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

SCHEDULE 14A

)

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

Filed by the Registrant

Filed by a Party other than the Registrant \Box

Check the appropriate box:

Preliminary Proxy Statement

□ Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))

- E Definitive Proxy Statement
- Definitive Additional Materials
- □ Soliciting Material Pursuant to §240.14a-12

SYNTA PHARMACEUTICALS CORP.

(Name of Registrant as Specified In Its Charter)

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

Payment of Filing Fee (Check the appropriate box):

No fee required.

 \Box Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

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

(4) Proposed maximum aggregate value of transaction:

(5) Total fee paid:

□ Fee paid previously with preliminary materials.

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

(1) Amount Previously Paid:

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

(3) Filing Party:

(4) Date Filed:



April 30, 2009

Dear Stockholder,

You are cordially invited to attend the 2009 Annual Meeting of Stockholders of Synta Pharmaceuticals Corp. to be held at 10:00 a.m. EST on Wednesday, June 10, 2009, at our offices at 45 Hartwell Avenue, Lexington, Massachusetts 02421. The attached notice of annual meeting and proxy statement describe the business we will conduct at the annual meeting and provide information about us that you should consider when you vote your shares.

At the annual meeting, two persons will be elected to our Board of Directors. In addition, we will ask stockholders to ratify the selection of Ernst & Young LLP as our independent registered public accounting firm for our fiscal year ending December 31, 2009. The Board of Directors recommends the approval of each of these proposals. Such other business will be transacted as may properly come before the annual meeting.

We hope you will be able to attend the annual meeting. Whether you plan to attend the annual meeting or not, it is important that your shares are represented. Therefore, when you have finished reading the proxy statement, you are urged to complete, sign, date and return the enclosed proxy card, or to complete your proxy by telephone or via the Internet, promptly in accordance with the instructions set forth on the card. We encourage you to vote by proxy so that your shares will be represented and voted at the meeting, whether or not you can attend.

Sincerely,

Sy: Bahuall

Safi R. Bahcall, Ph.D. President and Chief Executive Officer

YOUR VOTE IS IMPORTANT. PLEASE CAST YOUR VOTE PROMPTLY.

SYNTA PHARMACEUTICALS CORP. NOTICE OF 2009 ANNUAL MEETING OF STOCKHOLDERS

TIME:	10:00 a.m. EST
DATE:	Wednesday, June 10, 2009
PLACE:	The offices of Synta Pharmaceuticals Corp. 45 Hartwell Avenue, Lexington, MA 02421
PURPOSES:	

1. To elect two directors to serve three-year terms expiring in 2012.

2. To ratify the appointment of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2009.

3. To consider any other business that is properly presented at the meeting.

WHO MAY VOTE:

You may vote if you were the record owner of Synta Pharmaceuticals Corp. common stock at the close of business on April 21, 2009. A list of stockholders of record will be available at the meeting and, during the 10 days prior to the meeting, at the office of the Secretary at the above address.

All stockholders are cordially invited to attend the annual meeting. Whether you plan to attend the annual meeting or not, you are requested to complete, sign, date and return the enclosed proxy card, or to complete your proxy by telephone or via the Internet in accordance with the instructions on the proxy card, as soon as possible in accordance with the instructions on the proxy card.

BY ORDER OF THE BOARD OF DIRECTORS

Wendy & Rieder

Wendy E. Rieder, Esq. Secretary

April 30, 2009

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SYNTA PHARMACEUTICALS CORP. 45 HARTWELL AVENUE LEXINGTON, MA 02421 (781) 274-8200

PROXY STATEMENT FOR THE SYNTA PHARMACEUTICALS CORP. 2009 ANNUAL MEETING OF STOCKHOLDERS

GENERAL INFORMATION ABOUT THE ANNUAL MEETING

Why Did You Send Me this Proxy Statement?

We sent you this proxy statement and the enclosed proxy card because Synta Pharmaceuticals Corp.'s Board of Directors is soliciting your proxy to vote at the 2009 Annual Meeting of Stockholders to be held at 10:00 a.m. EST on Wednesday, June 10, 2009 at the offices of Synta Pharmaceuticals Corp., 45 Hartwell Avenue, Lexington, Massachusetts 02421, and any adjournments of the annual meeting. This proxy statement along with the accompanying notice of annual meeting summarizes the purposes of the meeting and the information you need to know to vote at the annual meeting.

On or about May 7, 2009, we will begin sending this proxy statement, the attached notice of annual meeting and the enclosed proxy card to all stockholders entitled to vote at the meeting. Although not part of this proxy statement, we are also sending along with this proxy statement, our 2008 annual report, which includes our financial statements for the fiscal year ended December 31, 2008.

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE SHAREHOLDER MEETING TO BE HELD ON JUNE 10, 2009:

The proxy statement and annual report to security holders are available for viewing, printing and downloading at the "Investors—Annual Meeting Materials" section of our website at www.syntapharma.com and through the following link: http://ir.syntapharma.com/phoenix.zhtml? c=147988&p=proxy.

Who Can Vote?

Only stockholders who owned our common stock at the close of business on April 21, 2009 are entitled to vote at the annual meeting. On this record date, there were 33,919,584 shares of our common stock outstanding and entitled to vote. Common stock is our only class of voting stock.

You do not need to attend the annual meeting to vote your shares. Shares represented by valid proxies, received in time for the meeting and not revoked prior to the meeting, will be voted at the meeting. A stockholder may revoke a proxy before the proxy is voted by delivering to our Secretary a signed statement of revocation or a duly executed proxy card bearing a later date. Any stockholder who has executed a proxy card but attends the meeting in person may revoke the proxy and vote at the meeting.

How Many Votes Do I Have?

Each share of our common stock that you own entitles you to one vote.

How Do I Vote?

Whether you plan to attend the annual meeting or not, we urge you to vote by proxy. Voting by proxy will not affect your right to attend the annual meeting. If your shares are registered directly in



your name through our stock transfer agent, Computershare, or you have stock certificates, you may vote:

- **By mail.** Complete and mail the enclosed proxy card in the enclosed postage prepaid envelope. Your proxy will be voted in accordance with your instructions. If you sign the proxy card but do not specify how you want your shares voted, they will be voted as recommended by our Board of Directors.
- **By Internet or by telephone.** Follow the instructions on the proxy card to vote by Internet or telephone.
- In person at the meeting. If you attend the meeting, you may deliver your completed proxy card in person or you may vote by completing a ballot, which will be available at the meeting.

If your shares are held in "street name" (held in the name of a bank, broker or other nominee), you must provide the bank, broker or other nominee with instructions on how to vote your shares and can do so as follows:

- By Internet or by telephone. Follow the instructions you receive from your broker to vote by Internet or telephone.
- **By mail.** You will receive instructions from your broker or other nominee explaining how to vote your shares.
- In person at the meeting. Contact the broker or other nominee who holds your shares to obtain a broker's proxy card and bring it with you to the meeting. You will not be able to vote at the meeting unless you have a proxy card from your broker.

How Does the Board of Directors Recommend That I Vote on the Proposals?

The Board of Directors recommends that you vote as follows:

- "FOR" the election of the two nominees for director; and
- "FOR" ratification of the selection of Ernst & Young LLP as our independent registered public accounting firm for our fiscal year ending December 31, 2009.

If any other matter is presented, the proxy card provides that your shares will be voted by the proxy holder listed on the proxy card in accordance with his or her best judgment. At the time this proxy statement was printed, we knew of no matters that needed to be acted on at the annual meeting, other than those discussed in this proxy statement.

May I Revoke My Proxy?

If you give us your proxy, you may revoke it at any time before the meeting. You may revoke your proxy in any one of the following ways:

- by signing a new proxy card and submitting it as instructed above;
- by re-voting by Internet or by telephone as instructed above (only your latest Internet or telephone vote will be counted);
- by notifying Synta's Secretary in writing before the annual meeting that you have revoked your proxy; or
- by attending the meeting in person and voting in person. Attending the meeting in person will not in and of itself revoke a previously submitted proxy unless you specifically request it.

What if I Receive More Than One Proxy Card?

You may receive more than one proxy card or voting instruction form if you hold shares of our common stock in more than one account, which may be in registered form or held in street name. Please vote in the manner described under "How Do I Vote?" for each account to ensure that all of your shares are voted.

Will My Shares be Voted if I Do Not Return My Proxy?

If your shares are registered in your name or if you have stock certificates, they will not be voted if you do not return your proxy or vote at the meeting as described above under "How Do I Vote?"

If your shares are held in street name and you do not provide voting instructions to the bank, broker or other nominee that holds your shares as described above under "How Do I Vote?," the bank, broker or other nominee has the authority to vote your unvoted shares on both Proposals 1 and 2 even if it does not receive instructions from you. We encourage you to provide voting instructions. This ensures your shares will be voted at the meeting in the manner you desire. If your broker cannot vote your shares on a particular matter because it has not received instructions from you and does not have discretionary voting authority on that matter or because your broker chooses not to vote on a matter for which it does have discretionary voting authority, this is referred to as a "broker non-vote".

What Vote is Required to Approve Each Proposal and How are Votes Counted?

Proposal 1:The nominees for director who receive the most votes (also known as a "plurality" of the votes) will be elected. You may vote either FOR all
of the nominees, WITHHOLD your vote from all of the nominees or WITHHOLD your vote from any one or more of the nominees. Votes that
are withheld will not be included in the vote tally for the election of directors. Brokerage firms have authority to vote customers' unvoted
shares held by the firms in street name for the election of directors. If a broker does not exercise this authority, such broker non-votes will
have no effect on the results of this vote.

Proposal 2:The affirmative vote of a majority of the shares cast affirmatively or negatively for this proposal is required to ratify the selection of our
independent registered public accounting firm. Abstentions will have no effect on the results of this vote. Brokerage firms have authority to
vote customers' unvoted shares held by the firms in street name on this proposal. If a broker does not exercise this authority, such broker
non-votes will have no effect on the results of this vote. We are not required to obtain the approval of our stockholders to select our
independent registered public accounting firm. However, if our stockholders do not ratify the selection of Ernst & Young LLP as our
independent accountants for 2009, our Audit Committee will reconsider its selection.

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Is Voting Confidential?

We will keep all the proxies, ballots and voting tabulations private. We only let our Inspectors of Election, Computershare, examine these documents. Management will not know how you voted on a specific proposal unless it is necessary to meet legal requirements. We will, however, forward to management any written comments you make, on the proxy card or elsewhere.

Who is Paying for the Costs of Soliciting these Proxies?

We will pay all of the costs of soliciting these proxies. Our directors and employees may solicit proxies in person or by telephone, fax or email. We will pay these employees and directors no additional compensation for these services. We will ask banks, brokers and other institutions, nominees and fiduciaries to forward these proxy materials to their principals and to obtain authority to execute proxies. We will then reimburse them for their expenses.

What Constitutes a Quorum for the Meeting?

The presence, in person or by proxy, of the holders of a majority of the outstanding shares of our common stock is necessary to constitute a quorum at the meeting. Votes of stockholders of record who are present at the meeting in person or by proxy, abstentions, and broker non-votes are counted for purposes of determining whether a quorum exists.

Householding of Annual Disclosure Documents

In December 2000, the Securities and Exchange Commission, or the SEC, adopted a rule concerning the delivery of annual disclosure documents. The rule allows us or your broker to send a single set of our annual report and proxy statement to any household at which two or more of our stockholders reside, if we or your broker believe that the stockholders are members of the same family. This practice, referred to as "householding," benefits both you and us. It reduces the volume of duplicate information received at your household and helps to reduce our expenses. The rule applies to our annual reports, proxy statements and information statements. Once you receive notice from your broker or from us that communications to your address will be "householded," the practice will continue until you are otherwise notified or until you revoke your consent to the practice. Each stockholder will continue to receive a separate proxy card or voting instruction card.

If your household received a single set of disclosure documents this year, but you would prefer to receive your own copy, please contact our transfer agent, Computershare, by calling their toll free number, 1-800-662-7232.

If you do not wish to participate in "householding" and would like to receive your own set of our annual disclosure documents in future years, follow the instructions described below. Conversely, if you share an address with another Synta stockholder and together both of you would like to receive only a single set of our annual disclosure documents, follow these instructions:

- If your Synta shares are registered in your own name, please contact our transfer agent, Computershare, and inform them of your request by calling them at 1-800-662-7232 or writing them at P.O. Box 43078, Providence, Rhode Island 02940-3078.
- If a broker or other nominee holds your Synta shares, please contact the broker or other nominee directly and inform them of your request. Be sure to include your name, the name of your brokerage firm and your account number.

Electronic Delivery of Company Stockholder Communications

Most stockholders can elect to view future proxy statements and annual reports over the Internet instead of receiving paper copies in the mail. You can choose this option and save Synta the cost of producing and mailing these documents by following the instructions provided when you vote over the Internet.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information regarding the beneficial ownership of our common stock as of March 2, 2009 by:

- the executive officers named in the Summary Compensation Table on page 25;
- each of our directors and director nominees;
- all of our current directors and executive officers as a group; and
- each stockholder known by us to own beneficially more than 5% of our common stock.

Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission and includes voting or investment power with respect to the securities. Shares of common stock that may be acquired by an individual or group within 60 days of March 2, 2009, pursuant to the exercise of options or warrants, are deemed to be outstanding for the purpose of computing the percentage ownership of such individual or group, but are not deemed to be outstanding for the purpose of computing the percentage ownership of any other person shown in the table. Percentage of ownership is based on 33,919,584 shares of common stock outstanding on March 2, 2009.

Except as indicated in footnotes to this table, we believe that the stockholders named in this table have sole voting and investment power with respect to all shares of common stock shown to be beneficially owned by them, based on information provided to us by such stockholders. Unless otherwise indicated, the address for each director and executive officer listed is: c/o Synta Pharmaceuticals Corp., 45 Hartwell Avenue, Lexington, Massachusetts 02421.

	Number of Shares Beneficially	Percentage of Common Stock Beneficially
Beneficial Owner	Owned	Owned
Directors and Executive Officers		
Safi R. Bahcall, Ph.D.(1)	2,391,650	7.0%
Keith S. Ehrlich, C.P.A.(2)	100,709	*
James G. Barsoum, Ph.D.(3)	182,911	*
Keizo Koya, Ph.D.(4)	281,237	*
Eric W. Jacobson, M.D.(5)	99,994	*
Keith R. Gollust(6)	1,831,240	5.3%
Lan Bo Chen, Ph.D.(7)	3,427,452	10.1%
Bruce Kovner(8)	8,754,396	25.7%
William S. Reardon, C.P.A.(9)	23,300	*
Robert N. Wilson(10)	422,899	1.2%
All current executive officers and directors as a group (13 persons)(11)	17,807,000	50.6%
Five Percent Stockholders		
CxSynta LLC(12)	7,761,716	22.8%
c/o Caxton Corporation		
Princeton Plaza, Building 2		
731 Alexander Road		
Princeton, NJ 08540		
Lin-Huey Chen(13)	3,427,452	10.1%
184 East Emerson Road		
Lexington, MA 02420		

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* Represents beneficial ownership of less than 1% of the shares of common stock.

- (1) Consists of 2,250,525 shares of common stock owned of record by and 126,125 shares of common stock issuable upon the exercise of options exercisable within 60 days of March 2, 2009 held by Dr. Bahcall, and 15,000 shares of common stock owned of record by the Safi R. Bahcall Irrevocable Trust, the trustee of which is Dr. Bahcall's mother and of which Dr. Bahcall is the beneficiary. Dr. Bahcall disclaims beneficial ownership of the shares held by this trust except to the extent of any pecuniary interest therein.
- (2) Consists of 14,826 shares of common stock owned of record by and 85,883 shares of common stock issuable upon the exercise of options exercisable within 60 days of March 2, 2009 held by Mr. Ehrlich.
- (3) Consists of 40,000 shares of common stock owned of record by and 142,911 shares of common stock issuable upon the exercise of options exercisable within 60 days of March 2, 2009 held by Dr. Barsoum.
- (4) Consists of 33,045 shares of common stock owned of record by and 248,192 shares of common stock issuable upon the exercise of options exercisable within 60 days of March 2, 2009 held by Dr. Koya.
- (5) Consists of 25,300 shares of common stock owned of record by and 74,694 shares of common stock issuable upon the exercise of options exercisable within 60 days of March 2, 2009 held by Dr. Jacobson.
- (6) Consists of 47,273 shares of common stock owned of record by and 206,000 shares of common stock issuable upon the exercise of options exercisable within 60 days of March 2, 2009 held by Mr. Gollust; and 1,577,967 shares of common stock owned of record by Wyandanch Partners, L.P. Mr. Gollust is the president and sole stockholder of Gollust Management, Inc., which is the general partner of Wyandanch Partners, L.P.
- (7) Consists of 600,035 shares of common stock owned of record by Dr. Chen; 142,223 shares of common stock owned of record by LAJ Holdings LLC, the co-managers of which are Dr. Chen and his spouse, Lin-Huey Chen; 1,684,016 shares of common stock owned of record by the Wisteria Trust, the trustee of which is Dr. Chen's spouse; 243,481 shares of common stock owned of record by the Ann Chen Trust, a co-trustee of which is Dr. Chen's spouse; 12,946 shares of common stock owned of record by the Chen Grandchildren's Trust, a co-trustee of which is Dr. Chen's spouse; 12,946 shares of common stock owned of record by the Alexander Chen Wu 2002 Irrevocable Trust, a co-trustee of which is Dr. Chen's spouse; 8,560 shares of common stock owned of record by the Allison Chen Wu 2004 Irrevocable Trust, a co-trustee of which is Dr. Chen's spouse; 160,000 shares of common stock owned by the Lan Bo Chen 2008 GRAT, of which Dr. Chen is the trustee; and 320,000 shares of common stock owned by the Lin-Huey Chen 2008 GRAT, of which Dr. Chen is the trustee. See note 13.
- (8) Consists of 933,867 shares of common stock owned of record by and 58,813 shares of common stock issuable upon the exercise of options exercisable within 60 days of March 2, 2009 held by Mr. Kovner; and 7,761,716 shares of common stock owned of record by CxSynta LLC. Caxton Corporation is the managing member of CxSynta LLC and Bruce Kovner is the chairman of Caxton Corporation. See note 12.
- (9) Consists of 4,175 shares of common stock owned of record by and 19,125 shares of common stock issuable upon the exercise of options exercisable within 60 days of March 2, 2009 held by Mr. Reardon.
- (10) Consists of 356,274 shares of common stock owned of record by and 66,625 shares of common stock issuable upon the exercise of options exercisable within 60 days of March 2, 2009 held by Mr. Wilson.

- (11) Consists of the shares of common stock set forth in footnotes 1 through 10 and 56,279 shares of common stock owned of record by and 234,933 shares of common stock issuable upon the exercise of options exercisable within 60 days of March 2, 2009 held by three executive officers not named in the table.
- (12) Represents shares of common stock owned of record by CxSynta LLC. Caxton Corporation is the managing member of CxSynta LLC and Bruce Kovner is the chairman of Caxton Corporation. See note 8.
- (13) Consists of 600,035 shares of common stock owned of record by Mrs. Chen's spouse, Dr. Lan Bo Chen; 142,223 shares of common stock owned of record by LAJ Holdings LLC, of which Mrs. Chen and her spouse are co-managers; 1,684,016 shares of common stock owned of record by the Wisteria Trust, of which Mrs. Chen is the trustee; 243,481 shares of common stock owned of record by the Ann Chen Trust, of which Mrs. Chen is a co-trustee; 243,481 shares of common stock owned of record by the Jane Chen Trust, of which Mrs. Chen is a co-trustee; 12,946 shares of common stock owned of record by the Chen Grandchildren's Trust, of which Mrs. Chen is a co-trustee; 12,710 shares of common stock owned of record by the Alexander Chen Wu 2002 Irrevocable Trust, of which Mrs. Chen is a co-trustee; 8,560 shares of common stock owned of record by the Allison Chen Wu 2004 Irrevocable Trust, of which Mrs. Chen is a co-trustee; 160,000 shares of common stock owned by the Lan Bo Chen 2008 GRAT, of which Mrs. Chen is the trustee. See note 7.

MANAGEMENT AND CORPORATE GOVERNANCE

The Board of Directors

Our restated certificate of incorporation and restated bylaws provide that our business is to be managed by or under the direction of our Board of Directors. Our Board of Directors is divided into three classes for purposes of election. One class is elected at each annual meeting of stockholders to serve for a three-year term. Our Board of Directors currently consists of six members, classified into three classes as follows:

- the Class I directors are Lan Bo Chen, Ph.D. and William S. Reardon, C.P.A., and their terms will expire at the annual meeting of stockholders to be held in 2011;
- the Class II directors are Keith R. Gollust and Robert N. Wilson, and their terms expire at the upcoming annual meeting; and
- the Class III directors are Safi R. Bahcall, Ph.D. and Bruce Kovner, and their terms will expire at the annual meeting of stockholders to be held in 2010.

On February 25, 2009, our Board of Directors accepted the recommendation of the Nominating and Governance Committee and voted to nominate Keith R. Gollust and Robert N. Wilson for election at the annual meeting for a term of three years to serve until the 2012 annual meeting of stockholders, and until their respective successors have been elected and qualified.

Set forth below is information regarding our current directors, including the two current directors nominated for election at the annual meeting:

Name	Age	Position
Safi R. Bahcall, Ph.D.	40	President and Chief Executive Officer and Director
Keith R. $Gollust(1)(2)(3)$	63	Chairman of the Board of Directors
Lan Bo Chen, Ph.D.	65	Director
Bruce Kovner(2)(3)	64	Director
William S. Reardon, C.P.A.(1)	62	Director
Robert N. Wilson(1)(2)(3)	68	Director

- (1) Member of our Audit Committee.
- (2) Member of our Compensation Committee.
- (3) Member of our Nominating and Governance Committee.

Safi R. Bahcall, Ph.D. co-founded Synta with Dr. Lan Bo Chen and has been our Chief Executive Officer and a member of our Board of Directors since our inception in July 2001. Dr. Bahcall has served as our President since December 2003. From 1998 to 2001, Dr. Bahcall was a consultant at McKinsey & Company, a management consulting firm, advising investment banks and pharmaceutical companies on strategy, technology, and operations. Dr. Bahcall also co-founded a drug discovery company focused on novel ion channel research in November 2001, which was acquired by Synta in December 2002. He received his B.A. *summa cum laude* from Harvard University, was awarded his Ph.D. from Stanford University in theoretical physics, and was a Miller postdoctoral research fellow at the University of California, Berkeley.

Keith R. Gollust has been a member of our Board of Directors since July 2002 and has been our Chairman since September 2002. Mr. Gollust is a private investor and President of Gollust Management, Inc., the general partner of Wyandanch Partners, an investment partnership. Mr. Gollust also was a Managing Director of Caxton Associates, L.L.C., a hedge fund firm, from July 2003 through

December 2004. Mr. Gollust received a B.A. from Princeton University and an MSIA from Carnegie Mellon University.

Lan Bo Chen, Ph.D. co-founded Synta with Dr. Safi Bahcall and has been a member of our Board of Directors since July 2001, and a member of our scientific advisory board and its Chairman since July 2001. Dr. Chen is a Professor of Pathology, Emeritus, at Harvard Medical School. He has been at the Dana-Farber Cancer Institute and Harvard Medical School since July 1977. Dr. Chen is the founder of several biotechnology companies, including Fuji ImmunoPharmaceuticals Corp. and Shionogi BioResearch Corp. Dr. Chen received his B.S. in chemistry from National Taiwan University and his Ph.D. in cell biology from the Massachusetts Institute of Technology.

Bruce Kovner has been a member of our Board of Directors since July 2002. In 1983, Mr. Kovner founded Caxton Corporation, a diversified trading company and manager of client funds active in currency, interest rate, commodity and equity markets, and has acted as its Chairman since its inception. He is also Chairman of Caxton Associates LP, formerly Caxton Associates, L.L.C., which succeeded to a significant portion of Caxton Corporation's trading and investment activities in 1996. Prior to the formation of Caxton, Mr. Kovner served as a Vice President of Commodities Corporation, a private commodities trading company since acquired by Goldman Sachs. Mr. Kovner is also Chairman of the Board of the American Enterprise Institute, Chairman of the Board of the Juilliard School, and Vice Chairman of Lincoln Center for the Performing Arts. In addition, he is the Founder and Chairman of the School Choice Scholarships Foundation, which provides scholarships to low-income students in New York City to attend primary schools of their choice. Mr. Kovner received his B.A. from Harvard College in 1966. He continued his studies at the John F. Kennedy School of Government until 1970.

William S. Reardon, C.P.A. has been a member of our Board of Directors since August 2004. Until his retirement in 2002 from PricewaterhouseCoopers LLP, an international accounting firm, where he was employed from June 1973 to July 2002, Mr. Reardon was a business assurance (audit) partner at the firm's Boston office and leader of its life sciences industry practice for New England and the eastern United States. From 1998 to 2000, Mr. Reardon served on the board of the emerging companies section of the Biotechnology Industry Organization. He also served on the board of the Massachusetts Biotechnology Council from 2000 until his retirement in 2002. Mr. Reardon is currently a member of the board of directors and the chairman of the audit committees of Idera Pharmaceuticals, Inc., and Oscient Pharmaceuticals Corporation, both of which are publicly traded pharmaceutical companies. He is also an advisor to the audit committee at Momenta Pharmaceuticals, Inc., a publicly traded pharmaceutical company. Mr. Reardon received both his undergraduate degree in East Asian history and his M.B.A. from Harvard University.

Robert N. Wilson has been a member of our Board of Directors since June 2003. Mr. Wilson is Chairman of Still River Systems, a medical device company. Prior to his association with Still River Systems, Mr. Wilson was Chairman of Caxton Health Holdings, LLC, from 2004 through 2007 and was Vice Chairman of the board of directors of Johnson & Johnson, a manufacturer of healthcare products, from 1989 until 2003. Mr. Wilson had joined Johnson & Johnson in 1964. Mr. Wilson is also a director of Hess Corporation, an integrated oil and gas company and Charles Schwab Corporation, a publicly traded financial services company.

Director Independence

Our Board of Directors has reviewed the materiality of any relationship that each of our directors has with Synta, either directly or indirectly. Based on this review, our Board has determined that the following members of the Board are "independent directors" as defined by The Nasdaq Stock Market: Messrs. Gollust, Kovner, Reardon and Wilson.

Committees of the Board of Directors and Meetings

Meeting Attendance

During the fiscal year ended December 31, 2008 there were four meetings of our Board of Directors, and the various committees of the Board met a total of 14 times. No director attended fewer than 75% of the total number of meetings of the Board and of committees of the Board on which he served during 2008. The Board has adopted a policy under which each member of the Board is encouraged, but not required, to attend each annual meeting of our stockholders. Three of our directors attended our annual meeting of stockholders held in 2008.

Audit Committee

Our Audit Committee is composed of Messrs. Gollust, Reardon (chairman) and Wilson, and met eight times during fiscal year 2008. All members of the Audit Committee satisfy the current independence standards promulgated by the SEC and by The Nasdaq Stock Market, as such standards apply specifically to members of audit committees. Our Board of Directors has determined that Mr. Reardon is an "audit committee financial expert," as the SEC has defined that term. Our Audit Committee's role and responsibilities are set forth in the Audit Committee's written charter and include the authority to:

- approve and retain the independent auditors to conduct the annual audit of our books and records;
- review the proposed scope and results of the audit;
- review and pre-approve the independent auditor's audit and non-audit services rendered;
- approve the audit fees to be paid;
- review accounting and financial controls with the independent auditors and our financial and accounting staff;
- review and approve transactions between us and our directors, officers and affiliates;
- recognize and prevent prohibited non-audit services;
- establish procedures for complaints received by us regarding accounting matters;
- oversee internal audit functions, if any; and
- prepare the report of the Audit Committee that rules of the SEC require to be included in our annual meeting proxy statement.

A copy of the Audit Committee's written charter is publicly available through the "Investors—Corporate Governance" section of our website at *www.syntapharma.com*.

Compensation Committee

Our Compensation Committee is composed of Messrs. Gollust, Kovner and Wilson (chairman), and met five times during fiscal year 2008. All members of the Compensation Committee qualify as independent under the current definition promulgated by The Nasdaq Stock Market. Our Compensation Committee's role and responsibilities are set forth in the Compensation Committee's written charter and include the authority to:

 review and establish the compensation arrangements for management, including the compensation for our President and Chief Executive Officer;

- establish and review general compensation policies with the objective to attract and retain superior talent, to reward individual performance and to achieve our financial goals;
- administer our stock incentive plan;
- review the Compensation Discussion and Analysis, or CD&A, prepared by management, discuss the CD&A with management and, based on such review and discussions, recommend to our Board of Directors that the CD&A be included in our Annual Report on Form 10-K, annual meeting proxy statement, or any other applicable filing as required by the SEC; and
- prepare the report of the Compensation Committee that SEC rules require to be included in our annual meeting proxy statement.

The Compensation Committee is charged with establishing a compensation policy for our executives and directors that is designed to attract and retain the best possible executive talent, to motivate them to achieve corporate objectives, and reward them for superior performance. Our Compensation Committee is also responsible for establishing and administering our executive compensation policies and equity compensation plans. The Compensation Committee meets at least twice per year and more often as necessary to review and make decisions with regard to executive compensation matters. As part of its review of executive compensation matters, the Compensation Committee may delegate any of the powers given to it to a subcommittee of the committee consisting of one or more members of the Compensation Committee.

In the second quarter of 2007, based on the recommendation of management, the Compensation Committee engaged W.T. Haigh & Company, Inc., or W.T. Haigh, as our compensation consultant. W.T. Haigh was engaged to review all aspects of our executive compensation. We used the information we obtained from W.T. Haigh to revise our cash bonus policy and implement policies that were applied in determining equity compensation in February 2008 and for benchmarking compensation for performance during fiscal year 2008.

Please also see the CD&A and the report of the Compensation Committee set forth elsewhere in this proxy statement.

A copy of the Compensation Committee's written charter is publicly available through the "Investors—Corporate Governance" section of our website at www.syntapharma.com.

Nominating and Governance Committee

Our Nominating and Governance Committee is composed of Messrs. Gollust (chairman), Kovner and Wilson, and met one time in fiscal year 2008. All members of the Nominating and Governance Committee qualify as independent under the current definition promulgated by The Nasdaq Stock Market. Our Nominating and Governance Committee's role and responsibilities are set forth in the Nominating and Governance Committee's written charter and include the authority to:

- identify and nominate members of the Board of Directors;
- develop and recommend to the Board of Directors a set of corporate governance principles applicable to our company; and
- oversee the evaluation of the Board of Directors and management.

Our Nominating and Governance Committee may consider candidates recommended by stockholders as well as from other sources such as other directors or officers, third-party search firms or other appropriate sources. For all potential candidates, our Nominating and Governance Committee may consider all factors it deems relevant, such as a candidate's personal integrity and sound judgment, business and professional skills and experience, independence, knowledge of the industry in which we operate, possible conflicts of interest, diversity, the extent to which the candidate would fill a present



need on the Board of Directors, and concern for the long-term interests of the stockholders. In general, persons recommended by stockholders will be considered on the same basis as candidates from other sources. For each annual meeting, our Nominating and Governance Committee will consider only one recommended nominee from any stockholder or group of affiliated stockholders, and such recommending stockholder or group must have held at least 5% of our common stock for at least one year. All stockholder recommendations for proposed director nominees must be in writing to the Nominating and Governance Committee, care of our Secretary at 45 Hartwell Avenue, Lexington, Massachusetts 02421, no later than 120 calendar days prior to the first anniversary of the date of the proxy statement for the prior annual meeting of stockholders or, in certain circumstances, a reasonable time in advance of the mailing of our proxy statement for the annual meeting of stockholders for the current year. The recommendation must be accompanied by the following information concerning the recommending stockholder:

- name, address and telephone number of the recommending stockholder;
- the number of shares of our common stock owned by the recommending stockholder and the time period for which such shares have been held;
- if the recommending stockholder is not a stockholder of record, a statement from the record holder verifying the holdings of the recommending stockholder and a statement from the recommending stockholder of the length of time such shares have been held (alternatively the recommending stockholder may furnish a current Schedule 13D, Schedule 13G, Form 3, Form 4 or Form 5 filed with the SEC, together with a statement of the length of time that the shares have been held); and
- a statement from the recommending stockholder as to a good faith intention to continue to hold such shares through the date of the next annual meeting.

The recommendation must also be accompanied by the following information concerning the proposed nominee:

- the information required by Items 401, 403 and 404 of Regulation S-K under the Securities Act of 1933, as amended;
- a description of all relationships between the proposed nominee and the recommending stockholder, including any agreements or understandings regarding the nomination;
- a description of all relationships between the proposed nominee and any of our competitors, customers, suppliers, labor unions or other persons with special interests regarding Synta; and
- the contact information of the proposed nominee.

The recommending stockholder must also furnish a statement supporting a view that the proposed nominee possesses the minimum qualifications as set forth below for director nominees and describing the contributions that the proposed nominee would be expected to make to the Board of Directors and to the governance of Synta and must state whether, in its view, the proposed nominee, if elected, would represent all stockholders and not serve for the purpose of advancing or favoring any particular stockholder or other constituency of Synta. The recommendation must also be accompanied by the written consent of the proposed nominee (1) to be considered by the Nominating and Governance Committee and interviewed if the committee chooses to do so in its discretion, and (2) if nominated and elected, to serve as a director.

For all potential candidates, the Nominating and Governance Committee may consider all factors it deems relevant, including the following threshold criteria:

candidates should possess the highest personal and professional standards of integrity and ethical values;

- candidates must be committed to promoting and enhancing the long-term value of Synta for its stockholders;
- candidates must be able to represent fairly and equally all stockholders without favoring or advancing any particular stockholder or other constituency of Synta;
- candidates must have demonstrated achievement in one or more fields of business, professional, governmental, community, scientific or educational endeavor, and possess mature and objective business judgment and expertise;
- candidates are expected to have sound judgment, derived from management or policy making experience that demonstrates an ability to function effectively in an oversight role; and
- candidates must have, and be prepared to devote, adequate time to the Board of Directors and its committees.

In addition, the Nominating and Governance Committee will also take into account the extent to which the candidate would fill a present need on the Board of Directors, including the extent to which a candidate meets the independence and experience standards promulgated by the SEC and by The Nasdaq Stock Market.

A copy of the Nominating and Governance Committee's written charter is publicly available through the "Investors—Corporate Governance" section of our website at www.syntapharma.com.

Compensation Committee Interlocks and Insider Participation

Our Compensation Committee is composed of Messrs. Gollust, Kovner and Wilson. No member of our Compensation Committee has at any time been an employee of ours. None of our executive officers serve as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving as a member of our Board of Directors or Compensation Committee.

Shareholder Communications to the Board

Generally, stockholders who have questions or concerns should contact our Investor Relations department at ir@syntapharma.com. However, any stockholders who wish to address questions regarding our business directly with the Board of Directors, or any individual director, must prepare the communication in written form and mail or hand deliver the same to the following address:

ATTN: SECURITY HOLDER COMMUNICATION

Board of Directors [Designate individual director, if applicable] Synta Pharmaceuticals Corp. 45 Hartwell Avenue Lexington, MA 02421

Such communications should not exceed 500 words in length and must be accompanied by the following information:

- a statement of the type and amount of the securities of Synta that the person holds;
- any special interest, meaning an interest not in the capacity as a stockholder of Synta, that the person has in the subject matter of the communication; and
- the address, telephone number and e-mail address, if any, of the person submitting the communication.

The following types of communications are not appropriate for delivery to directors under these procedures:

- communications regarding individual grievances or other interests that are personal to the party submitting the communication and could not reasonably be construed to be of concern to security holders or other constituencies of Synta (such as employees, members of the communities in which we operate our businesses, customers and suppliers) generally;
- communications that advocate engaging in illegal activities;
- · communications that, under community standards, contain offensive, scurrilous or abusive content; and
- communications that have no rational relevance to the business or operations of Synta.

Communications will be distributed to the Board, or to any individual director or directors as appropriate, depending on the facts and circumstances outlined in the communications.

Executive Officers

The following table sets forth certain information regarding our executive officers who are not also directors:

Name	Age	Position
Michael P. Bailey	43	Senior Vice President, Business Development, Chief Commercial Officer
James G. Barsoum, Ph.D.	52	Senior Vice President, Research
Jeremy G. Chadwick, Ph.D.	46	Senior Vice President, Program Management and Clinical Operations
Keith S. Ehrlich, C.P.A.	58	Vice President, Finance and Administration, Chief Financial Officer
Eric W. Jacobson, M.D.	52	Senior Vice President, Clinical Research and Regulatory Affairs, Chief Medical Officer
Keizo Koya, Ph.D.	51	Senior Vice President, Drug Development
Wendy E. Rieder, Esq.	41	Vice President, Intellectual Property and Legal Affairs, General Counsel

Michael P. Bailey joined us in August 2008. Prior to joining us, Mr. Bailey served as ImClone Systems', a publicly traded biopharmaceutical company, Director of Marketing from June 1999 to December 2000, Senior Director of Marketing from December 2000 to December 2001, Vice President of Marketing from December 2001 to July 2006, and Senior Vice President of Commercial Operations from August 2006 until August 2008. Mr. Bailey led ImClone's Worldwide Commercial Organization, responsible for commercial aspects for the planning and launch of Erbitux® across multiple indications. In addition, Mr. Bailey was a key member of the strategic leadership committees for ImClone and its North American and Worldwide partnerships. Prior to joining ImClone, Mr. Bailey served at Genentech, Inc., a publicly traded biotechnology company, where he managed the company's cardiovascular development portfolio. Mr. Bailey started his career in the pharmaceutical industry as one of two MBA graduates selected for Smith-Kline Beecham's Executive Marketing Development Program, where he held a variety of commercial roles, including sales, strategic planning, and product management. Mr. Bailey earned a B.S. in Psychology from St. Lawrence University and holds an M.B.A. in International Marketing from the University of Notre Dame Graduate School of Business.

James G. Barsoum, Ph.D. has served as our Senior Vice President, Research since October 2006. He served as our Vice President, Biology from February 2003 to September 2006. From February 1987

to February 2003, Dr. Barsoum held various leadership roles at Biogen, Inc., now Biogen Idec Inc., a publicly traded biopharmaceutical company, most recently as the Director of Molecular and Cellular Biology. From January 1984 to January 1987, Dr. Barsoum held research fellowships at Stanford University and the Whitehead Institute for Biomedical Research. Dr. Barsoum received a Ph.D. in Biology from the Massachusetts Institute of Technology.

Jeremy G. Chadwick, Ph.D. has served as our Senior Vice President, Program Management and Clinical Operations since October 2006. He served as our Vice President, Program Management and Clinical Operations from May 2004 to September 2006. From January 2002 to May 2004, Dr. Chadwick served as Vice President, Development Operations at Vertex Pharmaceuticals, Inc., a publicly traded biopharmaceutical company. From December 1995 to September 1998, Dr. Chadwick held various positions at Parexel International, a publicly traded pharmaceutical services company, most recently as Vice President, U.S. Biostatistics and Data Management. From September 1985 to October 1995, Dr. Chadwick held various positions at Glaxo Group Research, most recently as Senior Manager, Medical Data Sciences Division. From September 1998 to October 2001, Dr. Chadwick was the Chief Operating Officer at Foliage Software Systems, a privately held software development company. Dr. Chadwick obtained both his Masters and Ph.D. in statistics from the University of London, U.K.

Keith S. Ehrlich, C.P.A. has served as our Chief Financial Officer since October 2006 and as our Vice President, Finance and Administration since March 2004. From November 2003 to February 2004, Mr. Ehrlich served as a financial consultant to us. From September 1999 to April 2003, Mr. Ehrlich was Vice President, Finance and Administration and Chief Financial Officer and Treasurer at Argentys Corporation, a private software development company. From January 1998 to July 1999, Mr. Ehrlich served as Senior Vice President, Finance and Administration, Chief Financial Officer and Treasurer of Dyax Corp., a publicly traded biopharmaceutical company. From October 1993 to January 1998, he served as Vice President, Finance and Administration and Chief Financial Officer and Treasurer of Oravax, Inc., a publicly traded biopharmaceutical company since acquired by Acambis plc. From May 1991 to October 1993, he served as Treasurer and Director of Finance of Vertex Pharmaceuticals, Inc., a publicly traded biopharmaceutical company. From January 1980 to April 1991, Mr. Ehrlich was an auditor with Coopers & Lybrand LLP. Mr. Ehrlich received his B.A. in Biology from Drew University and his M.B.A. in Finance and Accounting from Rutgers University.

Eric W. Jacobson, M.D. has served as our Senior Vice President, Clinical Research and Regulatory Affairs since October 2006 and as our Chief Medical Officer since January 2006. He served as our Vice President, Medical Research from April 2005 to December 2005. From January 2002 until April 2005, Dr. Jacobson held positions of increasing responsibility at Millennium Pharmaceuticals, Inc., a publicly traded biopharmaceutical company, most recently serving as Senior Director, Clinical Research and previously as Director, Clinical Research. From June 2000 until January 2002, Dr. Jacobson was the U.S. Medical Director, New Clinical Therapies for Serono Laboratories, Inc., a publicly traded biotechnology company. Dr. Jacobson was employed as an Academic Rheumatologist at the University of Massachusetts Medical Center from April 1991 until June 2000. From 1998 through 2000, he was also a consultant for the Center for Clinical and Lifestyle Research assisting with study design, data interpretation, report generation and journal publication. From July 1993 through June 1995, Dr. Jacobson was Adjunct Faculty at Northeastern University in their Physician Assistant Program, and previous to this Dr. Jacobson was a Rheumatologist at the North Carolina Arthritis and Allergy Care Center from July 1989 until April 1991. Dr. Jacobson received his B.S. at the University of Illinois at Champaign/Urbana and his M.D. at Rush Medical College of Rush University. Dr. Jacobson has had numerous academic appointments and has published over 25 abstracts, papers and book chapters.

Keizo Koya, Ph.D. has served as our Senior Vice President, Drug Development since September 2002. From September 1997 to August 2002, Dr. Koya worked for Shionogi BioResearch Corp. as Vice President, Research and Development. From April 1995 to August 1997, Dr. Koya was the Director,

Drug Discovery and Development at Fuji ImmunoPharmaceuticals Corp., now EMD Lexigen Research Center Corp., a biopharmaceutical company. From October 1990 to March 1995 he was employed by Fuji Photo Film Co., Ltd., a global imaging and information company, where he was most recently the Head of Pharmaceutical R&D, U.S. Representative Office. He earned his Ph.D. in organic chemistry at Kyushu University.

Wendy E. Rieder, Esq. has served as our General Counsel since October 2006 and as our Vice President, Intellectual Property and Legal Affairs since December 2002. In August 1998, Ms. Rieder co-founded Microbiotix, Inc., a privately held biotechnology company developing small-molecule antiinfectives, and served as its Chief Operating Officer and Vice President, Business Development and Intellectual Property from January 2000 to December 2002. From August 1997 to December 1999, Ms. Rieder served as the Vice President, Business Development and Intellectual Property at LipoGenics, Inc., a subsidiary of a publicly traded biopharmaceutical company. Ms. Rieder was a patent attorney at Boehringer Ingelheim Pharmaceuticals, a U.S. affiliate of Boehringer Ingelheim GmbH, a global pharmaceutical company, from August 1995 to July 1997, and a patent agent at Fish & Neave LLP from January 1991 to July 1995. Ms. Rieder received an M.A. in organic chemistry from Columbia University and a J.D. from Fordham Law School.

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COMPENSATION DISCUSSION AND ANALYSIS

The primary objectives of the Compensation Committee of our Board of Directors with respect to executive compensation are to attract, retain, and motivate the best possible executive talent. The focus is to tie short and long-term cash and equity incentives to achievement of measurable corporate and individual performance objectives, and to align executives' incentives with stockholder value creation. To achieve these objectives, the Compensation Committee has maintained, and continues to develop, compensation plans that tie a substantial portion of executives' overall compensation to our research, clinical, regulatory, commercial, and operational performance.

In 2007, the Compensation Committee, based on management's recommendation, engaged W.T. Haigh & Company, Inc., or W.T. Haigh, a compensation consulting firm with experience in evaluating public biopharmaceutical companies, to review all aspects of our executive compensation, including base salary, incentive compensation, bonuses, equity compensation, and severance and change in control arrangements. In connection with the engagement, we asked W.T. Haigh to help us collect and analyze data and to compare all components of our compensation program to the practices of peer companies, as well as data from companies represented in compensation survey data for national and regional companies in the biopharmaceutical industry, in particular data obtained from Radford Biotechnology Surveys, or the Radford Survey, prepared by AON Consulting, Inc. from companies in its overall survey totals and companies with between 150 to 499 employees, which we use in certain instances to validate data from the peer companies. We, together with W.T. Haigh, developed the below list of peer companies in 2008 based on several characteristics, including their being publicly traded and operating in our industry with a similar market cap and reported research and development expenses, as well as being of comparable size, scientific focus, stage and geographic location to us. We intend to periodically review the companies included in this peer group and modify its composition as needed to ensure that the data we collect and analyze continues to be from what we consider to be our most comparable peers for compensation purposes.

- Affymax, Inc.
- Alnylam Pharmaceuticals, Inc.
- Altus Pharmaceuticals Inc.
- ARIAD Pharmaceuticals, Inc.
- ArQule, Inc.
- Array BioPharma Inc.
- CombinatoRx Incorporated
- Cytokinetics, Inc.
- Dendreon Corporation
- Dyax Corp.
- Genomic Health, Inc.
- Idenix Pharmaceuticals, Inc.

- ImmunoGen, Inc.
- Incyte Corporation
- Indevus Pharmaceuticals Inc.
- Infinity Pharmaceuticals, Inc.
- Kosan Biosciences Incorporated
- Molecular Insight Pharmaceuticals, Inc.
- Momenta Pharmaceuticals, Inc.
- Osiris Therapeutics, Inc.
- ProGenics Pharmaceuticals, Inc.
- Rigel Pharmaceuticals, Inc.
- Riger Filannaceuticals, nic.
- Trubion Pharmaceuticals Inc.

Based on the recommendations of W.T. Haigh, the Compensation Committee adopted certain changes to our compensation program in 2007, including changes to our cash bonus policy and equity award practices that were applied in determining equity compensation in February 2008 and for benchmarking compensation for performance during fiscal year 2008. Prior to the adoption of these revised practices, management developed our compensation plans by utilizing publicly available compensation data and subscription compensation survey data for national and regional companies in the biopharmaceutical industry, in particular data obtained from the Radford Survey. We believe that the practices of the companies represented in this data provided us with appropriate compensation benchmarks, because these companies have similar organizational structures and tend to compete with us for executives and other employees. For benchmarking executive compensation in 2008 and prior years, we reviewed the compensation data we had collected from the complete group of companies



represented in the survey data, as well as a subset of the data from those companies that have a similar number of employees as our company.

Based on management's analyses and recommendations, the Compensation Committee has approved a pay-for-performance compensation philosophy, which is intended to bring base salaries and total executive compensation in line with approximately the fiftieth percentile of the companies with a similar number of employees represented in the compensation data we review. We also consider specific compensation data from the peer companies noted above to ensure the competitiveness of the compensation packages we provide to our named executive officers and certain other key employees.

We work within the framework of this pay-for-performance philosophy to determine each component of an executive's initial compensation package based on numerous factors, including:

- the individual's particular background and circumstances, including training and prior relevant work experience;
- the individual's role with us and the compensation paid to similar persons in the companies represented in the compensation data that we review;
- the demand for individuals with the individual's specific expertise and experience at the time of hire;
- performance goals and other expectations for the position;
- comparison to other executives within our company having similar levels of expertise and experience; and
- uniqueness of industry skills.

The Compensation Committee has also implemented an annual performance management program, under which annual performance goals are determined and set forth in writing at the beginning of each calendar year for the corporation as a whole, each corporate department, and each individual employee. Annual corporate goals are proposed by management and approved by the Board of Directors at the outset of each fiscal year. These corporate goals target the achievement of specific research, clinical, regulatory, and operational milestones. The Chief Executive Officer's proposed goals are closely tied to the annual corporate goals and are approved by the Compensation Committee of the Board of Directors. Annual department and individual goals focus on contributions which facilitate the achievement of specific corporate goals and are set during the first quarter of each calendar year. Department goals are proposed by each department head and approved by the Chief Executive Officer. Individual goals are proposed by each employee and approved by the Goals proposed by our other executive officers. Annual salary increases, annual bonuses, and annual stock option awards granted to our employees are tied to the achievement of the corporate and department goals, and each individual's contribution to the achievement of specific corporate goals. We may perform an interim assessment of the written goals to report progress against the previously established goals and to make any adjustments to the goals for the remainder of the year based on changing circumstances. Notwithstanding the above, all compensation decisions for employees at every level, including our Chief Executive Officer and other executive officers, are made in the sole discretion of the Board of Directors or the Compensation Committee.

Generally, during the first calendar quarter, we evaluate individual, department, and corporate performance against the written goals for the recently completed year. Consistent with our compensation philosophy, each employee's evaluation typically begins with a written self-assessment, which is submitted to the employee's supervisor. The supervisor then prepares a written evaluation based on the employee's self-assessment, the supervisor's own evaluation of the employee's performance, and input from others within the company. This process leads to a recommendation for

annual employee salary increases, annual stock option awards, and bonuses, if any, which is then reviewed and approved, altered or rejected by the Compensation Committee in its sole discretion. In the case of the Chief Executive Officer, his self-assessment is submitted to the Compensation Committee which then conducts his individual performance evaluation and determines his compensation changes and awards, if any. Our executive officers, other than the Chief Executive Officer, submit their self-assessments to the Chief Executive Officer, who performs the individual evaluations and submits recommendations to the Compensation Committee for salary increases, bonuses, and stock option awards. These recommendations are reviewed and approved, altered or rejected by the Compensation Committee in its sole discretion. For all employees, including our executive officers, annual base salary increases, annual stock option awards, and annual bonuses, to the extent granted, are typically implemented during the first calendar quarter of the year.

Compensation Components

The components of our compensation package are as follows:

Base Salary

Base salaries for our executives are established based on the scope of their responsibilities and their prior relevant background, training, and experience, taking into account competitive market compensation paid by the companies represented in the compensation data we review for similar positions and the overall market demand for such executives at the time of hire. As with total executive compensation, we believe that executive base salaries should generally target the fiftieth percentile of the range of salaries for executives in similar positions and with similar responsibilities in the companies of similar size to us represented in the compensation data we review. An executive's base salary is also evaluated together with other components of the executive's compensation to ensure that the executive's total compensation is in line with our overall compensation philosophy.

Base salaries are reviewed annually as part of our performance management program and increased for merit reasons, based on the executive's success in meeting or exceeding individual performance objectives and an assessment of whether significant corporate goals were achieved. If necessary, we also realign base salaries with market levels for the same positions in the companies of similar size to us represented in the compensation data we review, if we identify significant market changes in our data analysis. Additionally, we adjust base salaries as warranted throughout the year for promotions or other changes in the scope or breadth of an executive's role or responsibilities. There were no such adjustments made to the salaries of our named executive officers during 2008.

In February 2008, the Compensation Committee approved base salary increases for our executives effective March 1, 2008, including increasing the base salary of our Chief Executive Officer and other named executive officers as follows:

Name	2007 Base Salary (\$)	2008 Base Salary (\$)	Percent Increase
Safi R. Bahcall, Ph.D.	355,000	385,000	8.5%
Keith S. Ehrlich	230,000	245,000	6.5%
James G. Barsoum, Ph.D.	240,000	275,000	14.6%
Eric W. Jacobson, M.D.	280,000	302,000	8.0%
Keizo Koya, Ph.D.	270,000	286,000	6.0%

The amount of the salary increases were determined based on market data reviewed by the Compensation Committee and were approved in order to align each of our executives' base salaries with market levels for the same positions in companies of similar size to us.

Annual Bonus

In July 2007, based in part on the recommendations of W.T. Haigh, the Compensation Committee approved the implementation of an expanded cash bonus program intended to increase the cash element of our annual compensation program in relation to stock based compensation to more closely track the compensation programs of the peer companies reviewed and related compensation survey data. This expanded program established target percentages and includes eligibility for an annual performance-based cash bonus for all employees. The amount of cash available under the bonus plan is determined on an annual basis by the Compensation Committee and depends on the level of achievement of the stated corporate and department goals, and individual contribution to the achievement of specific corporate goals. Individual employees have a target cash bonus generally set as a percentage of base salary. Currently, employees are eligible for annual performance-based cash bonuses in amounts ranging from 5%-50% of their base salaries, with the percentage of the target bonus increasing with an employee's level of responsibility. The plan approved in 2007 provides for a 30% target bonus for Vice Presidents and 50% for our Chief Executive Officer. These targets were developed based on the recommendations of W.T. Haigh and the Radford Survey data. In its sole discretion, the Compensation Committee may, however, award bonus payments above or below these amounts on a case-by-case basis or may decide to not award bonus payments at all, notwithstanding the achievement of particular goals or individual contributions.

The primary corporate, financial and operational goals for our 2008 fiscal year were:

- meet specific enrollment target for our Phase 3 SYMMETRY trial;
- complete certain operational non-clinical and manufacturing objectives pertaining to elesclomol;
- achieve a specified amount of elesclomol milestone targets under our collaborative development, commercialization and license agreement with GlaxoSmithKline;
- meet specific enrollment targets for our STA-9090 Phase 1 clinical trials;
- identify one or more CRACM inhibitor lead candidates for preclinical development;
- generate one or more partnership opportunities; and
- improve operational functions as we work towards becoming a fully-integrated commercial pharmaceutical company.

Although all of the above-stated goals were achieved in our 2008 fiscal year, the Compensation Committee determined not to award any cash bonuses for 2008 performance due to the suspension of the clinical development of our lead drug candidate, elesclomol, in February 2009, which was followed by a workforce reduction in March 2009. For a more complete description of the circumstances surrounding this decision, see "—Post-2008 Developments" below.

Long-Term Incentives

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We believe that long-term performance is achieved through an ownership culture that encourages long-term participation by our executive officers in equity-based awards. Our 2006 Stock Plan allows the grant to employees of stock options, restricted stock, and other equity-based awards. We typically make an initial equity award of stock options to new employees and annual equity grants as part of our overall compensation program. An option committee appointed by our Board of Directors is currently authorized to make new hire stock option grants to all employees, except for executive officers, within certain parameters, beyond which Compensation Committee approval is required. The option committee awards new hire stock option grants as of the employee's initial start date with an exercise price equal to the closing price of our common stock on the date of grant, in accordance with our 2006 Stock Plan. Annual grants of options to all of our employees and equity awards to our executive

officers are approved by the Compensation Committee, the timing of which is consistent each year with a regularly scheduled meeting of the Compensation Committee and is not coordinated with the public release of nonpublic material information.

Initial stock option awards. Executives who join us are awarded initial stock option grants. These grants have an exercise price equal to the fair market value of our common stock on the grant date and a vesting schedule of 25% on the first anniversary of the date of hire and quarterly thereafter for the next three years. The amount of the initial stock option award is determined based on the executive's position with us and analysis of the competitive practices of the companies similar in size to us represented in the compensation data that we review. The initial stock option awards are calculated to have a total face value (calculated by multiplying the number of shares subject to the option by the exercise price thereof) equal to a percentage of the executive's base salary, and are intended to provide the executive with incentive to build value in the organization over an extended period of time. The amount of the initial stock option award is also reviewed in light of the executive's base salary and other compensation to ensure that the executive's total compensation is in line with our overall compensation philosophy. Currently, we grant our executives initial stock option awards with a total face value ranging from one and one half to two times the executive's base salary. However, we retain flexibility in awarding more stock options initially to newly hired executives, with the approval of the Compensation Committee.

Restricted stock awards. We have made grants of restricted stock to executive officers and certain high ranking non-executive employees to provide additional long-term incentive to build stockholder value. Restricted stock awards are made in anticipation of contributions that will create value in the company and are subject to a lapsing repurchase right by the company if the employee leaves prior to the date the shares are no longer restricted. Because the shares have a defined value at the time the restricted stock grants are made, restricted stock grants are often perceived as having more immediate value than stock options, which have a less calculable value when granted. However, we generally grant fewer shares of restricted stock than the number of stock options we would grant for a similar purpose. In 2004 and 2005, we awarded certain executive officers and senior non-executive employees restricted stock grants that were subject to a lapsing repurchase right as to the first 50% of the shares after two years and are subject to a lapsing repurchase right as to the remaining 50% of the shares after the earlier of four years or approval of an NDA with the FDA. The second vesting tranche of these restricted stock grants was structured in this way to recognize the significance of the approval of an NDA to us and to award the executive's role in achieving such a milestone.

Annual stock option awards. Our practice is to make annual stock option awards as part of our overall performance management program. The Compensation Committee believes that stock options provide management with a strong link to long-term corporate performance and the creation of stockholder value. We intend that the annual aggregate value of these awards will be set near competitive median levels for companies represented in the compensation data we review. As is the case when the amounts of base salary and initial equity awards are determined, a review of all components of the executive's compensation is conducted when determining annual equity awards to ensure that an executive's total compensation conforms to our overall philosophy and objectives. A pool of options is reserved for executives and non-officers based on setting a target grant level for each employee category, with the higher ranked employees being eligible for a higher target grant. Our annual stock option awards are typically based on a target percentage of base salary and granted upon the achievement of performance goals.

In July 2007, the Compensation Committee reaffirmed the practice of determining annual stock option awards based on a multiple of base salary and an evaluation of individual performance, including individual contribution to the achievement of specific corporate goals, and established and applied revised target amounts for our executive officers based in part on the recommendations of

W.T. Haigh in granting annual stock option awards for 2007 performance: 126% for Vice Presidents (previously 135%), 156% for Senior Vice Presidents (previously 150%), and 380% for the Chief Executive Officer (previously 200%). The annual stock option awards for 2007 performance were granted on February 27, 2008 and were in line with these target amounts, which amounts, including the target amount for the Chief Executive Officer, were consistent with our philosophy of targeting total executive compensation in line with approximately the fiftieth percentile of the companies represented in the compensation data we review.

Other Compensation

We maintain broad-based benefits that are provided to all employees, including health insurance, life and disability insurance, dental insurance, and a 401(k) plan with a matching company contribution. In particular circumstances, we also utilize cash signing bonuses when certain executives and senior nonexecutives join us. Such cash signing bonuses are typically repayable in full to the company if the employee recipient voluntarily terminates employment with us prior to the first anniversary of the date of hire. Whether a signing bonuse is paid and the amount thereof is determined on a case-by-case basis under the specific hiring circumstances. For example, we will consider paying signing bonuses to compensate for amounts forfeited by an executive upon terminating prior employment, to assist with relocation expenses, and/or to create additional incentive for an executive to join our company in a position where there is high market demand. We also provide our Chief Executive Officer with approximately 50% reimbursement for an apartment he leases in Massachusetts and reimburse him for commuting costs for travel from his residence in New York to our offices in Lexington, Massachusetts. Our Board of Directors and Compensation Committee believe that these payments facilitate the Chief Executive Officer's travel between Massachusetts and New York, where our Chief Executive Officer is required to conduct significant business activities on behalf of the company.

Termination Based Compensation

Severance Arrangements with our Chief Executive Officer. Our employment agreement with our Chief Executive Officer provides severance of 24 months of base salary if his employment is terminated without cause. After reviewing the practices of companies represented in the compensation data we obtained, the Compensation Committee negotiated our Chief Executive Officer's severance package to provide him an amount equal to his base salary for the length of his non-competition arrangement with us. We believe that our Chief Executive Officer's severance package is generally in line with severance packages offered to chief executive officers of the companies of similar size to us represented in the compensation data we reviewed.

Severance and Change of Control Agreements with our Other Named Executive Officers. The Compensation Committee determined that the retention of our executive team over the next several years is important to our success and to maintain and create stockholder value, and that severance and change of control agreements are significant incentives in retaining our executive team. In addition, the Compensation Committee recognizes that executives, especially highly ranked executives, often face challenges securing new employment following termination. In accordance with these determinations, on April 28, 2008, we entered into severance and change of control agreements with each of our Senior Vice Presidents and Vice Presidents, including all of our named executive officers, with the exception of our Chief Executive Officer, reflecting terms approved by the Compensation Committee. The Compensation Committee approved certain severance and change of control arrangements for Senior Vice Presidents and Vice Presidents that include provisions for severance payments, a separation bonus under certain circumstances, accelerated vesting of equity awards, and the continuation of health benefits. Receipt of any payments or benefits under the agreements is conditioned on the executive officer executing a written release of us from any and all claims arising in connection with his or her employment.

The specific terms of these agreements are further described below under "Potential Payments upon Termination or Change of Control."

As a public company, we have continued to review the practices of companies similar to us, and we believe that the approved terms of Dr. Bahcall's severance arrangements, and those of our other executive officers, are generally in line with severance packages offered to chief executive officers and other executive officers of the public companies of similar size to us represented in the compensation data we reviewed.

Acceleration of Vesting of Equity-Based Awards Under Our Stock Plans. In the event of a change of control as defined in our 2001 Stock Plan and 2006 Stock Plan, certain provisions of these plans allow for acceleration of equity awards in case an employee is terminated for certain reasons within six months after a change of control, which we refer to as "double trigger" acceleration. See "Potential Payments Upon Termination or Change of Control— Change of Control Arrangements Under Our 2001 Stock Plan and 2006 Stock Plan" below for a detailed discussion of these provisions. We believe a "double trigger" requirement maximizes shareholder value because it prevents an unintended windfall to management in the event of a friendly (non-hostile) change of control. Under this structure, unvested equity awards under our 2001 Stock Plan and 2006 Stock Plan and 2006 Stock Plan would continue to incentivize our executives to remain with the company after a friendly change of control. If, by contrast, our 2001 Stock Plan and 2006 Stock Plan had only a "single trigger," and if a friendly change of control occurred, management's equity awards would all vest immediately, creating a windfall, and the new owner would then likely find it necessary to replace the compensation with new unvested equity awards in order to retain management. This rationale is why we believe a "double-trigger" equity vesting acceleration mechanism is more stockholder-friendly, and thus more appropriate for our company, than a "single trigger" acceleration mechanism.

The severance and change of control agreements entered into in 2008 provide for the full acceleration of all outstanding equity awards in the event of a termination without cause or resignation for good reason within one year following a change of control. Thus, the severance and change of control agreements extend the period following a change of control during which if a termination occurs the executive officer is entitled to accelerated vesting under our stock plans by six months.

Post-2008 Developments

On February 26, 2009, we suspended our global Phase 3 clinical trial of elesclomol plus paclitaxel in metastatic melanoma, called the SYMMETRY trial, following a meeting of the independent data monitoring committee, or DMC, in which the DMC noted that while an interim review of the primary endpoint of progression free survival showed trends that favored the elesclomol arm of the study; the interim analysis of the secondary overall survival endpoint favored the control arm. We simultaneously suspended our other ongoing elesclomol studies, including our trial in prostate cancer and our single agent dose-escalating trial, pending further analysis of the SYMMETRY trial results. The FDA also placed our elesclomol trials on clinical hold at that time. In light of the suspension of the elesclomol development program and in anticipation of a workforce reduction, the Compensation Committee decided not to award any cash bonuses for 2008 performance and to freeze salaries in 2009, except for some salary increases in connection with a limited number of promotions in 2009 for certain employees in positions below the level of Vice President.

On March 13, 2009, we announced a workforce reduction of approximately 90 positions, to a total of approximately 130 positions, to allow us to operate with current cash reserves for approximately two more years without the need for additional equity financing.

On April 13, 2009, the Compensation Committee discussed and approved an employee retention program to be implemented in 2009, which includes a pool of \$1,250,000 from which specified cash payments will be made to certain employees and executive officers, 50% of which payments will be paid



on October 13, 2009 and the remaining 50% of which will be paid on April 13, 2010, provided the recipient is employed by us or a successor company on such dates. If a recipient is terminated without cause prior to April 13, 2010, they are entitled to full payment. The approved employee retention program also included the award of stock options on April 13, 2009 to all employees, including our Chief Executive Officer and other executive officers, which vest as to 50% of the shares on January 13, 2010, and as to the remaining 50% of the shares on October 13, 2010, and have an exercise price of \$2.49 per share, which was the closing price of our common stock on April 13, 2009.

The Compensation Committee determined and approved the following retention payments and stock options awards for our named executive officers:

Name	 al Retention Payment	Stock Option (#)
Safi R. Bahcall, Ph.D.	\$ _	146,300
President and Chief Executive Officer		
Keith S. Ehrlich, C.P.A. Vice President, Finance and Administration, Chief Financial Officer	\$ 49,000	30,870
James G. Barsoum, Ph.D. Senior Vice President, Research	\$ _	42,900
Eric W. Jacobson, M.D. Senior Vice President, Clinical Research and Regulatory Affairs, Chief Medical Officer	\$ 60,400	47,112
Keizo Koya, Ph.D. Senior Vice President, Drug Development	\$ _	44,616

Drs. Bahcall, Barsoum and Koya voluntarily elected not to participate in the cash portion of the retention program.

Conclusion

Our compensation policies are designed to retain and motivate our senior executive officers and to ultimately reward them for outstanding individual and corporate performance.

EXECUTIVE OFFICER AND DIRECTOR COMPENSATION

Summary Compensation Table

The following table shows the compensation paid or accrued during the fiscal years ended December 31, 2008, 2007 and 2006 to (1) our President and Chief Executive Officer, (2) our Chief Financial Officer and (3) our three most highly compensated executive officers, other than our President and Chief Executive Officer and our Chief Financial Officer.

Name and Principal Position	Year	Salary (\$)	Bonus (\$)(1)	Stock Awards (\$)(2)	Option Awards (\$)(3)	All Other Compensation (\$)	Total (\$)
Safi R. Bahcall, Ph.D.	2008	380,000	0	266,868(4)	434,356(5)	71,415(6)	1,152,639
President and Chief Executive Officer	2007	352,500	177,500	274,995	327,972	80,453	1,213,420
	2006	340,000	100,000	343,256	265,518	38,610	1,087,384
Keith S. Ehrlich, C.P.A. Vice President, Finance and Administration, Chief Financial Officer	2008 2007 2006	242,500 228,334 215,334	0 69,000 44,000	133,434(7) 137,498 137,498	163,787(8) 137,406 113,377	7,140(9) 6,474 5,241	546,861 578,712 515,450
James G. Barsoum, Ph.D. Senior Vice President, Research	2008 2007 2006	269,167 238,333 228,334	0 96,000 46,000	213,495(7) 219,996 219,996	197,938(10 159,459 129,365) 7,652(9) 6,833 5,339	688,252 720,621 629,034
Eric W. Jacobson, M.D. Senior Vice President, Clinical Research and Regulatory Affairs, Chief Medical Officer	2008 2007 2006	298,333 276,667 249,166	0 112,000 65,000	87,500(7) 87,498 87,498	256,452(11 208,645 163,024) 7,988(9) 7,850 5,700	650,273 692,660 570,388
Keizo Koya, Ph.D. Senior Vice President, Drug Development	2008 2007 2006	283,333 268,334 258,334	0 108,000 52,000	213,495(7) 219,996 219,996	215,475(12 171,542 136,581) 7,688(9) 7,688 4,078	719,991 775,560 670,989

(1) Represents a cash bonus for performance in the applicable fiscal year, which was paid in the following fiscal year. As discussed in the Compensation Discussion and Analysis, due to events that occurred in 2009 that impacted the development of our lead drug candidate elesclomol, the Compensation Committee determined to not award bonuses for 2008 performance.

- (2) See our discussion of "Stock-Based Compensation" under Note 2 and Note 7 to our audited consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2008 for details as to the assumptions used to determine the fair value of the stock. See also our discussion of stock-based compensation under Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations— Critical Accounting Policies and Estimates" of our Annual Report on Form 10-K for the year ended December 31, 2008.
- (3) See our discussion of "Stock-Based Compensation" under Note 2 to our audited consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2008 for details as to the assumptions used to determine the fair value of the option awards. Our executive officers will not realize the value of these awards in cash until these awards are exercised and the underlying shares are subsequently sold. See also our discussion of stock-based compensation under Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations— Critical Accounting Policies and Estimates" of our Annual Report on Form 10-K for the year ended December 31, 2008.
- (4) Represents compensation expense incurred by us in fiscal year 2008 in connection with a grant of 50,000 shares of restricted common stock on December 21, 2004 to Dr. Bahcall.
- (5) Consists of \$134,926, \$122,450, \$68,586 and \$108,394, representing the compensation expense incurred by us in fiscal year 2008 in connection with option grants to Dr. Bahcall to purchase 37,500 shares of common stock on February 15, 2005, 50,000 shares of common stock on February 15, 2006, 46,000 shares of common stock on February 28, 2007 and 100,000 shares of common stock on February 27, 2008, respectively.

- (6) Consists of \$36,000 of rental payments for a company apartment for Dr. Bahcall's use, \$19,800 as a tax reimbursement in connection with the rental payments, commuting costs for Dr. Bahcall's travel from his home in New York to our offices in Lexington, Massachusetts, and matching contributions made under our 401(k) plan.
- (7) Represents compensation expense incurred by us in fiscal year 2008 in connection with grants of 25,000, 40,000, and 40,000 shares of restricted common stock on December 21, 2004 to Mr. Ehrlich, Dr. Barsoum, and Dr. Koya, respectively, and a grant of 25,000 shares of restricted common stock on December 12, 2005 to Dr. Jacobson.
- (8) Consists of \$48,303, \$50,378, \$33,693 and \$31,413, representing the compensation expense incurred by us in fiscal year 2008 in connection with option grants to Mr. Ehrlich to purchase 13,425 shares of common stock on February 15, 2005, 20,571 shares of common stock on February 15, 2006, 22,000 shares of common stock on February 26, 2007 and 28,980 shares of common stock on February 27, 2008, respectively.
- (9) Represents matching contributions made under our 401(k) plan.
- (10) Consists of \$64,405, \$57,725, \$35,225 and \$40,583, representing the compensation expense incurred by us in fiscal year 2008 in connection with option grants to Dr. Barsoum to purchase 17,900 shares of common stock on February 15, 2005, 23,571 shares of common stock on February 15, 2006, 23,000 shares of common stock on February 26, 2007 and 37,440 shares of common stock on February 27, 2008, respectively.
- (11) Consists of \$91,438, \$67,894, \$49,774 and \$47,346, representing the compensation expense incurred by us in fiscal year 2008 in connection with option grants to Dr. Jacobson to purchase 25,000 shares of common stock on April 11, 2005, 27,723 shares of common stock on February 15, 2006, 32,500 shares of common stock on February 26, 2007 and 43,680 shares of common stock on February 27, 2008, respectively.
- (12) Consists of \$64,405, \$65,596, \$39,819 and \$45,655, representing the compensation expense incurred by us in fiscal year 2008 in connection with option grants to Dr. Koya to purchase 17,900 shares of common stock on February 15, 2005, 26,785 shares of common stock on February 15, 2006, 26,000 shares of common stock on February 26, 2007 and 42,120 shares of common stock on February 27, 2008, respectively.

2008 Grants of Plan-Based Awards

The following table shows information regarding grants of equity awards that we made during the fiscal year ended December 31, 2008 to each of the executive officers named in the Summary Compensation Table.

Name	Grant Date	All Other Option Awards: Number of Securities Underlying Options (#)	Exercise or Base Price of Option Awards (\$/Sh)	Fa	Grant Date tir Value of Stock and Option Awards(1)
Safi R. Bahcall, Ph.D. President and Chief Executive Officer	2/27/08	100,000	8.82	\$	578,100
Keith S. Ehrlich, C.P.A. Vice President, Finance and Administration, Chief Financial Officer	2/27/08	28,980	8.82	\$	167,533
James G. Barsoum, Ph.D. Senior Vice President, Research	2/27/08	37,440	8.82	\$	216,441
Eric W. Jacobson, M.D. Senior Vice President, Clinical Research and Regulatory Affairs, Chief Medical Officer	2/27/08	43,680	8.82	\$	252,514
Keizo Koya, Ph.D. Senior Vice President, Drug Development	2/27/08	42,120	8.82	\$	243,496

(1) See our discussion of "Stock-Based Compensation" under Note 2 to our audited consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2008 for details as



to the assumptions used to determine the fair value of the option awards. Our executive officers will not realize the value of these awards in cash until these awards are exercised and the underlying shares are subsequently sold. See also our discussion of stock-based compensation under Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Estimates" of our Annual Report on Form 10-K for the year ended December 31, 2008.

The terms of each executive officer's compensation are derived from our employment agreement, in the case of Dr. Bahcall, and our letter agreements, in the case of our other executive officers, entered into between us and them and annual performance reviews conducted by the Compensation Committee, in the case of Dr. Bahcall, and by Dr. Bahcall for the other executive officers. Annual base salary increases, annual stock option awards and cash bonuses, if any, for Dr. Bahcall are determined by the Compensation Committee. Dr. Bahcall recommends annual base salary increases, annual stock option awards and cash bonuses, if any, for the other executive officers, which are reviewed and approved by the Compensation Committee.

Employment Agreement with Dr. Safi Bahcall

Pursuant to a letter agreement effective as of April 18, 2005 between us and Dr. Bahcall, we agreed to employ Dr. Bahcall as our President and Chief Executive Officer on an at-will basis. We also agreed that so long as Dr. Bahcall continues to serve as our President and Chief Executive Officer, he will be nominated by the Board of Directors for election as a director at each annual meeting preceding which his term as director expires. Under this agreement, Dr. Bahcall's current annual base salary is \$385,000, and is subject to adjustment from time to time at the discretion of the Board of Directors or the Compensation Committee. Dr. Bahcall is also eligible to receive annual grants of stock options under our stock plans at the discretion of the Board of Directors or the Compensation Committee and, under our bonus policy, he is eligible to receive an annual performance-based cash bonus of up to 50% of his base salary, which amount, if any, is determined in the sole discretion of the Board of Directors or the Compensation Committee key person life insurance on Dr. Bahcall in an amount determined by Synta and with Synta as the beneficiary and one or more other policies of insurance insuring Dr. Bahcall's life. To date, we have not purchased any life insurance on Dr. Bahcall. As a condition of employment, Dr. Bahcall has entered into a non-competition/non-solicitation agreement pursuant to which he has agreed not to compete with Synta or to solicit customers or employees of Synta for a period of 24 months after the termination of his employment.

Offer Letters

We do not have formal employment agreements with any of our other executive officers named in the Summary Compensation Table, however certain elements of the executive officers' compensation and other employment arrangements are set forth in letter agreements that we executed with each of them at the time their employment with us commenced. The letter agreements provide, among other things, the executive officer's initial annual base salary and initial stock option award. Each letter agreement provides that the executive officer's employment with us is on an at-will basis. As a condition to their employment, each executive officer has entered into a non-competition/non-solicitation agreement pursuant to which each officer has agreed not to compete with Synta or to solicit customers or employees of Synta for a period of 12 months after the termination of employment. These letter agreements are further described below. Since the date of the letter agreements, the compensation paid to each of these executive officers has been increased and additional equity awards have been awarded. In addition, under our bonus policy, each executive officer is eligible to receive an annual performance-based cash bonus up to a certain percentage of such officer's base salary, as noted below, which amount, if any, may be increased or decreased in the discretion of the Compensation Committee.

Keith S. Ehrlich, C.P.A. Pursuant to a letter agreement dated February 19, 2004 between us and Mr. Ehrlich, we agreed to employ Mr. Ehrlich as Vice President, Finance and Administration, beginning on March 1, 2004. In October 2006, Mr. Ehrlich began serving as our Chief Financial Officer. Mr. Ehrlich's annual base salary is currently \$245,000. Under our bonus policy, Mr. Ehrlich is eligible to receive an annual performance-based cash bonus of up to 30% of his base salary.

James G. Barsoum, Ph.D. Pursuant to a letter agreement dated January 22, 2003 between us and Dr. Barsoum, we agreed to employ Dr. Barsoum as Vice President, Biology, beginning on February 26, 2003. In October 2006, Dr. Barsoum began serving as our Senior Vice President, Research. Dr. Barsoum's annual base salary is currently \$275,000. Under our bonus policy, Dr. Barsoum is eligible to receive an annual performance-based cash bonus of up to 40% of his base salary.

Eric W. Jacobson, M.D. Pursuant to a letter agreement dated March 23, 2005 between us and Dr. Jacobson, we agreed to employ Dr. Jacobson as Vice President, Medical Research, beginning on April 11, 2005. In connection with the execution of the letter agreement, we paid Dr. Jacobson a lump sum bonus of \$25,000. Since January 2006, Dr. Jacobson has served as our Chief Medical Officer and since October 2006, as our Senior Vice President, Clinical Research and Regulatory Affairs. Dr. Jacobson's annual base salary is currently \$302,000. Under our bonus policy, Dr. Jacobson is eligible to receive an annual performance-based cash bonus of up to 40% of his base salary.

Keizo Koya, Ph.D. Pursuant to a letter agreement dated October 1, 2002 between us and Dr. Koya, we agreed to employ Dr. Koya as Senior Vice President of Drug Development, beginning on October 1, 2002. Dr. Koya's annual base salary is currently \$286,000. Under our bonus policy, Dr. Koya is eligible to receive an annual performance-based cash bonus of up to 40% of his base salary.

We also have severance and change of control arrangements in place with each of the executive officers named in our Summary Compensation Table. For a description and quantification of benefits payable to the executive officers in connection with a termination of employment or a change of control pursuant to these arrangements, see "—Potential Payments Upon Termination or Change of Control".

Fiscal Year 2008 Equity Awards

On February 27, 2008, the Board of Directors awarded our executive officers the option awards set forth in the 2008 Grants of Plan-Based Awards table as part of the annual option award grants to all of our officers and employees. The size of the option awards granted to these executive officers were in line with the target amounts established by the Compensation Committee for annual stock option awards for 2007 performance, based on 100% performance level: 126% for Vice Presidents, 156% for Senior Vice Presidents, and 380% for our Chief Executive Officer.

All of these stock options were issued under our 2006 Stock Plan and were granted with an exercise price per share equal to the fair market value of our common stock on the date of grant, which, in accordance with our 2006 Stock Plan, is the closing price of our common stock on the date of grant as reported by The Nasdaq Global Market. Subject to the terms of the 2006 Stock Plan and the option agreements issued in connection with these grants, all of these options vest as to 25% of the shares on the first anniversary of the grant date and as to an additional 6.25% of the shares on the last day of each successive three-month period thereafter. Stock option awards under our 2006 Stock Plan may vest in full upon a termination within six months following a change of control, and are subject to accelerated vesting under the severance and change of control agreements entered into in 2008, as discussed below under "— Potential Payments Upon Termination or Change of Control".

Fiscal Year 2008 Performance Bonuses and other Compensation Actions in 2009

As discussed above in the Compensation Discussion and Analysis under "—Post-2008 Developments", due to the suspension of our SYMMETRY trial and our other ongoing elesclomol studies in February 2009, which was followed by a workforce reduction of approximately 90 positions, to a total of approximately 130 positions, announced in March 2009, the Compensation Committee decided to not award cash bonuses for 2008 performance and to freeze salaries in 2009, except for some salary increases in connection with a limited number of promotions in 2009 for certain employees in positions below the level of Vice President.

On April 13, 2009, the Compensation Committee approved an employee retention program. The employee retention program includes a cash pool of \$1,250,000, from which payments will be allocated to certain employees and executive officers. The retention payments will be paid as follows: 50% on October 13, 2009 and the remaining 50% on April 13, 2010, provided that on each such date, the recipient is employed by us or a successor company. In addition, if a recipient is terminated without "cause," as such term is defined in the 2006 Stock Plan, prior to April 13, 2010, the recipient will be entitled to receive any portion of the retention payment that he or she has not yet received.

The employee retention program also included the award of stock options on April 13, 2009 to all employees, including our executive officers. These options were granted under the 2006 Stock Plan, vest as to 50% of the shares on January 13, 2010, and as to the remaining 50% of the shares on the October 13, 2010, and have an exercise price of \$2.49 per share, which was the closing price of our common stock on April 13, 2009.

The retention payments and stock option grants approved by the Compensation Committee and awarded to our named executive officers are set forth above under "--Post-2008 Developments" in the Compensation Discussion and Analysis.

Outstanding Equity Awards at 2008 Fiscal Year-End

The following table shows grants of stock options and grants of unvested stock awards outstanding on December 31, 2008, the last day of our fiscal year, to each of the executive officers named in the Summary Compensation Table.

		Option Awa	rds		Stock Aw	vards	
<u>Name</u>	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$)(1)	
Safi R. Bahcall, Ph.D.		_	—	_	25,000(2)	153,000	
President and Chief Executive Officer	37,500(3) 37,500 20,125 —	12,500(5) 25,875(6) 100,000(7)	14.00(4) 14.00 8.53 8.82	2/15/15 2/15/16 2/28/17 2/27/18			
Keith S. Ehrlich, C.P.A. Vice President, Finance and Administration, Chief Financial Officer	37,500(8) 	5,143(5) 12,375(11) 28,980(7)	14.00(9) 14.00(4) 14.00 8.75 8.82	_	12,500(10) 	76,500 — — — —	
James G. Barsoum, Ph.D. Senior Vice President, Research	75,000(12) 10,000(13) 17,900(3) 17,678 10,062		10.843 14.00(9) 	4/3/13 5/27/14 	 20,000(14) 	 122,400 	
Eric W. Jacobson, M.D. Senior Vice President, Clinical Research and Regulatory Affairs, Chief Medical Officer	23,437 20,792 14,218 	1,563(15) 	14.00	4/11/15 2/15/16 2/26/17 2/27/18	12,500(16) 	76,500 	
Keizo Koya, Ph.D. Senior Vice President, Drug Development	125,000(17) 50,000(18) 10,000(13) 17,900(3) 20,088 11,375) —	10.843 10.843 14.00(9) 	12/13/12 6/17/13 5/27/14 	 20,000(14) 	 122,400 	

(1) The market value of the stock awards was determined by multiplying the number of shares by \$6.12, the closing price of our common stock on The Nasdaq Global Market on December 31, 2008, the last day of our fiscal year.

(2) Represents a restricted stock grant for 50,000 shares, 25,000 shares of which vested on January 4, 2007 and the remaining 25,000 of which vested on January 5, 2009.

- (3) The option vested as to 25% of the shares on February 15, 2006 and as to an additional 6.25% of the shares on the last day of each calendar quarter thereafter.
- (4) These options were originally granted at an exercise price of \$22.00 per share and were repriced effective March 1, 2006 to \$14.00 per share.
- (5) The option vested as to 25% of the shares on February 15, 2007 and vests as to an additional 6.25% of the shares on the last day of each calendar quarter thereafter.
- (6) The option vested as to 25% of the shares on February 28, 2008 and vests as to an additional 6.25% of the shares on the last day of each successive three-month period thereafter.
- (7) The option vested as to 25% of the shares on February 27, 2009 and vests as to an additional 6.25% of the shares on the last day of each successive three-month period thereafter.
- (8) The option vested as to 10,938 of the shares on March 1, 2005 and as to an additional 2,213 shares on the last day of each calendar quarter thereafter.
- (9) These options were originally granted at an exercise price of \$16.00 per share and were repriced effective March 1, 2006 to \$14.00 per share.
- (10) Represents a restricted stock grant for 25,000 shares, 12,500 shares of which vested on January 4, 2007 and the remaining 12,500 of which vested on January 5, 2009.
- (11) The option vested as to 25% of the shares on February 26, 2008 and vests as to an additional 6.25% of the shares on the last day of each successive three-month period thereafter.
- (12) The option vested as to 25% of the shares on April 3, 2004 and as to an additional 6.25% of the shares on the last day of each calendar quarter thereafter.
- (13) The option vested as to 25% of the shares on March 1, 2005 and as to an additional 6.25% of the shares on the last day of each calendar quarter thereafter.
- (14) Represents a restricted stock grant for 40,000 shares, 20,000 shares of which vested on January 4, 2007 and the remaining 20,000 of which vested on January 5, 2009.
- (15) The option vested as to 25% of the shares on April 11, 2006 and vests as to an additional 6.25% of the shares on the last day of each calendar quarter thereafter.
- (16) Represents a restricted stock grant for 25,000 shares, 12,500 shares of which vested on January 4, 2008 and the remaining 12,500 of which will vest on January 4, 2010, provided that, if prior to January 4, 2010 we receive approval of an NDA, the 12,500 shares vesting on January 4, 2010 will vest at the time such approval is received.
- (17) The option vested as to 37,500 shares on October 1, 2002 and as to an additional 6.25% of the shares on the last day of each calendar quarter thereafter.
- (18) The option vested as to 25% of the shares on April 1, 2004 and as to an additional 6.25% of the shares on the last day of each calendar quarter thereafter.

2008 Option Exercises and Stock Vested

The following table shows information regarding the vesting of stock awards held by each executive officer named in the Summary Compensation Table during the fiscal year ended December 31, 2008.



There were no exercises of options to purchase our common stock by the executive officers named in the Summary Compensation Table during the fiscal year ended December 31, 2008.

	Stock A	wards
Name	Number of Shares Acquired on Vesting (#)(1)	Value Realized on Vesting (\$)(1)
Safi R. Bahcall, Ph.D.	—	_
President and Chief Executive Officer		
Keith S. Ehrlich, C.P.A. Vice President, Finance and Administration, Chief Financial Officer	_	_
James G. Barsoum, Ph.D. Senior Vice President, Research	—	_
Eric W. Jacobson, M.D. Senior Vice President, Clinical Research and Regulatory Affairs, Chief Medical Officer	12,500	78,750
Keizo Koya, Ph.D. Senior Vice President, Drug Development	_	_

(1) All shares vested on January 4, 2008. The value realized is calculated by multiplying the number of vested shares times \$6.30, the closing price of our common stock on January 4, 2008.

Pension Benefits

We do not have any qualified or non-qualified defined benefit plans.

Nonqualified Deferred Compensation

We do not have any non-qualified defined contribution plans or other deferred compensation plans.

Potential Payments Upon Termination or Change of Control

We have entered into agreements and maintain certain plans that may require us to make certain payments and/or provide certain benefits to the executive officers named in the Summary Compensation Table in the event of a termination of employment or a change of control.

Severance Arrangements with Dr. Safi Bahcall, President and Chief Executive Officer

Pursuant to our employment agreement with Dr. Bahcall, in the event of termination without cause, Dr. Bahcall is entitled to continue to receive his thencurrent base salary for a period of 24 months. As a condition to the receipt of the aforementioned severance payments, Dr. Bahcall will be required to execute and deliver a written release of Synta from any and all claims arising in connection with his employment. Dr. Bahcall has also entered into a noncompetition/non-solicitation agreement pursuant to which he has agreed not to compete with Synta or to solicit customers or employees of Synta for a period of 24 months after the termination of his employment.

Pursuant to the terms of the employment agreement, a termination of Dr. Bahcall "without cause" includes, but is not limited to, Dr. Bahcall's resignation following a significant and material diminution in title, salary, duties or responsibilities by us. The preceding sentence notwithstanding, "cause"



includes (but is not limited to): (i) any substantial malfeasance or non-feasance of duty, (ii) any material breach by Dr. Bahcall of any of the terms of the Confidential Information Agreement and Non-Competition Agreement between him and us, (iii) any attempt by Dr. Bahcall to secure any improper personal profit in connection with our business or any of our affiliates, (iv) Dr. Bahcall's conviction, or the entry of a pleading of guilty or nolo contendre to, any crime involving moral turpitude or any felony, or (v) any conduct substantially injurious or prejudicial to our business or that of our affiliates.

Severance and Change of Control Agreements with our Other Named Executive Officers

Severance and Change of Control Agreements with our Senior Vice Presidents

Pursuant to the terms of the severance and change of control agreements entered into with our Senior Vice Presidents, including our named executive officers James G. Barsoum, Ph.D., Eric W. Jacobson, M.D., and Keizo Koya, Ph.D., in the event of a termination other than for "*cause*" or in the event the officer terminates for "*good reason*" (as such terms are defined in the agreements and set forth below), Drs. Barsoum, Jacobson, and Koya are entitled to receive the following:

- continuation of salary at the officer's then-current base salary for a period of six months;
- acceleration of vesting of outstanding stock option awards that would have vested during the six month period following the officer's date of termination; and
- continuation of health benefits for up to six months.

In the event that within one year following a "change of control" (as defined in the agreements and set forth below) the officer's employment is terminated other than for cause or the officer terminates his employment for good reason, Drs. Barsoum, Jacobson, and Koya are entitled to receive the following:

- payment of an amount equal to 12 months of the officer's then-current base salary;
- payment of a separation bonus equal to the officer's target annual bonus for the year in which the termination occurs, prorated for the portion of the year in which the officer was employed;
- full acceleration of vesting of equity awards outstanding immediately prior to termination; and
- continuation of health benefits for up to 12 months.

Severance and Change of Control Agreements with our Vice Presidents

Pursuant to the terms of the severance and change of control agreements entered into with our Vice Presidents, including our named executive officer Keith Ehrlich, in the event of a termination other than for cause or in the event Mr. Ehrlich terminates for good reason, Mr. Ehrlich is entitled to receive the following:

- continuation of salary at his then-current base salary for a period of three months;
- acceleration of vesting of outstanding stock option awards that would have vested during the three month period following Mr. Ehrlich's date of termination; and
- continuation of health benefits for up to three months.

In the event that within one year following a change of control Mr. Ehrlich's employment is terminated other than for cause or he terminates his employment for good reason, Mr. Ehrlich is entitled to the same payments and benefits as Drs. Barsoum, Jacobson, and Koya are entitled to under such circumstances and described above.



Receipt of any payments or benefits under the agreements at the time of termination will be conditioned on the officer executing a written release of Synta from any and all claims arising in connection with his employment.

Defined Terms in Severance and Change of Control Agreements

As defined in the severance and change of control agreements:

"*Cause*" includes, but is not limited to: (i) dishonesty with respect to us or any affiliate, parent or subsidiary of ours; (ii) insubordination; (iii) substantial malfeasance or nonfeasance of duty; (iv) unauthorized disclosure of confidential information; (v) breach of any material provision of any employment, consulting, advisory, non-disclosure, invention assignment, non-competition, or similar agreement between us and the executive officer; or (vi) conduct substantially prejudicial to our business or of any affiliate, parent or subsidiary of ours. Our Board of Directors has sole discretion to determine the existence of cause, and its determination will be conclusive on us and the executive officer. Cause is not limited to events which have occurred prior to the termination of the executive officer's service, nor is it necessary that the finding of cause occur prior to such termination. If the Board of Directors determines, subsequent to the executive officer's termination of service, that either prior or subsequent to the termination the executive officer engaged in conduct which would constitute cause, then the executive officer will have no right to any benefit or compensation under the severance and change of control agreement.

A "change of control" means the occurrence of any of the following events:

- (i) Any "Person" (as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended) becomes the "Beneficial Owner" (as defined in Rule 13d-3 under said Act), directly or indirectly, of our securities representing 50% or more of the total voting power represented by our then outstanding voting securities (excluding for this purpose any such voting securities held by us, or any affiliate, parent or subsidiary of ours, or by any employee benefit plan of ours) pursuant to a transaction or a series of related transactions which the Board of Directors does not approve; or
- (ii) (A) A merger or consolidation of us whether or not approved by the Board of Directors, other than a merger or consolidation which would result in our voting securities outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or the parent of such corporation) at least 50% of the total voting power represented by our voting securities or such surviving entity or parent of such corporation, as the case may be, outstanding immediately after such merger or consolidation; (B) or our stockholders approve an agreement for the sale or disposition by us of all or substantially all of our assets; or
- (iii) A change in the composition of the Board of Directors, as a result of which fewer than a majority of the directors are "Incumbent Directors", which means directors who either (A) were directors as of April 28, 2008, or (B) are elected, or nominated for election, to the Board of Directors with the affirmative votes of at least a majority of the Incumbent Directors, or by a committee of the Board of Directors made up of at least a majority of the Incumbent Directors, or nomination (but shall not include an individual whose election or nomination is in connection with an actual or threatened proxy contest relating to the election of directors).

"Good reason" means: (i) the executive officer, as a condition of remaining an employee of ours, is required to change the principal location where he or she renders services to us to a location more than 50 miles from his or her then-current location of employment; (ii) there occurs a material adverse change in the executive officer's duties, authority or responsibilities which causes his or her position with us to become of significantly less responsibility or authority than his or her position was on the date the severance and change of control agreement was executed; or (iii) there occurs a material reduction in the executive officer's base salary.

Change of Control Arrangements Under Our 2001 Stock Plan and 2006 Stock Plan

Under our 2001 Stock Plan and 2006 Stock Plan, in the event of a termination of our outstanding options in connection with a corporate transaction, where outstanding options are not assumed or substituted, all outstanding options shall become fully exercisable immediately prior to their termination. In addition, in the event of a change of control where outstanding options are assumed or substituted or in the event of a change of control that does not constitute a corporate transaction under our 2001 Stock Plan or 2006 Stock Plan, all outstanding options will become immediately exercisable in full and all rights of repurchase with respect to outstanding stock grants shall terminate if on or prior to the date that is six months after the date of the change of control event (i) a participant's service with us or our succeeding corporation is terminated by us or the succeeding corporation without cause; (ii) a participant terminates his or her service with us as a result of being required to change of control event; or (iii) the participant terminates his or her service after there occurs a material adverse change in a participant's duties, authority or responsibilities which cause such participant's position with us to become of significantly less to make appropriate adjustments for other stock-based awards. The term "change of control. Our 2006 Stock Plan allows the same definition as it does under our severance and change of control agreements.

Potential Payments Upon a December 31, 2008 Termination

Dr. Safi Bahcall, President and Chief Executive Officer

The following table summarizes the potential payments to Dr. Bahcall, our President and Chief Executive Officer, under his employment agreement and our 2001 and 2006 Stock Plans assuming that a termination occurred under the circumstances set forth in the column headings. The information presented assumes that the termination occurred on December 31, 2008, the last business day of our most recently completed fiscal year. The closing price of our common stock as listed on The Nasdaq Global Market on December 31, 2008 was \$6.12 per share.

Executive Benefits and Payments Upon Termination	Termination within Six Months Following a Change of Control	oluntary Not for Cause ermination
Base Salary	\$ 770,000	\$ 770,000
Acceleration of Vesting of Equity	100%	0%
Number of Vesting Stock Options and Value upon	138,375 shares	—
Termination(1)	\$ 0	—
Number of Vesting Shares and Value upon	25,000 shares	_
Termination(1)	\$ 153,000	
Total	\$ 923,000	\$ 770,000

(1) Value upon termination is calculated using a value for our common stock of \$6.12 per share, the closing price of our common stock on The Nasdaq Global Market on December 31, 2008. All unvested options had an exercise price greater than \$6.12 per share.

Our Other Named Executive Officers

The following table summarizes the potential payments to our named executive officers, other than Dr. Bahcall, under the severance and change of control agreements assuming that a termination occurred under the circumstances set forth in the column headings. The information presented assumes

that the termination occurred on December 31, 2008, the last business day of our most recently completed fiscal year. The closing price of our common stock as listed on The Nasdaq Global Market on December 31, 2008 was \$6.12 per share.

Name	Executive Benefits and Payments upon Termination	wi or	ermination thout Cause Resignation for Good Reason	wi or F	ermination thout Cause Resignation for Good Reason vithin One Year 'ollowing a Change of Control
Keith S. Ehrlich, C.P.A.	Base Salary	\$	61,250	\$	245,000
Vice President, Finance and	Bonus		—	\$	73,500
Administration, Chief Financial	Number of Vesting Stock Options		9,905		46,498
Officer	and Value upon Termination	\$	0(1)\$	0(2)
	Number of Vesting Shares and		—	¢	12,500
	Value upon Termination	¢	2.007	\$	76,500(3)
	Cobra Benefits	\$	2,997	\$	11,988
	Total	\$	64,247	\$	406,988
James G. Barsoum, Ph.D. Senior Vice President, Research Eric W. Jacobson, M.D. Senior Vice President, Clinical Research and Regulatory Affairs, Chief Medical Officer	Base Salary Bonus Number of Vesting Stock Options and Value upon Termination Number of Vesting Shares and Value upon Termination Cobra Benefits Total Base Salary Bonus Number of Vesting Stock Options and Value upon Termination Number of Vesting Shares and Value upon Termination Cobra Benefits	\$ \$ \$ \$ \$ \$	5,994 143,494 151,000 22,741	\$ \$ 4)\$ \$ \$ \$ \$ 4)\$ \$ \$ \$	275,000 110,000 56,271 0(2) 20,000 122,400(3) 11,988 519,388 302,000 120,800 70,456 0(2) 12,500 76,500(3) 12,024
	Total	\$	157,012	\$	511,324
Keizo Koya, Ph.D. Senior Vice President, Drug Development	Base Salary Bonus Number of Vesting Stock Options and Value upon Termination Number of Vesting Shares and Value upon Termination Cobra Benefits	\$ \$	5,988	\$ \$ 4)\$ \$ \$	286,000 114,400 63,442 0(2) 20,000 122,400(3) 11,976
	Total	\$	148,988	\$	534,776

(1) The value of the accelerated stock option vesting was calculated by multiplying the number of shares underlying options that would have vested in the three months following December 31, 2008 by \$6.12 per share. All unvested options had an exercise price greater than \$6.12 per share.

(2) The value of the accelerated stock option vesting was calculated by multiplying the number of shares underlying all outstanding unvested options as of December 31, 2008 by \$6.12 per share. All unvested options had an exercise price greater than \$6.12 per share.

- (3) The value of the accelerated restricted stock vesting was calculated by multiplying the number of unvested shares as of December 31, 2008 by \$6.12.
- (4) The value of the accelerated stock option vesting was calculated by multiplying the number of shares underlying options that would have vested in the six months following December 31, 2008 by \$6.12 per share. All unvested options had an exercise price greater than \$6.12 per share.

Director Compensation

The following table sets forth a summary of the compensation earned by our directors and/or paid to certain of our directors in 2008 pursuant to certain agreements we have with them, other than Dr. Bahcall:

	Fees Earned				
Name	or Paid in Cash (\$)	Stock Awards (\$)(1)	Option Awards (\$)(2)	All Other Compensation (\$)	Total (\$)
Keith R. Gollust(3)	20,000(4)	50,000(5)	44,854(6)		114,854
Lan Bo Chen, Ph.D.(7)	_	—		220,000(8)	220,000
Judah Folkman, M.D.(9)	_				
Bruce Kovner(10)	30,000(11)	20,000(12)	13,415(13)) —	63,415
William S. Reardon, C.P.A.(14)	45,000(15)	10,000(16)	13,415(13)) —	68,415
Robert N. Wilson(17)	20,000(4)	40,000(18)	13,415(13)) —	73,415

- (1) See our discussion of "Stock-Based Compensation" under Note 2 and Note 7 to our audited consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2008 for details as to the assumptions used to determine the fair value of the stock awards. See also our discussion of stock-based compensation under Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Estimates" in our Annual Report on Form 10-K for the year ended December 31, 2008.
- (2) See our discussion of "Stock-Based Compensation" under Note 2 to our audited consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2008 for details as to the assumptions used to determine the fair value of the option awards. Our nonemployee directors will not realize the value of these awards in cash until these awards are exercised and the underlying shares are subsequently sold. See also our discussion of stock-based compensation under Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Estimates" in our Annual Report on Form 10-K for the year ended December 31, 2008.
- (3) As of December 31, 2008, the last day of our fiscal year, there were outstanding 18,500 shares of common stock, 4,048 of which were restricted, and options for the purchase of 208,000 shares of common stock, 204,000 of which were vested, issued to Mr. Gollust as director compensation.
- (4) Represents fees paid for committee service during the fiscal year ended December 31, 2008.
- (5) Consists of \$20,000, \$20,000 and \$10,000, representing the compensation expense incurred by us in fiscal year 2008 in connection with issuances of 4,819 shares of restricted common stock on June 30, 2007 as the elected form of payment for board service from July 1, 2007 through June 30, 2008, all of which are vested, 5,398 shares of restricted common stock on June 11, 2008 as the elected form of payment for board service from July 1, 2008 through June 30, 2009, and 2,699 shares of restricted common stock on June 11, 2008 as the elected form of payment for service as chairman of the board of directors from July 1, 2008 through June 30, 2009, 50% of which grants were vested as of December 31, 2008, and the remainder of which are subject to our repurchase right which lapsed as to 25% of the shares on March 31, 2009, and lapses as to the remaining 25%

of the shares on June 30, 2009. Mr. Gollust paid \$.0001 per share, the par value of our common stock. The grant date fair values of the restricted stock awards on June 11, 2008 were \$40,000 for the award of 5,398 shares, and \$20,000 for the award of 2,699 shares. The number of shares issued on June 11, 2008 was calculated by dividing the dollar amount of annual compensation Mr. Gollust elected to receive in shares of restricted stock by the fair value of our common stock of \$7.41 as of June 10, 2008.

- (6) Consists of \$25,341, \$13,415, and \$6,098, representing the compensation expense incurred by us in fiscal year 2008 in connection with option grants to Mr. Gollust to purchase 75,000 shares of common stock on February 27, 2008, the grant date fair value of which was \$273,975, 5,500 shares of common stock on June 11, 2008, the grant date fair value of which was \$25,553, and 2,500 shares of common stock on June 11, 2008, the grant date fair value of which was \$11,615, respectively.
- (7) As of December 31, 2008, the last day of our fiscal year, we have not granted Dr. Chen any stock or option awards.
- (8) Consists of \$120,000 in fees paid in 2008 for consulting services pursuant to our consulting agreement with Dr. Chen and \$100,000 in payments remitted in 2008 pursuant to our agreement and release with Dr. Chen, both of which agreements are further described below.
- (9) Dr. Folkman passed away on January 14, 2008. As of December 31, 2008, the last day of our fiscal year, there were outstanding 5,451 shares of common stock, and options for the purchase of 40,000 shares of common stock, 34,375 of which were vested, issued to Dr. Folkman as director compensation. During his lifetime, Dr. Folkman transferred all right, title and interest in these options to Children's Medical Center Corporation pursuant to stock option transfer agreements in which Children's Medical Center Corporation agreed to be subject to all of the conditions and restrictions under the options. The options expired unexercised on January 14, 2009.
- (10) As of December 31, 2008, the last day of our fiscal year, there were outstanding 10,982 shares of common stock, 2,699 of which were restricted, and options for the purchase of 60,188 shares of common stock, 57,438 of which were vested, issued to Mr. Kovner as director compensation.
- (11) Consists of \$10,000 in fees paid for committee service during the fiscal year ended December 31, 2008 and \$20,000 as the elected form of payment for board service from July 1, 2007 through June 30, 2008.
- (12) Represents the compensation expense incurred by us in fiscal year 2008 in connection with the issuance of 5,398 shares of restricted common stock on June 11, 2008 as the elected form of payment for board service from July 1, 2008 through June 30, 2009, 50% of which were vested as of December 31, 2008, and the remainder of which are subject to our repurchase right which lapsed as to 25% of the shares on March 31, 2009, and lapses as to the remaining 25% of the shares on June 30, 2009. Mr. Kovner paid \$.0001 per share, the par value of our common stock. The grant date fair value of the restricted stock award on June 11, 2008 was \$40,000. The number of shares issued on June 11, 2008 was calculated by dividing the dollar amount of annual compensation Mr. Kovner elected to receive in shares of restricted stock by the fair value of our common stock of \$7.41 as of June 10, 2008.
- (13) Represents the compensation expense incurred by us in fiscal year 2008 in connection with an option grant to purchase 5,500 shares of common stock on June 11, 2008, the grant date fair value of which was \$25,553.
- (14) As of December 31, 2008, the last day of our fiscal year, there were outstanding 4,175 shares of common stock, 674 of which were restricted, and options for the purchase of 20,500 shares of common stock, 17,750 of which were vested, issued to Mr. Reardon as director compensation.

- (15) Consists of \$15,000 in fees paid for committee service during the fiscal year ended December 31, 2008, \$15,000 as the elected form of payment for board service from July 1, 2007 through June 30, 2008, and \$15,000 as the elected form of payment for board service from July 1, 2008 through June 30, 2009.
- (16) Consists of \$5,000 and \$5,000, representing the compensation expense incurred by us in fiscal year 2008 in connection with issuances of 1,204 shares of restricted common stock on June 30, 2007 as the elected form of payment for board service from July 1, 2007 through June 30, 2008, all of which are vested, and 1,349 shares of restricted common stock on June 11, 2008 as the elected form of payment for board service from July 1, 2008 through June 30, 2009, 50% of which were vested as of December 31, 2008, and the remainder of which are subject to our repurchase right which lapsed as to 25% of the shares on March 31, 2009, and lapses as to the remaining 25% of the shares on June 30, 2009. Mr. Reardon paid \$.0001 per share, the par value of our common stock. The grant date fair value of the restricted stock award on June 11, 2008 was \$10,000. The number of shares issued on June 11, 2008 was calculated by dividing the dollar amount of annual compensation Mr. Reardon elected to receive in shares of restricted stock by the fair value of our common stock of \$7.41 as of June 10, 2008.
- (17) As of December 31, 2008, the last day of our fiscal year, there were outstanding 15,801 shares of common stock, 2,699 of which were restricted, and options for the purchase of 68,000 shares of common stock, 65,250 of which were vested, issued to Mr. Wilson as director compensation.
- (18) Consists of \$20,000 and \$20,000, representing the compensation expense incurred by us in fiscal year 2008 in connection with issuances of 4,819 shares of restricted common stock on June 30, 2007 as the elected form of payment for board service from July 1, 2007 through June 30, 2008, all of which are vested, and 5,398 shares of restricted common stock on June 11, 2008 as the elected form of payment for board service from July 1, 2008 through June 30, 2009, 50% of which were vested as of December 31, 2008, and the remainder of which are subject to our repurchase right which lapsed as to 25% of the shares on March 31, 2009, and lapses as to the remaining 25% of the shares on June 30, 2009. Mr. Wilson paid \$.0001 per share, the par value of our common stock. The grant date fair value of the restricted stock award on June 11, 2008 was \$40,000. The number of shares issued on June 11, 2008 was calculated by dividing the dollar amount of annual compensation Mr. Wilson elected to receive in shares of restricted stock by the fair value of our common stock of \$7.41 as of June 10, 2008.

Director Compensation Policy

In January 2005, our Board of Directors approved our Director Compensation Policy, which was amended and restated in June 2008.

Initial Stock Option Grant Upon Election

Pursuant to this policy, each non-employee director receives an option to purchase 15,000 shares of our common stock upon his or her initial appointment to our Board of Directors. These options vest as to 25% of such grant on the first anniversary of the grant date and as to an additional 6.25% of such grant on the last day of each successive three-month period thereafter, subject to the non-employee director's continued service as a director. The exercise price of these options is equal to the fair market value of our common stock on the date of grant.

Annual Compensation

Under our Director Compensation Policy, each non-employee director is compensated on an annual basis for providing services to Synta. Director compensation is paid for the period from July 1 through June 30 of each year.



Annual Compensation in the Form of Cash and/or Restricted Stock

Each non-employee director receives compensation consisting of one of the following combinations of cash and/or a grant of our common stock, at the election of each non-employee director, as follows:

- \$40,000 cash;
- \$30,000 cash and such number of shares of restricted common stock with a value of \$10,000 on the date of grant of the shares;
- \$20,000 cash and such number of shares of restricted common stock with a value of \$20,000 on the date of grant of the shares;
- \$10,000 cash and such number of shares of restricted common stock with a value of \$30,000 on the date of grant of the shares; or
- such number of shares of restricted common stock with a value of \$40,000 on the date of grant of the shares.

In addition, the chairman of the Board of Directors, provided he or she is a non-employee director, receives an additional annual fee of \$20,000 consisting of cash and/or a grant of our common stock, at the election of the chairman, as follows:

- \$20,000 cash;
- such number of shares of restricted common stock with a value of \$20,000 on the date of grant of the shares; or
- any combination of cash or grant of shares of restricted common stock that equals \$20,000.

The number of shares to be received by a non-employee director is calculated by dividing the total dollar amount that the non-employee director has elected to be paid in shares of common stock by the fair market value of the shares of our common stock on the last business day prior to the date of grant of the shares. Shares granted are subject to a lapsing repurchase right such that the shares are subject to forfeiture to us if a non-employee director does not continue to serve as a member of the Board of Directors, or with respect to shares issued as part of the chairman's compensation, as chairman of the Board of Directors, as of the end of the applicable quarter as follows: the repurchase right lapses as to 25% of each such grant on each of September 30, December 31, March 31 and June 30 thereafter.

Annual Stock Option Awards

Under our Director Compensation Policy, each non-employee director receives an annual option grant to purchase 5,500 shares of our common stock, and the chairman of the Board of Directors, provided he or she is a non-employee director, receives an additional annual option grant to purchase 2,500 shares of our common stock. The options have an exercise price equal to the fair market value of our common stock on the date of grant and vest as to 25% of the shares on the last day of each calendar quarter following the date of grant, subject to the non-employee director's continued service as a director or chairman, as applicable.

In the event of termination of service of a non-employee director, options and restricted stock granted under our Director Compensation Policy will vest to the extent of a pro rata portion through the non-employee director's last day of service as a director or as chairman, as applicable, based on the number of days accrued in the applicable period prior to his or her termination of service. Each non-employee director stock option will terminate on the earlier of ten years from the date of grant and three months after the recipient ceases to serve as a director, except in the case of death or disability, in which event the option will terminate one year from the date of the director's death or disability.



The option and restricted stock awards disclosed in the above Director Compensation Table and accompanying footnotes that were granted prior to March 15, 2006, were granted under our 2001 Stock Plan. On March 15, 2006, our Board of Directors adopted and our stockholders approved our 2006 Stock Plan and at the same time terminated our 2001 Stock Plan. All options and restricted stock awards granted after March 15, 2006 were granted under our 2006 Stock Plan.

Committee Fees

Pursuant to our Director Compensation Policy, each non-employee director also receives an annual fee of \$5,000 for each committee of the Board of Directors on which such individual serves. However, the chairman of each committee, other than the Audit Committee, receives an annual fee of \$10,000, and the chairman of the Audit Committee receives an annual fee of \$15,000 for services as chairman.

Expenses

We reimburse each member of our Board of Directors who is not an employee for reasonable travel and other expenses in connection with attending meetings of the Board of Directors.

Proposed Amended and Restated Director Compensation Policy

In April 2009, the Compensation Committee approved, and recommended to the Board for approval, a further amended and restated Director Compensation Policy. We anticipate that the Board of Directors will approve the amended and restated policy in June 2009 and that it will be implemented in connection with the annual compensation paid for the period from July 1, 2009 through June 30, 2010.

The proposed amendments:

- Establish July 1 of each year as the "Annual Grant Date" for annual compensation paid in the form of restricted stock and stock options.
- Provide that all restricted stock awards and stock options that are to be issued under the Director Compensation Policy shall be automatically granted on the applicable date provided in the policy without any further action required by the Board of Directors.
- Provide that the calculation of shares to be issued in connection with an election to receive restricted stock will be based on the fair market value of the common stock on the Annual Grant Date, July 1, of each year, which is defined in our 2006 Stock Plan as the closing price of the common stock on such date, or if such date is not a trading day, then the last market trading day prior to July 1.

Consulting Agreement with Dr. Lan Bo Chen

In 2002, we entered into an oral consulting agreement with Dr. Chen pursuant to which Dr. Chen provided consulting services as mutually determined by us and Dr. Chen from time to time. This consulting agreement had no definitive term. Under the terms of the agreement, we provided compensation to Dr. Chen of \$25,000 per month. In April 2005, we entered into a written consulting agreement with Dr. Chen pursuant to which he has agreed to provide consulting services to us and to serve as the chairman and/or a member of our scientific advisory board. This written agreement supersedes the aforementioned oral agreement. Under the original terms of this agreement, we agreed to pay Dr. Chen \$25,000 per month for these services. In March 2007, we amended the consulting agreement to reduce the fee from \$25,000 to \$10,000 per month. This written agreement has no definitive term and may be terminated by us or Dr. Chen upon 15 days advance written notice. The agreement also contains a one-year post termination non-competition and non-solicitation provision. We paid Dr. Chen \$120,000 in 2008 under this agreement.

1	1
+	1

Agreement and Release with Dr. Lan Bo Chen

In January 2005, we entered into an Agreement and Release with Dr. Chen whereby we resolved all outstanding matters regarding various oral understandings and arrangements between Dr. Chen and Synta, including arrangements relating to (1) the assignment by Dr. Chen of the benefit of his interests, if any, resulting from our acquisition of the assets of Cancer Genomics, Inc., Kava Pharmaceuticals, Inc., and SinglePixel Biomedical, Inc., (2) Dr. Chen's assignment of inventions, non-competition, non-solicitation and confidentiality agreements with us, and (3) a general release by Dr. Chen of any and all claims that Dr. Chen may have had against us. Pursuant to this agreement we will pay Dr. Chen \$500,000 payable in \$25,000 installments quarterly for five years. We paid Dr. Chen \$100,000 in 2008 under this agreement.

EQUITY COMPENSATION PLAN INFORMATION

The following table provides certain aggregate information with respect to all of our equity compensation plans in effect as of December 31, 2008:

<u>Plan Category</u>	(a) Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights(1)	(b) Weighted Avera Exercise Price o Outstanding Opti Warrants and Rig	of ons,	(c) Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (excluding securities reflected in column (a))	
Equity Compensation Plans Approved by Security Holders(2)	4,691,246	\$	10.41	1,546,847(3)	
Equity Compensation Plans not Approved by Security Holders	_		_	_	
Total	4,691,246	\$	10.41	1,546,847	

 Includes options to purchase 311,153 shares of our common stock issued under our 2001 Stock Plan and 2006 Stock Plan that were cancelled after December 31, 2008.

- (2) These plans consist of our 2006 Stock Plan and our 2001 Stock Plan. In connection with the adoption of our 2006 Stock Plan in March 2006, our 2001 Stock Plan was terminated and thereafter no further stock options were granted under the 2001 Plan. All outstanding stock options and stock grants granted under the 2001 Plan remained outstanding and subject to their terms and the terms of the 2001 Plan.
- (3) Represents shares of common stock available for future issuance under our 2006 Stock Plan. Our 2006 Stock Plan contains an "evergreen provision" which allows for an annual increase in the number of shares available for issuance under the plan on the first day of each of our fiscal years during the period beginning in fiscal year 2008 and ending on the second day of fiscal year 2016. The annual increase in the number of shares shall be equal to the lowest of (i) 1,300,000 shares; (ii) 5% of our outstanding shares on the first day of the fiscal year; and (iii) an amount determined by our Board of Directors. Under this provision, no annual increase shall be made to the extent that the number of shares of common stock available for issuance under the 2006 Stock Plan and all other employee or director stock plans would exceed 25% of our outstanding shares on the first day of the applicable fiscal year. Does not include 1,300,000 shares available for issuance under our 2006 Stock Plan that were added pursuant to this evergreen provision on January 1, 2009.

COMPENSATION COMMITTEE REPORT

The Compensation Committee of our Board of Directors has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K, which appears elsewhere in this proxy statement, with our management. Based on this review and discussion, the Compensation Committee has recommended to the Board of Directors that the Compensation Discussion and Analysis be included in our proxy statement.

MEMBERS OF THE COMPENSATION COMMITTEE:

Robert N. Wilson (Chairman) Bruce Kovner Keith R. Gollust

REPORT OF AUDIT COMMITTEE

The Audit Committee of the Board of Directors, which consists entirely of directors who meet the independence and experience requirements of The Nasdaq Stock Market, has furnished the following report:

The Audit Committee assists the Board in overseeing and monitoring the integrity of our financial reporting process, compliance with legal and regulatory requirements and the quality of internal and external audit processes. This committee's role and responsibilities are set forth in a charter adopted by the Board, which is available on our website at *www.syntapharma.com*. This committee reviews and reassesses our charter annually and recommends any changes to the Board for approval. The Audit Committee is responsible for overseeing our overall financial reporting process, and for the appointment, compensation, retention, and oversight of the work of our independent auditors. In fulfilling its responsibilities for the financial statements for the fiscal year ended December 31, 2008, the Audit Committee took the following actions:

- Reviewed and discussed the audited financial statements for the fiscal year ended December 31, 2008 with management and Ernst & Young LLP, our independent auditors;
- Discussed with Ernst & Young LLP the matters required to be discussed by Statement on Auditing Standards No. 61, as amended, as adopted by the Public Company Accounting Oversight Board in Rule 3200T, relating to the conduct of the audit; and
- Received written disclosures and the letter from Ernst & Young LLP regarding its independence as required by the applicable requirements of the Public Company Accounting Oversight Board regarding Ernst &Young LLP's communications with the Audit Committee and the Audit Committee further discussed with Ernst & Young LLP their independence. The Audit Committee also considered the status of pending litigation, taxation matters and other areas of oversight relating to the financial reporting and audit process that the committee determined appropriate.

Based on the Audit Committee's review of the audited financial statements and discussions with management and Ernst & Young LLP, the Audit Committee recommended to the Board that the audited financial statements be included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2008 for filing with the SEC.

MEMBERS OF THE AUDIT COMMITTEE

William S. Reardon, C.P.A. (Chairman) Keith R. Gollust Robert N. Wilson

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Our records reflect that all reports which were required to be filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, as amended, were filed on a timely basis. We received either a written statement from our directors, officers and 10% stockholders or know from other means that any required Forms 5 were filed or that no Forms 5 were required to be filed.

CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS

Except as set forth in this proxy statement under the caption "Executive Officer and Director Compensation", there were no transactions to which we were a party in 2008 or through the date of this proxy statement with our directors and officers and beneficial owners of more than 5% of our voting securities and their affiliates.



Policy for Approval of Related Person Transactions

Pursuant to the written charter of our Audit Committee, the Audit Committee is responsible for reviewing and approving, prior to our entry into any such transaction, all transactions in which we are a participant and in which any of the following persons has or will have a direct or indirect material interest:

- our executive officers;
- our directors;
- the beneficial owners of more than 5% of our securities;
- the immediate family members of any of the foregoing persons; and
- any other persons whom the Board of Directors determines may be considered related persons.

For purposes of these procedures, "immediate family members" means any child, stepchild, parent, stepparent, spouse, sibling, mother-in-law, father-inlaw, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, and any person (other than a tenant or employee) sharing the household with the executive officer, director or 5% beneficial owner.

In reviewing and approving such transactions, the Audit Committee shall obtain, or shall direct our management to obtain on its behalf, all information that the committee believes to be relevant and important to a review of the transaction prior to its approval. Following receipt of the necessary information, a discussion shall be held of the relevant factors if deemed to be necessary by the committee prior to approval. If a discussion is not deemed to be necessary, approval may be given by written consent of the committee. This approval authority may also be delegated to the chairman of the Audit Committee in some circumstances. No related person transaction shall be entered into prior to the completion of these procedures.

The Audit Committee or its chairman, as the case may be, shall approve only those related person transactions that are determined to be in, or not inconsistent with, the best interests of us and our stockholders, taking into account all available facts and circumstances as the committee or the chairman determines in good faith to be necessary. These facts and circumstances will typically include, but not be limited to, the benefits of the transaction to Synta; the impact on a director's independence in the event the related person is a director, an immediate family member of a director or an entity in which a director is a partner, stockholder or executive officer; the availability of other sources for comparable products or services; the terms of the transaction; and the terms of comparable transactions that would be available to unrelated third parties or to employees generally. No member of the Audit Committee shall participate in any review, consideration or approval of any related person transaction with respect to which the member or any of his or her immediate family members is the related person.

PROPOSAL NO. 1—ELECTION OF DIRECTORS

Our Board of Directors currently consists of six members, classified into three classes as follows: Lan Bo Chen, Ph.D. and William S. Reardon, C.P.A. constitute the Class I directors with a term ending at the 2011 annual meeting of stockholders; Keith R. Gollust and Robert N. Wilson constitute the Class II directors with a term ending at the upcoming annual meeting of stockholders; and Safi R. Bahcall, Ph.D. and Bruce Kovner constitute the Class III directors with a term ending at the 2010 annual meeting of stockholders. At each annual meeting of stockholders, directors are elected for a full term of three years to succeed those directors whose terms are expiring.

On February 25, 2009, the Board of Directors accepted the recommendation of the Nominating and Governance Committee and voted to nominate Keith R. Gollust and Robert N. Wilson for election at the annual meeting for a term of three years to serve until the 2012 annual meeting of stockholders, and until their successors have been elected and qualified, or until their earlier death, resignation, retirement or removal. Unless authority to vote for any of these nominees is withheld, the shares represented by a validly executed proxy will be voted FOR the election as directors of Mr. Gollust and Mr. Wilson. In the event that any nominee should become unable or unwilling to serve, the shares represented by a validly executed proxy will be voted for the election of such other person as the Board of Directors may recommend in his place, unless the Board chooses to reduce the number of directors serving on the Board. We have no reason to believe that any nominee will be unable or unwilling to serve as a director.

A plurality of the shares voted at the annual meeting is required to elect each nominee as a director.

THE BOARD OF DIRECTORS RECOMMENDS THE ELECTION OF MR. GOLLUST AND MR. WILSON AS DIRECTORS, AND PROXIES SOLICITED BY THE BOARD WILL BE VOTED IN FAVOR THEREOF UNLESS A STOCKHOLDER HAS INDICATED OTHERWISE ON THE PROXY.

PROPOSAL NO. 2—INDEPENDENT PUBLIC ACCOUNTANTS

The Audit Committee has appointed Ernst & Young LLP, independent registered public accounting firm, to audit our financial statements for the fiscal year ending December 31, 2009. Ernst & Young LLP audited our financial statements for the fiscal year ended December 31, 2008. The Board proposes that the stockholders ratify this appointment. In the event the stockholders do not ratify the appointment of Ernst & Young LLP as our independent public accountants, the Audit Committee will reconsider its appointment. We expect that a representative of Ernst & Young LLP will be present at the meeting, will be able to make a statement if they so desire, and will be available to respond to appropriate questions.

On April 14, 2008, the Audit Committee appointed Ernst & Young LLP to audit our financial statements for the fiscal year ending December 31, 2008. During the two fiscal years ended December 31, 2006 and 2007, and the subsequent interim period through April 14, 2008, neither company management, the Audit Committee nor anyone acting on our behalf consulted with Ernst & Young LLP regarding (1) the application of accounting principles to a specified transaction, either completed or proposed, or the type of audit opinion that might be rendered on our financial statements, and neither a written report was provided to us nor oral advice was provided that Ernst & Young LLP concluded was an important factor considered by us in reaching a decision as to the accounting, auditing or financial reporting issue, or (2) any matter that was the subject of a "disagreement" (as defined in Item 304(a)(1)(v) of Regulation S-K and related instructions) or a "reportable event" (as defined in Item 304(a)(1)(v) of Regulation S-K and related instructions).

Also on April 14, 2008, the Audit Committee dismissed KPMG LLP, who served as our independent registered public accounting firm for the fiscal year ended December 31, 2007. The decision to change accounting firms was approved by the Audit Committee, which subsequently advised the Board of Directors of its decision. The audit reports of KPMG LLP on our consolidated financial statements as of and for the years ended December 31, 2006 and 2007 did not contain any adverse opinion or disclaimer of opinion, nor were they qualified or modified as to uncertainty, audit scope, or accounting principles, except as follows:

KPMG LLP's report on the consolidated financial statements of Synta as of and for the years ended December 31, 2006 and 2007 contained a separate paragraph stating that, "As discussed in Note 2 to the consolidated financial statements, the Company adopted Statement of Financial Accounting Standards (SFAS) No. 123R, *Share-Based Payment*, effective January 1, 2006".

During the two fiscal years ended December 31, 2006 and 2007, and the subsequent interim period through April 14, 2008, there were no (1) "disagreements" with KPMG LLP on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedures, which disagreements, if not resolved to their satisfaction, would have caused them to make reference in connection with their report to the subject matter of the disagreement or (2) "reportable events".

Accounting Fees and Services

The following table presents fees for professional audit services rendered by KPMG LLP for the audit of our annual financial statements for the year ended December 31, 2007 and fees billed for other services rendered by KPMG LLP during that period.

	2007
Audit fees	\$400,000
Audit-related fees	15,000
Tax fees	15,000
All other fees	47,000
Total	\$477,000

The following table presents fees for professional audit services rendered by KPMG LLP and Ernst & Young LLP for the audit of our annual financial statements for the year ended December 31, 2008 and fees billed for other services rendered by KPMG LLP and Ernst & Young LLP during that period.

	2008
Audit fees	\$369,000
Audit-related fees	—
Tax fees	14,000
All other fees	42,000
Total	\$425,000

Audit Fees

KPMG's fees for audit services totaled \$400,000 for 2007. KPMG's fees for audit services totaled \$28,000 and Ernst & Young's fees for audit services totaled \$341,000 for 2008. Audit services were comprised of services associated with the 2007 and 2008 annual audits and registration statements. In fiscal 2008, the audit fees also reflect the required audit of the effectiveness of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act of 2002.

Audit-Related Fees

KPMG's fees for audit-related services totaled \$15,000 for 2007. Audit-related services were comprised of an employee benefit plan audit.

Tax Fees

KPMG's fees for tax services totaled \$15,000 for 2007. KPMG's fees for tax services totaled \$14,000 for 2008. Tax services were comprised of tax compliance, tax advice and tax planning services.

All Other Fees

KPMG's fees for other services totaled \$47,000 for 2007. KPMG's fees for other services totaled \$25,000 and Ernst & Young's fees for other services totaled \$17,000 for 2008. Other services were comprised of advisory fees.

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

Consistent with policies of the SEC regarding auditor independence, the Audit Committee has responsibility for appointing, setting compensation and overseeing the work of the independent auditor. In recognition of this responsibility, the Audit Committee has established a policy to pre-approve all audit and permissible non-audit services provided by the independent auditor.

Prior to engagement of the independent auditor for the next year's audit, management will submit an aggregate of services expected to be rendered during that year for each of four categories of services to the Audit Committee for approval.

1. *Audit* services include audit work performed in the preparation of financial statements, as well as work that generally only the independent auditor can reasonably be expected to provide, including comfort letters, statutory audits, and attest services and consultation regarding financial accounting and/or reporting standards.

2. *Audit-Related* services are for assurance and related services that are traditionally performed by the independent auditor, including due diligence related to mergers and acquisitions, employee benefit plan audits, and special procedures required to meet certain regulatory requirements.

3. *Tax* services include all services performed by the independent auditor's tax personnel except those services specifically related to the audit of the financial statements, and includes fees in the areas of tax compliance, tax planning, and tax advice.

4. Other Fees are those associated with services not captured in the other categories.

Prior to engagement, the Audit Committee pre-approves these services by category of service. The fees are budgeted and the Audit Committee requires the independent auditor and management to report actual fees versus the budget periodically throughout the year by category of service. During the year, circumstances may arise when it may become necessary to engage the independent auditor for additional services not contemplated in the original pre-approval. In those instances, the Audit Committee requires specific pre-approval before engaging the independent auditor.

The Audit Committee may delegate pre-approval authority to one or more of its members. The member to whom such authority is delegated must report, for informational purposes only, any pre-approval decisions to the Audit Committee at its next scheduled meeting.

The affirmative vote of a majority of the shares cast affirmatively or negatively at the annual meeting is required to ratify the appointment of the independent public accountants.

If our stockholders ratify the selection of Ernst & Young LLP, the Audit Committee may still, in its discretion, decide to appoint a different independent auditor at any time during the year ending December 31, 2009, if it concludes that such a change would be in the best interests of Synta and our stockholders. If our stockholders fail to ratify the selection, the Audit Committee will reconsider, but not necessarily rescind, the appointment.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE TO RATIFY THE APPOINTMENT OF ERNST & YOUNG LLP AS INDEPENDENT PUBLIC ACCOUNTANTS, AND PROXIES SOLICITED BY THE BOARD WILL BE VOTED IN FAVOR OF SUCH RATIFICATION UNLESS A STOCKHOLDER HAS INDICATED OTHERWISE ON THE PROXY.

CODE OF CONDUCT AND ETHICS

We have adopted a code of conduct and ethics that applies to all of our directors, employees, including our chief executive officer and chief financial and accounting officers. The text of the code of conduct and ethics is posted on the "Investors—Corporate Governance" section of our website at *www.syntapharma.com.* Disclosure regarding any amendments to, or waivers from, provisions of the code of conduct and ethics that apply to our directors, principal executive and financial officers will be included in a Current Report on Form 8-K within four business days following the date of the amendment or waiver, unless website posting of such amendments or waivers is then permitted by the rules of The Nasdaq Stock Market.

OTHER MATTERS

The Board of Directors knows of no other business which will be presented at the annual meeting. If any other business is properly brought before the annual meeting, proxies in the enclosed form will be voted in accordance with the judgment of the persons voting the proxies.

STOCKHOLDER PROPOSALS AND NOMINATIONS FOR DIRECTOR

To be considered for inclusion in the proxy statement relating to our 2010 Annual Meeting of Stockholders, stockholder proposals must be received no later than January 7, 2010. To be considered for presentation at the 2010 Annual Meeting, although not included in the proxy statement, proposals must be received no earlier than February 21, 2010 and no later than March 23, 2010; provided, however, that in the event that the date of the 2010 Annual Meeting is more than thirty (30) days before or more than thirty (30) days after the anniversary date of the preceding year's annual meeting, notice by the stockholder to be timely must be so delivered not earlier than the close of business on the ninetieth (90) day prior to such annual meeting and not later than the close of business on the later of the sixtieth (60th) day prior to such annual meeting or the tenth (10th) day following the day on which we make a public announcement of the date of such meeting.

Proposals that are not received in a timely manner will not be voted on at the 2010 Annual Meeting. If a proposal is received on time, the proxies that management solicits for the meeting may still exercise discretionary voting authority on the proposal under circumstances consistent with the proxy rules of the SEC. All stockholder proposals should be marked for the attention of Secretary, Synta Pharmaceuticals Corp., 45 Hartwell Avenue, Lexington, MA 02421.

WHETHER OR NOT YOU INTEND TO BE PRESENT AT THE MEETING, YOU ARE URGED TO FILL OUT, SIGN, DATE AND RETURN THE ENCLOSED PROXY, OR COMPLETE YOUR PROXY BY TELEPHONE OR VIA THE INTERNET, AT YOUR EARLIEST CONVENIENCE.

BY ORDER OF THE BOARD OF DIRECTORS:

Wendy & Rieder

Wendy E. Rieder, Esq. Secretary

Lexington, Massachusetts April 30, 2009

Our Annual Report on Form 10-K, which includes our financial statements, for the fiscal year ended December 31, 2008, and which provides additional information about us can be found on the website of the Securities and Exchange Commission at *www.sec.gov.* It is also available on the "Investors—SEC Filings" section of our website at *www.syntapharma.com.* You may obtain a printed copy of our Annual Report on Form 10-K, including our financial statements, free of charge, from us by sending a written request to: Secretary, Synta Pharmaceuticals Corp., 45 Hartwell Avenue, Lexington, MA 02421. Exhibits will be provided upon written request.

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PHARMACEUTICALS*	C123456789
MR A SAMPLE DESIGNATION (IF ANY)	000000000.00000 ext 00000000.000000 ext 00000000.000000 ext 00000000.000000 ext
ADD 1 ADD 2	Electronic Voting Instructions
MIC A GAMPLE DESIGNATION (IF ANY) ADD 1 ADD 2 ADD 3 ADD 4 ADD 5 ADD 6	You can vote by Internet or telephone! Available 24 hours a day, 7 days a week! Instead of mailing your proxy you may choose one of the two voting
holladahdalladahdalladahdalladahdalda	methods outlined below to vote your proxy. VALIDATION DETAILS ARE LOCATED BELOW IN THE TITLE BAR.
	Proxies submitted by the Internet or telephone must be received by 1:00 a.m., Central Time, on June 10, 2009.
	Vote by Internet -Log on to the internet and go to www.investorvote.com/SNTA -Follow the steps cutined on the secured website.
Using a <u>black ink</u> pen, mark your votes with an X as shown in	Vote by telephone Call toll free 1-800-652-VOTE (8683) within the United States, Canada & Puerto Rico any time on a touch tone telephone. There is NO CHARGE to you for the call. Follow the instructions provided by the recorded message.
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Proxy — SYNTA PHARMACEUTICALS CORP.

45 HARTWELL AVENUE LEXINGTON, MA 02421 PROXY FOR ANNUAL MEETING OF STOCKHOLDERS - JUNE 10, 2009

SYNTA PHARMACEUTICALS CORP. BOARD OF DIRECTORS SOLICITS THIS PROXY

The undersigned, revoking any previous proxies relating to these shares, hereby acknowledges receipt of the Notice and Proxy Statement dated April 30, 2009 in connection with the Annual Meeting of Stockholders to be held at 10:00 a.m. EST on Wednesday, June 10, 2009 at the offices of Synta Pharmaceuticals Corp. at 45 Hartwell Avenue, Lexington, MA 02421 and hereby appoints Safi R. Bahcall and Keith S. Ehrlich, and each of them (with full power to act alone), the attorneys and proxies of the undersigned, with power of substitution to each, to vote all shares of the Common Stock of Synta Pharmaceuticals Corp. registered in the name provided in this Proxy which the undersigned is entitled to vote at the 2009 Annual Meeting of Stockholders, and at any adjournments of the meeting, with all the powers the undersigned would have if personally present at the meeting. Without limiting the general authorization given by this Proxy, the proxies are, and each of them is, instructed to vote or act as follows on the proposals set forth in the Proxy.

This Proxy when executed will be voted in the manner directed herein. If no direction is made this Proxy will be voted FOR the election of the nominees for director and FOR the ratification of the selection of Ernst & Young LLP as independent public accountants for the fiscal year ending December 31, 2009.

In their discretion, the proxies are authorized to vote upon such other business as may properly come before the meeting.

If you wish to vote in accordance with the Board of Directors' recommendations, just sign on the reverse side. You need not mark any boxes.

Mark, sign and date your proxy card and return it promptly in the enclosed envelope.

PLEASE CAST YOUR VOTE AS SOON AS POSSIBLE!