



April 27, 2012

Dear Fellow Stockholder:

We will hold our 2012 annual meeting of stockholders at 11:00 a.m. on Wednesday, June 20, 2012 at the Grand Hyatt New York, 109 East 42nd Street, New York, NY 10017.

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 that reads "Thomas M. Patton". The signature is written in a cursive style with a large initial "T" and "M".

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 20, 2012 at the Grand Hyatt New York, 109 East 42nd Street, New York, NY 10017.

The items of business at the annual meeting are:

1. Election of seven directors.
2. Ratification of appointment of independent accountants for 2012.
3. 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 23, 2012 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 27, 2012, 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 2012 proxy statement and 2011 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 2012 proxy statement and 2011 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 20, 2012 – 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 20, 2012, or at any adjournment of the meeting. This proxy statement contains information about the items being voted on at the annual meeting.

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 23, 2012 (the record date) can vote at the meeting. As of the record date, there were issued and outstanding:

- 13,619,712 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 18,938,861 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 19, 2012.
- **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 19, 2012.
- **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. Proposal 2 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 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 for these proposals.

By when must stockholder proposals be submitted for the 2013 annual meeting?

Stockholder proposals intended to be presented at our 2013 annual meeting pursuant to Securities Exchange Act Rule 14a-8 must be received by our Secretary not later than December 28, 2012, 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 13, 2013.

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 23, 2012 are reflected in the chart below. The following information is based upon Schedules 13D and 13G filed with the Securities and Exchange Commission by the persons and entities shown as of the respective dates appearing below or other information obtained by the company.

<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, McNerney & Partners II, L.P.	Common	5,639,960 (a)	29.3%
TMP Nominee II, LLC	Series A		
TMP Associates II, L.P.	Convertible	95,500 (a)	100%
60 South 6 th Street	Preferred		
Suite 3620	Series A		
Minneapolis, MN 55402	Exchangeable	54,500 (a)	100%
	Preferred		
BMI Capital Corporation	Common	3,015,418 (b)	22.1%
570 Lexington Avenue			
New York, NY 10022			
J. Sanford Davis	Common	921,500	6.8%
14 Longview Terrace			
Madison, CT 06443			
Louis P. Scheps	Common	834,564 (c)	5.8%
11 Riverwalk			
Branford, CT 06405			
Norman H. Pessin	Common	684,050 (d)	5.0%
Sandra F. Pessin			
366 Madison Avenue			
14 th Floor			
New York, NY 10017			

- (a) Based upon information set forth in a Schedule 13D/A Amendment No. 2 filed with the SEC on September 6, 2011 by Thomas, McNerney & Partners II, L.P. (“TMP II LP”), TMP Nominee II, LLC (“TMPN”), TMP Associates II, L.P. (“TMPA”), Thomas, McNerney & Partners II, LLC, 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 represent “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, 2012 equal to approximately 37.6 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 \$2.82 per share. Of the common stock equivalent rights in the table above (i) 5,562,129 are deemed owned directly by TMP II LP, and Thomas, McNerney & Partners II, LLC (“TMP II LLC”), the general partner of TMP II LP, may be deemed to have shared voting power, and James Thomas, a managing member of TMP II LLC, may be deemed to have shared power to vote such shares, (ii) 58,091 are owned directly by TMPN, and James Thomas, a managing member of TMPN, may be deemed to have shared power to vote such shares, and (iii) 19,740 are directly owned by TMPA, and TMP II LLC, the general partner of TMPA, may be deemed to have shared voting power, and James Thomas, a managing member of TMP II LLC, and a member of our Board may be deemed to have shared power to vote such shares. Data reflects accretion of dividends as of March 31, 2012.
- (b) Based upon information set forth in a Schedule 13G filed with the SEC on February 13, 2012. BMI Capital Corporation holds sole dispositive power over the indicated shares.
- (c) Includes 714,401 shares issuable upon exercise of warrants.
- (d) Based upon information set forth in a Schedule 13D filed with the SEC on June 29, 2010. Includes 284,050 shares held by SEP IRA FBO Norman Pessin.

How much stock is owned by directors and executive officers?

The following table shows beneficial ownership of CASMED common stock as of April 23, 2012 by our directors and our executive officers named in the compensation tables in this proxy statement. Shares issuable upon exercise of options or warrants are shown in a separate column.

<u>Name of Beneficial Owner</u>	<u>Common Stock Deemed to be Beneficially Owned (a)</u>	<u>Options and Warrants Exercisable Within 60 Days (b)</u>	<u>Percent of Class</u>
Lawrence S. Burstein	107,059 (c)	115,000	1.6%
Evan Jones	366,176 (d)	20,000	2.8%
Gregory P. Rainey	10,930	6,666	*
James E. Thomas	5,643,913 (e)	6,666	29.3%
Kathleen A. Tune	3,953	6,666	*
Kenneth R. Weisshaar	10,802	13,333	*
Thomas M. Patton	536,045 (f)	160,417	5.1%
Jeffery A. Baird	60,001	122,500	1.3%
Matthew P. Herwig	25,000	53,125	*
All current executive officers and directors as a group (9) . .	6,763,879	504,373	36.8%

* Less than one percent of the class

- (a) Includes restricted stock held by the named individuals as follows: Mr. Burstein, Mr. Jones, Mr. Rainey, Mr. Thomas, Ms. Tune and Mr. Weisshaar—each 988 shares; Mr. Patton – 301,042 shares; and Mr. Baird and Mr. Herwig – each 17,188 shares.
- (b) The director or executive officer has the right to acquire beneficial ownership of this number of shares within 60 days of the record date for the annual meeting (April 23, 2012) by exercising outstanding stock options or warrants.
- (c) Includes 75,000 shares held in Mr. Burstein’s IRA rollover account and 9,375 shares owned directly and indirectly by a family member.
- (d) Includes 333,333 shares held by jVen Capital LLC.
- (e) 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 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 shares.
- (f) 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 holdings of and 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 have been timely filed for 2011.

**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 present position for at least five years. The shares represented by the proxies will be voted in favor of the election as directors of the persons named below unless authority to do so is withheld. Should you choose not to vote for a nominee, you may list 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

<u>Name</u>	<u>Age</u>	<u>Year First Became Director</u>	<u>Principal Occupation During the Past Five Years</u>
Lawrence S. Burstein	69	1985	Mr. Burstein has been President and principal stockholder of Unity Venture Capital Associates, Ltd. since March 1996. Prior thereto he was President, a director and principal stockholder of Trinity Capital Corporation since October 1982. Mr. Burstein is a director of three other public companies: THQ, Inc., a manufacturer of video game cartridges, I.D. Systems, Inc., which designs, develops and produces a wireless monitoring and tracking system; and Atrinsic, Inc., which is principally an internet direct marketing company. In addition, Mr. Burstein was formerly a director of Millennium India Acquisition Corporation, a publicly traded 1940 Act investment company. He was also formerly a director of American Telecom Services, Inc., a provider of converged telecommunication services. Mr. Burstein received an L.L.B. from Columbia Law School. Mr. Burstein has considerable experience in legal and strategic business matters across a variety of industries. His past experience with the Company is important to the Board’s ability to evaluate our business strategies and decisions.

<u>Name</u>	<u>Age</u>	<u>Year First Became Director</u>	<u>Principal Occupation During the Past Five Years</u>
Evan Jones	55	2008	<p>Mr. Jones is currently Executive Chairman of Opgen, Inc., a privately-held genome mapping company, and a member of the Board of Directors of Fluidigm Corporation, a publicly-traded life-sciences technology company, and Veracyte, Inc. He was a co-founder of Digene Corporation, a publicly traded biotechnology company focused on women’s health and molecular diagnostic testing, serving as Chairman of the Board from 1995 until its sale in 2007. Mr. Jones was CEO of Digene from 1990 to 2006, and President from 1990 to 1999. In July 2007, Mr. Jones formed jVen Capital, LLC, a life sciences investment company, where he is currently Managing Member. Mr. Jones is a member of the Board of Directors of the Children’s National Medical Center in Washington DC. He is Chairman of the Campaign for Public Health Foundation, an independent, not-for-profit organization dedicated to increasing funding for the Centers for Disease Control and Prevention, and is a member of the Board of Directors and the Executive Committee of Research!America. Mr. Jones received a B.A. from the University of Colorado and an M.B.A. from The Wharton School of the University of Pennsylvania. Mr. Jones has considerable knowledge of the medical device market as well as experience leading a publicly-traded company and interacting with investors and shareholders. His experience is valuable to the Board’s ability to assess our strategy and direction and evaluate our business decisions.</p>

<u>Name</u>	<u>Age</u>	<u>Year First Became Director</u>	<u>Principal Occupation During the Past Five Years</u>
Thomas M. Patton.	48	2010	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, CT. From 2003-2010, Mr. Patton has 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 part-time basis in 2006 and 2007. Mr. Patton was a co-founder and CEO of QDx, Inc., a start-up company that developed a platform for hematology diagnostics in 2003. 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, DC. 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.
Gregory P. Rainey	59	2010	Mr. Rainey is currently President of CCI Performance Group, LLC which provides strategic and sales management consulting serves for healthcare companies. From 1994 – 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 currently serves as a member of the board of directors of RTI Biologics, Inc., a leading provider of sterile biological implants, and served on the board of directors of NuOrtho Surgical, Inc. until October 2011. 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.

<u>Name</u>	<u>Age</u>	<u>Year First Became Director</u>	<u>Principal Occupation During the Past Five Years</u>
James E. Thomas	51	2011	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., Galil Medical Ltd., and InnoPharma, Inc. Prior to joining Warburg, he was a Vice President at Goldman Sachs International in London. Mr. Thomas also serves as a Member of the Board of Directors at the Second Stage Theatre in New York City and The Children's Hospital at Montefiore. He graduated magna cum laude with a B.S. in Economics from the Wharton School at the University of Pennsylvania and received an M.Sc. in Economics from the London School of Economics. Mr. Thomas' extensive experience in the health care and investment industries is valuable to the board's ability to assess our business initiatives and financing alternatives.
Kathleen A. Tune	47	2011	Ms. Tune is currently a partner with Thomas, McNerney & Partners. From 2000-2003, 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 Pfizer) 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 privately held VertiFlex, Inc. She is currently President of the non-profit Mid-America Health Care Investors Network (MHIN) and is a member of the Executive Leadership Team for the American Heart Association's Go Red for Women campaign. 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.

<u>Name</u>	<u>Age</u>	<u>Year First Became Director</u>	<u>Principal Occupation During the Past Five Years</u>
Kenneth R. Weisshaar	61	2010	Mr. Weisshaar currently serves as a member of the Board of Directors of Orthofix International, N.V., a NASDAQ listed orthopedic device company. Mr. Weisshaar also serves on the Board of Directors of CenterLight Health System, a large non-profit nursing home and managed care organization located in the New York City area. Mr. Weisshaar previously served as a member of the Board of Directors of Digene Corporation, a publicly traded biotechnology company focused on women's health and molecular diagnostic testing. From 2000 to 2002, Mr. Weisshaar served as Chief Operating Officer and Strategy Advisor of Sensatex, Inc. a start-up company developing wireless vital signs monitoring equipment. Prior to that, 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 a 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 our ability to evaluate business alternatives.

The board of directors recommends that stockholders vote FOR the nominees described in Proposal 1.

Executive Officers

Our executive officers are as follows:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Thomas M. Patton	48	President and Chief Executive Officer
Jeffery A. Baird	58	Chief Financial Officer and Secretary
Matthew J. Herwig	45	Vice President – Sales and Marketing

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 startup venture engaged in the development of novel medical diagnostic products. Mr. Baird was employed by Novamatrix Medical Systems, Inc. from 1988 to 2002 and held various positions including Controller, Treasurer and CFO. Prior to joining Novamatrix, Mr. Baird was employed by Philips Medical Systems, Inc., a medical diagnostic imaging company.

Matthew J. Herwig joined CASMED during January 2011 as Vice President—Sales and Marketing. From 2009 to 2010, Mr. Herwig was Vice President of U.S. Marketing for Energy Based Devices at Covidien Healthcare, a leading global healthcare products company. From 2002 to 2006 and from 2008 to 2009, he was employed by Covidien holding numerous positions including Director of Global Marketing – Imaging Solutions/Pharmaceuticals, Director of U.S. Marketing – Imaging Solutions and Vice President of Marketing and Sales Training for the Nellcor division. From 1997 to 2002, Mr. Herwig held various marketing and sales positions for Mallinckrodt, which was purchased by Covidien Healthcare. In addition, from 2006 to 2008 he was employed by Computerized Medical Systems, an Elekta Company, as the Vice President of Global Marketing and North America Sales. Prior to joining Mallinckrodt, he was employed by Ethicon, Inc., a Johnson & Johnson company.

Board Information and Committees

The board met ten times in 2011 and acted three times by unanimous written consent. Each director 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 2011. The board has determined that each of our non-employee directors currently serving on the board or who served on the board during 2011 is independent based upon the criteria provided by Nasdaq Stock Market rules. Members of the board serve on one or more of the committees described below, except for directors who are also employees of the Company.

Pursuant to the terms of the Investment Agreement dated June 8, 2011 among CASMED, Thomas,

McNerney & Partners, L.P. and certain affiliates of Thomas, McNerney & Partners, L.P. (i) two of the members of our seven member board of directors were required to irrevocably tender their resignations to take effect concurrently with the closing of the Series A preferred stock investment contemplated by the Investment Agreement and (ii) the purchasers were given the right to designate two nominees to be appointed to fill such vacancies as of the closing. Accordingly, on June 8, 2011, Louis P. Scheps and Jerome Baron irrevocably tendered their resignations to take effect concurrently with the closing of the Series A preferred stock transaction. The purchasers nominated James E. Thomas and Kathleen A. Tune (the “Purchaser Designees”), who, pursuant to the Investment Agreement, were appointed to serve as members of our board of directors as of the closing. Mr. Thomas and Ms. Tune are nominees for re-election as the Purchaser Designees at this annual meeting. 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.

Since Mr. Scheps resignation in 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 eight times in 2011, 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. Members of the committee are Gregory Rainey, 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 the Nasdaq Stock Market. The board of directors has determined that each of Gregory Rainey, 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 2011, 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 2011. 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 Lawrence Burstein, Evan Jones, Gregory Rainey and James Thomas. Mr. Jones is chairman of the committee.

The **Nominating and Governance Committee**, which met once in 2011, 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 shareholders or to fill board vacancies; develops and recommends to the board and oversees implementation of our policies and procedures for the receipt of shareholder 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 Lawrence Burstein, Evan Jones, James Thomas and Kenneth Weisshaar. Mr. Burstein is chairman of the committee.

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. We pay our non-employee directors an annual retainer of \$20,000. We also pay an annual retainer of \$4,000 each to the Audit Committee and Compensation Committee chairmen and \$2,000 to the Nominating and Governance Committee chairman. We pay an annual retainer of \$2,000 to each other Audit Committee and Compensation Committee member and \$1,000 to each other Nominating and Governance Committee member. During 2011, we paid total annual fees of \$102,500 to the non-employee directors for their participation as board members and a total of \$19,000 in fees to the non-employee directors for their participation as committee members. Fees paid during 2011 include \$24,500 issued to Jerome Baron and Louis Scheps for services performed prior to their resignation from the board of directors on June 9, 2011.

Fees payable to Mr. Thomas and Ms. Tune as members of the board of directors and for various committee assignments, were paid, at their direction, to Thomas, McNerney & Partners.

Our non-employee directors are eligible to receive options, restricted stock and other equity-linked grants under our 2003 Equity Incentive Plan and 2011 Equity Incentive Plan. We granted 3,953 shares of restricted common stock under the 2003 Equity Incentive Plan to each of Messrs. Burstein, Jones, Rainey and Weisshaar on June 8, 2011 and to Mr. Thomas and Ms. Tune on June 9, 2011. The grants were intended to approximate \$10,000 in cash value based upon the market value of the common stock at the date of grant. These restricted stock grants vest in equal quarterly installments during the twelve months from date of grant. In accordance with past practice, upon joining the board on June 9, 2011,

we also granted Mr. Thomas and Ms. Tune options to purchase 20,000 shares of common stock at an exercise price of \$2.54 per share, representing the fair market value on the date of grant. Such options vest in equal annual installments over three years from the date of grant.

In 2012, the board intends to grant to each non-employee director, on the date of the annual meeting of stockholders, a number of restricted shares equal to \$10,000 divided by the closing price of the common stock on such date. The aforementioned grant would vest one year from the date of grant in quarterly installments.

Director Compensation Table. The following table shows all compensation paid or granted, during or with respect to the 2011 fiscal year to each of the non-employee directors for services rendered to CASMED during 2011.

2011 DIRECTOR COMPENSATION

Name (a)	Fees Earned or Paid in Cash (\$)	Stock Awards \$(b)	Stock Option Awards(c)	All Other Compensation (\$)	Total (\$)
Lawrence Burstein	\$23,500	\$10,001	—	—	\$33,501
Evan Jones	\$24,750	\$10,001	—	—	\$34,751
Gregory Rainey	\$24,000	\$10,001	—	—	\$34,001
James Thomas	\$11,500	\$10,041	\$35,734	—	\$57,275
Kathleen Tune	\$11,000	\$10,041	\$35,734	—	\$56,775
Kenneth Weisshaar	\$24,750	\$10,001	—	—	\$34,751
Jerome Baron (d)	\$12,000	—	—	—	\$12,000
Louis Scheps (d)	\$12,500	—	—	—	\$12,500

- (a) As of December 31, 2011, Mr. Burstein held options and warrants to purchase an aggregate of 115,000 shares of our common stock. Messrs. Jones, Rainey, Thomas, Ms. Tune and Mr. Weisshaar each held an option to purchase an aggregate of 20,000 shares of our common stock. As of December 31, 2011, Messrs. Burstein, Jones, Rainey, Thomas, Ms. Tune and Mr. Weisshaar each held 988 shares of restricted stock.
- (b) Dollar amounts represent the fair market value of 3,953 shares of restricted stock granted to Messrs. Burstein, Jones, Rainey and Weisshaar on June 8, 2011 and to Mr. Thomas and Ms. Tune on June 9, 2011. The fair market value of the grants issued on June 8, 2011 and June 9, 2011 were \$2.53 and \$2.54, respectively, representing the closing market prices on the date of the grants. The shares vest quarterly over a one year period from grant date.
- (c) Dollar amounts represent the grant date fair value of an option to purchase 20,000 shares of our common stock granted each to Mr. Thomas and Ms. Tune on June 9, 2011 commensurate with their appointment to the board of directors. Fair value is based upon a Black-Scholes calculation assuming a risk free interest rate of 1.95%, volatility of 84%, a term of 6 years and an annual dividend rate of zero. The options vest in three annual installments from the grant date.
- (d) Mr. Baron and Mr. Scheps resigned from the board of directors effective June 9, 2011.

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 procedures. CASMED security holders and other interested persons may communicate with the chairmen of our Compensation Committee, Audit Committee and 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, Connecticut 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. Each of the five members of the board who were members at the time of our 2011 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 shareholders 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 shareholder 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 2013 annual meeting of stockholders that are submitted prior to the end of 2012 to our Secretary at CAS Medical Systems, Inc., 44 East Industrial Road, Branford, Connecticut 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, as described above under the heading "Board Information and Committees", the board has not received any nominees for election to the board at the 2012 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 The Nasdaq Stock Market that 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 \$306,000 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. Patton will also be eligible for a performance-based bonus for 2012 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 our Company, Mr. Patton was granted a non-qualified stock option to purchase 350,000 shares of our common stock at \$2.10, the closing price of our common stock on the Nasdaq Stock Market upon the effective date of the agreement. Such stock options vest 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. Such restricted shares vest over a period of four (4) years from date of grant in the following manner – 20,833 shares vested as of December 30, 2010 and the remaining shares vest on the first day following the end of each calendar quarter beginning with April 1, 2011 and continuing each July 1st, October 1st, January 1st, and April 1st thereafter until October 1, 2014. At each quarterly vesting date, 15,625 shares will vest except for October 1, 2014 at which time 10,417 shares will vest provided that Mr. Patton is still employed with the Company. 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 the company's stock price meeting or exceeding an average of \$4.15 per share for sixty 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 \$321,000 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,

2011 was \$587,500 based upon the closing price of \$1.75 of our common stock on the NASDAQ market 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 \$321,000 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, 2011 was \$587,500 based upon the closing price of \$1.75 of our common stock on the NASDAQ market 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 \$212,000 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 2012 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 \$107,000 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, 2011 was \$45,250 based upon the closing price of \$1.75 of our common stock on the NASDAQ market 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 \$213,000 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, 2011 was \$45,250 based upon the closing price of \$1.75 of our common stock on the NASDAQ market as of that date.

Matthew J. Herwig. On January 7, 2011, we entered into an employment agreement with Matthew J. Herwig pursuant to which Mr. Herwig is serving as our Vice President of Sales and Marketing. Under the terms of the employment agreement, Mr. Herwig is employed on an "at will" basis, will receive an annual base salary of \$219,300 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. Herwig will be eligible for a performance-based bonus for 2012 equal to 30% of his annual salary if certain targets are achieved. Mr. Herwig 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. Herwig to accept employment with our Company, Mr. Herwig was granted a non-qualified stock option to purchase 150,000 shares of our common stock at a price of \$3.16 which reflected the closing price of our common stock on the Nasdaq Stock Market upon the effective date of the agreement. The grant will vest over a four year period with 37,500 shares vesting on the first anniversary of the grant and the remaining shares vesting in equal monthly installments, so long as Mr. Herwig remains an employee. As a further inducement to consummate Mr. Herwig's employment, Mr. Herwig was granted 25,000 shares of restricted common stock of our Company which will also vest over a four year period with 6,250 shares vesting on the first anniversary of the grant and the remaining shares vesting in equal quarterly installments on the first day of the following calendar quarters, so long as Mr. Herwig remains an employee.

If we terminate Mr. Herwig's employment without Serious Cause (as defined in the Employment Agreement) or Mr. Herwig terminates his employment for Good Reason (as defined in the Employment Agreement), we will continue to pay Mr. Herwig 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 \$117,000 based upon his current salary and benefits level. In addition, if Mr. Herwig terminates his employment for Good Reason or if we terminate Mr. Herwig's employment without Serious Cause, all of Mr. Herwig'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, 2011 was \$45,250 based upon the closing price of \$1.75 of our common stock on the NASDAQ market as of that date.

If we (or a successor company) terminate Mr. Herwig's employment without Serious Cause or Mr. Herwig 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. Herwig 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 \$235,000 based upon his current salary and benefits level. The intrinsic value of those equity-linked awards subject to acceleration and outstanding as of December 31, 2011 was \$45,250 based upon the closing price of \$1.75 of our common stock on the NASDAQ market as of that date.

Compensation Discussion and Analysis

Our Compensation Committee, which is comprised of four 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.
- 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 2011 for our chief executive officer and for the other executive officers was generally at the competitive industry average.

Annual Incentive Program. During January 2011, the Compensation Committee implemented the 2011 management annual incentive program. The criteria under the program consist of certain targets including revenues, operating cash flows, and research and development ("R&D") milestones. Upon 100% achievement of the targets, a bonus of \$600,000 in aggregate would be payable to our management upon the close of the 2011 fiscal year in either cash or vested common stock. The program provides for reduced payouts at certain achievements below 100% as well as increased payouts for performance above target. Actual amounts paid to management for 2011 were \$230,000 and were paid during 2012.

During February 2012, the Compensation Committee approved the 2012 management annual incentive program, which includes various targets including revenues, adjusted operating cash flow, and R&D timetables. A bonus of \$665,000 would be payable

upon achieving 100% of the targets payable in either cash or vested common stock. The program provides for reduced payouts at certain achievements below 100% as well as increased payouts for performance above target.

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 2010 or 2011.

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-oriented 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 2010 and 2011 fiscal years to (i) our chief executive officer and (ii) the other most highly compensated executive officers, other than the CEO, whose total compensation during 2011 exceeded \$100,000 and who were serving as executive officers as of December 31, 2011. (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 2011 fiscal year.)

TABLE I
2010-2011 SUMMARY COMPENSATION TABLE

<u>Name and Principal Position</u>	<u>Year</u>	<u>Salary</u>	<u>Stock Awards (a)</u>	<u>Option Awards (a)</u>	<u>Non-Equity Incentive Plan Compensation (b)</u>	<u>All Other Compensation (c)</u>	<u>Total</u>
Thomas M. Patton President and Chief Executive Officer(d)	2011	\$300,000	\$ 0	\$120,400	\$60,375	\$ 0	\$ 480,775
	2010	\$ 99,258	\$834,960	\$529,450	\$ 0	\$ 0	\$1,463,668
Jeffery A. Baird Chief Financial Officer	2011	\$208,000	\$ 79,000	\$140,000	\$25,116	\$3,707	\$ 455,823
	2010	\$196,716	\$ 0	\$ 0	\$ 0	\$3,631	\$ 200,347
Matthew J. Herwig Vice President – Sales and Marketing(e)	2011	\$207,558	\$ 79,000	\$359,800	\$25,961	\$ 0	\$ 672,319
	2010	—	—	—	—	—	—

(a) Dollar amounts set forth with regard to restricted stock 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 value utilized for restricted stock grants represents the closing market price on the date of grant. Fair market value utilized for stock option grants issued during 2011 are based upon on a Black-Scholes calculation assuming a risk free interest rate ranging from 1.20% to 3.33%, volatility of 83% to 93%, a term of 4.4 to 6.25 years and an annual dividend rate of zero. 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, 2011.

- (b) Amounts in this column represent sums paid to the executives in 2012 pursuant to the achievement of incentives for calendar year 2011. See "Compensation Discussion and Analysis – Annual Incentive Program" above.
- (c) Amounts shown include the cost of term life and disability insurance for Mr. Baird.
- (d) Mr. Patton joined the Company on August 27, 2010.
- (e) Mr. Herwig joined the Company on January 7, 2011.

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 2011 fiscal year to the named executive officers.

TABLE II
2011 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 (#)(a)	All Other Awards: Number of Securities Underlying Options (#)(b)	Exercise or Base Price of Option Awards (\$/sh)	Grant Date Fair Value of Stock and Option Awards
		Threshold (\$)	Target (\$)	Maximum (\$)				
Thomas M. Patton (a) . . .	—	\$0	\$150,000	\$198,750				
	12/8/11					100,000	\$1.69	\$120,400
Jeffery A. Baird (b)	—	\$0	\$ 62,400	\$ 82,680				
	1/7/11				25,000			\$ 79,000
	1/7/11					50,000	\$3.16	\$109,900
	12/8/11					25,000	\$1.69	\$ 30,100
Matthew J. Herwig (c) . . .	—	\$0	\$ 64,500	\$ 85,463				
	1/7/11				25,000			\$ 79,000
	1/7/11					150,000	\$3.16	\$329,700
	12/8/11					25,000	\$1.69	\$ 30,100

- (a) Stock options granted to Mr. Patton on December 8, 2011 vest 25% per year from grant date.
- (b) The restricted stock grant of 25,000 shares to Mr. Baird vests 25% on the first anniversary of the date of grant and quarterly thereafter for the following three years. The stock option grants of 50,000 and 25,000 shares dated January 7, 2011 and December 8, 2011, respectively, vest 25% per year from the date of grant.
- (c) Stock option and restricted stock grants made to Mr. Herwig on January 7, 2011 represent inducement grants issued commensurate with his employment with the company. The option grant of 150,000 shares vests over four years as follows: 37,500 shares upon the first anniversary of the grant and 3,125 shares per month thereafter beginning on the monthly anniversary of the date of grant. The restricted stock grant of 25,000 shares on December 8, 2011 vests 25% per year from date of grant.

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, 2011.

**TABLE III
OUTSTANDING EQUITY AWARDS AT 2011 FISCAL YEAR END**

<u>Name</u>	<u>Number of Securities Underlying Unexercised Options (#) Exercisable</u>	<u>Option Awards</u>			<u>Stock Awards</u>	
		<u>Number of Securities Underlying Unexercised Options (#) Unexercisable</u>	<u>Option Exercise Price (\$)</u>	<u>Option Expiration Date</u>	<u>Number of Shares or Units of Stock That Have Not Vested (#)</u>	<u>Market Value of Shares or Units of Stock That Have Not Vested (\$) (a)</u>
Thomas M. Patton	116,667	233,333	\$2.10	8/27/2020		
	—	100,000	\$1.69	12/8/2021		
					332,292	\$581,511
Jeffery A. Baird	50,000	0	\$1.40	1/6/2014		
	20,000	0	\$2.30	2/17/2015		
	40,000	0	\$3.10	6/15/2015		
	—	50,000	\$3.16	1/7/2021		
	—	25,000	\$1.69	12/8/2021		
					25,000	\$ 43,750
Matthew J. Herwig	—	150,000	\$3.16	1/7/2021		
	—	25,000	\$1.69	12/8/2021		
					25,000	\$ 43,750

(a) These values are based on \$1.75 per share, the market price of a share of CASMED common stock as of December 30, 2011 (the final trading day of 2011).

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 2011 and information regarding restricted stock held by those persons that vested during 2011.

**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	—	—	46,875	\$125,938
Jeffery A. Baird	—	—	5,000	\$ 15,550
Matthew J. Herwig	—	—	—	—

Equity Compensation Plan Table. The following table (Table V) sets forth general information concerning our equity compensation plans as of December 31, 2011.

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. a)</u>	<u>Weighted-average exercise price of outstanding options, warrants and rights (\$) (col. b)</u>	<u>Number of securities remaining available for issuance under equity compensation plans (excluding securities reflected in column (a)) (col. c)</u>
Equity compensation plans approved by security holders: (a)	1,197,425	\$2.25	493,835
Equity compensation plans not approved by security holders: (b)	<u>1,389,401</u>	\$1.14	<u>0</u>
Total	<u>2,586,826</u>	\$1.65	493,835

- (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 889,401 shares granted to both current and former directors of the Company as compensation for services rendered which have no expiration date and 500,000 shares under inducement stock options granted to certain officers of the Company commensurate with their employment with the Company. The inducement stock option grants have a weighted average exercise price of \$2.42. The warrants generally have no specific expiration date and have an exercise price range of \$0.30 to \$1.44.

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 accountants are 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, 2011, 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, 2011 be included for filing in CASMED's annual report on Form 10-K for the year ended December 31, 2011.

Audit Committee of the Board of Directors

- Gregory P. Rainey
- 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 J.H. Cohn LLP in fiscal year 2011 were approved in advance by the Audit Committee.

Proposal 2: Approval of Appointment of CASMED's Independent Accountants

The Audit Committee of our board of directors has selected J.H. Cohn LLP as our independent registered public accounting firm for the year ending December 31, 2012, and has directed that the selection of independent accountants be submitted for ratification by stockholders at the annual meeting. A representative of J.H. Cohn 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 J.H. Cohn LLP as our independent accountants is not required by our Bylaws or otherwise. However, the Audit Committee is submitting the selection of J.H. Cohn 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 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

J.H. Cohn LLP performed the audit of our annual consolidated financial statements included in the

annual report on Form 10-K and the review of interim consolidated financial statements included in quarterly reports on Form 10-Q and the review and audit of the application of new accounting pronouncements and certain other SEC releases. Aggregate fees billed by J.H. Cohn LLP were \$128,660 and \$143,903 for the years ended December 31, 2011 and 2010, respectively.

Audit-Related Fees

J.H. Cohn LLP also provided 401(k) Plan audit services to the Company during 2011 and 2010 for the plan years ended December 31, 2011 and 2010, respectively. Fees billed for those services were \$12,600 and \$12,818, respectively.

Tax Fees

J.H. Cohn LLP did not provide tax services to CASMED during the years ended December 31, 2011 and 2010. The Company utilizes an independent third-party accounting firm to perform those services.

All Other Fees

J.H. Cohn LLP did not provide services in addition to those described above during the years ended December 31, 2011 and 2010.

The board of directors recommends that stockholders vote FOR the appointment of J.H. Cohn LLP as the company's independent accountants for 2012.

Additional Information

Solicitation of Proxies

In addition to the use of the mails, proxies may be solicited by the directors, officers, and employees of the company without additional compensation in person, or by telephone, facsimile, email 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, Connecticut 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 enclosed proxy to vote in accordance with their judgment.

By order of the board of directors.

Jeffery A. Baird
Secretary