

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

SCHEDULE 14A
(Rule 14a-101)

INFORMATION REQUIRED IN PROXY STATEMENT
SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a)
of the Securities Exchange Act of 1934

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

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

Nile Therapeutics, Inc.

(Name of Registrant as Specified in its Charter)

(Name of Person(s) Filing Proxy Statement, if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- No fee required.
- Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

(1) Title of each class of securities to which transaction applies:

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

(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

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- Fee paid previously with preliminary materials.
- Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

(1) Amount Previously Paid:

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

(3) Filing Party:

(4) Date Filed:



**NOTICE OF ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD ON MAY 10, 2011**

To Our Stockholders:

You are cordially invited to attend the Annual Meeting of Stockholders of Nile Therapeutics, Inc., a Delaware corporation (the "Company"). The Annual Meeting will be held on Tuesday, May 10, 2011, at 10:00 a.m. (local time) at our headquarters, located at 4 West 4th Avenue, Suite 400, San Mateo, CA 94402, for the following purposes:

- (1) To elect eight directors to hold office until our 2012 Annual Meeting of Stockholders, or until their respective successors have been elected and qualified, or until their earlier resignation or removal;
- (2) To authorize an amendment to our certificate of incorporation to effect a combination (reverse split) of our common stock at a ratio not to exceed one-for-ten;
- (3) To ratify the appointment of Crowe Horwath LLP as our independent registered public accounting firm for our fiscal year ending December 31, 2011; and
- (4) To transact such other business as may properly come before the meeting or any adjournment thereof.

The foregoing items of business are more fully described in the Proxy Statement accompanying this Notice. The record date for determining those stockholders who will be entitled to notice of, and to vote at, the meeting and at any adjournments thereof is April 1, 2011.

Whether or not you plan to attend the meeting, please vote as soon as possible. You may vote by mailing a completed proxy card. A postage-prepaid envelope is enclosed for the submission of your proxy card. You may revoke a previously delivered proxy at any time prior to the meeting. If you are a stockholder of record and decide to attend the meeting and wish to revoke your proxy, you may do so automatically by voting in person at the meeting. If your shares are held by a broker or other nominee, and you would like to vote in person at the meeting, you will need to obtain a legal proxy from your broker or nominee and present it at the meeting.

If you have any questions regarding the completion of the enclosed proxy card or would like directions to the meeting, please call (650) 458-2670.

By Order of the Board of Directors,

NILE THERAPEUTICS, INC.

/s/ Joshua A. Kazam

Joshua

A. Kazam
Chief Executive Officer

San Mateo, California
April 8, 2011

IMPORTANT

To ensure your representation at the Annual Meeting, please mark, sign, date and return the enclosed proxy card as soon as possible in the enclosed postage-prepaid envelope. If you attend the Annual Meeting, you may vote in person even if you returned a proxy.



4 West 4th Ave., Suite 400
San Mateo, California 94402

**2011 ANNUAL MEETING OF STOCKHOLDERS TO BE HELD
MAY 10, 2011**

PROXY STATEMENT

This proxy statement is furnished to our stockholders as of April 1, 2011, the record date, in connection with the solicitation of proxies by our Board of Directors for use at our annual meeting of stockholders, to be held at our headquarters, located at 4 West 4th Avenue, Suite 400, San Mateo, CA 94402, on Tuesday, May 10, 2011, at 10:00 a.m. (local time), and at any adjournments or postponements of the meeting. This proxy statement and the proxy card, together with a copy of our Annual Report on Form 10-K for our fiscal year ended December 31, 2010, is first being mailed to our stockholders on or about April 8, 2011. Our telephone number is (650) 458-2670.

**Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting:
The proxy statement, proxy card, and Annual Report on Form 10-K are available at
http://www.nilethera.com/inv_sec.html**

**QUESTIONS AND ANSWERS REGARDING THIS SOLICITATION
AND VOTING AT THE MEETING**

***Why am I
receiving
this proxy
statement?***

You are receiving this proxy statement from us because you were a stockholder of record at the close of business on the record date of April 1, 2011. As a stockholder of record, you are invited to attend our annual meeting of stockholders and are entitled to vote on the items of business described in this proxy statement. This proxy statement contains important information about the meeting and the items of business to be transacted at the meeting. You are strongly encouraged to read this proxy statement, which includes information that you may find useful in determining how to vote.

***Who is
entitled to
attend and
vote at the
meeting?***

Only holders of record of shares of our common stock at the close of business on April 1, 2011 (the record date) are entitled to notice of, to attend and to vote at the meeting and any adjournments or postponements of the meeting.

***How many
shares are
outstanding?***

On the record date, 34,698,764 shares of our common stock were issued and outstanding and held by approximately 167 holders of record, which does not include stockholders holding our stock in "street name." Each share of common stock outstanding on the record date is entitled to one vote.

How many shares must be present or represented to conduct business at the meeting (that is, what constitutes a quorum)?

The presence at the meeting, in person or represented by proxy, of the holders of at least a majority of the shares of our common stock, issued and outstanding on the record date and entitled to vote at the meeting, will constitute a quorum for the transaction of business. If, however, a quorum is not present, in person or represented by proxy, then either the chairman of the meeting or the stockholders entitled to vote at the meeting may adjourn the meeting until a later time.

What items of business will be voted on at the meeting?

The items of business to be voted on at the meeting are as follows:

- (1) To elect eight directors to hold office until our 2012 Annual Meeting of Stockholders, or until their respective successors have been elected and have qualified, or until their earlier resignation or removal;
- (2) To authorize an amendment to our certificate of incorporation to effect a combination (reverse split) of our common stock at a ratio not to exceed one-for-ten; and
- (3) To ratify the appointment of Crowe Horwath LLP as our independent registered public accounting firm for our fiscal year ending December 31, 2011.

What happens if additional matters are presented at the meeting?

The only items of business that our Board of Directors intends to present at the meeting are set forth in this proxy statement. As of the date of this proxy statement, no stockholder has advised us of the intent to present any other matter, and we are not aware of any other matters to be presented at the meeting. If any other matter or matters are properly brought before the meeting, the person(s) named as your proxyholder(s) will have the discretion to vote your shares on the matters in accordance with their best judgment and as they deem advisable.

How does the Board of Directors recommend that I vote?

Our Board of Directors recommends that you vote your shares **FOR** the election of each of the director nominees, **FOR** the authorization to amend our certificate of incorporation to effect the reverse stock split, and **FOR** the ratification of the appointment of Crowe Horwath LLP.

What shares can I vote at the meeting?

You may vote all of the shares you owned as of April 1, 2011, the record date, including shares held directly in your name as the *stockholder of record* and all shares held for you as the *beneficial owner* through a broker, trustee or other nominee such as a bank.

What is the difference between holding shares as a stockholder of record and as a beneficial owner? Some of our stockholders hold their shares through a broker or other nominee rather than directly in their own name. As summarized below, there are some distinctions between shares held of record and those owned beneficially.

Stockholders of Record. If your shares are registered directly in your name with our transfer agent, American Stock Transfer and Trust Company, you are considered, with respect to those shares, the stockholder of record, and these proxy materials are being sent directly to you by us. As the stockholder of record, you have the right to vote in person at the meeting or direct the proxyholder how to vote your shares on your behalf at the meeting by fully completing, signing and dating the enclosed proxy card and returning it to us in the enclosed postage-paid return envelope.

Beneficial Owner. If your shares are held in a brokerage account or by a trustee or another nominee, you are considered the beneficial owner of shares held in street name, and these proxy materials are being forwarded to you together with a voting instruction card by your broker, trustee or other nominee. As the beneficial owner, you have the right to direct your broker, trustee or nominee to vote your shares as you instruct in the voting instruction card. The broker, trustee or other nominee may either vote in person at the meeting or grant a proxy and direct the proxyholder to vote your shares at the meeting as you instruct in the voting instruction card. You may also vote in person at the meeting, but only after you obtain a “legal proxy” from the broker, trustee or nominee that holds your shares, giving you the right to vote your shares at the meeting. Your broker, trustee or nominee has enclosed or provided a voting instruction card for you to use in directing the broker, trustee or nominee how to vote your shares.

How can I vote my shares without attending the meeting? As discussed previously, whether you hold shares directly as the stockholder of record or as a beneficial owner, you may direct how your shares are voted without attending the meeting by completing and returning the enclosed proxy card or voting instruction card. If you provide specific instructions with regard to items of business to be voted on at the meeting, your shares will be voted as you instruct on those items. Proxies properly signed, dated and submitted to us that do not contain voting instructions and are not revoked prior to the meeting will be voted “FOR” the election of each of the director nominees, “FOR” the proposal to authorize an amendment to our certificate of incorporation to effect a reverse stock split, and “FOR” the ratification of the appointment of Crowe Horwath LLP.

How can I vote my shares in person at the meeting? Shares held in your name as the stockholder of record may be voted in person at the meeting. Shares held beneficially in street name may be voted in person only if you obtain a legal proxy from the broker, trustee or nominee that holds your shares giving you the right to vote the shares at the meeting. You should be prepared to present photo identification for admittance. Please also note that if you are not a stockholder of record but hold shares through a broker, trustee or nominee, you will need to provide proof of beneficial ownership as of the record date, such as your most recent brokerage account statement, a copy of the voting instruction card provided by your broker, trustee or nominee, or other similar evidence of ownership. The meeting will begin promptly at 10:00 a.m. (local time). Check-in will begin at 9:30 a.m. Even if you plan to attend the meeting, we recommend that you also complete, sign and date the enclosed proxy card or voting instruction card and return it promptly in the accompanying postage-paid return envelope in order to ensure that your vote will be counted if you later decide not to, or are unable to, attend the meeting.

Can I change my vote or revoke my proxy? You may change your vote or revoke your proxy at any time prior to the vote at the meeting. If you are the stockholder of record, you may change your vote by granting a new proxy bearing a later date, which automatically revokes the earlier proxy, by providing a written notice of revocation to our Corporate Secretary prior to your shares being voted, or by attending the meeting and voting in person. Attendance at the meeting will not cause your previously granted proxy to be revoked unless you specifically so request.

If you are a beneficial owner, you may change your vote by submitting a new voting instruction card to your broker, trustee or nominee, or, if you have obtained a legal proxy from your broker, trustee or nominee giving you the right to vote your shares, by attending the meeting and voting in person. Proxy cards, voting instructions, ballots and voting tabulations that identify individual stockholders are handled in a manner that protects your voting privacy. Your vote will not be disclosed, except as required by law to American Stock Transfer and Trust Company, our transfer agent, to allow for the tabulation of votes and certification of the vote, and to facilitate a successful proxy solicitation.

Is my vote confidential?

How are votes counted and what vote is required to approve each item? Each outstanding share of our common stock entitles the holder to one vote per share on each matter considered at the meeting. Stockholders are not entitled to cumulate their votes in the election of directors or with respect to any matter submitted to a vote of the stockholders.

Proposal No. 1 The election of directors requires a plurality of the votes cast for the election of directors and, accordingly, the director nominees receiving the highest number of affirmative "FOR" votes at the meeting will be elected to serve as directors. You may vote either "FOR" or "WITHHOLD" your vote for the director nominees. A properly executed proxy marked "WITHHOLD" with respect to the election of one or more directors will not be voted with respect to the director or directors indicated, although it will be counted for purposes of determining whether there is a quorum.

Proposal No. 2 Stockholder ratification and approval of the proposal to authorize an amendment to the Company's certificate of incorporation to effect a reverse stock split at a ratio not to exceed 1-for-10 requires the affirmative vote of a majority of our outstanding shares of common stock as of the record date. You may vote either "FOR" or "AGAINST" the proposed amendment, or you may "ABSTAIN." Abstentions and broker non-votes will be counted for purposes of determining whether there is a quorum. Abstentions will also be counted towards the number of votes cast and will thus have the same effect as "AGAINST" votes. Broker non-votes will not be counted towards the number of votes cast, but will have the effect of a vote AGAINST the proposal.

Proposal No. 3 Stockholder ratification of the appointment of Crowe Horwath LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2011 is not required by law or by our governing instruments. Our Board of Directors, however, is submitting the selection of Crowe Horwath LLP to our stockholders for ratification as a matter of good corporate governance and practice. The ratification of the appointment of Crowe Horwath LLP requires the affirmative vote of a majority of the votes cast. You may vote either "FOR" or "AGAINST" ratification of the appointment, or you may abstain. A properly executed proxy marked "ABSTAIN" with respect to the ratification of the appointment will not be voted with respect to such ratification, although it will be counted for purposes of determining both whether there is a quorum and the total number of votes cast with respect to the proposal and will thus have the same effect as a vote "AGAINST" the proposal. If the stockholders fail to ratify the appointment, the audit committee of our Board of Directors will reconsider whether or not to retain that firm.

What is a "broker non-vote"? Under the rules that govern brokers and banks who have record ownership of our shares of common stock that are held in street name for their clients such as you, who are the beneficial owners of the shares, brokers and banks have the discretion to vote such shares on routine matters. For non-routine matters, brokers and banks do not have such discretion, resulting in a broker non-vote.

How are "broker non-votes" counted? Broker non-votes will be counted as present for the purpose of determining the presence or absence of a quorum for the transaction of business, but they will *not* be counted in tabulating the voting result for any particular proposal.

How are abstentions counted? If you return a proxy card that indicates an abstention from voting on one or more proposals, the shares represented by your proxy will be counted as present for the purpose of determining both the presence of a quorum and the total number of votes cast with respect to a proposal (other than the election of directors), but they will not be counted in tabulating the voting results for any particular proposal. As a result, an abstention will have the same effect as a vote against a proposal (other than the election of directors).

What happens if the meeting is adjourned? If our annual meeting is adjourned to another time and place, no additional notice will be given of the adjourned meeting if the time and place of the adjourned meeting is announced at the annual meeting, unless the adjournment is for more than 30 days, in which case a notice of the adjourned meeting will be given to each stockholder of record entitled to vote at the adjourned meeting. At the adjourned meeting, we may transact any items of business that might have been transacted at the annual meeting.

Who will serve as inspector of elections? A representative of American Stock Transfer and Trust Company, our transfer agent, will tabulate the votes and act as inspector of elections at the meeting.

What should I do in the event that I receive more than one set of proxy materials? You may receive more than one set of these proxy solicitation materials, including multiple copies of this proxy statement and multiple proxy cards or voting instruction cards. For example, if you hold your shares in more than one brokerage account, you may receive a separate voting instruction card for each brokerage account in which you hold shares. In addition, if you are a stockholder of record and your shares are registered in more than one name, you may receive more than one proxy card. Please complete, sign, date and return each proxy card and voting instruction card that you receive to ensure that all your shares are voted.

Who is soliciting my vote and who will bear the costs of this solicitation? The enclosed proxy is being solicited on behalf of our Board of Directors. We will bear the entire cost of solicitation of proxies, including preparation, assembly, printing and mailing of this proxy statement. In addition to solicitation by mail, our directors, officers and employees may also solicit proxies in person, by telephone, by electronic mail or by other means of communication. We will not pay any additional compensation to our directors, officers or other employees for soliciting proxies. Copies of the proxy materials will be furnished to brokerage firms, banks, trustees, custodians and other nominees holding beneficially owned shares of our common stock, who will forward the proxy materials to the beneficial owners. We may, at our discretion, reimburse brokerage firms, banks, trustees, custodians and other agents for the costs of forwarding the proxy materials. Our costs for forwarding proxy materials will not be significant.

Where can I find the voting results of the meeting? We intend to announce preliminary voting results at the meeting, and publish the final voting results in a Current Report on Form 8-K that we expect to file within four business days after the meeting.

PROPOSAL NO. 1:

ELECTION OF DIRECTORS

Nominees

Our Board of Directors currently consists of eight members. Each of our eight current directors has been nominated for election at the Annual Meeting. Unless otherwise instructed, the proxy holders will vote the proxies received by them at the Annual Meeting for the eight current directors of the Company named as nominees below. The proxies cannot be voted for a greater number of persons than the number of nominees nominated. If any nominee is unable or declines to serve as a director at the time of the Annual Meeting, the proxies will be voted for any nominee who shall be designated by the present Board of Directors to fill the vacancy. It is not expected that any nominee will be unable to or will decline to serve as a director. If stockholders nominate additional persons for election as directors, the proxy holder will vote all proxies received by him to assure the election of as many of the Board of Directors' nominees as possible, with the proxy holder making any required selection of specific nominees to be voted for. The term of office of each person elected as a director will continue until the next Annual Meeting of Stockholders wherein directors are elected, or until such person's successor has been elected.

Vote Required

The eight nominees receiving the highest number of affirmative votes of the votes cast shall be elected as directors of the Company for the ensuing year.

Recommendation

The Board of Directors unanimously recommends that the stockholders vote "FOR" each of the nominees named in this Proposal No. 1. Unless you indicate otherwise, your proxy will be voted "FOR" each of Drs. Belldegrun, Litvack and Mieyal and Messrs. Brewer, Granadillo, Kash, Kazam, and Schafer.

Director Nominees

Set forth below is information regarding each nominee for election to our Board of Directors, including his age as of the date of the Annual Meeting, his positions and offices held with the Company and certain biographical information:

<u>Name of Nominee</u>	<u>Age</u>	<u>Position Held</u>	<u>Director Since</u>
Arie S. Belldegrun, M.D.	61	Director	September 2009
Richard B. Brewer	60	Chairman of the Board	July 2010
Pedro Granadillo	64	Director	October 2007
Peter M. Kash	49	Director	September 2007
Joshua A. Kazam	34	Director & Chief Executive Officer	September 2007
Frank Litvack, M.D.	55	Director	September 2009
Paul A. Mieyal, Ph.D.	41	Director	September 2007
Gregory W. Schafer	47	Director	January 2008

Set forth below are descriptions of the backgrounds of each member of the Board of Directors, his principal occupations for at least the past five years and his current public-company directorships.

Arie S. Belldegrun, M.D., FACS has been a director of Nile since September 2009. Dr. Belldegrun is Director of the Institute of Urologic Oncology at UCLA, Professor of Urology and Chief of the Division of Urologic Oncology. He holds the Roy and Carol Doumani Chair in Urologic Oncology at the David Geffen School of Medicine at the University of California, Los Angeles (UCLA). In 1997, Dr. Belldegrun founded Agensys, Inc., an early-stage privately-held biotechnology company based in Los Angeles, California, that is focused on the development of fully human monoclonal antibodies to treat solid tumor cancers in a variety of cancer targets. Dr. Belldegrun served as founding Chairman of Agensys from 1997 to 2002 and then as a director until December 2007, when the company was acquired by Astellas Pharma. Dr. Belldegrun served as Vice Chairman of the Board and Chairman of the Scientific Advisory Board of Cougar Biotechnology, Inc., a

Los Angeles-based biopharmaceutical company, from December 2003 until its acquisition by Johnson & Johnson in July 2009. From February 2004 to December 2009, Dr. Beldegrun also served on the Board of Directors of Hana Biosciences, Inc., a publicly-held biopharmaceutical company. He is also Chairman and Partner of Two River Group Holdings LLC, a New York based venture capital firm. Dr. Beldegrun's prior experience also includes serving as principal investigator of more than 50 clinical trials of anti-cancer drug candidates and therapies. Dr. Beldegrun completed his M.D. at the Hebrew University Hadassah Medical School in Jerusalem, his post graduate fellowship at the Weizmann Institute of Science and his residency in Urological Oncology at Harvard Medical School. Prior to UCLA, Dr. Beldegrun was at the National Cancer Institute/NIH as a research fellow in surgical oncology under Steven A. Rosenberg, M.D., Ph.D. He is certified by the American Board of Urology and is a Fellow of the American College of Surgeons and the American Association of Genitourinary Surgeons.

Richard B. Brewer was appointed to serve as our Executive Chairman in July 2010. Mr. Brewer also currently serves as Chairman of the Boards of Dendreon Corporation, a publicly-held biotechnology company based in Seattle, and Arca Biopharma, Inc., a publicly-held biotechnology company developing genetically targeted therapies for patients with heart failure and other cardiovascular diseases. Mr. Brewer was President and Chief Executive Officer of Arca Biopharma from November 2006 to December 2009. Prior to joining Arca Biopharma, from January 2003, Mr. Brewer was Managing Partner of Crest Asset Management, where he provided guidance to and invested in biotechnology opportunities. Before that, Mr. Brewer was President and Chief Executive Officer of Scios, Inc., a biopharmaceutical company that was acquired by Johnson & Johnson in 2004. Additionally, Mr. Brewer is a member of the Board of Directors of SRI (Stanford Research Institute), as well as a Member of the Board of Advisors for Northwestern University, Kellogg School of Business, Biotechnology Section. Mr. Brewer possesses deep knowledge of the natriuretic peptide space having served as CEO and President of Scios Inc., where he led the company in achieving FDA approval for Natrecor® (nesiritide). Previous to Scios, Mr. Brewer served as Chief Operating Officer of Heartport, a cardiovascular device company developing minimally invasive approaches to major heart surgery. Before Heartport, he spent over a decade at Genentech, ultimately serving as Senior Vice President of U.S. Marketing and Senior Vice President of Genentech Europe and Canada. Mr. Brewer holds an M.B.A. from Northwestern University and a B.S. from Virginia Polytechnic Institute & State University.

Pedro Granadillo has served as a director of the Company since October 2007, and also serves as Chairman of the Compensation Committee and as a member of the Nominating & Corporate Governance Committee and Audit Committee. Mr. Granadillo served as Senior Vice President for Eli Lilly and Company, or Lilly, until 2004 when he retired after 34 years of service. He was a member of Lilly's Executive Committee. As Lilly's top human resources, manufacturing and quality executive, he was responsible for policies affecting a global workforce of more than 45,000 employees, as well as a broad network of manufacturing facilities for its extensive line of products. He also oversaw more than 20 sites and 13,000 employees involved in the manufacturing of Lilly's conventional "small-molecule" pharmaceuticals and "large-molecule" biotech therapies. Mr. Granadillo currently serves as a director of Dendreon Corp., Noven Pharmaceuticals, Inc., First Indiana Bank and Haemonetics Corporation, all of which are publicly-held biopharmaceutical companies. Mr. Granadillo received his B.S. in Industrial Engineering from Purdue University.

Peter M. Kash has served as a director of the Company since its inception in August 2005, and also currently serves as the Chairman of the Nominating & Corporate Governance Committee and as a member of the Compensation Committee. Mr. Kash has also served as a director of Arno Therapeutics, Inc., a New Jersey-based biopharmaceutical company focused on the treatment of cancer patients, since its inception in August 2005. From December 2004 to December 2006, Mr. Kash served as a director of Javelin Pharmaceuticals, Inc., a publicly-held biopharmaceutical company focused on pain management. In September 2004, Mr. Kash co-founded Two River Group Holdings, LLC, a venture capital firm that specializes in the creation of new companies to acquire rights to commercially develop early stage biotechnology products. He serves as President of Two River Group Management, LLC, the managing member of Two River Group Holdings, LLC. Mr. Kash is also the President and Chairman of Riverbank Capital Securities, Inc., a broker-dealer registered with the Financial Industry Regulatory Authority, or FINRA (formerly NASD). From 1992 until 2004, Mr. Kash was a Senior Managing Director of Paramount BioCapital,

Inc., a FINRA member broker-dealer, specializing in conducting private financings for public and private development stage biotechnology companies as well as Paramount BioCapital Investments, LLC, a venture capital company. Mr. Kash also served as Director of Paramount Capital Asset Management, Inc., the general partner of several biotechnology-related hedge funds and as member of the General Partner of the Orion Biomedical Fund, LP, a private equity fund. Mr. Kash received his B.S. in Management Science from SUNY Binghamton and his M.B.A. in Banking and International Finance from Pace University. Mr. Kash is currently completing his doctorate in education at Yeshiva University.

Joshua A. Kazam has served as our non-employee President and Chief Executive Officer since June 2009, and has served as a director of the Company since inception in August 2005. In September 2004, Mr. Kazam co-founded Two River Group Holdings, LLC, and currently serves as Vice President and Director of Two River's managing member, Two River Group Management, LLC. Mr. Kazam also serves as an Officer and Director of Riverbank Capital Securities, Inc. From 1999 to 2004, Mr. Kazam was a Managing Director of Paramount BioCapital, Inc. where he was responsible for ongoing operations of venture investments, and as the Director of Investment for the Orion Biomedical Fund, LP. Mr. Kazam currently serves as a director of several privately-held biotechnology and biopharmaceutical companies, including Arno Therapeutics, Inc. (since its August 2005 inception), and Velcera, Inc. (since its inception in May 2004). Mr. Kazam is a graduate of the Wharton School of the University of Pennsylvania.

Frank Litvack, M.D. has been a director of the Company since September 2009. Dr. Litvack served as Chairman (from 2002) and CEO (from 2003) of Conor MedSystems, Inc., a publicly-held company focused on the development of vascular drug delivery systems, until its acquisition by Johnson & Johnson in February 2007. From 2000 to 2005, Dr. Litvack was Chairman of Savacor, Inc., a medical device company that was acquired by St. Jude Medical, Inc. in late 2005. Since 2000, Dr. Litvack has been a Professor of Medicine at University of California, Los Angeles. From 1989 until 1997, Dr. Litvack was a founder and director of Progressive Angioplasty Systems Inc., which was acquired by United States Surgical Corporation. Since 1996, Dr. Litvack has been a member of Calmedica, LLC. Since 1985, Dr. Litvack has been an attending cardiologist at Cedars-Sinai Medical Center. Dr. Litvack co-directed the Cardiovascular Intervention Center at Cedars-Sinai Medical Center from 1986 to 2000. Dr. Litvack currently serves as a director of several privately-held corporations. Dr. Litvack holds an M.D. from McGill University.

Paul Mieyal, Ph.D., CFA has served as a director of the Company since September 2007, and also serves as a member of the Audit Committee and the Compensation Committee. Since 2006, Dr. Mieyal has served as a Vice President of Wexford Capital LP, or Wexford, an SEC registered investment advisor located in Greenwich, CT. Prior to that, from 2000 to 2006, he was Vice President in charge of healthcare investments for Wechsler & Co., Inc., a private investment firm and registered broker-dealer. Dr. Mieyal serves as a director of Nephros, Inc. a publicly held company. Dr. Mieyal received his Ph.D. in Pharmacology from New York Medical College, a B.A. in chemistry and psychology from Case Western Reserve University, and is a Chartered Financial Analyst.

Gregory W. Schafer has served as a director of the Company since January 2008, and also serves as Chairman of the Audit Committee. Mr. Schafer has served as Chief Financial Officer Jennerex, a biotherapeutics company focused in oncology, since June 2010. From April 2009 to June 2010, Mr. Schafer served as an independent consultant to private and public biotechnology companies. From April 2006 to January 2009, Mr. Schafer served as the Vice President and Chief Financial Officer of Onyx Pharmaceuticals, Inc. Prior to Onyx, from 2004 to 2006, Mr. Schafer served as a consultant to several private and public biotechnology companies. From 1997 to 2004, Mr. Schafer held various executive positions at Cerus Corporation, a public biotechnology company, including Vice President and Chief Financial Officer. Prior to joining Cerus, Mr. Schafer worked as a management consultant for Deloitte & Touche LLP. Mr. Schafer holds an M.B.A from the Anderson Graduate School of Management at UCLA and a BSE in Mechanical Engineering from the University of Pennsylvania.

Experience, Qualifications, Attributes and Skills of Directors

We look to our directors to lead us through our continued growth as an early-stage public biopharmaceutical company. Our directors bring their leadership experience from a variety of life science companies and professional backgrounds which we require to continue to grow and bring value to our stockholders. With over 35 years of biotech and pharmaceutical industry experience, Mr. Brewer, our Executive Chairman, brings a wealth of operational, financial, and business development expertise to us, including a deep knowledge of the heart failure space in particular. Dr. Litvack's clinical expertise in cardiology offers a unique perspective into the development and practical application of our product candidates. Mr. Brewer, Mr. Kash, Mr. Kazam and Dr. Mieyal have venture capital or investment banking backgrounds and offer expertise in financing and growing small biopharmaceutical companies. Each of Mr. Brewer, Dr. Belldegrun, Mr. Kash, Mr. Kazam, Dr. Litvack, Dr. Mieyal and Mr. Schafer have significant experience with early stage private and public companies and bring depth of knowledge in building stockholder value, growing a company from inception and navigating significant corporate transactions and the public company process. Mr. Granadillo has extensive experience in the pharmaceutical industry, allowing him to contribute his significant operational experience. Mr. Kazam's current position as our CEO also allows him to provide a unique insight into our development and growth. As a result of his experience in the role of chief financial officer of public companies, Mr. Schafer also bring extensive finance, accounting and risk management knowledge to us.

COMPENSATION OF DIRECTORS

On July 8, 2010, the Compensation Committee of our Board of Directors amended the compensation plan applicable to our non-employee directors. As amended, our non-employee directors receive an annual stock option grant pursuant to our 2005 Stock Option Plan relating to 80,000 shares of common stock, and the chairs of the Board's Audit and Compensation Committees each receive an additional annual stock option grant relating to 20,000 shares. All of such stock options are awarded upon each director's re-election by our stockholders and vest in their entirety on the first anniversary of the grant date. Newly-appointed non-employee directors are entitled to receive a stock option to purchase 130,000 shares of our common stock, which option vests in three equal annual installments commencing on the first anniversary of the grant date.

Prior to the adoption of this plan, our non-employee directors did not receive any cash fees for their service, but were periodically awarded stock options. The following table sets forth the compensation received by our directors for their service in 2010. Mr. Brewer is not listed below since he is an employee of Nile Therapeutics and receives no additional compensation for serving on our Board of Directors or its committees. Mr. Kazam, who is also currently serving as our Chief Executive Officer, does not receive any compensation for his service as our Chief Executive Officer and his compensation reflected below represents compensation received solely for his services as a director in accordance with the standard compensation applicable to our other non-employee directors.

Name	Fees Earned or Paid in Cash	Option Awards ⁽¹⁾	Total
Arie S. Beldegrun, M.D.	\$ —	\$ 16,876	\$ 16,876
Pedro Granadillo	—	21,095	21,095
Peter M. Kash	—	16,876	16,876
Joshua A. Kazam	—	16,876	16,876
Frank Litvack, M.D.	—	16,876	16,876
Paul A. Mieyal, Ph.D.	—	16,876	16,876
Gregory W. Schafer	—	21,095	21,095

(1) Amounts reflect the grant date fair value of awards granted under the Company's Amended and Restated Stock Option Plan, computed pursuant to Financial Accounting Standards Board's Accounting Standards Codification 718 "Compensation — Stock Compensation". Assumptions used in the calculation of these amounts are included in Note 10 of the Notes to Audited Financial Statements included in our Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 14, 2011.

CORPORATE GOVERNANCE

Process for Identifying and Evaluating Director Nominees

The Board of Directors is responsible for nominating directors for election at annual meetings of stockholders or to fill vacancies on the Board of Directors. The Board of Directors has delegated the selection and nomination process to the Nominating & Corporate Governance Committee, with the expectation that other members of the Board of Directors, and of management, will be requested to take part in the process as appropriate.

Procedures for Re-Nomination of a Current Director

The Nominating & Corporate Governance Committee reviews, at least annually, the performance of each current director and considers the results of such evaluation when determining whether or not to re-nominate such director for an additional term. In addition to reviewing the qualifications outlined in the “Director Qualifications” section below, in determining whether to recommend a director for re-election, the Nominating & Corporate Governance Committee also considers the director’s past attendance at meetings and participation in and contributions to the activities of the Board of Directors. As part of this analysis, the Nominating & Corporate Governance Committee will also take into account the nature of and time involved in a director’s service on other boards or committees. Following this review, the Nominating & Corporate Governance Committee nominated and recommended that all current members of the Board of Directors be elected to the Board of Directors.

New Candidates

Generally, the Nominating & Corporate Governance Committee identifies candidates for director nominees in consultation with management, through the use of search firms or other advisers, through recommendations submitted by stockholders or through such other methods as the Nominating & Corporate Governance Committee deems to be helpful to identify candidates. Once candidates have been identified, the Nominating & Corporate Governance Committee confirms that the candidates meet all of the minimum qualifications for director nominees established by the Nominating & Corporate Governance Committee. The Nominating & Corporate Governance Committee may gather information about the candidates through interviews, detailed questionnaires regarding experience, background and independence, comprehensive background checks from a qualified company of its choosing, or any other means that the Nominating & Corporate Governance Committee deems to be helpful in the evaluation process.

An initial reviewing member of the Nominating & Corporate Governance Committee will make a preliminary determination regarding whether a potential candidate is qualified to fill a vacancy or satisfy a particular need. If so, the full Nominating & Corporate Governance Committee will make an investigation and interview the potential candidate, as necessary, to make an informed final determination. The Nominating & Corporate Governance Committee will meet as a group to discuss and evaluate the qualities and skills of each candidate, both on an individual basis and taking into account the overall composition and needs of the Board of Directors. The policy of the Nominating & Corporate Governance Committee is that there be no difference in the manner by which it evaluates director nominees, whether nominated by management, by a member of the Board of Directors or by a stockholder. Based on the results of the evaluation process, the Nominating & Corporate Governance Committee recommends candidates for the Board of Director’s approval as director nominees for election to the Board of Directors. The Nominating & Corporate Governance Committee also recommends candidates for the Board of Director’s appointment to the Committees of the Board of Directors.

Director Qualifications

The Nominating & Corporate Governance Committee is responsible for reviewing with the Board of Directors from time to time the appropriate qualities, skills and characteristics desired of members of the Board of Directors in the context of the needs of the business and current make-up of the Board of Directors. In evaluating the suitability of individual candidates (both new candidates and current members of the Board of Directors), the Nominating & Corporate Governance Committee, in nominating candidates for election, or the Board of Directors, in approving (and, in the case of vacancies, appointing) such candidates, take into account many factors, including:

- personal and professional integrity, ethics and values;
- experience in corporate management, such as serving as an officer or former officer of a publicly-held company, and a general understanding of marketing, finance and other elements relevant to the success of a publicly-traded company in today's business environment;
- experience in the Company's industry and with relevant social policy concerns;
- experience as a board member of another publicly-held company;
- academic expertise in an area of the Company's operations; and
- practical and mature business judgment, including ability to make independent analytical inquiries.

Each candidate nominee must possess fundamental qualities of intelligence, honesty, good judgment, high ethics and standards of integrity, fairness and responsibility. A candidate must also have substantial or significant business or professional experience or an understanding of life sciences, finance, marketing, financial reporting, international business or other disciplines relevant to our business.

The Nominating & Corporate Governance Committee and the Board of Directors evaluate each individual in the context of the Board of Directors as a whole, with the objective of assembling a group that can best perpetuate the success of our business and represent stockholder interests through the exercise of sound judgment using its diversity of experience in these various areas. The Company does not have a diversity policy; however, as summarized above, the Nominating & Corporate Governance Committee seeks to nominate candidates with a diverse range of knowledge, experience, skills, expertise, and other qualities that will contribute to the overall effectiveness of the Board of Directors.

Procedures for Recommendation of Director Nominees by Stockholders

The Nominating & Corporate Governance Committee will consider director candidates who are recommended by our stockholders. Stockholders, in submitting recommendations to the Nominating & Corporate Governance Committee for director candidates, must comply with our Bylaws as well as the procedures established by the Nominating & Corporate Governance Committee, which provide that the person or group submitting the recommendation must provide the Nominating & Corporate Governance Committee with a notice that sets forth:

- all information relating to each nominee that is required to be disclosed in solicitations of proxies for election of directors in an election contest, or is otherwise required, in each case, pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended, or the Exchange Act;
- information regarding the relationship between the recommending stockholder or recommending stockholder group and the nominee;
- whether the nominee or any immediate family member of the nominee has, during the year of the nomination or the preceding three fiscal years, accepted directly or indirectly certain consulting, advisory, or other compensatory fees from the recommending stockholder or any member of the group of recommending stockholders or any affiliate of any such holder or member;
- such information as may be reasonably required to determine whether the nominee is qualified to serve on the Audit Committee of the Board of Directors;

- such information as may be reasonably required to determine whether the nominee complies with the standards of independence established by the Nasdaq Stock Market, if applicable;
- each nominee's written consent to being named in a proxy statement as a nominee and to serving as a director if elected;
- the name and address of the recommending stockholder or recommending stockholder group giving the notice (and the beneficial owner, if any, on whose behalf the nomination is made);
- the class and number of shares of our capital stock that are owned beneficially and of record by such recommending stockholder or recommending stockholder group (and such beneficial owner, if applicable);
- a representation that the recommending stockholder or members of the recommending stockholder group are holders of record of our stock entitled to vote at such meeting and intend to appear in person or by proxy at the meeting to propose such nomination; and
- a representation whether the recommending stockholder or recommending stockholder group (or such beneficial owner, if any), intends to solicit proxies from stockholders in support of such nomination.

We may request from the recommending stockholder or recommending stockholder group such other information as may reasonably be required to determine whether each person recommended by a stockholder or stockholder group as a nominee meets the minimum director qualifications established by the Board of Directors and to enable us to make appropriate disclosures to stockholders entitled to vote in the next election of directors. Nominees are required to make themselves reasonably available to be interviewed by the Nominating & Corporate Governance Committee and members of management, as determined appropriate by the Nominating & Corporate Governance Committee. We will not accept a stockholder recommendation for a nominee if the recommended candidate's candidacy or, if elected, Board of Directors membership, would violate applicable state law, federal law or the rules of any exchange or market on which our securities are listed or traded.

Notices should be directed to the attention of the Corporate Secretary, Nile Therapeutics, Inc., 4 West 4th Ave., Suite 400, San Mateo, California 94402.

Code of Business Conduct and Ethics

The Board of Directors has adopted a Code of Business Conduct and Ethics, or the Code, that applies to all directors, officers, employees, consultants, contractors and agents, wherever they are located and whether they work for us on a full- or part-time basis. The Code was designed to help such directors, employees and other agents to resolve ethical issues encountered in the business environment. The Code covers topics such as conflicts of interest, compliance with laws, confidentiality of Company information, encouraging the reporting of any illegal or unethical behavior, fair dealing and use of Company assets.

You can access the Code, as adopted by the Board of Directors, at the Corporate Governance page of our website at www.nilethera.com. Please note that information contained on our website is not incorporated by reference in, or considered to be a part of, this Proxy Statement. We may post amendments to or waivers of the provisions of the Code, if any, made with respect to any directors and employees on that website.

Communications with the Board of Directors

We provide a process for stockholders to send communications to the Board of Directors, the non-management members as a group, or any of the directors individually. Stockholders may contact any of the directors, including the non-management directors, by writing to them c/o the Corporate Secretary, Nile Therapeutics, Inc., 4 West 4th Ave., Suite 400, San Mateo, California 94402. All communications will be compiled by our Corporate Secretary, and submitted to the Board of Directors or the individual directors, as applicable, on a periodic basis.

Communications from our officers or directors and proposals submitted by stockholders to be included in our definitive proxy statement, pursuant to Rule 14a-8 of the Exchange Act (and related communications) will not be viewed as a stockholder communication. Communications from our employees or agents will be viewed as stockholder communications only if such communications are made solely in such employee's or agent's capacity as a stockholder.

INFORMATION CONCERNING THE BOARD OF DIRECTORS AND ITS COMMITTEES

Independence of the Board of Directors

The listing standards of the Nasdaq Stock Market require that a majority of the members of a listed company's board of directors must qualify as "independent," as determined by the board. Our Board of Directors consults with our legal counsel to ensure that the Board's determinations are consistent with all relevant securities and other laws and regulations regarding the definition of "independent," including those set forth in the applicable Nasdaq listing standards. Consistent with these considerations, and after review of all relevant transactions or relationships between each director, or any of his family members, and Nile, its senior management and its independent registered public accounting firm, the Board has determined that Messrs. Granadillo, Kash and Schafer and Drs. Litvack and Mieyal are independent directors within the meaning of the applicable Nasdaq listing standards.

Board Leadership Structure and Risk Management

The Company currently has separate individuals serving as Chairman of the Board and as Chief Executive Officer. The CEO is responsible for setting the strategic direction of the Company and managing the day-to-day leadership and performance of the Company, while the Chairman provides guidance to the CEO, sets the agenda for meetings of the Board of Directors and presides over meetings of the full Board. The Company believes this structure strengthens the role of the Board in fulfilling its oversight responsibility and fiduciary duties to the Company's stockholders while recognizing the day-to-day management direction of the Company by its CEO, Mr. Kazam.

The Board of Directors believes that oversight of the Company's risk management efforts is a key responsibility that is shared by the entire Board. The Board regularly reviews risk management information regarding the Company's liquidity and operations. Board members regularly receive financial statements which are then discussed at the quarterly meetings of the Board. In addition, Mr. Kazam frequently has informal discussions with board members regarding risk management.

Board Committees and Meetings

The Board held five meetings (either in person or by telephone conference) in 2010 and took action by written consent twice. All directors attended at least 75% of the aggregate meetings of the Board and of the committees on which they served. A director who is unable to attend a meeting is expected to notify the Chairman of the Board of Directors or the Chairman of the appropriate Committee in advance of such meeting, and, whenever possible, participate in such meeting via teleconference. In addition, directors are expected to make reasonable efforts to attend annual meetings of stockholders. One of our seven directors attended the 2010 Annual Meeting of Stockholders.

The Board of Directors has established three standing committees: the Audit Committee, the Compensation Committee and the Nominating & Corporate Governance Committee. Each Committee of the Board of Directors has a charter that has been assessed and approved by the Board of Directors. Each Committee reviews the appropriateness of its charter at least annually. The charters of these Committees are available on our website at www.nilethera.com. The following table provides membership for each of the Board committees:

<u>Name of Committee</u>	<u>Membership</u>
Audit	Mr. Granadillo, Dr. Mieyal and Mr. Schafer (Chair)
Compensation	Mr. Granadillo (Chair), Mr. Kash and Dr. Mieyal
Nominating & Corporate Governance	Mr. Granadillo and Mr. Kash (Chair)

Audit Committee

The Audit Committee is responsible for, among other duties, reviewing the Company's internal audit and accounting processes, reviewing the results and scope of the audit and other services provided by the Company's independent registered public accounting firm and reviewing and discussing audited financial statements, management's assessment of internal control over financial reporting under Section 404 of the Sarbanes Oxley Act of 2002 and other accounting matters with the management of the Company. The Audit Committee is established in accordance with section 3(a)(58)(A) of the Exchange Act. The responsibilities of the Audit Committee include:

- meeting with our management periodically to consider management's analysis of the adequacy of our internal controls and the objectivity of our financial reporting;
- appointing the independent registered public accounting firm, determining the compensation of the independent registered public accounting firm and pre-approving the engagement of the independent registered public accounting firm for audit and non-audit services;
- overseeing the independent registered public accounting firm, including reviewing independence and quality control procedures and experience and qualifications of audit personnel that are providing audit services;
- meeting with the independent registered public accounting firm and reviewing the scope and significant findings of the audits performed by them, and meeting with management and internal financial personnel regarding these matters;
- reviewing our financing plans, management's analysis of the adequacy and sufficiency of financial and accounting controls, practices and procedures, the activities and recommendations of the auditors and our reporting policies and practices, and reporting recommendations to the full Board of Directors for approval;
- establishing procedures for the receipt, retention and treatment of complaints regarding internal accounting controls or auditing matters and the confidential, anonymous submissions by employees of concerns regarding questionable accounting or auditing matters; and
- preparing the reports required by the SEC rules to be included in our annual proxy statement.

The Audit Committee held four meetings (either in person or by telephone conference) in 2010. The charter of the Audit Committee is available on the internet at http://www.nilethera.com/inv_corp_gov.html.

Our Board of Directors has reviewed the definition of independence for Audit Committee members and has determined that each member of our Audit Committee is independent (as independence is currently defined in the applicable Nasdaq listing standards). The Board has further determined that Mr. Schafer qualifies as an "audit committee financial expert," as defined by applicable rules of the Securities and Exchange Commission.

Compensation Committee

The purpose of the Compensation Committee is to review and make recommendations to the Board of Directors regarding all forms of compensation to be provided to the executive officers and employees of the Company. The Compensation Committee's policy is to ensure that senior management will be accountable to the Board of Directors through the effective application of compensation policies applicable to the Company's executive officers, including performance goals and stock and incentive compensation. In addition, the Compensation Committee strives to attract and retain key management talent, to support the achievement of the Company's business strategies through the establishment of appropriate compensation components, to ensure the integrity of the Company's compensation and benefit practices, and to safeguard the interests of the Company's stockholders. The Compensation Committee is responsible for, among other duties, reviewing and approving the compensation arrangements for the Company's senior management and any compensation plans in which the executive officers and directors are eligible to participate, and acting as administrator of the Company's stock option plans, employee stock purchase plan and such other equity participation plans as may be adopted by the Board of Directors. The Compensation Committee's role includes coordination and

cooperation with other Board committees, management, external auditors, counsel and other committee advisors. The responsibilities of the Compensation Committee include:

- designing and approving (in consultation with management and the Board of Directors) overall employee compensation policies and recommending to the Board of Directors major compensation programs; and
- reviewing and approving the compensation of our Chief Executive Officer and other corporate officers, including salary, bonus and equity awards.

All current members of the Compensation Committee are independent (as independence is currently defined in the applicable Nasdaq listing standards). The Compensation Committee held four meetings (either in person or by telephone conference) in 2010. The charter of the Compensation Committee is available on the internet at http://www.nilethera.com/inv_corp_gov.html.

Nominating & Corporate Governance Committee

The Nominating & Corporate Governance Committee is responsible for, among other duties, identifying appropriate candidates for nomination to membership on the Board of Directors. The Nominating & Corporate Governance Committee is also responsible for reviewing director nominees recommended by stockholders of the Company. The procedures for making such a recommendation are described in the Company's bylaws and above in the section entitled "Corporate Governance — Procedures for Recommendation of Director Nominees by Stockholders." The responsibilities of the Nominating & Corporate Governance Committee include:

- selecting or recommending qualified candidates for election to the Board of Directors and appointment to the Committees of the Board of Directors;
- evaluating and reviewing the performance of existing directors;
- making recommendations to the Board of Directors regarding governance matters, including our Certificate of Incorporation, Bylaws and Charters of the Committees of the Board of Directors; and
- developing and recommending to the Board of Directors applicable governance and nominating guidelines.

All current members of the Nominating & Corporate Governance Committee are independent (as independence is currently defined in the applicable Nasdaq listing standards). The Nominating & Corporate Governance Committee did not meet in 2010. The charter of the Nominating & Corporate Governance Committee is available on the internet at http://www.nilethera.com/inv_corp_gov.html.

Compensation Committee Interlocks and Insider Participation

No member of the Compensation Committee has at any time served as an officer or been otherwise employed by us. None of our executive officers currently serves, or in the past year has served, as a member of the Board of Directors or Compensation Committee of any other entity that has executive officers who have served on our Board of Directors or Compensation Committee.

EXECUTIVE OFFICERS OF THE COMPANY

The executive officers of the Company and their ages as of the date of the Annual Meeting are as follows:

<u>Name</u>	<u>Age</u>	<u>Position</u>	<u>Executive Officer Since</u>
Richard B. Brewer	60	Executive Chairman	July 2010
Joshua A. Kazam	34	President and Chief Executive Officer	June 2009
Daron Evans	37	Chief Financial Officer	February 2007
Hsiao Lieu	40	Vice President, Clinical Research	March 2008

Richard B. Brewer has served as our Executive Chairman since July 2010. See his biography set forth above in the section entitled "Director Nominees."

Joshua A. Kazam has served as our non-employee President and Chief Executive Officer since June 2009. See his biography set forth above in the section entitled "Director Nominees."

Daron Evans has been our Chief Financial Officer since September 2007 and was our Chief Operating Officer from February 2007 to September 2007. Mr. Evans has over fifteen years of professional experience in drug development financial analysis and fiscal control. From 2006 to 2007, Mr. Evans served as Director of Business Assessment at Vistakon, a Johnson & Johnson company, where he led efforts to improve R&D efficiency and speed to market. From 2004 to 2006, he was a Director of Portfolio & Business Analytics for Scios R&D, a Johnson & Johnson company, where he was responsible for financial controls and reporting for portfolio of six clinical stage programs and five preclinical stage programs. While at Scios, Mr. Evans also served as Project Manager for the European Registration Trial of Nesiritide. Mr. Evans also has experience as co-founder of a biotechnology diagnostic company, and has worked as a Management Consultant in the pharmaceutical industry with Booz Allen Hamilton. Mr. Evans received his M.B.A. from The Fuqua School of Business at Duke University, his M.S. in Biomedical Engineering from Southwestern Medical School and University of Texas at Arlington and his B.S. in Chemical Engineering from Rice University.

Hsiao D. Lieu, M.D., F.A.C.C. has been the Company's Vice President of Clinical Research since March 2008. Dr. Lieu has over 13 years of experience in the biopharmaceutical/biotech industry including academic medicine (cardiology), molecular cardiology research, translational and clinical drug development including execution of large multinational Phase III clinical trials and responsibility for interactions with regulatory authorities and key opinion leaders in the U.S., Canada, and Europe. From 2006 to 2008, Dr. Lieu was Director of Clinical Development for Portola Pharmaceuticals, Inc. From 2003 to 2006 Dr. Lieu worked at CV Therapeutics, Inc., where he served as Director, Clinical Research and Development. Dr. Lieu also worked as a researcher at the J. David Gladstone Institute of Cardiovascular Disease at the University of California at San Francisco ("UCSF") from 2001 to 2003 where he conducted molecular cardiology research. Dr. Lieu currently serves as an Adjunct Assistant Clinical Professor of Medicine, Cardiology Division at UCSF. Dr. Lieu completed his clinical cardiology fellowship at UCSF and his residency in internal medicine at Columbia University. He received his M.D. from the Albert Einstein College of Medicine with distinction in molecular biology research, and his B.A. from New York University. Dr. Lieu is a Fellow of the American College of Cardiology.

COMPENSATION OF EXECUTIVE OFFICERS

Summary Compensation Table

The following summary compensation table reflects cash and non-cash compensation for the 2009 and 2010 fiscal years awarded to or earned by (i) each individual serving as our principal executive officer during the fiscal year ended December 31, 2010; and (ii) each individual that served as an executive officer at the end of the fiscal year ended December 31, 2010 and who received in excess of \$100,000 in total compensation during such fiscal year. We refer to these individuals as our “named executive officers.”

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Option Awards (\$) ⁽¹⁾	All Other Compensation (\$)	Total (\$)
Richard B. Brewer ⁽²⁾ <i>Executive Chairman</i>	2010	\$ 107,384	\$ —	\$ 271,899	\$ —	\$ 379,283
	2009	—	—	—	—	—
Joshua A. Kazam ⁽³⁾ <i>President & CEO</i>	2010	\$ —	\$ —	\$ 16,876	\$ —	\$ 16,876
	2009	—	—	80,963	—	80,963
Daron Evans <i>Chief Financial Officer</i>	2010	\$ 226,522	\$ 75,000	\$ 89,170	\$ 530 (4)	\$ 391,222
	2009	200,000	20,000	80,034	530 (4)	300,564

- (1) Amounts reflect the grant date fair value of awards granted under the Company’s Amended and Restated Stock Option Plan, computed pursuant to Financial Accounting Standards Board’s Accounting Standards Codification 718 “*Compensation — Stock Compensation*”. Assumptions used in the calculation of these amounts are included in Note 10 of the Notes to Audited Financial Statements included in our Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 14, 2011. For awards that are subject to performance conditions, amounts reflect the assumption that the highest level of performance conditions will be achieved. See the “*Outstanding Equity Awards at Fiscal Year-End*” table in this proxy statement for information regarding all option awards outstanding as of December 31, 2010.
- (2) Mr. Brewer was appointed Executive Chairman on July 21, 2010. Mr. Brewer does not receive additional compensation for his service as a director of the Company.
- (3) Mr. Kazam was appointed President and CEO on June 11, 2009. Mr. Kazam, also a director of Nile, does not receive additional compensation for his service as President and CEO.
- (4) Represents premiums paid for life insurance.

Employment Agreements and Post-Termination Benefits

Richard B. Brewer — Executive Chairman

Mr. Brewer’s employment as our Executive Chairman is subject to the terms of a letter agreement dated July 15, 2010. In accordance with the agreement, Mr. Brewer is entitled to an annual salary of \$240,000. In addition, upon Mr. Brewer’s appointment, we issued to him a 10-year stock option to purchase 450,000 shares of our common stock at an exercise price of \$0.32 per share and which was immediately exercisable. In addition, following the effective date of the amendment of our 2005 Stock Option Plan, we issued to Mr. Brewer a second 10-year option to purchase 900,000 shares of our common stock at an exercise price of \$0.37 per share, which vests and becomes exercisable in eight equal quarterly installments commencing September 30, 2011, provided that the vesting of this option will accelerate in the event of a “change of control” (as defined under our 2005 Stock Option Plan) of the Company. Both stock options were awarded pursuant to our 2005 Stock Option Plan. Mr. Brewer is not entitled to any severance or other post-termination benefits in the event his employment with us is terminated by either him or us.

Daron Evans — Chief Financial Officer

Mr. Evans’ employment with us was initially governed by an employment agreement dated January 19, 2007, as amended on August 19, 2007 and March 4, 2008, respectively. The employment agreement, which initially provided for Mr. Evans’s employment as Chief Operating Officer of our predecessor entity, a privately-held Delaware corporation, or Old Nile, provides for a term that expired on February 13, 2010.

Despite the expiration of the employment agreement, Mr. Evans' employment with us continues on an indefinite basis on substantially the same compensation terms. Under his former employment agreement, Mr. Evans was initially entitled to an annual base salary of \$175,000. Mr. Evans' annual base salary was increased to \$200,000 as of January 1, 2009, and to \$250,000 as of July 15, 2010. In addition, Mr. Evans is eligible to receive an annual performance bonus of up to 30% of his annual base salary upon the successful completion of annual corporate and individual milestones.

Mr. Evans' former employment agreement also provided for the awarding of certain stock options, referred to as Employment Options, Performance Options, and Technology Options. On September 17, 2007, Mr. Evans was granted Employment Options to purchase 239,896 shares of our common stock at an exercise price of \$2.71, vesting in three equal installments on the day before each anniversary of his employment agreement. Mr. Evans was also granted Performance Options to purchase 288,458 shares of our common stock at an exercise price of \$2.71, vesting up to one-third in each calendar year, or a pro-rata portion thereof for a period less than a full year, based on the successful completion of annual corporate and individual milestones as determined by our Board of Directors or its Compensation Committee. To the extent our Board or Compensation Committee declines to vest the maximum amount of Performance Options in any given calendar year, or a pro-rata portion thereof for a period less than a full year, such unvested amount are deemed forfeited by Mr. Evans. On March 4, 2008, the Compensation Committee determined that, for the pro-rated period ending December 31, 2007, Mr. Evans' Performance Options would vest in the amount of 76,528 shares out of a possible 84,562 shares, resulting in the forfeiture of Performance Options to purchase 8,034 shares. On January 16, 2009, the Compensation Committee determined that, for the calendar year ending December 31, 2008, Mr. Evans' Performance Options would vest in the amount of 43,269 shares out of a possible 96,153 shares, resulting in the forfeiture of Performance Options to purchase 52,884 shares. On January 19, 2010, the Compensation Committee determined that, for the calendar year ending December 31, 2009, Mr. Evans' Performance Options would vest in the amount of 50,000 shares out of a possible 96,153 shares, resulting in the forfeiture of Performance Options to purchase 46,153 shares. On July 8, 2010, Mr. Evans was granted a 10-year option to purchase 200,000 shares of our common stock at an exercise price of \$0.301 per share, which vests and becomes exercisable in twelve equal quarterly installments commencing September 30, 2010. On July 26, 2010, Mr. Evans was granted a 10-year option to purchase 250,000 shares of our common stock at an exercise price of \$0.37 per share, which vests and becomes exercisable in twelve equal quarterly installments commencing September 30, 2010.

Pursuant to a Severance Benefits Agreement dated July 24, 2010, if Mr. Evans' employment is terminated by us other than for "cause" (as defined below), Mr. Evans shall be entitled, upon execution of a customary release, to continued payment of his then-current base salary for a period of six months. For this purpose, "cause" means the following conduct or actions taken by Mr. Evans: (i) willful failure to perform his duties to the Company or willful misconduct in the performance of such duties; (ii) any willful, intentional or grossly negligent act causing material harm to the business or reputation of the Company; (iii) any material violation of the confidentiality, invention assignment, or non-solicitation obligations set forth in the agreement; (iv) indictment of any felony or a misdemeanor involving moral turpitude; or (v) any misappropriation or embezzlement of the Company's property.

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth information concerning stock options held by the named executive officers at December 31, 2010:

Name	Number of Securities Underlying Unexercised Options Exercisable	Number of Securities Underlying Unexercised Options Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options	Option Exercise Price (\$)	Option Expiration Date
Richard B. Brewer	450,000	—	—	0.32	07/21/2020
	—	900,000	—	0.37	07/26/2020 ⁽¹⁾
Joshua A. Kazam ⁽²⁾	50,000	—	—	4.50	01/25/2018
	25,000	—	—	0.93	12/22/2018
	65,000	—	—	1.77	07/21/2019
	—	80,000	—	0.37	07/26/2010 ⁽³⁾
Daron G. Evans	409,696	—	—	2.71	09/17/2017
	49,020	—	—	0.88	01/15/2019
	67,500	—	25,000	0.89	06/24/2019 ⁽⁴⁾
	33,333	166,667	—	0.30	07/08/2020 ⁽⁵⁾
	41,667	208,333	—	0.37	07/26/2020 ⁽⁵⁾

(1) Option granted on July 26, 2010 and which vests in 8 quarterly installments of 112,500 shares commencing on September 30, 2011.

(2) All stock options held by Mr. Kazam were awarded as compensation for his services as a director.

(3) Option granted July 26, 2010 and which vests in its entirety on July 26, 2011.

(4) Option granted on June 24, 2009 to purchase up to a maximum of 100,000 shares, of which the right to purchase 25,000 vested immediately and the right to purchase remaining shares vested subject to the performance of specified clinical development milestones in two installments of up to 50,000 shares and up to 25,000 shares. On February 15, 2010, Mr. Evans' right to purchase 42,500 of such 50,000-share installment vested and the remaining 7,500 shares of such installment were forfeited. On January 3, 2011, Mr. Evans' right to purchase 18,128 shares of the final 25,000-share installment vested and the remaining 6,872 shares were forfeited. This table reflects the vesting of such option as of December 31, 2010, without giving effect to the satisfaction of the vesting criteria on January 3, 2011.

(5) Option vests in 12 equal quarterly installments commencing September 30, 2010.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information known to us regarding the beneficial ownership of our common stock as of April 1, 2011 by:

- each of our directors,
- each named executive officer as defined and named in the Summary Compensation Table appearing herein,
- all of our directors and executive officers as a group, and,
- each person known by us to beneficially own more than five percent of our common stock (based on information supplied in Schedules 13D and 13G filed with the Securities and Exchange Commission).

Except as indicated by footnote, and subject to applicable community property laws, each person identified in the table possesses sole voting and investment power with respect to all capital stock shown to be held by that person. The address of each named executive officer and director, unless indicated otherwise, is c/o Nile Therapeutics, Inc., 4 West 4th Ave., Suite 400, San Mateo, California 94402.

Name of Beneficial Owner	Shares of Common Stock Beneficially Owned ⁽¹⁾	Percentage of Common Stock Beneficially Owned ⁽¹⁾
Named Executive Officers and Directors:		
Richard B. Brewer ⁽²⁾	450,000	1.3
Joshua A. Kazam ⁽³⁾	2,657,407	7.6
Daron Evans ⁽⁴⁾	684,548	1.9
Arie S. Belldegrun ⁽⁵⁾	1,315,630	3.7
Pedro Granadillo ⁽⁶⁾	202,588	*
Peter M. Kash ⁽⁷⁾	2,658,193	7.6
Frank Litvack ⁽⁸⁾	400,000	1.2
Paul A. Mieyal	—	—
Gregory W. Schafer ⁽⁹⁾	175,100	*
Directors and executive officers as a group (10 individuals)	8,813,379	23.1
5% Stockholders:		
David M. Tanen ⁽¹⁰⁾ 689 5th Avenue, 12th Floor New York, NY 10022	1,830,296	5.3
Wexford Capital LP ⁽¹¹⁾ 411 West Putnam Avenue Greenwich, CT 06830	2,746,952	7.9

* Represents less than 1%.

(1) Based on 34,698,764 shares of our common stock outstanding as of April 1, 2011. Beneficial ownership is determined in accordance with Rule 13d-3 under the Exchange Act, and includes any shares as to which the security or stockholder has sole or shared voting power or investment power, and also any shares which the security or stockholder has the right to acquire within 60 days of April 1, 2011, whether through the exercise or conversion of any stock option, convertible security, warrant or other right. The indication herein that shares are beneficially owned is not an admission on the part of the security or stockholder that he, she or it is a direct or indirect beneficial owner of those shares.

(2) Represents shares issuable upon the exercise of a stock option.

- (3) Includes (i) 140,000 shares issuable upon the exercise of stock options held by Mr. Kazam; (ii) 244,278 shares issuable upon the exercise of outstanding warrants held by Mr. Kazam; (iii) 613,841 shares held by the Kazam Family Trust, of which Mr. Kazam's spouse is the trustee and his children are beneficiaries, and as to which Mr. Kazam's disclaims beneficial ownership except to the extent of any pecuniary interest therein; (iv) 165,530 shares held by Mr. Kazam's spouse as custodian for the benefit of their minor children, to which Mr. Kash disclaims beneficial ownership except to the extent of his pecuniary interest therein; and (v) 165,530 shares held by the Kash Family Foundation, of which Mr. Kazam is trustee but as to which he has no pecuniary interest.
- (4) Includes (i) 656,844 shares issuable upon the exercise of stock options held by Mr. Evans; (ii) 3,952 shares issuable upon the exercise of warrants held by Mr. Evans; and (iii) a total of 10,600 shares held by Mr. Evans' spouse and minor children.
- (5) Includes (i) 604,210 shares issuable upon the exercise of warrants held by Dr. Belldegrün, (ii) 81,145 shares held by Leumi Overseas Trust Corp. Ltd. as Trustee of the BTL Trust, of which 4,210 shares are issuable upon the exercise of warrants, (iii) 129,600 shares held by the Belldegrün Family Trust, of which 64,800 shares are issuable upon the exercise of warrants, (iv) 486,400 shares held by the Arie S. Belldegrün M.D. Inc. Profit Sharing Plan, including 243,200 shares issuable upon the exercise of warrants, (v) 584,000 shares held by Leumi Overseas Trust Corp. Ltd. as Trustee of the Tampere Trust, of which 292,000 shares are issuable upon the exercise of warrants, and (vi) 34,485 shares held by Bellco Capital, LLC. Dr. Belldegrün disclaims beneficial ownership of the shares and warrants held by Leumi Overseas Trust Corp. Ltd. as Trustee of each of the BTL Trust and the Tampere Trust, except to the extent of his beneficiary interest therein.
- (6) Includes 175,000 shares issuable upon the exercise of stock options.
- (7) Includes (i) 175,000 shares issuable upon the exercise of stock options held by Mr. Kash, (ii) 224,866 shares issuable upon the exercise of warrants held by Mr. Kash, (iii) 496,589 shares held by Mr. Kash's spouse as custodian for the benefit of their minor children under the UGMA, to which Mr. Kash disclaims beneficial ownership except to the extent of his pecuniary interest therein, and (iv) 165,530 shares held by the Kash Family Foundation.
- (8) Consists of 400,000 shares held by Calmedica Capital L.P., a limited partnership of which Dr. Litvack is a limited partner, including 200,000 shares issuable upon the exercise of warrants. Dr. Litvack disclaims beneficial ownership of these shares and warrants except to the extent of his pecuniary interest therein.
- (9) Includes 175,000 shares issuable upon the exercise of stock options.
- (10) Includes 140,000 shares issuable upon the exercise of stock options and 31,650 shares issuable upon the exercise of warrants. Also includes 137,941 shares held by Mr. Tanen's spouse as custodian for the benefit of their minor daughter under the UGMA, to which Mr. Tanen disclaims beneficial ownership except to the extent of his pecuniary interest therein. Mr. Tanen was a director of Nile from its inception until September 2009.
- (11) Includes (i) 1,910,103 shares held by Iota Investors LLC, a Delaware limited liability company ("Iota Investors"), (ii) five year warrants to purchase 16,841 shares at an exercise price of \$2.71 per share held by Iota Investors, and (iii) 696,675 shares held by Wexford Spectrum Investors LLC, a Delaware limited liability company ("Wexford Spectrum"). Wexford Capital LP, a Delaware limited partnership ("Wexford Capital"), is a registered Investment Advisor and also serves as an investment advisor or sub-advisor to the members of Iota Investors and Wexford Spectrum. Wexford GP LLC, a Delaware limited liability company ("Wexford GP"), is the general partner of Wexford Capital. Mr. Charles E. Davidson is chairman, a managing member and a controlling member of Wexford GP and Mr. Joseph M. Jacobs is president, a managing member and a controlling member of Wexford GP. Beneficial ownership also includes 123,333 shares issuable upon the exercise of stock options that have been assigned to Wexford Capital by Mr. Mieval, a director of Nile and vice president of Wexford Capital.

PROPOSAL NO. 2:

APPROVAL OF AMENDMENT TO CERTIFICATE OF INCORPORATION TO EFFECT A REVERSE STOCK SPLIT

Overview

On March 10, 2011, our Board unanimously approved an amendment to our certificate of incorporation to effect a reverse stock split of all outstanding shares of our common stock at an exchange ratio not to exceed one-for-ten (1:10). In order to effect any reverse split of our common stock, we need to amend our certificate of incorporation, which requires the approval of our stockholders. You are being asked to vote to authorize an amendment to our certificate of incorporation to allow our Board of Directors to effect a reverse stock split at a ratio that it determines in its discretion, not to exceed one-for-ten. Should we receive the required stockholder approval, the Board will have the sole authority to elect, at any time prior to the first anniversary of the Annual Meeting:

- whether or not to effect a reverse stock split, and
- if so, the number of whole shares of our common stock up to 10 which will be combined into one share of our common stock.

The Board believes that providing the flexibility for the Board to choose an exact split ratio based on then-current market conditions is in the best interests of Nile and its stockholders.

The text of the form of proposed amendment to our certificate of incorporation is attached to this proxy statement as *Annex A*. Such form provides that any whole number of outstanding shares not to exceed 10 would be combined into one share of our common stock. If approved by the stockholders, and following such approval, the Board determines that a reverse stock split is in the best interests of Nile and its stockholders, the reverse stock split will become effective upon filing the amendment with the Secretary of State of the State of Delaware. The amendment will contain the number of shares selected by the Board within the limits set forth in this Proposal No. 2 to be combined into one share of our common stock.

Except for adjustments that may result from the treatment of fractional shares as described below, each stockholder will hold the same percentage of our outstanding common stock immediately following the reverse stock split as such stockholder held immediately prior to the reverse stock split.

The par value of our common stock would remain unchanged at \$0.001 per share. The amendment would not change the number of authorized shares of common stock. Accordingly, the reverse stock split will have the effect of creating additional unreserved shares of our authorized common stock. Although we have no current arrangements or understandings providing for the issuance of the additional shares that would be made available for issuance upon effectiveness of the reverse stock split, these additional shares may be used by us for various purposes in the future without further stockholder approval, including, among other things:

- raising the capital necessary to fund our operations, including the clinical and pre-clinical development of our current or any future product candidates;
- providing equity incentives for our employees, officers, directors and consultants;
- entering into collaborations or other strategic relationships; and
- expanding our business through the acquisition of other businesses, products or product candidates.

Reasons for the Reverse Stock Split

Our Board believes that a reverse stock split may be desirable and should be approved by stockholders for a number of reasons, including:

- *Reduced Risk of NASDAQ Delisting.* The primary reason our Board believes a reverse stock split is desirable is to maintain the listing of our common stock on The NASDAQ Capital Market. By potentially increasing our stock price, the reverse stock split would reduce the risk that our stock will be delisted from The NASDAQ Capital Market, which requires, among other things, that issuers maintain a closing bid price of at least \$1.00 per share. We announced on June 4, 2010, that we had

received a letter, dated June 1, 2010, from the Listing Qualifications Department of The NASDAQ Stock Market, or the Staff, notifying us that, for 30 consecutive business days, the bid price for our common stock had closed below the minimum \$1.00 per share requirement, or the Bid Price Requirement, for continued inclusion on The NASDAQ Capital Market pursuant to NASDAQ Listing Rules. In accordance with NASDAQ Listing Rules, we were given 180 calendar days, or until November 29, 2010, to regain compliance. To regain compliance, the bid price of our common stock needed to close at or above \$1.00 for at least 10 consecutive business days at any time prior to November 29, 2010. Because the bid price of our common stock did not close above \$1.00 for 10 consecutive days, we received a further notification from NASDAQ on November 30, 2010, informing us that our common stock would be subject to delisting from The NASDAQ Capital Market unless we requested a hearing to the NASDAQ Listing Qualifications Panel. On December 7, 2010, we requested a hearing, which was conducted on January 6, 2011. At this hearing we requested that the Listing Qualifications Panel grant us an additional extension to May 31, 2011, in which to regain compliance with the \$1.00 minimum closing bid price requirement, and on March 1, 2011, we were notified by NASDAQ that our request had been granted. However, if we fail to regain compliance during this extension period, our common stock could be subject to delisting. We may need to effect the proposed reverse stock split in order to regain compliance.

- *Increase in Eligible Investors.* In addition, a reverse stock split would allow a broader range of institutions to invest in our stock (namely, funds that are prohibited from buying stocks whose price is below a certain threshold), potentially increasing the trading volume and liquidity of our common stock.
- *Increased Analyst and Broker Interest.* A reverse stock split would help increase analyst and broker interest in our stock as their policies can discourage them from following or recommending companies with low stock prices. Because of the trading volatility often associated with low-priced stocks, many brokerage houses and institutional investors have adopted internal policies and practices that either prohibit or discourage them from investing in such stocks or recommending them to their customers. Some of those policies and practices may also function to make the processing of trades in low-priced stocks economically unattractive to brokers. Additionally, because brokers' commissions on transactions in low-priced stocks generally represent a higher percentage of the stock price than commissions on higher-priced stocks, the current average price per share of our common stock can result in individual stockholders paying transaction costs representing a higher percentage of their total share value than would be the case if the share price were substantially higher.

Effects of the Reverse Stock Split

Reduction of Shares Held by Individual Stockholders. After the effective date of the proposed reverse stock split, each stockholder will own fewer shares of our common stock. However, the proposed reverse stock split will affect all of our stockholders uniformly and will not affect any stockholder's percentage ownership interests in us, except to the extent that the reverse split results in any of our stockholders owning a fractional share as described below. Proportionate voting rights and other rights and preferences of the holders of our common stock will not be affected by the proposed reverse stock split (other than as a result of the payment of cash in lieu of fractional shares as described more fully below). For example, a holder of two percent of the voting power of the outstanding shares of common stock immediately prior to reverse stock split would continue to hold two percent of the voting power of the outstanding shares of common stock immediately after the reverse stock split. The number of stockholders of record will not be affected by the proposed reverse stock split (except to the extent that any stockholder holds only a fractional share interest and receives cash for such interest after the proposed reverse stock split). However, if the proposed reverse stock split is implemented, it may increase the number of stockholders of Nile who own "odd lots" of less than 100 shares of our common stock. Brokerage commissions and other costs of transactions in odd lots may be higher than the costs of transactions of more than 100 shares of common stock.

Reduction in Total Outstanding Shares. The proposed reverse stock split will reduce the total number of outstanding shares of common stock by the split ratio determined by the Board within the limits set forth in this Proposal No. 2.

The following table contains approximate information relating to our common stock under certain of the possible split ratios based on share information as of April 1, 2011:

	Current	1-for-2	1-for-5	1-for-10
Authorized shares	100,000,000	100,000,000	100,000,000	100,000,000
Outstanding	34,698,764	17,349,382	6,939,752	3,469,876
Reserved for issuance pursuant to miscellaneous outstanding warrants and options	6,506,234	3,253,117	1,301,246	650,623
Reserved for issuance pursuant to outstanding awards under the 2005 Plan	7,163,021	3,581,510	1,432,604	716,302
Reserved for issuance pursuant to future awards under the 2005 Plan	2,027,984	1,013,992	405,596	202,798
Authorized and unreserved	49,603,997	74,801,999	89,920,802	94,960,401

Change in Number and Exercise Price of Employee and Director Equity Awards. The proposed reverse stock split will reduce the number of shares of common stock available for issuance under our equity plans in proportion to the exchange ratio selected by the Board within the limits set forth in this Proposal No. 2. Under the terms of our outstanding equity awards, the proposed reverse stock split will cause a reduction in the number of shares of common stock issuable upon exercise or vesting of such awards in proportion to the exchange ratio of the reverse stock split and will cause a proportionate increase in the exercise price of such awards. The number of shares authorized for future issuance under our equity plans will also be proportionately reduced. The number of shares of common stock issuable upon exercise or vesting of outstanding equity awards will be rounded to the nearest whole share and no cash payment will be made in respect of such rounding.

Regulatory Effects. Our common stock is currently registered under Section 12(b) of the Exchange Act, and we are subject to the periodic reporting and other requirements of the Exchange Act. The proposed reverse stock split will not affect the registration of our common stock under the Exchange Act or our obligation to publicly file financial and other information with the SEC. If the proposed reverse stock split is implemented, our common stock will continue to trade on The NASDAQ Capital Market under the symbol "NLTX" (although NASDAQ would likely add the letter "D" to the end of the trading symbol for a period of 20 trading days to indicate that the reverse stock split has occurred), assuming our common stock has not otherwise been delisted due to our failure to comply with the minimum stockholders' equity continued listing requirement or otherwise.

No Going Private Transaction. Notwithstanding the decrease in the number of outstanding shares following the proposed reverse stock split, the Board does not intend for this transaction to be the first step in a series of plans or proposals of a "going private transaction" within the meaning of Rule 13e-3 of the Exchange Act.

Risks of Proposed Reverse Stock Split

The proposed reverse stock split may not ultimately increase our stock price, which would prevent us from realizing some of the anticipated benefits of the reverse stock split, including maintaining our listing on NASDAQ.

The Board expects that a reverse stock split of our common stock will increase the market price of our common stock so that we are able to maintain compliance with the NASDAQ minimum bid price listing standard. However, the effect of a reverse stock split upon the market price of our common stock cannot be predicted with any certainty, and the history of similar stock splits for companies in like circumstances is varied. It is possible that the per share price of our common stock after the reverse stock split will not rise in proportion to the reduction in the number of shares of our common stock outstanding resulting from the

reverse stock split, and there can be no assurance that the market price per post-reverse split share will either exceed or remain in excess of the \$1.00 minimum bid price for a sustained period of time. The market price of our common stock may also be based on other factors which may be unrelated to the number of shares outstanding, including our future performance. In addition, there can be no assurance that we will not be delisted due to a failure to meet other continued listing requirements, including the minimum stockholders' equity requirement, even if the market price per post-reverse stock split share of our common stock remains in excess of \$1.00 per share. Notwithstanding the foregoing, the Board would only implement the proposed reverse stock split within the proposed exchange ratio range, if it believed it would result in the market price of our common stock rising to the level necessary to satisfy the \$1.00 minimum bid price requirement for the foreseeable future.

The proposed reverse stock split may decrease the liquidity of our stock.

The liquidity of our capital stock may be harmed by the proposed reverse split given the reduced number of shares that would be outstanding after the reverse stock split, particularly if the stock price does not increase as a result of the reverse stock split.

Board Discretion to Implement the Reverse Stock Split

If the reverse stock split is approved by our stockholders, it will be effected, if at all, only upon a determination by the Board that a reverse stock split is in the best interests of Nile and our stockholders. Such determination shall be based upon certain factors, including our then-current stock price, the existing and expected marketability and liquidity of our common stock, prevailing market conditions, the likely effect on the market price of our common stock and the desire to continue to meet the continued listing requirements of The NASDAQ Capital Market. Notwithstanding the approval of the reverse stock split by our stockholders, the Board may, in its sole discretion, abandon the proposed amendment to our certificate of incorporation and determine not to effect the reverse stock split as permitted under Section 242(c) of the Delaware General Corporation Law. If the Board fails to implement the reverse stock split prior to the one year anniversary of the Annual Meeting, additional stockholder approval would be required prior to implementing any reverse stock split.

Effective Date

The proposed reverse stock split would become effective on the date of filing of a certificate of amendment to our certificate of incorporation with the office of the Secretary of State of the State of Delaware. Except as explained below with respect to fractional shares, on the effective date, shares of common stock issued and outstanding immediately prior thereto will be combined and converted, automatically and without any action on the part of the stockholders, into new shares of common stock in accordance with the reverse stock split ratio determined by the Board within the limits set forth in this Proposal No. 2.

Payment for Fractional Shares

No fractional shares of common stock will be issued as a result of the proposed reverse stock split. Instead, stockholders who otherwise would be entitled to receive fractional shares, upon surrender to the exchange agent of such certificates representing such fractional shares, will be entitled to receive cash in an amount equal to the product obtained by multiplying (a) the closing sales price of our common stock on the effective date as reported on The NASDAQ Capital Market by (b) the number of shares of our common stock held by such stockholder that would otherwise have been exchanged for such fractional share interest.

Exchange of Stock Certificates

As soon as practicable after the effective date, stockholders will be notified that the reverse stock split has been effected. Our transfer agent will act as exchange agent for purposes of implementing the exchange of stock certificates for record holders (i.e., stockholders who hold their shares directly in their own name and not through a broker). Record holders of pre-reverse split shares will be asked to surrender to the exchange agent certificates representing pre-reverse split shares in exchange for a book entry with the transfer agent or certificates representing post-reverse split shares in accordance with the procedures to be set forth in a letter of transmittal to be sent by us. No new certificates will be issued to a stockholder until such stockholder has

surrendered such stockholder's outstanding certificate(s) together with the properly completed and executed letter of transmittal to the exchange agent. STOCKHOLDERS OF RECORD SHOULD NOT DESTROY ANY STOCK CERTIFICATE(S) AND SHOULD NOT SUBMIT ANY CERTIFICATE(S) UNTIL REQUESTED TO DO SO.

For beneficial holders of pre-reverse split shares (i.e., stockholders who hold their shares through a broker), your broker will make the appropriate adjustment to the number of shares held in your account following the effective date of the reverse stock split.

Accounting Consequences

The par value per share of our common stock will remain unchanged at \$0.001 per share after the reverse stock split. As a result, on the effective date of the reverse split, the stated capital on our consolidated balance sheet attributable to common stock will be reduced and the additional paid-in-capital account will be increased by the amount by which the stated capital is reduced. Per share net income or loss will be increased because there will be fewer shares of our common stock outstanding. We do not anticipate that any other accounting consequences, including changes to the amount of stock-based compensation expense to be recognized in any period, will arise as a result of the reverse stock split.

No Appraisal Rights

Under the Delaware General Corporation Law, our stockholders are not entitled to dissenter's rights with respect to the proposed amendment to our certificate of incorporation to effect the reverse stock split.

Material Federal U.S. Income Tax Consequences of the Reverse Stock Split

The following is a summary of important tax considerations of the proposed reverse stock split. It addresses only stockholders who hold the pre-reverse split shares and post-reverse split shares as capital assets. It does not purport to be complete and does not address stockholders subject to special rules, such as financial institutions, tax-exempt organizations, insurance companies, dealers in securities, mutual funds, foreign stockholders, stockholders who hold the pre-reverse split shares as part of a straddle, hedge, or conversion transaction, stockholders who hold the pre-reverse split shares as qualified small business stock within the meaning of Section 1202 of the Internal Revenue Code of 1986, as amended, or the Code, stockholders who are subject to the alternative minimum tax provisions of the Code, or stockholders who acquired their pre-reverse split shares pursuant to the exercise of employee stock options or otherwise as compensation. This summary is based upon current law, which may change, possibly even retroactively. It does not address tax considerations under state, local, foreign, and other laws. Furthermore, we have not obtained a ruling from the Internal Revenue Service or an opinion of legal or tax counsel with respect to the consequences of the reverse stock split. Each stockholder is advised to consult his or her tax advisor as to his or her own situation.

The reverse stock split is intended to constitute a reorganization within the meaning of Section 368 of the Code. Assuming the reverse stock split qualifies as a reorganization, a stockholder generally will not recognize gain or loss on the reverse stock split, except to the extent of cash, if any, received in lieu of a fractional share interest in the post-reverse split shares. The aggregate tax basis of the post-reverse split shares received will be equal to the aggregate tax basis of the pre-reverse split shares exchanged therefor (excluding any portion of the holder's basis allocated to fractional shares), and the holding period of the post-reverse split shares received will include the holding period of the pre-reverse split shares exchanged.

A holder of the pre-reverse split shares who receives cash generally will recognize gain or loss equal to the difference between the portion of the tax basis of the pre-reverse split shares allocated to the fractional share interest and the cash received. Such gain or loss will be a capital gain or loss and will be short term if the pre-reverse split shares were held for one year or less and long term if held more than one year. No gain or loss will be recognized by Nile as a result of the reverse stock split.

Required Vote and Recommendation of the Board of Directors

Approval and adoption of an amendment to our certificate of incorporation to effect the reverse stock split requires the affirmative vote of at least a majority of Nile' issued and outstanding shares of common

stock entitled to vote either in person or by proxy at the Annual Meeting. If you ABSTAIN from voting, it will be counted towards the tabulation of votes cast on the proposal and will have the same effect as an AGAINST vote.

**THE BOARD OF DIRECTORS RECOMMENDS
A VOTE *FOR* PROPOSAL NO. 2.**

PROPOSAL NO. 3:

**RATIFICATION OF APPOINTMENT OF
INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The Audit Committee of the Board of Directors has selected Crowe Horwath LLP (“Crowe”), an independent registered public accounting firm, to audit the financial statements of the Company for fiscal 2011. Stockholder ratification of the appointment is not required under the laws of the State of Delaware, but the Board of Directors has decided to ascertain the position of the stockholders on the appointment. In the event of a negative vote, the Audit Committee will reconsider its selection. We expect that representatives of Crowe will be in attendance at the Annual Meeting, will have an opportunity to make a statement if they so desire, and will be available to respond to appropriate questions.

Auditor Fees

The following is a summary of the fees billed to us by Crowe Horwath LLP, our independent registered public accounting firm, for professional services rendered for fiscal years ended December 31, 2010 and 2009:

Service Category	Fiscal Year Ended December 31,	
	2010	2009
Audit Fees	\$ 137,308	\$ 112,100
Audit-Related Fees	—	—
Tax Fees	8,576	6,000
All Other Fees	—	—
Total Fees	<u>\$ 145,884</u>	<u>\$ 118,100</u>

In the above table, in accordance with the SEC’s definitions and rules, “audit fees” are fees for professional services for the audit and review of our annual financial statements, as well as the audit and review of our financial statements included in our registration statements filed under the Securities Act and issuance of consents and for services that are normally provided by the accountant in connection with statutory and regulatory filings or engagements except those not required by statute or regulation; “audit-related fees” are fees for assurance and related services that were reasonably related to the performance of the audit or review of our financial statements, including attestation services that are not required by statute or regulation, due diligence and services related to acquisitions; “tax fees” are fees for tax compliance, tax advice and tax planning; and “all other fees” are fees for any services not included in the first three categories.

Audit Committee Pre-Approval Process

Pursuant to our Audit Committee Charter, before the independent registered public accounting firm is engaged by the Company or its subsidiaries to render audit or non-audit services, the Audit Committee pre-approves the engagement. Audit Committee pre-approval of audit and non-audit services is not required if the engagement for the services is entered into pursuant to pre-approval policies and procedures established by the Audit Committee regarding the Company’s engagement of the independent registered public accounting firm, provided the policies and procedures are detailed as to the particular service, the Audit Committee is informed of each service provided and such policies and procedures do not include delegation of the Audit Committee’s responsibilities under the Exchange Act to the Company’s management. The Audit Committee may delegate to one or more designated members of the Audit Committee the authority to grant pre-approvals, provided such approvals are presented to the Audit Committee at a subsequent meeting. If the Audit Committee elects to establish pre-approval policies and procedures regarding non-audit services, the Audit Committee must be informed of each non-audit service provided by the independent registered public accounting firm. Audit Committee pre-approval of non-audit services (other than review and attest services) also is not be required if such services fall within available exceptions established by the SEC. None of the services provided by our independent registered public accounting firm for fiscal 2009 or 2010 were obtained in reliance on the waiver of the pre-approval requirement afforded in SEC regulations.

Changes in Our Independent Registered Accounting Firm

On August 6, 2009, we engaged Crowe Horwath LLP (“Crowe”) to be our independent registered public accounting firm. The engagement of Crowe was the result of the combination of Hays & Company LLP (“Hays”), the Company’s then-current independent registered public accounting firm, with Crowe. The same Hays personnel that served the Company in the past have continued to serve the Company following its engagement of Crowe. Hays’ combination with Crowe occurred as a matter of law; the Company took no action to dismiss Hays, and Hays did not inform the Company that it resigned as the Company’s principal independent accountant. The engagement of Crowe was approved by the Audit Committee of the Company’s Board of Directors.

The reports of Hays on their audits of the Company’s financial statements as of and for the fiscal years ended December 31, 2008 and 2007, contained no adverse opinion or disclaimer of opinion, and were not qualified or modified as to uncertainty, audit scope or accounting principles, except as follows: Hays’ report on the Company’s financial statements as of and for the year ended December 31, 2008, which financial statements were included in the Company’s Annual Report on Form 10-K for the year ended December 31, 2008, contained an explanatory paragraph that included a statement that the Company’s lack of revenue and recurring losses from operations raised substantial doubt about the Company’s ability to continue as a going concern.

During the fiscal years ended December 31, 2008 and 2007, and the subsequent interim period through August 6, 2009, the date of the Company’s engagement of Crowe, there were no disagreements with Hays on any matter of accounting principles and practices, financial statement disclosure or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of Hays, would have caused them to make reference thereto in their report on the financial statements for such years. During the fiscal years ended December 31, 2008 and 2007, and through August 6, 2009, none of the reportable events specified in Item 304(a)(v) of Regulation S-K occurred.

During the fiscal years ended December 31, 2008 and 2007, and through August 6, 2009, the Company did not consult with Crowe regarding either (i) the application of accounting principles to a specified transaction, either completed or proposed; or the type of audit opinion that might be rendered on the Company’s financial statements, and either a written report was provided to the Company or oral advice was provided that Hays concluded was an important factor considered by the Company in reaching a decision as to the accounting, auditing or financial reporting issue; or (ii) any matter that was the subject of a disagreement and required to be reported under Item 304(a)(1)(iv) or Item 304(a)(1)(v) of Regulation S-K and the related instructions thereto.

Required Vote and Recommendation of the Board of Directors

The affirmative vote of a majority of the votes cast is required to ratify the appointment of Crowe Horwath LLP as our independent registered public accounting firm for fiscal 2011. If you ABSTAIN from voting, it will be counted towards the tabulation of votes cast on the proposal and will have the same effect as an AGAINST vote.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE *FOR* PROPOSAL NO. 3.

OTHER MATTERS

Transactions with Related Persons

On June 24, 2009, we entered into a services agreement with Two River Consulting, LLC, or TRC, to provide us with various clinical development, operational and administrative services for a period of one year. As compensation for such services, we will pay to TRC a monthly cash fee of \$65,000 and we issued stock options to purchase up to an aggregate of 750,000 shares of our common stock at a price per share equal to \$0.89, the closing sale price of our common stock on June 24, 2009. Shares relating to 25% of this option vested immediately and the remaining shares will vest pursuant to the achievement of certain milestones relating to the development of CD-NP. In February 2010, an additional 318,750 shares subject to this option vested and 56,250 shares subject to the option were forfeited. On January 3, 2011, an additional 135,957 shares vested and the remaining 51,543 shares lapsed and were forfeited. Instead of issuing the stock option to TRC, at TRC's direction, the options were issued to designated employees of TRC who are engaged in performing the services under the services agreement.

On August 12, 2010, we and TRC entered into an amendment to the Services Agreement to extend the term of the agreement and provide that it will continue on a month-to-month basis until otherwise terminated by one of the parties upon 30 days' notice. We also agreed to issue to designees of TRC a 5-year stock option to purchase 250,000 shares of our common stock at a price per share of \$0.38, the closing sale price of the common stock on August 12, 2010. The stock option was fully vested and immediately exercisable at the time of grant.

Joshua A. Kazam, our President & Chief Executive Officer and director, Arie S. Belldegrun, a current director, and David M. Tanen, a director of the Company until September 2009, are the principal owners of TRC. None of Messrs. Kazam and Tanen and Dr. Belldegrun received any of the stock options issued by us pursuant to the services agreement. The terms of the Services Agreement with TRC, including the August 12, 2010 amendment, were reviewed and approved by a special committee of our Board of Directors consisting of Pedro Granadillo, Paul Mieyal and Greg Schafer. None of the members of the special committee has any interest in TRC or the Services Agreement.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934, as amended, requires the Company's directors and officers and persons who own more than ten percent of a registered class of the Company's equity securities to file reports of ownership and reports of changes in the ownership with the SEC. Such persons are required by SEC regulations to furnish the Company with copies of all Section 16(a) forms they file. Based solely on its review of the copies of the forms submitted to it during the last fiscal year, the Company believes that, during the last fiscal year, all such reports were timely filed. With respect to the prior fiscal year, however, Dr. Mieyal filed a Form 4 on January 22, 2009 to report an option grant made on December 23, 2008.

The Board of Directors does not intend to present at the Annual Meeting any other matter not referred to above and does not presently know of any matter that may be presented at the Annual Meeting by others. However, if other matters properly come before the Annual Meeting, it is the intention of the persons named in the enclosed proxies to vote the proxy in accordance with their best judgment.

Stockholder Proposals

Under the rules of the Securities and Exchange Commission, or SEC, for stockholder proposals to be considered for inclusion in the proxy statement for the 2011 Annual Meeting, they must be submitted in writing to our Corporate Secretary, Nile Therapeutics, Inc., 4 West 4th Ave., Suite 400, San Mateo, California 94402. For a stockholder proposal to be considered for inclusion in our proxy statement for the 2012 Annual Meeting, the proposal must be in writing and received by us no later than December 9, 2011, or such proposal will be considered untimely under the Securities Exchange Act of 1934, as amended, or the Exchange Act. If the date of our 2012 Annual Meeting is more than 30 days before or 30 days after the anniversary date of our 2011 Annual Meeting, the deadline for inclusion of a stockholder proposal in our proxy statement will instead be a reasonable time before we begin to print and mail our proxy materials. Stockholder proposals must comply with the requirements of Rule 14a-8 of the Exchange Act and any other applicable rules established by the Securities and Exchange Commission. Stockholders are also advised to review our certificate of incorporation and bylaws, which contain additional requirements with respect to advance notice of stockholder proposals.

By Order of The Board of Directors,
NILE THERAPEUTICS, INC.
/s/ Joshua A. Kazam

Joshua A. Kazam
Chief Executive Officer

San Mateo, California
April 8, 2011

**FORM OF
CERTIFICATE OF AMENDMENT
OF
CERTIFICATE OF INCORPORATION
OF
NILE THERAPEUTICS, INC.**

Nile Therapeutics, Inc., a corporation organized and existing under and by the virtue of the Delaware General Corporation Law, through its duly authorized officer and by authority of its Board of Directors does hereby certify:

FIRST: That the name of the corporation is Nile Therapeutics, Inc., formerly known as SMI Products, Inc. (the Corporation). The date of filing of its original Certificate of Incorporation with the Secretary of State of the State of Delaware was January 26, 2007.

SECOND: That the Board of Directors of the Corporation duly adopted resolutions setting forth proposed amendments (the Certificate of Amendment) to the Certificate of Incorporation, declaring said amendments to be advisable and directing that said amendments be submitted to the stockholders of the Corporation for consideration thereof. The resolutions setting forth the proposed amendments are as follows:

RESOLVED, that the Certificate of Incorporation of the Corporation shall be amended by changing the Fourth Article thereof so that, as amended, the first paragraph of said Article shall be and read as follows:

“(a) *Authorized Capital.* The total number of shares of all classes of stock that the Corporation shall have authority to issue is 110,000,000, of which 100,000,000 shares, par value of \$0.001, shall be designated as Common Stock (“Common Stock”), and 10,000,000 shares, par value of \$0.001, shall be designated as Preferred Stock (“Preferred Stock”). Effective at []m. on [], 20[] (the “Effective Time”), every [] shares of Common Stock of the Corporation issued and outstanding immediately prior to the Effective Time (“Old Common Stock”) shall automatically be combined, without any action on the part of the holder thereof, into one (1) share of fully paid and nonassessable Common Stock of the Corporation (“New Common Stock”), subject to the treatment of fractional share interests described as follows. No fractional shares of Common Stock shall be issued. No stockholder of the Corporation shall transfer any fractional shares of Common Stock. The Corporation shall not recognize on its stock record books any purported transfer of any fractional share of Common Stock. A holder of Old Common Stock at the Effective Time who would otherwise be entitled to a fraction of a share of New Common Stock shall, in lieu thereof, be entitled to receive a cash payment in an amount equal to the fraction to which the holder would otherwise be entitled multiplied by the last closing sale price of the Old Common Stock prior to the Effective Time, as reported on the NASDAQ Capital Market (or if such price is not available, then such other price as determined by the Board of Directors) and as appropriately adjusted for such combination.”

THIRD: That thereafter, pursuant to resolution of its Board of Directors, an annual meeting of stockholders of the Corporation was duly called and held upon notice in accordance with Section 222 of the Delaware General Corporation Law at which meeting the necessary number of shares as required by statute were voted in favor of the Certificate of Amendment.

FOURTH: That the foregoing Certificate of Amendment was duly adopted in accordance with the provisions of Section 242 of the Delaware General Corporation Law.

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be signed by Joshua A. Kazam, its Chief Executive Officer, as of [], 20[].

NILE THERAPEUTICS, INC.

By: _____
Name: Joshua A. Kazam
Title: Chief Executive Officer

ANNUAL MEETING OF STOCKHOLDERS OF
NILE THERAPEUTICS, INC.

May 10, 2011

NOTICE OF INTERNET AVAILABILITY OF PROXY MATERIAL:
The proxy statement, proxy card, and Annual Report on Form 10-K
are available at http://www.nilethera.com/inv_sec.html

Please sign, date and mail
your proxy card in the
envelope provided as soon
as possible.

↓ Please detach along perforated line and mail in the envelope provided. ↓

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THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE ELECTION OF DIRECTORS, "FOR" PROPOSAL 2 AND "FOR" PROPOSAL 3.
PLEASE SIGN, DATE AND RETURN PROMPTLY IN THE ENCLOSED ENVELOPE. PLEASE MARK YOUR VOTE IN BLUE OR BLACK INK AS SHOWN HERE

1. Election of Directors:

- FOR ALL NOMINEES
 WITHHOLD AUTHORITY
FOR ALL NOMINEES
 FOR ALL EXCEPT
(See instructions below)

NOMINEES:
 Arie S. Beldegrun
 Richard B. Brewer
 Pedro Granadillo
 Peter M. Kash
 Joshua A. Kazam
 Frank Litvack
 Paul A. Mieyal
 Gregory W. Schafer

INSTRUCTIONS: To withhold authority to vote for any individual nominee(s), mark "FOR ALL EXCEPT"
and fill in the circle next to each nominee you wish to withhold, as shown here: ●

To change the address on your account, please check the box at right and
indicate your new address in the address space above. Please note that
changes to the registered name(s) on the account may not be submitted via
this method.

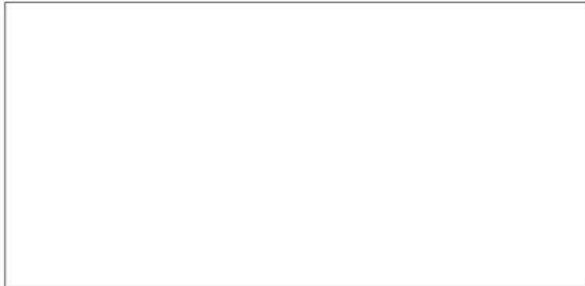
Signature of Stockholder

Date:

Signature of Stockholder

Date:

Note: Please sign exactly as your name or names appear on this Proxy. When shares are held jointly, each holder should sign. When signing as executor, administrator, attorney, trustee or guardian, please give full
title as such. If the signer is a corporation, please sign full corporate name by duly authorized officer, giving full title as such. If signer is a partnership, please sign in partnership name by authorized person.



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PROXY

NILE THERAPEUTICS, INC.

4 West 4th Avenue, Suite 400
San Mateo, California 94402

Annual Meeting of Stockholders - May 10, 2011

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

The undersigned hereby appoints each of Joshua Kazam and Daron Evans as proxy for the undersigned, with full power of substitution, to represent and to vote all the stock of the undersigned on the following matters as described in the Proxy Statement accompanying the Notice of Annual Meeting, receipt of which is hereby acknowledged, and according to the proxy holder's discretion, on all matters that may be properly presented for action at the Annual Meeting of Stockholders of Nile Therapeutics, Inc. to be held on Tuesday, May 10, 2011 and at any adjournment(s) or postponement(s) thereof. If properly executed, this proxy shall be voted in accordance with the instructions given. To the extent no directions are given on a proposal, the proxy holder will vote FOR the nominees listed on the reverse side of this proxy, FOR authorization of the amendment to the Company's certificate of incorporation and FOR ratification of the appointment of the independent registered public accounting firm and, in the discretion of the proxy holder, on other matters that may properly be presented at the Annual Meeting. The undersigned may revoke this proxy at any time prior to its exercise or may attend the Annual Meeting and vote in person.

■ (Continued and to be signed on the reverse side)

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