



April 26, 2017

Dear Fellow Stockholder:

We will hold our 2017 annual meeting of stockholders at 11:00 a.m. on Wednesday, June 21, 2017, at the Madison Beach Hotel, 94 West Wharf Road, Madison, CT 06443.

The notice of annual meeting and proxy statement accompanying this letter describe in detail the matters to be acted upon at the meeting.

It is important that your shares be represented at the meeting. Whether or not you plan to attend, please sign, date, and return your proxy card or vote by one of the other methods described in the proxy statement, as soon as possible.

We look forward to seeing you at the meeting.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Thom M. Patton".

Thomas M. Patton
President and Chief Executive Officer

CAS MEDICAL SYSTEMS, INC.

NOTICE OF ANNUAL MEETING

The annual meeting of stockholders of CAS Medical Systems, Inc. will be held at 11:00 a.m. on Wednesday, June 21, 2017, at the Madison Beach Hotel, 94 West Wharf Road, Madison, CT 06443.

The items of business at the annual meeting are:

1. Election of seven directors;
2. Advisory approval of the compensation of our named executive officers;
3. Ratification of appointment of independent accountants for 2017; and
4. Such other matters as may properly come before the meeting, including any continuation of the meeting caused by any adjournment or any postponement of the meeting.

April 24, 2017, is the record date for the meeting.

We are taking advantage of Securities and Exchange Commission rules that allow us to furnish proxy materials to our stockholders via the Internet. On or about April 26, 2017, we will be mailing our Notice of Internet Availability of Proxy Materials to our stockholders, which contains instructions for our stockholders' use of this process, including how to access our 2017 proxy statement and 2016 annual report to stockholders and how to vote online. In addition, the Notice of Internet Availability of Proxy Materials contains instructions on how you may receive a paper copy of the 2017 proxy statement and 2016 annual report to stockholders.

Jeffery A. Baird
Secretary

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE STOCKHOLDERS MEETING TO BE HELD ON JUNE 21, 2017 – The Proxy Statement and Annual Report to Stockholders are available at <http://www.casmed.com>.

Whether or not you expect to attend the annual meeting, we urge you to vote. You may vote by telephone or via the internet. If you receive a paper copy of the proxy card by mail, you may also mark, sign, date, and return the proxy card promptly in the accompanying postage-prepaid envelope.

CAS MEDICAL SYSTEMS, INC.
44 East Industrial Road
Branford, Connecticut 06405

PROXY STATEMENT

The Annual Meeting and Voting

Our Board of Directors is soliciting proxies to be used at the annual meeting of stockholders to be held on Wednesday, June 21, 2017, or at any adjournment of the meeting. This proxy statement contains information about the items being voted on at the annual meeting. We are mailing the Notice of Internet Availability of Proxy Materials to stockholders on or about April 26, 2017.

Who is entitled to vote?

Record stockholders of CAS Medical Systems, Inc. (CASMED) common stock, Series A Convertible Preferred Stock, and Series A Exchangeable Preferred Stock at the close of business on April 24, 2017 (the record date) can vote at the meeting. As of the record date, there were issued and outstanding:

- 28,229,081 shares of CASMED common stock; and
- 95,500 shares of CASMED Series A Convertible Preferred Stock and 54,500 shares of CASMED Series A Exchangeable Preferred Stock (which is substantially identical to the Series A Convertible Preferred Stock) containing voting rights equivalent to a total of 5,319,149 shares of common stock.

Each common stockholder has one vote for each share of common stock owned as of the record date. Each holder of a share of Series A Convertible Preferred Stock and Series A Exchangeable Preferred Stock has 35.46 votes per share owned as of the record date. Therefore, a total of 33,548,230 votes are eligible to be cast at the annual meeting. A list of all stockholders entitled to vote at the meeting will be available for examination by any stockholder for any purpose germane to the meeting at our office at 44 East Industrial Road, Branford, Connecticut, for the ten-day period immediately preceding the meeting.

How do I vote?

If you are a stockholder with shares registered in your name, you can vote by one of the following methods:

- **Via the Internet** – To vote by Internet, go to www.voteproxy.com and follow the instructions there. The deadline for voting via the Internet is 11:59 p.m. (EDT) on June 20, 2017.
- **By Telephone** – To vote by telephone, dial (800) 776-9437 and follow the instructions. The deadline for voting by telephone is 11:59 p.m. (EDT) on June 20, 2017.
- **By Mail** – Stockholders who receive a paper proxy card may elect to vote by mail and should complete, sign, and date their proxy card and mail it in the pre-addressed, postage-paid envelope that accompanies the delivery of paper proxy cards. Proxy cards submitted by mail must be received by the time of the annual meeting in order for your shares to be voted.

If you properly sign and return your proxy card or complete your proxy via the telephone or Internet, your shares will be voted as you direct. If you sign and return your proxy but do not specify how you want your shares voted, they will be voted consistent with the recommendations of our Board, as described below and in the Notice of Internet Availability of Proxy Materials and in accordance with the best judgment of the persons named on the proxy on any other matters which may come before the meeting.

How do I vote if my shares are held in street name?

If your shares are held by a broker, bank, or other stockholder of record exercising fiduciary powers which holds securities of record in nominee name or otherwise (typically referred to as being held in "street name"), you may receive a separate voting instruction form, or you may need to contact your broker, bank, or other stockholder of record to determine whether you will be able to vote electronically via the Internet or by telephone.

May I change my vote?

You may revoke your proxy at any time before it is voted at the meeting in several ways. You may (i) send in a revised proxy dated later than the first,

(ii) vote in person at the meeting, or (iii) notify our Secretary in writing prior to the meeting that you have revoked your proxy.

What constitutes a quorum?

The holders of shares representing a majority of the votes which may be cast at the meeting, present in person or represented by proxy, constitute a quorum. Abstentions, broker non-votes, and votes withheld from director nominees are included in the count to determine a quorum.

What is the required vote to approve each proposal?

If a quorum is present, each of the seven director candidates who receive a majority of the votes of the shares present in person or represented by proxy and entitled to vote on the election of directors will be elected. Proposals 2 and 3 will be approved if a quorum is present and a majority of the votes cast by holders present in person or represented by proxy are cast in favor of the applicable proposal.

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

Under Nasdaq Stock Market (“Nasdaq”) rules, if your broker holds your shares in its “street” name, the broker may, under certain circumstances, vote your shares on the agenda items even if it does not receive instructions from you. Although they are

included in determining whether a quorum is present, broker non-votes and abstentions are not considered votes cast on the matters before the meeting and neither will have an effect on the voting on the election of Board members or on Proposals 2 and 3.

By when must stockholder proposals be submitted for the 2018 annual meeting?

Stockholder proposals intended to be presented at our 2018 annual meeting, pursuant to Securities Exchange Act Rule 14a-8, must be received by our Secretary not later than December 27, 2017, for inclusion in our proxy statement and form of proxy relating to that meeting. Stockholder proposals submitted outside the process provided in Rule 14a-8 shall be considered untimely in accordance with Rule 14a-5(e) if made after March 11, 2018.

Which stockholders own at least 5% of CASMED?

The only persons or groups known to us to be beneficial owners of more than 5% of our outstanding common stock, Series A Convertible Preferred Stock, and Series A Exchangeable Preferred Stock as of April 24, 2017, are reflected in the chart below. The following information is based upon Schedules 13D and 13G and other filings with the Securities and Exchange Commission by the persons and entities shown as of the respective dates appearing below or other information obtained by CASMED.

Name and Address of Beneficial Owners	Class of Stock	Amount and Nature of Beneficial Ownership	Percent of Class
Thomas, McNerney & Partners II, L.P.	Common	11,175,747 (a)	29.6%
TMP Nominee II, LLC	Series A	95,500 (a)	100%
TMP Associates II, L.P.	Convertible Preferred		
45 South 7 th Street	Series A	54,500 (a)	100%
Suite 3060	Exchangeable Preferred		
Minneapolis, MN 55402	Common	4,179,838 (b)	14.8%
Acuta Capital Partners LLC			
1301 Shoreway Road, Suite 350			
Belmont, CA 94002			
Norman H. Pessin and affiliates	Common	2,524,810 (c)	8.9%
366 Madison Avenue, 14 th Floor			
New York, NY 10017			
Deerfield Mgmt, L.P.	Common	1,816,489 (d)	6.4%
780 Third Avenue, 37 th Floor			
New York, NY 10017			

<u>Name and Address of Beneficial Owners</u>	<u>Class of Stock</u>	<u>Amount and Nature of Beneficial Ownership</u>	<u>Percent of Class</u>
Thomas M. Patton. c/o CAS Medical Systems, Inc. 44 East Industrial Road Branford, CT 06405	Common	1,623,389 (e)	5.6%

- (a) Based upon information set forth in a Form 4 filed with the SEC on February 13, 2015, by Thomas McNerney & Partners II, L.P. (“TMP II LP”); TMP Nominee II, LLC (“TMPN”); TMP Associates II, L.P. (“TMPA”); and Thomas, McNerney & Partners II, LLC (“TMP II LLC”). Also based upon information set forth in a Schedule 13D/A Amendment No. 2 filed with the SEC on September 6, 2011, by TMP II LP, TMPN, TMPA, TMP II LLC, Messrs. James Thomas, Pete McNerney, Alex Zisson, Pratik Shah, and Dr. Eric Aguiar, and other data available to CASMED. TMP II LP, TMPN, and TMPA hold, respectively, 94,182; 984; and 334 shares of Series A Convertible Preferred Stock (which represent in the aggregate 100% of the outstanding Series A Convertible Preferred Stock) and 53,748; 561; and 191 shares of Series A Exchangeable Preferred Stock (which represent in the aggregate 100% of the outstanding Series A Exchangeable Preferred Stock). The shares in the table above, with respect to common stock, include “common stock equivalent” rights on shares of Series A Convertible Preferred Stock and Series A Exchangeable Preferred Stock. Each share of Series A Convertible Preferred Stock and Series A Exchangeable Preferred Stock has “common stock equivalent” rights as of March 31, 2017, equal to approximately 62.8 shares of common stock, which is determined by dividing the stated value of \$100 per share of Series A Convertible Preferred Stock and Series A Exchangeable Preferred Stock plus accretion by an effective conversion price of \$2.389 per share. Of the common stock equivalent rights in the table above (i) 9,288,859 are deemed owned directly by TMP II LP, (ii) 97,014 are owned directly by TMPN, and (iii) 32,966 are directly owned by TMPA. Data reflects accretion of dividends as of March 31, 2017. TMP II LLC, the general partner of TMP II LP and TMPA, has shared voting and dispositive power over the shares held by TMP II LP and TMPA. In addition, TMPN has entered into an agreement with TMP II LLC that directs TMPN to vote and dispose of securities in the same manner as directed by TMP II LLC with respect to the shares held by TMP II LP and TMPA. Messrs. Thomas and McNerney are the managers of TMPN and have shared voting and dispositive power over such securities, provided that they are obligated to exercise such power in the same manner as TMP II LLC votes and disposes of the securities of CASMED over which TMP II LLC exercises voting and dispositive power. Mr. Thomas is the manager of TMP II LLC. The persons and entities named in this footnote are referred to individually herein as a “Reporting Person” and collectively as the “Reporting Persons.” Amounts in the table above also include 33,454 shares of common stock and options to purchase 42,500 shares of common stock held by each of Mr. Thomas and Ms. Kathleen A. Tune, directors of CASMED, which shares and options are held in their respective names but are being held for the benefit of TMP II LP. Each Reporting Person disclaims beneficial ownership of the above-referenced shares other than to the extent of their pecuniary interest therein.
- (b) Based upon information set forth in a Schedule 13G Amendment No. 1 filed with the SEC on February 16, 2017, by Acuta Capital Partners LLC. Acuta Capital Partners LLC holds sole voting and dispositive power over the indicated shares.
- (c) Based upon information set forth in a Schedule 13D Amendment No. 3 filed with the SEC on January 4, 2017, by Norman H. Pessin, Sandra F. Pessin, and Brian Pessin. Norman H. Pessin holds sole voting and dispositive power over 1,395,777 of the indicated shares; Sandra F. Pessin holds sole voting and dispositive power over 708,487 of the indicated shares; and Brian Pessin holds sole voting and dispositive power over 420,546 of the indicated shares.
- (d) Based upon information set forth in a Schedule 13G Amendment No. 3 filed with the SEC on March 17, 2017, by Deerfield Mgmt, L.P. (“DM”); Deerfield Management Company, L.P. (“DMC”); Deerfield Special Situations Fund, L.P. (“DSS”); and Mr. James E. Flynn. DM, DMC, DSS and Mr. Flynn each hold shared voting and dispositive power over all of the indicated shares.

- (e) Mr. Patton is our President and Chief Executive Officer and a member of our Board of Directors. The share amount includes 675,000 shares underlying outstanding stock options exercisable within 60 days of April 24, 2017, the record date for the annual meeting. The share amount also includes 32,500 shares held in a relative's IRA over which Mr. Patton has dispositive power.

How much stock is owned by directors and executive officers?

The following table shows beneficial ownership of CASMED common stock as of April 24, 2017, by our directors and our executive officers named in the compensation tables in this proxy statement and by all current directors and executive officers as a group. Shares issuable upon exercise of options are shown in a separate column.

Name of Beneficial Owner	Common Stock Deemed to be Beneficially Owned (a)	Options Exercisable Within 60 Days (b)	Percent of Class
Alan W. Milinazzo	12,500	22,500	*
Paul A. Molloy	12,500	22,500	*
Gregory P. Rainey	40,431	42,500	*
James E. Thomas	11,057,293 (c)	42,500	29.4%
Kathleen A. Tune	33,454	42,500	*
Kenneth R. Weisshaar	40,303	42,500	*
Thomas M. Patton	948,389 (d)	675,000	5.6%
Jeffery A. Baird	214,734	172,500	1.4%
John K. Gamelin	135,757	210,000	1.2%
All current executive officers and directors as a group (10)	12,630,908	1,428,750	36.0%

* Less than one percent of the class

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- (a) Includes restricted stock held by the named individuals as follows: Mr. Patton – 362,500 shares; Mr. Baird – 90,000 shares; Mr. Gamelin – 90,000 shares; Messrs. Milinazzo, Molloy, Rainey, Thomas, Weisshaar, and Ms. Tune – 12,500 shares each.
- (b) The director or executive officer has the right to acquire beneficial ownership of this number of shares by exercising outstanding stock options within 60 days of April 24, 2017, the record date for the annual meeting.
- (c) See footnote (a) to the table above under the heading "Which stockholders own at least 5% of CASMED?" Mr. Thomas may be deemed to have shared voting and dispositive power over the common stock, Series A Convertible Preferred Stock, and Series A Exchangeable Preferred Stock held by TMP II LP, TMPA, and TMPN. The amount set forth in the table includes the amount of common stock that may be acquired upon conversion of such preferred shares.
- (d) Includes 32,500 shares held in a relative's IRA over which Mr. Patton has dispositive power.

Section 16(a) Beneficial Ownership Reporting Compliance

Directors and persons who are considered "officers" of the company for purposes of Section 16(a) of the Securities Exchange Act of 1934, as amended, and greater than 10% stockholders (referred to as reporting persons) are required to file reports with the Securities and Exchange Commission showing their transactions in CASMED securities. It is generally our practice to file the forms on behalf of our reporting persons who are directors or officers. We believe that all such forms were timely filed during 2016.

Proposal 1: Election of Directors

Seven directors, constituting the entire Board of Directors of CASMED, are to be elected at the annual meeting to serve for a term of one year or until their respective successors are duly elected and qualify. Information about each nominee for director (all of whom are incumbent directors), including the nominee's age, is set forth below. Unless otherwise indicated, each nominee has held his or her present position for at least five years. The shares represented by the proxies will be voted in favor of the persons named below unless authority to do so is withheld. Should you choose not to vote for a nominee, you may mark on the proxy the name of the nominee for whom you choose not to vote and mark your proxy under Proposal No. 1 for all other nominees. Should any nominee become unable to accept nomination or election as a director (which is not now anticipated), the persons named in the enclosed proxy will vote for a substitute nominee, as may be selected by the Board of Directors, unless the size of the Board is reduced. Mr. Thomas and Ms. Tune are nominee designees of Thomas McNerney & Partners (see "Board Information and Committees" below).

NOMINEES FOR ELECTION TO BOARD OF DIRECTORS

Name	Age	Year First Became Director	Principal Occupation During the Past Five Years
Alan W. Milinazzo	57	2015	Mr. Milinazzo is currently a Partner of the consulting firm of Heidrick & Struggles. From 2013 to 2016, he served as President and Chief Executive Officer of InspireMD, Inc., a publicly-traded interventional device company focused on developing novel embolic protection products. From 2005 to 2012, he served as Chief Executive Officer and Director of Orthofix International, N.V., a publicly-traded global orthopedic company. From 2002 to 2005, he served as Vice President of the vascular business as well as Vice President and G.M. of the coronary and peripheral businesses at Medtronic Inc. Mr. Milinazzo also served in executive positions at Boston Scientific Corporation. In addition to being a board member on the board of the Musculoskeletal Transplant Foundation, he serves on the board of Flexion Therapeutics Inc. He formerly served on the boards of InspireMD, Inc.; Orthofix International, N.V.; Medpace; and HET Systems. Mr. Milinazzo graduated cum laude from Boston College. He is an experienced senior executive and board director, developing high-growth, profitable, global healthcare businesses, including biologics and therapeutic devices. With his expertise in management and marketing within the healthcare industry, Mr. Milinazzo provides the Board the expanded ability to evaluate key decisions on business development and operations.

Name	Age	Year First Became Director	Principal Occupation During the Past Five Years
Paul A. Molloy	55	2015	<p>Mr. Molloy is currently the Chief Executive Officer of ClearFlow Inc., a commercial-stage medical device company focused on post-surgical wound management. From 2010 to 2013, Mr. Molloy served as the President of the Vascular Division of Teleflex Inc. (NYSE: TFX) and as the Chief Executive Officer of VasoNova, Inc., a vascular ultrasound navigation technology company, which was acquired by Teleflex. From 2008 to 2010, Mr. Molloy served as the President and Chief Executive Officer of MiCardia Corporation, a medical device company focused on cardiology. Mr. Molloy has over 25 years of management experience in the medical device industry and currently serves on the Board of Directors of privately-held ClearFlow Inc. and Velano Vascular, Inc. He is a graduate of the Instituut der Bedrijfswetenschappen, Utrecht, Netherlands, and has an M.B.A. from the University of Chicago Booth School of Business. Mr. Molloy has extensive experience in finance as well as sales and marketing, adding to the Board's ability to evaluate key business initiatives and program development.</p>
Thomas M. Patton.	53	2010	<p>Mr. Patton has served as CASMED's President and Chief Executive Officer and as a member of the CASMED Board of Directors since August 2010. He previously served as the CEO of Wright Medical Group, an orthopedic device company, located in Memphis, Tennessee, and as President of Novametrix Medical Systems, a patient-monitoring company, located in Wallingford, Connecticut. From 2003 to 2010, Mr. Patton acted as an advisor to the healthcare-focused private equity group of Ferrer Freeman & Company and, in that capacity, served as the interim CEO of Informed Medical Communications on a part-time basis in 2006 and 2007. Mr. Patton is a co-founder and CEO of QDx, Inc., a start-up company that developed a platform for hematology diagnostics beginning in 2003. He also serves on the Board of Directors of Misonix, Inc. Mr. Patton attended The College of the Holy Cross, where he majored in Economics and Accounting. After graduating magna cum laude from Georgetown University Law Center, Mr. Patton worked at the law firm of Williams & Connolly in Washington, D.C. Thereafter, he joined Wright Medical Group as its General Counsel where he served in various executive roles until being appointed CEO. Mr. Patton has extensive experience in the medical device industry and, as President and Chief Executive Officer, provides the Board with primary knowledge of CASMED's business operations.</p>

Name	Age	Year First Became Director	Principal Occupation During the Past Five Years
Gregory P. Rainey	64	2010	<p>Mr. Rainey is currently President of CCI Performance Group, LLC, which provides strategic and sales management consulting services for healthcare companies. From 1994 to 2004, Mr. Rainey was employed by Stryker Corporation where he held various sales management positions including the position of Vice President of Sales. Mr. Rainey has also held various sales positions with Joint Medical Corporation and U.S. Surgical Corporation. He served on the Board of Directors of RTI Biologics, Inc., a leading provider of sterile biological implants, until December 2013 and served on the Board of Directors of NuOrtho Surgical, Inc. until October 2011. Mr. Rainey also serves as a Board member and Chairman of the Marketing Committee of The Community Foundation of Middlesex County, a non-profit entity dedicated to philanthropy in Middlesex County, Connecticut. Mr. Rainey is a graduate of Loyola University with a B.S. in Biology. Mr. Rainey's extensive experience is valuable to the Board's ability to assess our sales management and product distribution strategies.</p>
James E. Thomas.	56	2011	<p>Mr. Thomas is a co-founder of Thomas, McNerney & Partners and has been investing in health care companies since 1992. He previously headed Warburg Pincus LLC's medical technology private equity practice, where he had responsibility for investments in biotechnology, pharmaceutical, medical device, and diagnostic companies. Mr. Thomas is currently a board member of Clarus Therapeutics, Inc. and Keystone Dental, Inc. Prior to joining Warburg, he was a Vice President at Goldman Sachs International in London. He graduated magna cum laude with a B.S. in Economics from the Wharton School at the University of Pennsylvania and received a M.Sc. in Economics from the London School of Economics. Mr. Thomas's extensive experience in the health care and investment industries is valuable to the Board's ability to assess our business initiatives and financing alternatives.</p>

Name	Age	Year First Became Director	Principal Occupation During the Past Five Years
Kathleen A. Tune	52	2011	<p>Ms. Tune is currently an advisor to Thomas, McNerney & Partners and Managing Partner at Eyrie Partners, a healthcare advisory firm. She was employed by Thomas, McNerney & Partners from 2003 to 2016, and during that time was Partner in the firm. From 2000 to 2003, Ms. Tune was employed by Piper Jaffray Companies, where she was a health care analyst focused on medical technology companies. While at Piper, she covered companies in the medical device, medical supply, and diagnostic areas. Ms. Tune was also employed by Solvay, S.A. (in a division that is now part of Zoetis), where she was responsible for new product development and was also a Senior Scientist at the University of Minnesota. Ms. Tune currently serves on the Board of Directors of VertiFlex, Inc. and the non-profit Mid-America Health Care Investors Network (MHIN). Her educational background includes an M.S. degree in Microbiology from the University of Minnesota and an M.B.A. from the University of Minnesota's Carlson School of Management. Ms. Tune's extensive experience in the medical device industry and finance is valuable to the Board's ability to evaluate key business decisions.</p>
Kenneth R. Weisshaar	66	2010	<p>Mr. Weisshaar previously served as a member of the Board of Directors of Orthofix International, N.V., a Nasdaq-listed orthopedic device company, Digene Corporation, a publicly-traded biotechnology company focused on women's health and molecular diagnostic testing, and CenterLight Health System, a large non-profit nursing home and managed care organization located in the New York City area. Mr. Weisshaar spent 12 years as a corporate officer at Becton Dickinson and Company, a medical technology company where, at different times, he was responsible for global businesses in medical devices and diagnostic products and served as Chief Financial Officer and Vice President, Strategic Planning. Mr. Weisshaar was also employed by McKinsey and Company primarily as a healthcare and manufacturing consultant. Mr. Weisshaar received a B.S. in Chemical Engineering from the Massachusetts Institute of Technology and an MBA from the Harvard Business School. Mr. Weisshaar, our audit committee chairman, has extensive operating and financial management experience in the medical device market, which is valuable to the Board's ability to oversee finances and operations as well as to evaluate business alternatives.</p>

The Board of Directors recommends that stockholders vote FOR the nominees described in Proposal 1.

Executive Officers

Our executive officers are as follows:

Name	Age	Position
Thomas M. Patton	53	President and Chief Executive Officer
Jeffery A. Baird	63	Chief Financial Officer and Secretary
Paul B. Benni	49	Chief Scientific Officer
John K. Gamelin	51	Vice President – Research and Development

Information Concerning Executive Officers Who Are Not Directors

Jeffery A. Baird joined CASMED during January 2004 as Chief Financial Officer and Secretary. From April 2003 to December 2003, Mr. Baird was CFO of QDx, Inc., a start-up venture engaged in the development of novel medical diagnostic products. Mr. Baird was employed by Novametrix Medical Systems, Inc. from 1988 to 2002 and held various positions including Controller, Treasurer, and CFO. Prior to joining Novametrix, Mr. Baird was employed by Philips Medical Systems, Inc., a medical diagnostic imaging company.

Paul B. Benni, Ph.D., joined CASMED in 1998 and in 2006 became Chief Scientific Officer. Dr. Benni is the primary inventor of our FORE-SIGHT® Tissue Oximeter, a near-infrared spectroscopy- (NIRS-) based device to monitor the oxygen saturation of the brain and other tissues of the human body non-invasively by using various wavelengths of light. With the support of several grants from the National Institutes for Health for his unique approach, Dr. Benni made possible the development and first commercialization of FORE-SIGHT for CASMED in 2007. Dr. Benni graduated from Rutgers, The State University of New Jersey, in 1990 with a B.S. in Electrical Engineering and in 1999 with a Ph.D. in Biomedical Engineering focused on NIRS research. Prior to attending graduate school, he worked as an engineer with GE Aerospace on satellites and the Mars Observer spacecraft. Dr. Benni holds several patents on NIRS technology and authored several peer-reviewed journal articles on the topic.

John K. Gamelin, Ph.D., joined CASMED in 2009, became the Director of Research and Development in 2010, and was appointed as Vice President of Research and Development in 2012. He has more than 20 years of experience inventing and developing optical, acoustic, and electronic instrumentation, from research concept to commercial production. Previously, he was a co-founder and Vice President of Engineering for

Tellium, an optical switching company. He began his career as a Senior Scientist at Bellcore, the research and engineering organization for the Regional Bell Operating Companies. Dr. Gamelin holds four U.S. patents in optical cross-connects and switching technology and several patent applications in biomedical imaging and medical instrumentation. He is the author or co-author of more than 50 publications on topics that include biomedical imaging and laser transmitters. He received his Ph.D. in Electrical Engineering from the University of California.

Board Information and Committees

The Board met six times in 2016. Each director serving on the Board during 2016 attended at least 75% of the total number of Board meetings and meetings held by the Board committees on which he or she served during 2016. The Board has determined that each of our non-employee directors currently serving on the Board or who served on the Board during 2016 is independent based upon the criteria provided by Nasdaq rules. Members of the Board serve on one or more of the committees described below, except for directors who are also employees of CASMED.

Pursuant to the terms of the June 2011 Investment Agreement among CASMED, Thomas, McNerney & Partners, L.P. and certain affiliates of Thomas, McNerney & Partners, L.P., two of the members of our seven-member Board of Directors tendered their resignations, and the purchasers nominated James E. Thomas and Kathleen A. Tune (the “Purchaser Designees”) to serve as members of our Board of Directors as of the closing. Pursuant to the Investment Agreement, the purchasers’ right to nominate the Purchaser Designees shall at no time be in excess of the level considered proportionate for purposes of the Nasdaq listing rules or other applicable listing rules. Mr. Thomas and Ms. Tune are the nominees for re-election as the Purchaser Designees at this annual meeting.

Since June 2011, the Board of Directors has operated without a formal chairman. In April 2012, Mr. Thomas was appointed as our lead director,

although all directors have input into the preparation of the meeting agenda and topics of board discussion and oversight. The Board of Directors believes that this is an appropriate structure for the overall governance of the Board.

The Board of Directors has general risk oversight responsibilities. The Board believes that its structure enables it to effectively oversee risk management.

The Board has standing Audit, Compensation, and Nominating and Governance Committees. Further information regarding these committees and the director nomination process is provided below.

The **Audit Committee**, which met five times in 2016, monitors our financial reporting standards and practices and our internal financial controls to ensure compliance with the policies and objectives established by the Board of Directors. The committee directly retains and recommends for stockholder approval an independent accounting firm to conduct the annual audit and discusses with our independent accountants the scope of their examinations, with particular attention to areas where either the committee or the independent accountants believe special emphasis should be directed. The committee reviews the quarterly and annual financial statements and the annual independent accountants' report, invites the accountants' recommendations on internal controls and on other matters, and reviews the evaluation given and corrective action taken by management. It reviews the independence of the accountants and pre-approves audit and permissible non-audit services. It has primary oversight responsibility for our Compliance Program. Members of the committee are Paul Molloy, Kathleen Tune, and Kenneth Weisshaar. Mr. Weisshaar chairs the committee. Each member of the committee is independent as defined in Rule 10A-3 of the Securities and Exchange Commission and the listing standards of Nasdaq. The Board of Directors has determined that each of Paul Molloy, Kathleen Tune, and Kenneth Weisshaar qualifies as an "audit committee financial expert," as that term is defined in Regulation S-K of the Securities and Exchange Commission.

The **Compensation Committee**, which met seven times in 2016, oversees our executive and director compensation programs and policies and annually reviews all components of compensation to ensure that our objectives are appropriately achieved. These functions are not delegated to our officers or to third-party professionals, although the committee may from time to time retain third-party

consultants to provide advice regarding compensation issues. No such consultants were retained during 2016. The committee also considers input from our executive officers, although final decisions regarding executive compensation are made by the committee. The committee is also responsible for certain administrative aspects of our compensation plans and stock plans and approves or recommends changes in these plans. It also approves performance targets and grants under our incentive plans and our stock plan for our executive officers. The committee also reviews officers' potential for growth and, with the chief executive officer, will be responsible for succession planning. The members are Gregory Rainey, James Thomas, and Alan Milinazzo. Mr. Thomas is chairman of the committee. All members serving on the Compensation Committee during 2016 were independent, based upon the criteria provided by Nasdaq rules.

The **Nominating and Governance Committee**, which met once in 2016, reviews, on a periodic basis, the overall effectiveness and/or appropriateness of our corporate governance and recommends improvements when necessary; assists the Board in identifying, screening, and reviewing individuals qualified to serve as directors in accordance with criteria approved by the Board and shall recommend to the board candidates for nomination for election at the annual meeting of stockholders or to fill board vacancies; develops and recommends to the Board and oversees implementation of our policies and procedures for the receipt of stockholder suggestions regarding board composition and recommendations of candidates for nomination by the Board; and assists the Board in disclosing information relating to functions of the committee as may be required in accordance with the Federal securities laws. Members of the committee are Gregory Rainey, James Thomas, and Kenneth Weisshaar. Mr. Rainey is the chairman of the committee. All members serving on the committee during 2016 were independent, based upon the criteria provided by Nasdaq rules.

Each committee is governed by a written charter. Copies of each committee charter are available on our website at www.casmed.com.

Director Compensation

Director Fees. During 2016, we paid our non-employee directors an annual cash retainer of \$30,000, payable in quarterly installments. We also paid an additional annual cash retainer of \$5,000 to

the Audit Committee chairman, payable in quarterly installments. During 2016, we incurred total cash fees of \$125,000 to the non-employee directors as a group for their participation as Board and committee members. Fees of \$60,000 payable to Mr. Thomas and Ms. Tune, as members of the Board of Directors were accrued, at their direction, to Thomas, McNerney & Partners II, LLC.

Our non-employee directors are eligible to receive options, restricted stock, and other equity-linked grants under our 2011 Equity Incentive Plan. Effective with the 2016 calendar year, each new

non-employee Board member shall be granted a ten-year stock option to purchase 30,000 shares of common stock upon initial appointment to the Board, which shall vest in four equal annual installments from the date of the grant. Further, each non-employee member of the Board shall receive annually a stock-based grant which shall vest in two equal annual installments from the date of the grant. On January 8, 2017, each non-employee member of the Board received a grant of 12,500 shares of restricted common stock which vest in two equal annual installments from the date of the grant.

Director Compensation Table. The following table shows all compensation paid or granted, during or with respect to the 2016 fiscal year, to each of the non-employee directors for services rendered to CASMED during 2016.

2016 DIRECTOR COMPENSATION

Name (a)	Fees Earned or Paid in Cash (\$)	Stock Awards (b)	Stock Option Awards (b)	All Other Compensation (\$)	Total (\$)
Alan Milinazzo	\$30,000	\$ —	\$ —	—	\$30,000
Paul Molloy	\$30,000	—	—	—	\$30,000
Gregory Rainey	\$30,000	—	—	—	\$30,000
James Thomas	\$30,000	—	—	—	\$30,000
Kathleen Tune	\$30,000	—	—	—	\$30,000
Kenneth Weisshaar	\$35,000	—	—	—	\$35,000

- (a) As of December 31, 2016, Ms. Tune and Messrs. Rainey, Thomas, and Weisshaar each held non-qualified options to purchase an aggregate of 65,000 shares of our common stock, and Messrs. Milinazzo and Molloy each held non-qualified options to purchase an aggregate of 45,000 shares of our common stock.
- (b) Directors did not receive equity awards during 2016. On January 9, 2017, non-employee members of the Board of Directors each received a grant of 12,500 shares of our common stock. Each grant was valued at \$20,250 based upon the Nasdaq official closing price of \$1.62 per share on the date of the grant. The shares vest 50% per year on the first and second anniversaries of the grant.

Communications with Directors

In order to provide our security holders and other interested parties with a direct and open line of communication to the Board of Directors, the Board of Directors has adopted the following procedure: CASMED security holders and other interested persons may communicate with the chairmen of our Compensation Committee, Audit Committee, Nominating and Governance Committee, or with the non-management directors as a group by sending written correspondence to our Secretary. The correspondence should specify which of the foregoing is the intended recipient. Communications should be sent by mail addressed in care of the corporate Secretary, CAS Medical Systems, Inc., 44 East Industrial Road, Branford, CT 06405.

All communications received in accordance with these procedures will be reviewed initially by our corporate Secretary. The Secretary will relay all such communications to the appropriate director or directors unless the Secretary determines that the communication:

- Does not relate to the business or affairs of CASMED or the functioning or constitution of the Board of Directors or any of its committees;
- Relates to routine or insignificant matters that do not warrant the attention of the Board of Directors;
- Is an advertisement or other commercial solicitation or communication;
- Is frivolous or offensive; or

- Is otherwise not appropriate for delivery to directors.

The director or directors who receive any such communication will have discretion to determine whether the subject matter of the communication should be brought to the attention of the full Board of Directors or one or more of its committees and whether any response to the person sending the communication is appropriate. Any response will be made only in accordance with applicable law and regulations relating to the disclosure of information.

Our Secretary will retain copies of all communications received pursuant to these procedures for a period of at least one year. The Board of Directors will review the effectiveness of these procedures from time to time and, if appropriate, recommend changes. We have not established a formal policy regarding director attendance at our annual meetings of stockholders, but our directors generally do attend the annual meeting. The Chairman of the Board or the Chief Executive Officer presides at the annual meeting of stockholders, and the Board of Directors generally holds one of its regular meetings in conjunction with the annual meeting of stockholders. Accordingly, unless one or more members of the Board are unable to attend, all members of the Board are typically present for the annual meeting. Six of the seven members of the Board, who were members at the time of our 2016 annual meeting of stockholders, attended that meeting.

Nomination of Directors

The Nominating and Governance Committee assists the Board of Directors in identifying, screening, and reviewing individuals qualified to serve as directors in accordance with criteria approved by the Board and shall recommend to the Board candidates for nomination for election at the annual meeting of stockholders or to fill Board vacancies. The Nominating and Governance Committee develops and recommends to the Board and oversees implementation of our policies and procedures for the receipt of stockholder suggestions regarding Board composition and recommendations of candidates for nomination by the Board. The full Board has adopted specifications applicable to members of the Board, and nominees for the Board must meet these specifications. The specifications provide that a candidate for director should:

- Have a reputation for industry, integrity, honesty, candor, fairness, and discretion;

- Be knowledgeable in his or her chosen field of endeavor, which field should have such relevance to our businesses as would contribute to the company's success;
- Be knowledgeable, or willing and able to become so quickly, in the critical aspects of our businesses and operations; and
- Be experienced and skillful in serving as a competent overseer of, and trusted advisor to, senior management of a publicly-held corporation.

In addition, nominees for the Board of Directors should contribute to the mix of skills, core competencies, and qualifications of the Board through expertise in one or more of the following areas: accounting and finance, the healthcare industry, international business, mergers and acquisitions, leadership, business and management, strategic planning, government relations, investor relations, executive leadership development, and executive compensation.

The Board of Directors also seeks nominees who will contribute to the Board's diversity. While the Board of Directors does not maintain a formulaic policy or approach with respect to diversity, it continually seeks a wide range of perspectives and experiences among its members.

The Board will consider nominees recommended by stockholders for election at the 2018 annual meeting of stockholders that are submitted prior to the end of 2017 to our Secretary at CAS Medical Systems, Inc., 44 East Industrial Road, Branford, CT 06405. Any recommendation must be in writing and must include a detailed description of the business experience and other qualifications of the recommended nominee, as well as the signed consent of the nominee to serve if nominated and elected, so that the candidate may be properly considered. All stockholder recommendations will be reviewed in the same manner as other potential candidates for board membership.

Other than Mr. Thomas and Ms. Tune, who are the Purchaser Designees of Thomas, McNerney & Partners, L.P., as described under the heading "Board Information and Committees," the Board has not received any nominees for election to the Board at the 2017 annual meeting from any stockholder or group that has held more than 5% of our common stock for a period of one year.

Code of Ethics

Our Board of Directors has approved a Code of Ethics in accordance with the rules of the Securities and Exchange Commission and Nasdaq which governs the conduct of each of our directors and senior executive officers, including our principal executive officer, principal financial officer, principal accounting officer, and controller. Our Code of Ethics is maintained on our website at www.casmed.com. Any amendments to or waivers of the Code of Ethics that apply to our principal executive officer, principal financial officer, or principal accounting officer and that relates to any element of the definition of the term "code of ethics," as the term is defined by the Securities and Exchange Commission, will be posted on our website at www.casmed.com. There are currently no such amendments or waivers.

We recognize the importance of preventing both actual conflicts of interest and the appearance of such conflicts in dealings between CASMED and "related persons" (CASMED directors, director nominees, executive officers, stockholders beneficially owning 5% or greater of our common stock, or the immediate family members of any of the foregoing). In accordance with its charter, the Audit Committee regularly reviews our corporate policies with respect to conflicts of interest, including related party transactions, and investigates instances of such conflicts.

Executive Officer Compensation

Executive Contracts and Severance and Change of Control Arrangements

Thomas M. Patton. On August 27, 2010, we entered into an employment agreement with Thomas M. Patton, our President and Chief Executive Officer. Under the terms of the agreement, Mr. Patton is employed on an "at will" basis, will receive an annual base salary of \$341,000, and will be eligible for an annual bonus in the form of cash or CASMED common stock, as determined at the sole discretion of the Compensation Committee of the Board. Accordingly, Mr. Patton will be eligible for a performance-based bonus for 2017 equal to 50% of his annual salary if certain targets are achieved. The designation of the performance targets and the attainment of such targets will be determined by the Compensation Committee of the Board of Directors in consultation with Mr. Patton. Mr. Patton will also be entitled to participate in all of our employee benefit programs, as such programs may be in effect from time to time.

As an inducement to cause Mr. Patton to accept employment with CASMED, Mr. Patton was granted a ten-year, non-qualified stock option to purchase 350,000 shares of our common stock at an exercise price of \$2.10 per share, the closing price of our common stock on Nasdaq upon the effective date of the agreement. Such stock options vested in equal monthly installments over a period of four years from date of grant. As a further inducement to consummate Mr. Patton's employment, Mr. Patton was granted 250,000 shares of restricted common stock of CASMED on the same date. Such restricted shares vested over a period of four years from date of grant. Additionally, upon being hired, Mr. Patton was also granted 150,000 shares of restricted common stock, the vesting of which will occur on the earlier of the following – (i) upon CASMED's stock price meeting or exceeding an average of \$4.15 per share for 60 consecutive trading days based upon the daily closing price of the primary market in which our common stock is traded or (ii) a change in control subject to certain conditions.

If we terminate Mr. Patton's employment without Serious Cause (as defined in the Employment Agreement) or Mr. Patton terminates his employment for Good Reason (as defined in the Employment Agreement), we will continue to pay Mr. Patton his then-current base salary for a period of one year from the date of such termination. Mr. Patton will be entitled to participate in our health benefit plans (with standard employee payment not to exceed the payment level prior to termination) for the one-year period. This would represent a payment of approximately \$359,500 based upon his current salary and benefits level. In addition, if Mr. Patton terminates his employment for Good Reason or if we terminate Mr. Patton's employment without Serious Cause, all of Mr. Patton's equity-linked grants (such as stock options and restricted stock) shall immediately accelerate and vest in full. The intrinsic value of those equity-linked awards subject to acceleration and outstanding as of December 31, 2016, was \$422,625 based upon the closing price of \$1.61 of our common stock on Nasdaq as of that date.

If we (or a successor company) terminate Mr. Patton's employment without Serious Cause or Mr. Patton terminates his employment for Good Reason, within the period commencing on the date that a Change of Control (as defined in the Employment Agreement) is formally proposed to our Board of Directors and ending on the second anniversary of the date on which such Change of

Control occurs, then Mr. Patton will be entitled to receive his then-current base salary for a period of one year from the date of such termination and in addition will be entitled to participate in our health benefit plans (with standard employee payment not to exceed the payment level prior to the change in control) for the period of one year. This would represent a payment of approximately \$359,500 based upon his current salary and benefits level. In addition, all of Mr. Patton's equity-linked grants (such as stock options and restricted stock) shall immediately accelerate and vest in full. The intrinsic value of those equity-linked awards, subject to acceleration and outstanding as of December 31, 2016, was \$422,625 based upon the closing price of \$1.61 of our common stock on Nasdaq as of that date.

Jeffery A. Baird. On August 10, 2009, we entered into an employment agreement with Jeffery A. Baird pursuant to which Mr. Baird is serving as our Chief Financial Officer. Under the terms of the employment agreement, Mr. Baird is employed on an "at will" basis, will receive an annual base salary of \$237,000, and will be eligible for an annual bonus in the form of cash or CASMED common stock, as determined at the sole discretion of the Compensation Committee of the Board. Mr. Baird will also be eligible for a performance-based bonus for 2017 equal to 30% of his annual salary if certain targets are achieved. Mr. Baird will also be entitled to participate in all of our employee benefit programs, as such programs may be in effect from time to time.

If we terminate Mr. Baird's employment without Serious Cause (as defined in the Employment Agreement) or Mr. Baird terminates his employment for Good Reason (as defined in the Employment Agreement), we will continue to pay Mr. Baird his then-current base salary for a period of six months from the date of such termination, and he will be entitled to participate in our health benefit plans (with standard employee payment not to exceed the payment level prior to termination) for the six-month period. This would represent a payment of approximately \$118,950 based upon his current salary and benefits level. In addition, if Mr. Baird terminates his employment for Good Reason or if we terminate Mr. Baird's employment without Serious Cause, all of Mr. Baird's equity-linked grants (such as stock options and restricted stock) shall immediately accelerate and vest in full. The intrinsic value of those equity-linked awards subject to acceleration and

outstanding as of December 31, 2016, was \$72,450 based upon the closing price of \$1.61 of our common stock on Nasdaq as of that date.

If we (or a successor company) terminate Mr. Baird's employment without Serious Cause or Mr. Baird terminates his employment for Good Reason, within the period commencing on the date that a Change of Control (as defined in the Employment Agreement) is formally proposed to our Board of Directors and ending on the second anniversary of the date on which such Change of Control occurs, then Mr. Baird will be entitled to receive his then-current base salary for a period of one year from the date of such termination and in addition will be entitled to participate in our health benefit plans (with standard employee payment not to exceed the payment level prior to the change in control) for the period of one year. This would represent a payment of approximately \$237,900 based upon his current salary and benefits level. In addition, all of Mr. Baird's equity-linked grants (such as stock options and restricted stock) shall immediately accelerate and vest in full. The intrinsic value of those equity-linked awards, subject to acceleration and outstanding as of December 31, 2016, was \$72,450 based upon the closing price of \$1.61 of our common stock on Nasdaq as of that date.

John K. Gamelin. On August 5, 2013, we entered into an employment agreement with John K. Gamelin pursuant to which Mr. Gamelin is serving as our Vice President – Research and Development. Under the terms of the employment agreement, Mr. Gamelin is employed on an "at will" basis, will receive an annual base salary of \$215,000, and will be eligible for an annual bonus with a target equal to 30% of his actual salary payable in the form of cash or CASMED common stock, as determined at the sole discretion of the Compensation Committee of the Board. Mr. Gamelin will also be entitled to participate in all of our employee benefit programs, as such programs may be in effect from time to time.

If we terminate Mr. Gamelin's employment without Serious Cause (as defined in the Employment Agreement) or Mr. Gamelin terminates his employment for Good Reason (as defined in the Employment Agreement), we will continue to pay Mr. Gamelin his then-current base salary for a period of six months from the date of such termination, he will be entitled to participate in our health benefit plans pursuant to COBRA with standard employee payment and employer subsidy

level prior to termination, and if the separation of service occurs at a time when more than one-half of the performance measuring for an annual performance bonus has elapsed, Mr. Gamelin will be eligible for a pro-rated amount of the performance bonus he would have otherwise earned had he remained employed for the entire performance period. Excluding amounts related to the performance bonus, this would represent a payment of approximately \$116,750 based upon his current salary and benefits level. In addition, if Mr. Gamelin terminates his employment for Good Reason or if we terminate Mr. Gamelin's employment without Serious Cause, all of Mr. Gamelin's equity-linked grants (such as stock options and restricted stock) shall immediately accelerate and vest in full. The intrinsic value of those equity-linked awards subject to acceleration and outstanding as of December 31, 2016, was \$72,450 based upon the closing price of \$1.61 of our common stock on Nasdaq as of that date.

If we (or a successor company) terminate Mr. Gamelin's employment without Serious Cause or Mr. Gamelin terminates his employment for Good Reason, within the period commencing on the date that a Change of Control (as defined in the Employment Agreement) is formally proposed to our Board of Directors and ending six months after the date on which such Change of Control occurs, then Mr. Gamelin will be entitled to receive his then-current base salary for a period of six months from the date of such termination, he will be entitled to participate in our health benefit plans pursuant to COBRA with standard employee payment and employer subsidy level prior to termination, and if the separation of service occurs at a time when more than one-half of the performance measuring for an annual performance bonus has elapsed, Mr. Gamelin will be eligible for a pro-rated amount of the performance bonus he would have otherwise earned had he remained employed for the entire performance period. Excluding amounts related to the performance bonus, this would represent a payment of approximately \$116,750 based upon his current salary and benefits level. In addition, all of Mr. Gamelin's equity-linked grants (such as stock options and restricted stock) shall immediately accelerate and vest in full upon a Change of Control. The intrinsic value of those equity-linked awards subject to acceleration and outstanding as of December 31, 2016, was \$72,450 based upon the closing price of \$1.61 of our common stock on Nasdaq as of that date.

Compensation Discussion and Analysis

Our Compensation Committee, which is comprised of three independent non-employee directors, has formulated a compensation philosophy that is designed to enable us to attract, retain, and reward capable employees who can contribute to the success of CASMED, principally through a combination of (1) base salaries, (2) annual incentive opportunities, and (3) longer-term incentive opportunities for senior management. We believe that implementation of a system of compensation that emphasizes performance-based compensation provides a strong alignment to stockholders' interests. Five key principles serve as the guiding framework for compensation decisions for all executive officers of CASMED:

- To attract and retain the most highly qualified management and employee team;
- To pay competitively, compared to similar companies in our industry;
- To encourage superior employee performance by aligning rewards with stockholder interests;
- To motivate senior executives to achieve CASMED's annual and long-term business goals by providing equity-based incentive opportunities; and
- To strive for fairness in administration by emphasizing performance-related contributions as the basis for pay decisions.

To implement these policies, we have designed the framework for a four-part executive compensation program consisting of base salary, annual incentives, long-term incentive opportunities for senior management, and other employment benefits.

Base Salary. We will seek to maintain levels of compensation that are competitive with similar companies in our industry. Base salary represents the fixed component of the executive compensation program. CASMED's philosophy regarding base salaries is to maintain salaries for the aggregate officer group at or near the competitive industry average. Periodic increases in base salary will relate to individual contributions evaluated against established objectives, length of service, and the industry's annual competitive pay practice movement. We believe that base salary for 2016 for our Chief Executive Officer and for the other executive officers was generally at the competitive industry average.

Annual Incentive Program. During January 2016, the Compensation Committee approved the 2016 management annual incentive program which included various targets including sales, cash used in operations, and personal goals. Total bonus payments of \$712,000 would be payable to the management team, including the named executive officers, upon achieving 100% of the targets, payable in either cash or vested common stock. The program provided for reduced payouts at certain achievement levels below 100% as well as increased payouts for performance above target. Actual amounts paid to management for 2016 included 390,240 shares of our common stock valued at \$1.47 per share based upon the Nasdaq official closing price on March 10, 2017, and approximately \$140,000 which is being paid in cash in 2017.

During February 2017, the Compensation Committee approved the 2017 management annual incentive program which includes various targets, including sales, adjusted cash flow from operations and personal goals. Total bonus payments of approximately \$730,000 would be payable to the management team including the named executive officers upon achieving 100% of the targets, payable in either cash or vested common stock. The program provides for reduced payouts at certain achievement levels below 100% as well as increased payouts for performance above target up to a capitated level.

The Compensation Committee also assesses whether to pay discretionary bonuses to our employees, including senior executives, either in cash or stock,

based upon performance. Payment of the performance bonuses is at the sole discretion of the Compensation Committee and is not based on specific metrics, although the Compensation Committee bases its decisions on numerous factors, including overall corporate and personal performance. No discretionary cash bonus payments were made to the named executive officers for 2015 or 2016.

Long-Term Incentives. We believe that long-term incentives should provide senior executives with an opportunity to increase their ownership and potentially gain financially from CASMED stock price increases. By this approach, the best interests of stockholders and senior executives will be closely aligned. Therefore, senior executives are eligible to receive restricted stock and stock options (which give them the right to purchase shares of common stock at a specified price in the future). These grants will vest based upon the passage of time, the achievement of performance metrics, or both. We believe that the use of restricted stock and stock options as the basis for long-term incentive compensation meets our defined compensation strategy and business needs by achieving increased value for stockholders and retaining key employees.

Other Benefits. Our philosophy is to provide competitive health and welfare benefits to executives and employees but to maintain a conservative posture relative to executive benefits. We do provide life insurance and supplemental disability insurance to certain of our senior executive officers.

Compensation Disclosure Tables

Summary Compensation Table. The following table (Table I) shows all compensation paid or granted, during or with respect to the 2015 and 2016 fiscal years to (i) our Chief Executive Officer, and (ii) the two other most highly-compensated executive officers, other than the CEO, whose total compensation during 2016 exceeded \$100,000 and who were serving as executive officers as of December 31, 2016. (Persons in this group are referred to individually as a “named executive officer” and collectively as the “named executive officers,” and, unless otherwise noted, the titles listed are the titles held as of the end of the 2016 fiscal year.)

TABLE I
2015-2016 SUMMARY COMPENSATION TABLE

Name and Principal Position	Year	Salary	Stock Awards (a)	Option Awards (a)	Non-Equity Incentive Plan Compensation (b)	All Other Compensation (c)	Total
Thomas M. Patton	2016	\$332,720	\$ —	\$ —	\$167,832	\$1,726	\$502,278
President and Chief Executive Officer	2015	\$337,026	\$246,000	\$ —	\$125,289	\$ —	\$708,315
Jeffery A. Baird	2016	\$230,976	\$ —	\$ —	\$ 76,767	\$3,509	\$311,252
Chief Financial Officer	2015	\$233,877	\$ 98,400	\$ —	\$ 52,984	\$3,708	\$388,969
John K. Gamelin	2016	\$209,305	\$ —	\$ —	\$ 69,558	\$ —	\$278,863
Vice President – R&D	2015	\$211,902	\$ 98,400	\$ —	\$ 48,008	\$ —	\$358,310

- (a) Dollar amounts set forth with regard to unrestricted and restricted stock grants and stock option grants are computed in accordance with FASB ASC Topic 718. Share value utilized for purposes of this determination is the applicable fair market value on the date of grant. Fair market values utilized for unrestricted and restricted stock grants represent the closing market price on the date of grant. For a further discussion of the assumptions underlying these amounts, reference is made to the footnotes to CASMED’s financial statements set forth in Form 10-K for the fiscal year ended December 31, 2016.
- (b) Amounts in this column represent sums paid to the executives in 2017 and 2016 pursuant to the achievement of incentives for calendar years 2016 and 2015, respectively. See “Compensation Discussion and Analysis – Annual Incentive Program” above.
- (c) Amounts shown include the cost of disability insurance for Mr. Patton and term life insurance and disability insurance for Mr. Baird.

Grants of Plan-Based Awards Table. The following table (Table II) shows all plan-based equity and non-equity grants made by CASMED during the 2016 fiscal year to the named executive officers.

**TABLE II
2016 GRANTS OF PLAN-BASED AWARDS**

Name	Grant Date	Estimated Future Payouts Under Non-Equity Incentive Plan Awards			All Other Stock Awards: Number of Shares of Stock or Units (#)	All Other Awards: Number of Securities Underlying Options (#)	Exercise or Base Price of Option Awards (\$/sh)	Grant Date Fair Value of Stock and Option Awards
		Threshold (\$)	Target (\$)	Maximum (\$)				
Thomas M. Patton	—	\$0	\$170,500	\$255,750	—	—	—	—
Jeffery A. Baird	—	\$0	\$ 71,100	\$106,650	—	—	—	—
John K. Gamelin	—	\$0	\$ 64,500	\$ 96,750	—	—	—	—

Outstanding Equity Awards at Fiscal Year-End Table. Shown in Table III below is information with respect to outstanding equity-based awards (consisting of unexercised options to purchase CASMED common stock and unvested restricted CASMED common stock) held by the named executive officers at December 31, 2016.

**TABLE III
OUTSTANDING EQUITY AWARDS AT 2016 FISCAL YEAR END**

Name (a)	Option Awards				Stock Awards		
	Number of Securities Underlying Unexercised Options (#)	Number of Securities Underlying Unexercised Options (#)	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$)	
Thomas M. Patton	350,000	0	\$2.10	8/27/2020	262,500	\$422,625	
	100,000	0	\$1.69	12/8/2021			
	100,000	0	\$2.18	12/17/2022			
	75,000	25,000	\$1.87	12/16/2023			
	50,000	50,000	\$1.79	12/18/2024			
Jeffery A. Baird	50,000	0	\$3.16	1/7/2021	45,000	\$ 72,450	
	25,000	0	\$1.69	12/8/2021			
	40,000	0	\$2.18	12/17/2022			
	37,500	12,500	\$1.87	12/16/2023			
	20,000	20,000	\$1.79	12/18/2024			
John K. Gamelin	44,000	0	\$3.00	11/19/2020	45,000	\$ 72,450	
	56,000	0	\$1.69	12/8/2021			
	60,000	0	\$2.18	12/17/2022			
	30,000	10,000	\$1.87	12/16/2023			
	20,000	20,000	\$1.79	12/18/2024			

- (a) Except as specified, all unvested options in the table above vest in four equal installments from the grant date (which grant date was ten years prior to the expiration date set forth in the table). For a discussion of the vesting of 150,000 shares of Mr. Patton's restricted stock, see "Executive Officer Compensation – Executive Contracts and Severance and Change of Control Arrangements – Thomas M. Patton" above.
- (b) These values are based on \$1.61 per share, the market price of a share of CASMED common stock as of December 30, 2016 (the final trading day of 2016).

Option Exercises and Stock Vested Table. The following table (Table IV) shows information with respect to all stock options exercised by the named executive officers during 2016 and information regarding restricted stock held by those persons that vested during 2016.

TABLE IV
OPTION EXERCISES AND STOCK VESTED TABLE

<u>Name</u>	<u>Option Awards</u>		<u>Stock Awards</u>	
	<u>Number of Shares Acquired on Exercise (#)</u>	<u>Value Realized on Exercise (\$)</u>	<u>Number of Shares Acquired on Vesting (#)</u>	<u>Value Realized on Vesting (\$)</u>
Thomas M. Patton	—	—	37,500	\$59,625
Jeffery A. Baird	—	—	15,000	\$23,850
John K. Gamelin	—	—	15,000	\$23,850

Equity Compensation Plan Table. The following table (Table V) sets forth general information concerning our equity compensation plans as of December 31, 2016.

TABLE V
EQUITY COMPENSATION PLAN INFORMATION

<u>Plan Category</u>	<u>Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants, and Rights (Col. 1)</u>	<u>Weighted-average Exercise Price of Outstanding Options, Warrants, and Rights (\$) (Col. 2)</u>	<u>Number of Securities Remaining Available for Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Col. 1) (Col. 3)</u>
Equity compensation plans approved by security holders: (a)	2,729,500	\$1.98	1,637,585
Equity compensation plans not approved by security holders: (b)	951,458	\$1.92	0
Total	3,680,958	\$1.96	1,637,585

- (a) Equity compensation plans approved by security holders consist of the 2003 Equity Incentive Plan and the 2011 Equity Incentive Plan.
- (b) The equity compensation plans not approved by security holders consist of warrants to purchase 109,000 shares granted to former directors as compensation for services rendered which have no expiration date, warrants to purchase 342,458 shares granted to the Company's current and former bank lenders, and 500,000 shares underlying inducement stock options granted to certain officers commensurate with their employment with CASMED. The inducement stock option grants have a weighted-average exercise price of \$2.42. The director warrants have no specific expiration date, and have an exercise price range of \$0.38 to \$1.98. The lender warrants expire between July 31, 2017, and June 30, 2026, and have an exercise price range of \$1.80 to \$1.98.

Proposal 2: **Advisory Vote on the Compensation of our Named Executive Officers**

Pursuant to the Dodd-Frank Wall Street Reform and Consumer Act (the “Dodd-Frank Act”), public companies are required to give their stockholders the opportunity to cast an advisory vote on a proposal (commonly known as a “say-on-pay” proposal) to endorse or not endorse named executive officer compensation. At our annual meeting held in 2013 our stockholders voted in favor of annual say-on-pay votes, and our Board has submitted such votes to the stockholders on an annual basis thereafter.

As discussed in the Compensation Discussion and Analysis above and in the Compensation Disclosure Tables that follow, our executive compensation program is designed to attract, retain, and reward capable employees who can contribute to our success. We believe that our executive compensation program is reasonable, competitive, and focused on the principle of pay for performance. To that end, compensation is based on a mix of base salary, performance-based annual and long-term incentives, and benefits and perquisites. Furthermore, we seek to maintain levels of compensation that are competitive with similar companies in our industry.

We believe that the 2016 compensation of our named executive officers was appropriate and aligned with the Company’s 2016 results. Accordingly, the Company is seeking stockholder approval of the following resolution:

“RESOLVED, that the stockholders approve, on an advisory basis, the compensation of the Company’s named executive officers, as disclosed pursuant to the compensation disclosure rules of the Securities and Exchange Commission in the ‘Compensation Discussion and Analysis’ and the related accompanying tabular and narrative disclosure included in the Company’s Proxy Statement for the 2017 Annual Meeting of Stockholders.”

Because this vote is advisory, it will not be binding on the Board of Directors. However, the Board of Directors values the opinions of our stockholders and has taken into account and will continue to take into account the outcome of the vote when considering future executive compensation arrangements as it deems appropriate.

The Board of Directors recommends that stockholders vote FOR the advisory resolution approving the compensation of the named executive officers as described in this Proxy Statement.

Audit Committee Report

The Audit Committee reviews CASMED's financial reporting function on behalf of the Board of Directors. Management has the primary responsibility for preparing the financial statements in accordance with accounting standards generally accepted in the United States and the reporting process, including the system of internal controls. CASMED's independent registered public accounting firm ("independent accounts") is responsible for expressing an opinion on the annual financial statements as to whether or not they are presented in conformity in all material respects with accounting principles generally accepted in the United States. The Audit Committee monitors these processes through periodic meetings with management and the independent registered public accounting firm.

In this context, the Audit Committee has reviewed and discussed, with management and the independent accountants, the audited financial statements for the year ended December 31, 2016, including the audit scope, internal control matters, and audit results. The Audit Committee also met with the independent accountants without management present. The Audit Committee has discussed with the independent accountants the matters required to be discussed by auditing standards. In addition, the Audit Committee has received from the independent accountants the written disclosures and letter required by the applicable requirements of the Public Company Accounting Oversight Board regarding the independent accountant's communications with the Audit Committee concerning independence, and discussed with them their independence from CASMED and its management. The Audit Committee has also considered whether all non-audit services rendered by the independent accountants to CASMED are compatible with the accountants' independence.

In reliance on the reviews and discussions referred to above, the Audit Committee recommended to the Board of Directors, and the Board has approved, that the financial statements for the year ended December 31, 2016, be included for filing in CASMED's annual report on Form 10-K for the year ended December 31, 2016.

Audit Committee of the Board of Directors

- Paul A. Molloy
- Kathleen A. Tune
- Kenneth R. Weisshaar

Audit Committee Pre-Approval Policy

The Audit Committee operates under a written charter. Under this charter, the Audit Committee is responsible for selecting, approving, compensating, and overseeing the independence, qualifications, and performance of the independent accountants. Further, the Audit Committee has adopted a pre-approval policy pursuant to which certain permissible non-audit services may be provided by the independent accountants. Pre-approval is generally provided for up to one year and may be detailed as to the particular service or category of services and may be subject to a specific budget. The Audit Committee may also pre-approve particular services on a case-by-case basis. In assessing requests for services from the independent accountants by management, the Audit Committee considers whether such services are consistent with the auditor's independence, whether the independent accountants are likely to provide the most effective and efficient service based upon their familiarity with the company, and whether the service could enhance our ability to manage or control risk or improve audit quality.

Notwithstanding the pre-approval policy, all of the audit-related, tax, and other services provided by CohnReznick LLP in calendar year 2016 were approved in advance by the Audit Committee.

Proposal 3: Approval of Appointment of CASMED's Independent Accountants

The Audit Committee of our Board of Directors has selected CohnReznick LLP as our independent registered public accounting firm for the year ending December 31, 2017, and has directed that the selection of independent accountants be submitted for ratification by stockholders at the annual meeting. A representative of CohnReznick LLP is expected to be present at the annual meeting and will have an opportunity to make a statement if he or she desires and will be available to respond to appropriate questions.

Stockholder ratification of the selection of CohnReznick LLP, as our independent accountants, is not required by our bylaws or otherwise. However, the Audit Committee is submitting the selection of CohnReznick LLP to the stockholders for ratification as a matter of good corporate practice. If the stockholders fail to ratify the selection, the Audit Committee will reconsider whether or not to retain that firm. Even if the selection were 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 CASMED and its stockholders.

Audit Fees

CohnReznick LLP performed the audit of our annual consolidated financial statements included in

the annual report on Form 10-K, the review of interim consolidated financial statements included in quarterly reports on Form 10-Q and certain other SEC filings. Aggregate fees billed for such services by CohnReznick LLP were \$154,953 and \$155,259 for the years ended December 31, 2016 and 2015, respectively.

Audit-Related Fees

CohnReznick LLP also provided 401(k) Plan audit services to the Company during 2016 and 2015 for the plan years ended December 31, 2015 and 2014, respectively. Fees billed for each year of those services were \$13,500 and \$13,000, respectively.

Tax Fees

CohnReznick LLP did not provide tax services to CASMED during the years ended December 31, 2016 and 2015. We utilize an independent third-party accounting firm to perform those services.

All Other Fees

CohnReznick LLP did not provide services in addition to those described above during the years ended December 31, 2016 and 2015.

The Board of Directors recommends that stockholders vote FOR the appointment of CohnReznick LLP as the company's independent accountants for 2017.

Additional Information

Solicitation of Proxies

Proxies may be solicited by the directors, officers, and employees of the company without additional compensation in person, or by telephone, facsimile, email, U.S. mail, or otherwise. Arrangements may also be made with brokerage firms and other custodians, nominees, and fiduciaries for the forwarding of solicitation material to the beneficial owners of CASMED common stock, and we will reimburse these brokers, custodians, nominees, and fiduciaries for reasonable out-of-pocket expenses incurred. The cost of solicitation will be borne entirely by CASMED.

Other Matters

Directions to the annual meeting can be obtained by making a written or oral request to our Secretary, c/o CAS Medical Systems, Inc., 44 East Industrial Road, Branford, CT 06405 or by telephone (203-488-6056).

Management knows of no other matters which may be presented for consideration at the meeting. However, if any other matters properly come before the meeting, it is the intention of the individuals named in the proxy to vote in accordance with their judgment.

By order of the Board of Directors.

Jeffery A. Baird
Secretary

