market value of our common stock on the date the options are granted which is the closing price of the stock on the date of grant or, if later, the date of hire. We expect that we will continue to provide key new employees with initial option grants to provide long-term compensation incentives and we will continue to rely on performance-based and retention grants to key employees.

*Benefits.* We provide the following benefits to our executive officers generally on the same basis as the benefits provided to all employees: health and dental insurance, life insurance, short and long-term disability, and a 401(k) profit sharing plan. These benefits are consistent with those offered by other companies and specifically with those companies with which we compete for employees. As noted below in "Agreements with Named Executive Officers," we may also provide additional benefits or perquisites under contractual agreements to our executive officers.

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

### ***2013 Compensation to Named Executive Officers***

In 2013, we experienced significant change in our senior management team following the departure of our former Chief Executive Officer and Chief Financial Officer, Frank Reynolds. Michael Astrue and Gregory Perry provided important transitional assistance to our company in their capacities as interim executive officers during our search for new, permanent executive leadership.

Mr. Astrue joined our company in August 2013 to serve as Interim Chief Executive Officer, and he also served for a short period in 2013 as our interim principal financial officer. Under our employment agreement with Mr. Astrue described below, Mr. Astrue received a salary at an annual rate of \$480,000 and was eligible for a bonus, based on achievement of certain objectives, in an amount equal to 50% of his salary due under the term of the agreement. In December 2013, the GNC Committee determined that the objectives required to earn a bonus under his employment agreement had been met and that, in light of Mr. Astrue's performance, determined to award him a bonus equal to 100% of his salary, to be paid in shares of our common stock in lieu of cash (108,848 shares). Mr. Astrue served as our Interim Chief Executive Officer until the expiration of his agreement in January 2014.

Mr. Perry joined our company in September 2013 to serve as Interim Chief Financial Officer. Under our employment agreement with Mr. Perry described below, Mr. Perry received a salary at an annual rate of \$370,000 in 2013 and was eligible for a bonus, based on achievement of certain objectives, in an amount equal to 40% of his salary due under the term of the agreement. In December 2013, the GNC Committee determined that the objectives required to earn a bonus under his employment agreement had been met and awarded him a bonus equal to 40% of his salary, to be paid in shares of our common stock in lieu of cash (22,374 shares). Mr. Perry served as our Interim Chief Financial Officer until the expiration of his agreement in December 2013.

Steven McAllister, our Interim Chief Financial Officer, joined our company on December 31, 2013. Under the terms of our offer letter with Mr. McAllister, Mr. McAllister received a pro-rated portion of his annual salary of \$260,000 for service in 2013.

Sean Moran became our Acting Chief Financial Officer in August 2013 and served in that role until his resignation in September 2013. Prior to becoming our Acting Chief Financial Officer, Mr. Moran was our Director of Finance. Mr. Moran's compensation in 2013 consisted of his salary. No bonuses were paid to Mr. Moran for 2013 and equity awards made to Mr. Moran in 2013 were forfeited as a result of his resignation.

As a result of his departure in August 2013, no bonuses were paid to Mr. Reynolds for 2013 and an option to purchase 600,000 shares of our common stock granted to Mr. Reynolds in November 2012 was forfeited.

Brian Hess, our Chief Technology Officer, joined our company in January 2012. He received an option grant of 50,000 shares and an option grant of 75,000 shares in 2013 based on an assessment of his performance in 2013. We also continue to pay the cost of Mr. Hess attending the Executive MBA Program at MIT's Sloan School of Management.

#### **Agreements with Named Executive Officers**

*Michael J. Astrue, former Interim Chief Executive Officer.* Under our employment agreement with Mr. Astrue, Mr. Astrue agreed to serve as our Interim Chief Executive Officer until January 10, 2014. Mr. Astrue received a salary at an annual rate of \$480,000 and was eligible to receive benefits to the same extent as provided to other senior management employees, including medical and dental benefits. In addition, at the end of the agreement term, subject to his performance of specified objectives, Mr. Astrue was eligible to receive a cash bonus equal to 50% of his total salary due under the full term of the agreement, except that he was not eligible to receive the bonus if (i) we terminated the employment agreement as a result of a material breach by Mr. Astrue or (ii) Mr. Astrue terminated the employment agreement for any reason. If Mr. Astrue's employment had been terminated prior to the end of its term (other than by us as a result of a material breach by Mr. Astrue or by Mr. Astrue for any reason), Mr. Astrue would have received a lump-sum payment equal to his remaining salary through the agreement term and the cash bonus, to the extent eligible.

*Gregory Perry, former Interim Chief Financial Officer.* Under our employment agreement with Mr. Perry, Mr. Perry agreed to serve as our Interim Chief Financial Officer for a term of three months, subject to extension upon mutual agreement of us and Mr. Perry. We agreed with Mr. Perry to extend his term until December 30, 2013. Mr. Perry received a salary at an annual rate of \$370,000. In lieu of medical and dental benefits, we paid Mr. Perry \$1,800 per month, and Mr. Perry was eligible to receive such other fringe benefits to the same extent as provided to other senior management employees (excluding medical and dental benefits). In addition, at the end of the agreement term, subject to his performance of specified objectives, Mr. Perry was eligible to receive a bonus equal to 40% of his total salary due under the full term of the agreement, except that he was not eligible to receive the bonus if (i) we terminated the employment agreement as a result of a material breach by Mr. Perry or (ii) Mr. Perry terminated the employment agreement for any reason. If Mr. Perry's employment was terminated prior to the end of its term (other than by us as a result of a material breach by Mr. Perry or by Mr. Perry for any reason), Mr. Perry would have received a lump-sum payment equal to his remaining salary through the agreement term and the cash bonus, to the extent eligible.

*Steven McAllister, Interim Chief Financial Officer.* Under the terms of our initial employment agreement with Mr. McAllister, Mr. McAllister agreed to serve as our Interim Chief Financial Officer until April 30, 2014, which date was subsequently extended through May 30, 2014. On May 30, 2014, we entered into an amended and restated employment agreement with Mr. McAllister, which amended and restated the terms of the prior employment agreement. Under the terms of the amended and restated agreement, Mr. McAllister receives a salary at an annual rate of \$260,000, and is eligible to receive benefits to the same extent as provided to our other senior management employees, including medical and dental benefits. In addition, at the end of the term of the agreement, subject to his performance of specified objectives, Mr. McAllister will receive a cash bonus equal to 50% of his total salary due under the full term of the agreement, except that he shall not be eligible to receive the bonus if (i) we terminate the agreement as a result of a material breach by Mr. McAllister or (ii) Mr. McAllister terminates the agreement for any reason. We also agreed to pay his bonus due for the period through May 30, 2014 and any bonus that may be earned for the period from May 31, 2014 through August 30, 2014, no later than August 30, 2014. If Mr. McAllister's employment is terminated prior to the end of its term (other than by us as a result of a material breach by Mr. McAllister or by Mr. McAllister for any reason), Mr. McAllister will receive a lump-sum payment equal to his remaining salary through the term of the agreement.

*Sean Moran, former Acting Chief Financial Officer.* We entered into an employment agreement with Mr. Moran in October 2010 pursuant to which Mr. Moran served as our Director of Finance. Under the terms of this agreement, Mr. Moran was entitled to an initial annual salary of \$235,000, to be reviewed annually and adjusted upward (but not downward without his consent) no less frequently than annually. Mr. Moran was eligible to receive benefits to the same extent as provided to other senior management employees, including medical and dental benefits.

*Frank M. Reynolds, former Chief Executive Officer and Chief Financial Officer.* We entered into an amended and restated executive employment agreement with Frank Reynolds, our former Chief Executive Officer and Chief Financial Officer, on March 5, 2012. The agreement established Mr. Reynolds' compensation as follows: (i) an annual base salary of \$545,000 for 2012 (increased to \$600,000 for 2013); (ii) an annual bonus, with a 2012 target of \$260,000 (increased to \$286,00 for 2013), subject to the achievement of performance targets approved by the GNC Committee under the Annual Cash Bonus Plan for Executive Officers; (iii) a one-time cash bonus of \$100,000 as consideration for Mr. Reynolds' service as Chief Financial Officer and efforts to find and appoint a new Chief Financial Officer; (iv) \$6,000 per month for housing and living expenses in Massachusetts for so long as he maintained his primary residence outside of Massachusetts, subject to a tax gross up; and (v) other annual fringe benefits in the amount of \$20,200 per year, subject to a tax gross up. Mr. Reynolds was also granted an option in March 2012 to purchase 590,000 shares of our common stock under our 2010



Equity Incentive Plan. The agreement also contained various restrictive covenants, including covenants relating to non-competition, non-solicitation, confidentiality and cooperation.

## 2014 Developments

In late 2013, we announced the appointment of Mark D. Perrin as our Chief Executive Officer, effective January 6, 2014. Under our employment agreement with Mr. Perrin, Mr. Perrin receives an annual salary of \$400,000 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 and will pay Mr. Perrin \$20,000 for moving expenses. Mr. Perrin received an initial option grant to purchase 2,000,000 shares of our common stock. This option 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. Mr. Perrin is also entitled to severance payments if his employment is terminated by us without cause, or by Mr. Perrin for "good reason," then (i) we are obligated to pay severance (consisting of base salary in effect at the time of termination and his prior year's annual bonus) to Mr. Perrin for a period of one year and (ii) with respect to any such terminations occurring subsequent to the first anniversary of the commencement of his employment, the unvested portion of any stock options held by him will vest to the extent of 12 additional months. 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. The agreement also contains various restrictive covenants, including covenants relating to non-competition, non-solicitation, confidentiality and assignment of inventions.

## Compensation Committee Report

The Governance, Nominating and 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 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.

### GOVERNANCE, NOMINATING AND COMPENSATION COMMITTEE

Kenneth DiPietro, Chairman

John A. McCarthy, Jr.

Dr. Richard J. Roberts

## Executive Compensation

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 2013 and (ii) our other most highly compensated executive in office at the end of 2013. Such officers are collectively referred to as our "named executive officers."

### Summary Compensation Table

The following table sets forth information regarding our named executive officers' compensation for fiscal years 2013, 2012 and 2011.

Name and Principal Position	Fiscal Year	Salary	Bonus	Stock Awards(1)	Options/SAR Awards(1)	All Other Compensation	Total
Michael J. Astrue(2) Former Interim Chief Executive Officer	2013	\$ 173,538	\$ —	\$ 234,023	\$ —	\$ —	\$ 407,561
Gregory Perry(3) Former Interim Chief Financial Officer	2013	\$ 83,962	\$ —	\$ 48,104	\$ —	\$ —	\$ 132,066
Steven McAllister(4) Interim Chief Financial Officer	2013	\$ 1,000	\$ —	\$ —	\$ —	\$ —	\$ 1,000
Sean Moran(5) Former Acting Chief Financial Officer	2013	\$ 236,393	\$ —	\$ —	\$ 96,565	\$ 7,721	\$ 340,679
Frank Reynolds(6) Former Chief Executive Officer, Former President, Former Chief Financial Officer	2013	\$ 413,077	\$ —	\$ —	\$ —	\$ 128,586	\$ 541,663
	2012	545,000	287,000	\$ —	1,606,621	228,776	2,667,397
	2011	477,000	230,000	\$ —	149,500	246,008	1,102,508
Brian Hess(7) Chief Technology Officer	2013	\$ 225,000	\$ —	\$ —	\$ 246,388	\$ 81,332	\$ 552,720
	2012	125,792	40,000	\$ —	464,680	47,090	\$ 677,562

- (1) The amounts shown in these columns represent the aggregate grant date fair value of awards computed in accordance with Financial Accounting Standards Board ("FASB") Accounting Standards Codification Topic 718, not the actual amounts paid to or realized by the named executive officer during fiscal 2013. 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 on Form 10-K for the year ended December 31, 2013 filed with the SEC on March 17, 2014.
- (2) Mr. Astrue joined our company on August 22, 2013 as Interim Chief Executive Officer. Mr. Astrue served in that role until January 6, 2014. Mr. Astrue also served as interim principal financial officer from September 10, 2013 until September 16, 2013. The amount in the "Stock Award" column represents the stock award Mr. Astrue received in lieu of a cash bonus. The number of shares of common stock was determined based on 100% of his salary to be paid during the term of his employment with the company, divided by the closing price of our common stock on the date the GNC Committee approved the bonus in December 2013.
- (3) Mr. Perry joined our company on September 16, 2013 as Interim Chief Financial Officer and served in that role until his departure from our company on December 30, 2013. The amount in the "Stock Award" column represents the stock award Mr. Perry received in lieu of a cash bonus. The number of shares of common stock was determined based on 40% of his salary to be paid during the term of his employment with the company, divided by the closing price of our common stock on the date the GNC Committee approved the bonus in December 2013.
- (4) Mr. McAllister joined our company as Interim Chief Financial Officer on December 31, 2013.

- (5) Mr. Moran was appointed Acting Chief Financial Officer on August 22, 2013 and served in that role until his resignation effective September 9, 2013. Prior to becoming Acting Chief Financial Officer, Mr. Moran was our Director of Finance. The amount in the "All Other Compensation" column represents the amount of matching contributions under our company's 401(k) plan.
- (6) The amount in the "All Other Compensation" column for 2013 represents (i) \$42,000 in living expenses, (ii) \$5,950 in auto allowance, (iii) \$10,000 for a professional membership, (iv) \$10,000 in travel allowance for Mr. Reynolds' daughter, (v) \$29,341 for a tax gross-up on auto allowance and living expenses, (vi) \$16,226 for vacation accrued in 2013, (v) \$7,098 for life insurance premiums and (vi) \$7,971 in matching contributions under our company's 401(k) plan. The amounts in the "All Other Compensation" column and "Total" column for 2012 and 2011 have been corrected to include \$12,500 and \$5,017, respectively, of matching contributions under our company's 401(k) plan in those prior years. Mr. Reynolds resigned from the company effective August 22, 2013.
- (7) Brian Hess joined our company in January 2012. Mr. Hess was an executive officer during 2013 but is no longer deemed to be an executive officer. The amount in the "All Other Compensation" column for 2013 represents (i) \$69,000 paid by our company on behalf of Mr. Hess for his participation in the MIT Sloan School of Management Executive MBA Program and (ii) \$12,332 in matching contributions under our company's 401(k) plan. The amounts in the "All Other Compensation" column and "Total" column for 2012 have been corrected to include \$42,000 paid on behalf of Mr. Hess for the Executive MBA Program in 2012 and \$5,090 of matching contributions under our company's 401(k) plan in 2012.

## Grant of Plan-Based Awards

The following table provides information regarding grants of plan-based awards to our named executive officers during 2013.

**Grant of Plan-Based Awards**

<u>Name</u>	<u>Grant Date</u>	<u>All Other Stock Awards: Number of Shares of Stock or Units (#)</u>	<u>All Other Option Awards: Number of Shares of Stock or Units (#)</u>	<u>Exercise or Base Price of Option Awards (\$/Sh)</u>	<u>Grant Date Fair Value of Stock and Option Awards(1)</u>
Michael Astrue	12/04/2013	108,848	—	—	\$ 234,023
Gregory Perry	12/04/2013	22,374	—	—	\$ 48,104
Steven McAllister		—	—	—	—
Sean Moran(2)	03/22/2013	—	50,000	\$ 2.48	\$ 96,565
Frank Reynolds		—	—	—	—
Brian Hess(3)	04/16/2013	—	50,000	\$ 3.24	\$ 125,260
	12/19/2013	—	75,000	\$ 1.95	\$ 120,728

- (1) The grant date fair value of each equity award was computed in accordance with FASB Accounting Standards Codification Topic 718.
- (2) This award was terminated as a result of Mr. Moran's resignation from our company in September 2013.
- (3) These option grants vest 25% on the first anniversary of the date of grant, and thereafter in 36 equal monthly installments.

## 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, 2013. Each option award reflected in the below table vests 25% of the shares vest on the first anniversary and 1/36 per month thereafter for thirty six months.

Name	Award Grant Date	No. of Securities Underlying Unexercised Options (#) Exercisable	No. of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price	Option Expiration Date
Michael J. Astrue	—	—	—	—	—
Gregory Perry	—	—	—	—	—
Steven McAllister	—	—	—	—	—
Sean Moran	—	—	—	—	—
Frank Reynolds	—	—	—	—	—
Brian Hess	01/17/2012	59,896	65,104	\$ 2.53	1/17/2022
	10/26/2012	58,333	141,667	\$ 1.69	10/26/2022
	04/16/2013	—	50,000	\$ 3.24	04/16/2023
	12/19/2013	—	75,000	\$ 1.95	12/19/2023

## Option Exercises and Stock Vested

The following table provides information regarding stock vested and options exercised during 2013 for each of our named executive officers.

### 2013 Option Exercises and Stock Vested

Name	Option Awards		Stock Awards(1)	
	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$)
Michael J. Astrue	—	—	108,848	\$ 234,023
Gregory Perry	—	—	22,374	\$ 48,104
Steve McAllister	—	—	—	—
Sean Moran	331,767	\$ 901,225	—	—
Frank Reynolds	151,042	\$ 19,635	—	—
Brian Hess	—	—	—	—

- (1) These amounts represent stock awards to Messrs. Astrue and Perry in lieu of bonus payments earned under their respective employment agreements with our company.

## 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 to the 401(k) plan 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. Company matching contributions under the 401(k) plan are subject to vesting based on years of service, becoming 100% vested after four years of service. 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 in certain circumstances. Under our agreement with Mr. Perrin, if his employment is terminated by us without cause, or by Mr. Perrin for "good reason," then (i) we are obligated to pay severance (consisting of base salary in effect at the time of termination and his prior year's annual bonus) to Mr. Perrin for a period of one year and (ii) with respect to any termination occurring after to the first anniversary of the commencement of his employment, the unvested portion of any stock options held by him will vest to the extent of 12 additional months. 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. Under our agreement with Mr. McAllister, if his employment is terminated prior to the end of its term (other than by us as a result of a material breach by Mr. McAllister or by Mr. McAllister for any reason), Mr. McAllister is entitled to a lump-sum payment equal to his remaining salary through the term of the agreement.

Certain of our former executive officers were also entitled to payments upon a termination of employment or change in control under certain circumstances. None of these former executives were eligible to receive severance payments under the terms of their employment agreements in connection with their departures from our company in 2013.

### Equity Compensation Plan Information

The following table provides certain information as of December 31, 2013 about shares of our common stock that may be issued under our equity compensation plans:

<u>Plan Category</u>	(a) Number of securities to be issued upon 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	8,055,522	\$ 1.56	5,135,757
Equity compensation plans not approved by security holders	—	—	—
Total	8,055,522	\$ 1.56	5,135,757

## SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information as of May 31, 2014, with respect to the beneficial ownership of our common stock by:

- each of our directors and named executive officers listed in the 2013 Summary Compensation Table;
- all of our executive officers and directors as a group; and
- each person 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 that person's address is c/o InVivo Therapeutics Holdings Corp., One Kendall Square, Building 1400 East, 4th Floor, Cambridge, Massachusetts 02139. Shares of our common stock subject to options or warrants currently exercisable or exercisable within 60 days of May 31, 2014 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 93,022,289 shares of our common stock outstanding as of May 31, 2014.

Name of Beneficial Owner	Number of Shares of Common Stock Beneficially Owned	Percentage of Common Stock Beneficially Owned
<b>Directors and Named Executive Officers</b>		
Michael J. Astrue(1)	108,848	*
Kenneth DiPietro(2)	70,833	*
Brian Hess(3)	167,726	*
Steven McAllister	—	—
John A. McCarthy, Jr.(2)	70,833	*
Sean Moran(4)	60,000	*
Mark D. Perrin	—	—
Gregory Perry(5)	22,374	*
Frank Reynolds(6)	9,000,320	9.7%
Dr. Richard J. Roberts(2)	1,038,380	*
All directors and executive officers as a group (8 persons)(7)	1,347,772	1.4%
<b>5% Stockholders</b>		
Robert Langer(8)	6,749,578	7.3%
Sabby Management, LLC and related persons(9)	9,115,434	9.8%

\* Less than one percent.

(1) Mr. Astrue's employment with the company ended in January 2014.

(2) Represents shares issuable upon the exercise of stock options within 60 days of May 31, 2014.

(3) Includes 165,626 shares issuable upon the exercise of stock options within 60 days of May 31, 2014.

(4) Mr. Moran resigned from the company in September 2013. Reflects amounts reported on a Form 4 filed with the SEC on September 4, 2013.

(5) Mr. Perry's employment with the company ended in December 2013.

- (6) Mr. Reynolds resigned from the company in August 2013. Reflects amounts reported on Amendment No. 2 to Schedule 13D filed by Mr. Reynolds with the SEC on May 15, 2014. Mr. Reynolds' address is 81 Lake Shore Road, Salem, New Hampshire 03079.
- (7) Includes an aggregate of 1,345,672 shares issuable upon the exercise of options within 60 days of May 31, 2014.
- (8) Mr. Langer's address is 98 Montvale Road, Newton, Massachusetts 02459.
- (9) The information is as reported on Schedule 13G filed with the SEC on May 14, 2014. The address for Sabby Management, LLC is 10 Mountainview Road, Suite 205, Upper Saddle River, New Jersey 07458. Of the shares indicated, (i) Sabby Healthcare Volatility Master Fund, Ltd. and Sabby Volatility Warrant Master Fund, Ltd. beneficially own 4,557,717 and 4,557,717 shares, respectively, and (ii) Sabby Management, LLC and Hal Mintz each beneficially own 9,115,434 shares. Sabby Management, LLC and Hal Mintz do not directly own any shares, but each indirectly owns 9,115,434 shares. Sabby Management, LLC, indirectly owns 9,115,434 shares of common stock because it serves as the investment manager of Sabby Healthcare Volatility Master Fund, Ltd. and Sabby Volatility Warrant Master Fund, Ltd. Mr. Mintz indirectly owns 9,115,434 shares of common stock in his capacity as manager of Sabby Management, LLC. Each of Sabby Management, LLC and Mr. Mintz disclaim beneficial ownership over these shares except to the extent of their respective pecuniary interest therein.

## CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

### Related Party Transaction Policy

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 \$120,000 in which a "related person" or entity has a direct or indirect material interest). "Related persons" include a company's 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) under all of the circumstances the transaction is in, or not inconsistent with, our company's best interests, and (iii) the transaction will be on terms no less favorable to our company than we could have obtained in an arms'-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.

### AUDIT COMMITTEE REPORT

The Audit Committee of the Board of Directors has reviewed and discussed our audited financial statements for fiscal 2013 with our management. The Audit Committee has discussed with Wolf & Company, P.C., our independent registered public accounting firm, the matters required to be discussed by the Statement on Auditing Standards No. 61, as adopted by the Public Company Accounting Oversight Board, or PCAOB, in Rule 3200T. The Audit Committee has received the written disclosures and the letter from Wolf & Company, P.C. required by the applicable requirements of the PCAOB regarding the independent accountant's communications with the Audit Committee concerning independence, and has discussed with Wolf & Company, P.C. its independence. The Audit Committee also considered whether Wolf & Company, P.C.'s provision of non-audit services to our company is compatible with maintaining Wolf & Company, P.C.'s independence. Based on the review and discussions described above, among other things, the Audit Committee recommended to the Board that the audited financial statements be included in our Annual Report on Form 10-K for the year ended December 31, 2013.

#### AUDIT COMMITTEE

John A. McCarthy, Jr., Chairman

Kenneth DiPietro

Dr. Richard J. Roberts

*The information contained in the foregoing report shall not be deemed to be "soliciting material" or "filed" or incorporated by reference into any of our previous or future filings with the SEC, or subject to the liabilities of Section 18 of the Exchange Act, except to the extent specifically incorporated by reference into a document filed under the Securities Act or the Exchange Act.*



**PROPOSAL NO. 2**  
**RATIFICATION OF THE APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The audit committee of our Board of Directors (the "Audit Committee") has again selected Wolf & Company, P.C. as our independent registered public accounting firm to audit our financial statements for the fiscal year ending December 31, 2014. The Board of Directors is asking our stockholders to ratify the appointment of Wolf & Company, P.C. as our independent registered public accounting firm. If the stockholders do not ratify the appointment of Wolf & Company, P.C. as our independent registered public accounting firm, the Audit Committee will 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 Wolf & Company, P.C. 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.

**Independent Registered Public Accounting Firm Fees**

***Audit Fees***

**2013 Audit Fees:** The aggregate audit fees billed by Wolf & Company, P.C. in 2013 were \$112,013. Audit fees consist 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.

**2012 Audit Fees:** The aggregate audit fees billed by Wolf & Company, P.C. in 2012 were \$99,849. Audit fees consist 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***

**2013 Audit-Related Fees:** The aggregate audit-related fees billed by Wolf & Company, P.C. in 2013 were \$26,950 related to the review of financial information and consents in conjunction with Form S-8 and Form S-3 filings.

**2012 Audit-Related Fees:** The aggregate audit-related fees billed by Wolf & Company, P.C. in 2012 were \$45,545 related to the review of financial information and consents in conjunction with Form S-8 and Form S-3 filings.

***Tax Fees***

There were no fees paid to Wolf & Company, P.C. for any tax related services in 2013 or 2012.

***All Other Fees***

There were no other fees paid to Wolf & Company, P.C. in 2013 or 2012.

**Policy on Audit Committee Pre-Approval of Audit and Permissible Non-Audit Services of Independent Registered Public Accounting Firm**

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 Wolf & Company, P.C. and believes that the provision of services for activities unrelated to the audit is compatible with maintaining Wolf & Company, P.C.'s independence.

## **Vote Required**

The affirmative vote of the holders of a majority of shares of common stock present in person or represented by proxy at the Annual Meeting and entitled to vote on this proposal is required to ratify the appointment of Wolf & Company, P.C., an independent registered public accounting firm, as the independent auditor of our company for the fiscal year ending December 31, 2014.

***Our Board unanimously recommends a vote FOR the ratification of the appointment of Wolf & Company, P.C. as our independent registered public accounting firm for the fiscal year ending December 31, 2014.***

## **OTHER MATTERS**

### **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 (collectively, "Reporting Persons") to file reports of beneficial ownership and changes in beneficial ownership with the SEC. Based solely upon review of copies of such reports, or other written representations from Reporting Persons, we believe that, during fiscal 2013, all Reporting Persons complied with all applicable requirements of Section 16(a) of the Exchange Act, except that former Acting Chief Financial Officer Sean Moran did not report four transactions on a timely basis and filed one Form 3 late, and former Chief Executive Officer and former Chief Financial Officer Frank Reynolds did not report 12 transactions on a timely basis and filed six Form 4s late.

### **Householding of Annual Meeting Materials**

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 on Form 10-K for the year ended December 31, 2013, as amended (the "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, Building 1400 East, 4th Floor, 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 a cost of approximately \$5,000, plus reimbursement of certain expenses.

## **Annual Report**

A copy of the Annual Report has been mailed concurrently with this proxy statement to all stockholders entitled to notice of and to vote at the Annual Meeting. The Annual Report is not incorporated into this proxy statement and is not considered proxy solicitation material.

## **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 2015 annual meeting of stockholders, the proponent and the proposal must comply with the proxy proposal submission rules of the SEC and namely, Rule 14a-8 of the Securities Exchange Act of 1934, as amended. One of the requirements is that that proposal must be received by our Secretary at our offices, InVivo Therapeutics Holdings Corp., One Kendall Square, Building 1400 East, 4th Floor, Cambridge, Massachusetts 02139, no later than the close of business on February 13, 2015, which is 120 calendar days before June 13, 2015, the anniversary date that this proxy statement was released to stockholders in connection with the Annual Meeting. 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 2015 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 is a reasonable time before we begin to print and mail proxy materials. In this regard, we presently anticipate that the 2015 annual meeting of stockholders will be held on May 21, 2015, and therefore, the deadline is a reasonable time before we begin to print and mail proxy materials for the 2015 annual meeting.

*Other stockholder proposals:* A stockholder proposal not included in our proxy statement for the 2015 annual meeting of stockholders, including proposed nominations for director, will not be eligible for presentation at the 2015 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, Building 1400 East, 4th Floor, Cambridge, Massachusetts 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 2015 annual meeting of stockholders is more than 30 days before, or more than 60 days after, such anniversary date, then to be timely notice must be provided not earlier than the close of business the 90th day prior to the 2015 annual meeting of stockholders and not later than the close of business on the later of the 60th day prior to the 2015 annual meeting of stockholders or the 10th day following the day on which public announcement of the date of the 2015 annual meeting of stockholders is first made by us. In this regard, we presently anticipate that the 2015 annual meeting of stockholders will be held on May 21, 2015, and therefore a stockholder notice of a proposed director nomination or a proposal for other business must be received by us not before February 20, 2015 but not after March 22, 2015.

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.

## Communications to the Board

All communications to our Board, our Board committees or any individual director, must be in writing and addressed to them c/o the Secretary, InVivo Therapeutics Holdings Corp., One Kendall Square, Building 1400 East, 4th Floor, Cambridge, Massachusetts 02139. Communications received in writing will be forwarded to the named recipient(s).

## 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.

By order of the Board of Directors,

A handwritten signature in black ink, appearing to read "John A. McCarthy, Jr.", written in a cursive style.

John A. McCarthy, Jr.  
*Chairman of the Board*

June 13, 2014

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.

Label Area 4" x 1 3/4"

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

Your phone or Internet vote authorizes the named proxies to vote your shares in the same manner as if you marked, signed and returned your proxy card. Votes submitted electronically over the Internet or by telephone must be received by 7:00 p.m., Eastern Time, on July 29, 2014.



**INTERNET/MOBILE –**  
[www.cstproxyvote.com](http://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.



**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



**THE BOARD OF DIRECTORS RECOMMENDS A VOTE “FOR” THE ELECTION OF THE NOMINEE FOR DIRECTOR AND “FOR” PROPOSAL 2.**

1. Election of Class III Director.

NOMINEE: (01) Mark D. Perrin

FOR  
NOMINEE

☐

WITHHOLD  
AUTHORITY

☐

Note: In their discretion, the proxy holders are authorized to vote upon such other matters as may properly come before the Annual Meeting or any adjournments or postponements thereof.

2. Ratification of Auditors.

To ratify the appointment of Wolf & Company, P.C., an independent registered public accounting firm, as the independent auditor of our company for the fiscal year ending December 31, 2014.

FOR

☐

AGAINST

☐

ABSTAIN

☐

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 NOMINEE FOR DIRECTOR, FOR PROPOSAL 2, 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 \_\_\_\_\_, 2014.

NOTE: Please sign exactly as your name or names appears 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 July 30, 2014**

**To access the Company's Proxy Statement for the 2014  
Annual Meeting of Stockholders and the Company's 2013  
Annual Report, visit:**

**<http://www.cstproxy.com/invivotherapeutics/2014/>**

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▲ 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 – JULY 30, 2014  
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 Annual Meeting (the "Annual Meeting") of Stockholders of InVivo Therapeutics Holdings Corp. (the "Company") to be held at the Boston Marriott Cambridge, located at Two Cambridge Center, 50 Broadway, Cambridge, Massachusetts 02142 on July 30, 2014 at 10:00 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 June 12, 2014 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)