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.

)

File	ed by the Registrant ■
File	ed by a Party other than the Registrant □
Che	eck the appropriate box:
	Preliminary Proxy Statement
	Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
×	Definitive Proxy Statement
	Definitive Additional Materials
	Soliciting Material under §240.14a-12
	SYNTA PHARMACEUTICALS CORP.
	(Name of Registrant as Specified In Its Charter)
	(Name of Person(s) Filing Proxy Statement, if other than the Registrant)
Pay	rment of Filing Fee (Check the appropriate box):
×	
	No fee required.
	No fee required. Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
	Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
	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:
	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

Fee	Fee paid previously with preliminary materials.										
whi	eck box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for ich the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the m 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 29, 2011

To Our Stockholders:

You are cordially invited to attend the 2011 Annual Meeting of Stockholders of Synta Pharmaceuticals Corp. to be held at 9:00 a.m. EST on Thursday, June 2, 2011, at our offices at 45 Hartwell Avenue, Lexington, Massachusetts 02421.

Details regarding the meeting, the business to be conducted at the meeting, and information about Synta Pharmaceuticals Corp. that you should consider when you vote your shares are described in this proxy statement.

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, 2011. 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 you cast your vote either in person or by proxy. You may vote over the Internet as well as by telephone or by mail. When you have finished reading the proxy statement, you are urged to vote in accordance with the instructions set forth in this proxy statement. 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.

Thank you for your continued support of Synta Pharmaceuticals Corp. We look forward to seeing you at the Annual Meeting.

Sincerely,

Safi R. Bahcall, Ph.D.

President and Chief Executive Officer

Sag. Buhwall

YOUR VOTE IS IMPORTANT.
PLEASE CAST YOUR VOTE PROMPTLY.

SYNTA PHARMACEUTICALS CORP. NOTICE OF 2011 ANNUAL MEETING OF STOCKHOLDERS

TIME: 9:00 a.m. EST

DATE: Thursday, June 2, 2011

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 2014.
- 2. To ratify the appointment of Ernst & Young LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2011.
- 3. To transact such other business that is properly presented at the meeting and any adjournments or postponements thereof.

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 13, 2011. A list of stockholders of record will be available at the meeting and, during the 10 days prior to the meeting, at our principal executive offices located at the above address.

All stockholders are cordially invited to attend the Annual Meeting. Whether you plan to attend the Annual Meeting or not, we urge you to vote and submit your proxy by the Internet, telephone or mail in order to ensure the presence of a quorum. You may change or revoke your proxy at any time before it is voted at the meeting.

BY ORDER OF THE BOARD OF DIRECTORS

Wendy & Rieder

Wendy E. Rieder, Esq.

Secretary

April 29, 2011

TABLE OF CONTENTS

	Page
IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE	
SHAREHOLDER MEETING TO BE HELD ON JUNE 2, 2011	1
IMPORTANT INFORMATION ABOUT THE ANNUAL MEETING AND VOTING Why is the Company Soliciting My Proxy?	1
Why is the Company Soliciting My Proxy: Who Can Vote?	1
	2
How Many Votes Do I Have?	2
How Do I Vote?	2
How Does the Board of Directors Recommend That I Vote on the Proposals?	<u>3</u>
May I Change or Revoke My Proxy?	<u>3</u>
What if I Receive More Than One Proxy Card?	<u>3</u>
Will My Shares be Voted if I Do Not Vote?	<u>3</u>
What Vote is Required to Approve Each Proposal and How are Votes Counted?	<u>4</u>
Is Voting Confidential?	<u>4</u>
Who is Paying for the Costs of Soliciting these Proxies?	<u>4</u>
What Constitutes a Quorum for the Meeting?	<u>5</u>
Householding of Annual Disclosure Documents	<u>5</u>
Electronic Delivery of Company Stockholder Communications	<u>5</u>
SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT	<u>6</u>
MANAGEMENT AND CORPORATE GOVERNANCE	9
The Board of Directors	9
<u>Director Independence</u>	<u>11</u>
Committees of the Board of Directors and Meetings	<u>12</u>
Board Leadership Structure	<u>15</u>
Our Board of Directors' Role in Risk Oversight	<u>16</u>
Stockholder Communications to the Board	<u>16</u>
Executive Officers	<u>17</u>
COMPENSATION DISCUSSION AND ANALYSIS	<u>19</u>
EXECUTIVE OFFICER AND DIRECTOR COMPENSATION	<u>28</u>
Summary Compensation Table	<u>28</u>
2010 Grants of Plan-Based Awards	<u>29</u>
Outstanding Equity Awards at 2010 Fiscal Year-End	<u>33</u>
2010 Option Exercises and Stock Vested	<u>34</u>
Pension Benefits	<u>35</u>
Nonqualified Deferred Compensation	<u>35</u>
Potential Payments Upon Termination or Change of Control	<u>35</u>
Director Compensation	<u>40</u>
Risks Related to Compensation Practices and Policies	<u>43</u>
EQUITY COMPENSATION PLAN INFORMATION	<u>44</u>
COMPENSATION COMMITTEE REPORT	<u>44</u>
REPORT OF AUDIT COMMITTEE	<u>45</u>
SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE	<u>45</u>
CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS PROPOSAL NO. 1—ELECTION OF DIRECTORS	<u>46</u> <u>49</u>
PROPOSAL NO. 2—INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM	<u>49</u> 50
CODE OF CONDUCT AND ETHICS	<u>50</u>
OTHER MATTERS	<u>52</u>
STOCKHOLDER PROPOSALS AND NOMINATIONS FOR DIRECTOR	52

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

PROXY STATEMENT FOR THE SYNTA PHARMACEUTICALS CORP. 2011 ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON JUNE 2, 2011

This proxy statement, along with the accompanying notice of 2011 Annual Meeting of Stockholders, contains information about the 2011 Annual Meeting of Stockholders of Synta Pharmaceuticals Corp., including any adjournments or postponements of the Annual Meeting. We are holding the Annual Meeting at 9:00 a.m. EST on Thursday, June 2, 2011, at our corporate offices located at 45 Hartwell Avenue, Lexington, Massachusetts 02421.

In this proxy statement, we refer to Synta Pharmaceuticals Corp. as "Synta," "the Company," "we" and "us."

This proxy statement relates to the solicitation of proxies by our Board of Directors for use at the Annual Meeting.

On or about May 4, 2011, we will begin sending this proxy statement, the attached Notice of Annual Meeting of Stockholders and the enclosed proxy card to all stockholders entitled to vote at the Annual Meeting.

Although not part of this proxy statement, we are also sending, along with this proxy statement, our 2010 annual report, which includes our financial statements for the fiscal year ended December 31, 2010.

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE SHAREHOLDER MEETING TO BE HELD ON JUNE 2, 2011

The proxy statement, the Notice of Annual Meeting of Stockholders and our 2010 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

Additionally, you can find a copy of our Annual Report on Form 10-K, which includes our financial statements, for the fiscal year ended December 31, 2010, and which provides additional information about us, on the website of the Securities and Exchange Commission, or the SEC, at www.sec.gov, or in the "Investors—SEC Filings" section of our website awww.syntapharma.com. You may also 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 and payment of an appropriate processing fee.

IMPORTANT INFORMATION ABOUT THE ANNUAL MEETING AND VOTING

Why is the Company Soliciting My Proxy?

The Board of Directors of Synta Pharmaceuticals Corp. is soliciting your proxy to vote at the 2011 Annual Meeting of Stockholders to be held at 9:00 a.m. EST on Thursday, June 2, 2011 at the offices of Synta Pharmaceuticals Corp., 45 Hartwell Avenue, Lexington, Massachusetts 02421, and any adjournments of the meeting, which we refer to as the Annual Meeting. The proxy statement along with the accompanying Notice of Annual Meeting of Stockholders summarizes the purposes of the meeting and the information you need to know to vote at the Annual Meeting.

We have made available to you on the Internet or have sent you this proxy statement, the Notice of Annual Meeting of Stockholders, the proxy card and a copy of our Annual Report on Form 10-K for the fiscal year ended December 31, 2010 because you owned shares of Synta Pharmaceuticals Corp. common stock on the record date.

Who Can Vote?

Only stockholders who owned our common stock at the close of business on April 13, 2011 are entitled to vote at the Annual Meeting. On this record date, there were 42,224,097 shares of our common stock outstanding and entitled to vote. Our 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. For instructions on how to change or revoke your proxy, see "May I Change or Revoke My Proxy?" below.

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. All shares represented by valid proxies that we receive through this solicitation, and that are not revoked, will be voted in accordance with your instructions on the proxy card or as instructed via Internet or telephone. You may specify whether your shares should be voted for either, both or neither of the nominees for director or withheld from either or both of the nominees for director, and whether your shares should be voted for, against or to abstain with respect to the proposal to ratify the appointment of Ernst & Young LLP as our independent registered public accounting firm. If you properly submit a proxy without giving specific voting instructions, your shares will be voted in accordance with the Board of Directors' recommendations as noted below. 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 registered in your name, you may vote:

- By mail. If you received a proxy card by mail, you can vote by mail by completing, signing, dating and returning the proxy card as instructed on the card. 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.

Telephone and Internet voting facilities for stockholders of record will be available 24-hours a day and will close at 1:00 a.m., Central Time, on June 2, 2011.

If your shares are held in "street name" (held in the name of a bank, broker or other holder of record), you will receive instructions from the holder of record. You must follow the instructions of the holder of record in order for your shares to be voted. Telephone and Internet voting also will be offered to stockholders owning shares through certain banks and brokers. If your shares are not registered in your own name and you plan to vote your shares in person at the Annual Meeting, you should contact your broker or agent to obtain a legal proxy or broker's proxy card and bring it to the Annual Meeting in order to vote.

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" the ratification of the selection of Ernst & Young LLP as our independent registered public accounting firm for our fiscal year ending December 31, 2011.

If any other matter is presented at the Annual Meeting, your proxy provides that your shares will be voted by the proxy holder listed in the proxy in accordance with his best judgment. At the time this proxy statement was first made available, we knew of no matters that needed to be acted on at the Annual Meeting, other than those described in this proxy statement.

May I Change or Revoke My Proxy?

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

- if you received a proxy card, by signing a new proxy card with a date later than your previously delivered proxy and submitting it as instructed above;
- by re-voting by Internet or by telephone as instructed above;
- 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. You must specifically request at the meeting that it be revoked.

Your most current proxy card or telephone or Internet vote is the one that will be counted.

What if I Receive More Than One Proxy Card?

You may receive more than one proxy card 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 above 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 Vote?

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 card by mail or vote by Internet, telephone or at the Annual 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 holder of record of your shares as described above, the bank, broker or other holder of record of your shares has the authority to vote your unvoted shares only on the ratification of the appointment of our independent registered public accounting firm (Proposal 2 of this proxy statement) without receiving instructions from you. Therefore, we encourage you to provide voting instructions to your bank, broker or other holder of record. This ensures your shares will be voted at the Annual Meeting and in the manner you desire. A "broker non-vote" will occur 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.

Your bank, broker or other holder of record no longer has the ability to vote your uninstructed shares in the election of directors. Therefore, if you hold your shares in street name it is critical that you cast your vote if you want your vote to be counted for the election of directors (Proposal 1 of this

proxy statement). In the past, if you held your shares in street name and you did not indicate how you wanted your shares voted in the election of directors, your bank, broker or other holder of record was allowed to vote your shares on your behalf in the election of directors as it felt appropriate. Thus, if you hold your shares in street name and you do not instruct your bank, broker or other nominee how to vote in the election of directors, no votes will be cast on that proposal on your behalf.

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

Proposal 1: Elect Directors The nominees for director who receive the most votes (also known as a "plurality" of the votes cast) 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 the directors. Brokerage firms do not have authority to vote customers' unvoted shares held by the firms in street name for the election of directors. As a result, any shares not voted by a customer will be treated as a broker non-vote. Such broker non-votes will have no effect on the results of this vote.

Proposal 2: Ratify Selection of Independent Registered Public Accounting

Firm

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 registered public accounting firm for 2011, our Audit Committee of our Board of Directors will reconsider its selection.

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 voting power of all outstanding shares of our common stock entitled to vote at the meeting 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

SEC rules concerning the delivery of annual disclosure documents allow 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. Stockholders who participate in householding will continue to have access to and utilize separate proxy voting instructions.

If your household received a single set of proxy materials 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 proxy materials 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 proxy materials, 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 1, 2011 by:

- the executive officers named in the Summary Compensation Table on page 28;
- 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 1, 2011, 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 42,165,729 shares of common stock outstanding on March 1, 2011.

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.

Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Common Stock Beneficially Owned
Directors and Executive Officers		
Safi R. Bahcall, Ph.D.(1)	2,737,935	6.4%
Keith S. Ehrlich(2)	177,626	*
Keizo Koya, Ph.D.(3)	390,824	*
Amar Singh(4)	25,000	*
Vojo Vukovic, M.D., Ph.D.(5)	100,544	*
Keith R. Gollust(6)	1,979,490	4.7%
Lan Bo Chen, Ph.D.(7)	3,377,252	8.0%
Bruce Kovner(8)	11,157,302	26.4%
Donald W. Kufe, M.D.	0	0
William S. Reardon, C.P.A.(9)	42,362	*
Robert N. Wilson(10)	550,024	1.3%
All current executive officers and directors as a group (12 persons)(11)	20,763,838	47.5%
Five Percent Stockholders		
CxSynta LLC(12)	7,761,716	18.4%
c/o Caxton Corporation		
Princeton Plaza, Building 2		
731 Alexander Road		
Princeton, NJ 08540		
Lin-Huey Chen(13)	3,377,252	8.0%
184 East Emerson Road		
Lexington, MA 02420		

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

- (1) Consists of 2,328,135 shares of common stock owned of record by and 394,800 shares of common stock issuable upon the exercise of options exercisable within 60 days of March 1, 2011 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 21,970 shares of common stock owned of record by and 155,656 shares of common stock issuable upon the exercise of options exercisable within 60 days of March 1, 2011 held by Mr. Ehrlich.
- (3) Consists of 39,843 shares of common stock owned of record by and 350,981 shares of common stock issuable upon the exercise of options exercisable within 60 days of March 1, 2011 held by Dr. Koya.
- (4) Represents shares of common stock owned of record by Mr. Singh.
- (5) Consists of 22,304 shares of common stock owned of record by and 78,240 shares of common stock issuable upon the exercise of options exercisable within 60 days of March 1, 2011 held by Dr. Vukovic.
- Consists of 179,523 shares of common stock owned of record by and 222,000 shares of common stock issuable upon the exercise of options exercisable within 60 days of March 1, 2011 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. The table does not reflect the purchase of 100,000 shares of common stock on April 14, 2011 by Wyandanch Partners, L.P. in Synta's issuer-directed registered direct offering. See the disclosure below under the heading "Certain Relationships and Related Person Transactions—Participation in Issuer-Directed Registered Direct Offering" for further information about Wyandanch Partners, L.P.'s participation in this offering.
- Consists of 638,932 shares of common stock owned of record by Dr. Lan Bo Chen; 142,223 shares of common stock owned of record by LAJ Holdings LLC, the manager of which is Dr. Chen's spouse, Lin-Huey Chen; 776,319 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; 243,481 shares of common stock owned of record by the Jane 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; 25,510 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; 21,360 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; 141,103 shares of common stock owned of record by the Lan Bo Chen 2009 GRAT, of which Dr. Chen is the trustee; 881,897 shares of common stock owned of record by the Lin-Huey Chen 2009 GRAT, of which Dr. Chen's spouse is the trustee; and 250,000 shares of common stock owned of record by the Lin-Huey Chen 2010 GRAT, of which Dr. Chen's spouse is the trustee. See note 13.
- Consists of 3,325,773 shares of common stock owned of record by and 69,813 shares of common stock issuable upon the exercise of options exercisable within 60 days of March 1, 2011 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. The table does not reflect the purchase of 1,431,493 shares of common stock on April 14, 2011 by Mr. Kovner in Synta's issuer-directed registered direct offering. See the disclosure below under the heading "Certain Relationships and Related Person Transactions—Participation in Issuer-Directed Registered Direct Offering" for further information about Mr. Kovner's participation in this offering.

- (9) Consists of 12,237 shares of common stock owned of record by and 30,125 shares of common stock issuable upon the exercise of options exercisable within 60 days of March 1, 2011 held by Mr. Reardon.
- Consists of 472,399 shares of common stock owned of record by and 77,625 shares of common stock issuable upon the exercise of options exercisable within 60 days of March 1, 2011 held by Mr. Wilson. The table does not reflect the purchase of 50,000 shares of common stock on April 14, 2011 by Mr. Wilson in Synta's issuer-directed registered direct offering. See the disclosure below under the heading "Certain Relationships and Related Person Transactions—Participation in Issuer-Directed Registere Direct Offering" for further information about Mr. Wilson's participation in this offering.
- (11) Consists of the shares of common stock set forth in footnotes 1 through 10 and 19,823 shares of common stock owned of record by and 205,656 shares of common stock issuable upon the exercise of options exercisable within 60 days of March 1, 2011 held by one executive officer 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.
- Consists of 638,932 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 is the manager; 776,319 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 Alexander Chen Wu 2002 Irrevocable Trust, of which Mrs. Chen is a co-trustee; 21,360 shares of common stock owned of record by the Allison Chen Wu 2004 Irrevocable Trust, of which Mrs. Chen is a co-trustee; 141,103 shares of common stock owned by the Lan Bo Chen 2009 GRAT, of which Mrs. Chen's spouse is the trustee; 881,897 shares of common stock owned by the Lin-Huey Chen 2009 GRAT, of which Mrs. Chen is the trustee; and 250,000 shares of common stock owned by the Lin-Huey Chen 2010 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 seven 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 expire at the upcoming Annual Meeting of Stockholders;
- the Class II directors are Keith R. Gollust and Robert N. Wilson, and their terms will expire at the Annual Meeting of Stockholders to be held in 2012; and
- the Class III directors are Safi R. Bahcall, Ph.D., Bruce Kovner, and Donald W. Kufe, M.D., and their terms will expire at the Annual Meeting of Stockholders to be held in 2013.

On February 28, 2011, our Board of Directors accepted the recommendation of the Nominating and Governance Committee and voted to nominate Lan Bo Chen, Ph.D. and William S. Reardon, C.P.A. for election at the Annual Meeting for a term of three years to serve until the 2014 Annual Meeting of Stockholders, and until their respective successors have been elected and qualified.

Set forth below are the names of the persons nominated as directors and directors whose terms do not expire this year, their ages, their offices in the company, if any, their principal occupations or employment for the past five years, the length of their tenure as directors and the names of other public companies in which such persons hold or have held directorships during the past five years.

Name	Age	Position
Safi R. Bahcall, Ph.D.	42	President and Chief Executive Officer and Director
Keith R. Gollust(1)(2)(3)	65	Chairman of the Board of Directors
Lan Bo Chen, Ph.D.	67	Director
Bruce Kovner(2)(3)	66	Director
Donald W. Kufe, M.D.	66	Director
William S. Reardon, C.P.A.(1)	64	Director
Robert N. Wilson(1)(2)(3)	70	Director

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

In addition to the information presented below regarding each of our director's specific experience, qualifications, attributes and skills that led our Board to the conclusion that he should serve as a director, we also believe that all of our directors have a reputation for integrity, honesty and adherence to high ethical standards. They each have demonstrated business acumen and an ability to exercise sound judgment, as well as a commitment of service to Synta and our Board.

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. Our Board of Directors has concluded that Dr. Bahcall should serve as a director as of the date of this proxy statement because, as our Chief Executive Officer and our co-founder, he has an extensive understanding of our R&D programs, detailed knowledge of our current and prior business activities and strategic insights based on his business experience.

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. In the past, Mr. Gollust has served as a director of numerous public and private companies. 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. Our Board of Directors has concluded that Mr. Gollust should serve as a director as of the date of this proxy statement based on his past service on the Board of Directors of four other publicly traded companies and his experience as managing general partner of various investment partnerships which gave him responsibility for investing over \$1 billion as a fiduciary.

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. Our Board of Directors has concluded that Dr. Chen should serve as a director as of the date of this proxy statement based on his extensive experience in discovering and developing anticancer drugs, including 27 years at the Dana-Farber Cancer Institute, Harvard Medical School, and his detailed knowledge of our R&D programs, as our co-founder and Chairman of our scientific advisory board.

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 Chairman of the Board of Trustees of the Juilliard School, and Vice Chairman of the Board of Directors of Lincoln Center for the Performing Arts. He also serves on the Board of the American Enterprise Institute, and the Institute for Advanced Study, and is a Managing Director of the Metropolitan Opera. 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. Our Board of Directors has concluded that Mr. Kovner should serve as a director as of the date of this proxy statement because, as Chairman of Caxton Associates LP, Mr. Kovner has gained extensive knowledge and experience regarding domestic and international capital markets. His financial expertise and many years of international investing experience provide additional insight to our Board.

Donald W. Kufe, M.D. was appointed to our Board of Directors on September 28, 2010. Dr. Kufe is a Professor of Medicine, Dana-Farber Cancer Institute and Harvard Medical School Department. Dr. Kufe received his M.D. from the University of Rochester School of Medicine. After a clinical fellowship in medical oncology at Dana-Farber Cancer Institute, he joined the staff in 1979. He has served as chief of the Division of Cancer Pharmacology, deputy director of the Dana-Farber/Harvard

Cancer Center, director of the Harvard Phase I Oncology Group and leader of the Experimental Therapeutics Program. He is an editor of the textbook "Cancer Medicine." Dr. Kufe is the recipient of the Richard P. and Claire W. Morse Scientific Award, DFCI, the Scholar Award, Burroughs-Wellcome and the Faculty Research Award, American Cancer Society. Dr. Kufe currently sits on the Board of Directors of Genus Oncology, LLC and Linus Pharmaceuticals, Inc., and from December 2003 to July 2009, he served as a director of Adherex Technologies Inc., a publicly traded biopharmaceutical company. The Board of Directors has concluded that Dr. Kufe should serve as a director as of the date of this proxy statement based on his thirty years of experience in the preclinical and clinical development of anticancer agents.

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 committee of Idera Pharmaceuticals, Inc., a publicly traded pharmaceutical company, and from 2003 to 2010 served in the same capacity for Oscient Pharmaceuticals Corporation, another publicly traded pharmaceutical company. In April 2010, Mr. Reardon joined the Board of Trustees of H&Q Life Sciences Investors and H&Q Healthcare Investors, two closed-end publicly held mutual funds. 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. Our Board of Directors has concluded that Mr. Reardon should serve as a director as of the date of this proxy statement because of his extensive expertise in accounting and financial matters and his experience in analyzing and evaluating financial statements as a former auditor, in particular in the biopharmaceutical industry. His experience on other publicly traded company boards of directors and audit committees provides a considerable benefit to our Audit Committee and to our Board.

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. Our Board of Directors has concluded that Mr. Wilson should serve as a director as of the date of this proxy statement because of the knowledge and extensive experience in the pharmaceutical industry that he brings to the Board, as well as his managerial, marketing, financial and international experience. In addition, Mr. Wilson's significant experience on other publicly traded company boards of directors and board committees provides him with an understanding of current corporate governance practices and trends, and compensation matters that provides value to our Board.

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, Koyner, Kufe, Reardon and Wilson.

Committees of the Board of Directors and Meetings

Meeting Attendance

During the fiscal year ended December 31, 2010 there were six meetings of our Board of Directors, and the various committees of the Board met a total of 13 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 2010. 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 six then serving directors attended our Annual Meeting of Stockholders held in 2010.

Audit Committee

Our Audit Committee is composed of Messrs. Gollust, Reardon (chairman) and Wilson, and met six times during fiscal year 2010. 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 the 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 six times during fiscal year 2010. 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 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. W.T. Haigh's engagement has continued for subsequent years and remains in effect today. We use the information we obtain from W.T.Haigh primarily for evaluating our executive compensation practices, including measuring the competitiveness of our practices against a list of peer companies that we develop together with W.T. Haigh annually. We also use information obtained from W.T. Haigh to review our cash bonus policy, equity awards, and base salary benchmarks across all levels of the company.

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 2010. 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.

If a stockholder wishes to nominate a candidate for director who is not to be included in our proxy statement, it must follow the procedures described in our bylaws and in "Stockholder Proposals and Nominations For Director" at the end of this proxy statement.

In addition, under our current corporate governance policies, the 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.

While we do not have a formal policy on diversity, our Nominating and Governance Committee considers diversity of experience as one of the factors it considers in conducting its assessment of director nominees, along with such other factors as it deems appropriate given the then current needs of the Board and the company, to maintain a balance of knowledge, experience and capability.

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.

Board Leadership Structure

Our current Board leadership structure separates the positions of Chief Executive Officer and Board Chairman, although we do not have a corporate policy requiring that structure. The Board believes that this separation is appropriate for the organization at this time because it allows for a division of responsibilities and a sharing of ideas between individuals having different perspectives. Our Chief Executive Officer, who is also a member of our Board of Directors, is primarily responsible for our operations and strategic direction, while our Board Chairman, who is an independent member of the Board, is primarily focused on matters pertaining to corporate governance, including management oversight. While the Board believes that this is the most appropriate structure at this time, the Board retains the authority to change the Board structure, including the possibility of combining the Chief

Executive Officer and Board Chairman position, if it deems such a change to be appropriate in the future.

Our Board of Directors' Role in Risk Oversight

The Board of Directors' role in risk oversight includes receiving periodic department reports from the functional head of each department, which highlights areas of material risk identified by each department head. The report prepared by our internal program management department highlights risks that pertain to our most advanced programs, and includes the probability of risk occurrence, the likely impact of the risk and any mitigating steps being taken. In addition to providing these periodic reports, representatives from company management are typically invited to participate in Board meetings and provide updates on identified risks at such meetings. Pursuant to the Audit Committee charter, the Board of Directors has delegated to the Audit Committee the duty to inquire of management and the independent auditors about significant risks or exposures facing the company. The Audit Committee reports to the full Board the outcome of risk-related inquiries, to the extent that such risks had not been previously identified to the Board through periodic reports or at Board meetings.

Stockholder 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 current executive officers who are not also directors:

Name	Age	Position
Keith S. Ehrlich	60	Vice President, Finance and Administration, Chief Financial Officer
Keizo Koya, Ph.D.	53	Senior Vice President, Drug Development
Wendy E. Rieder, Esq.	43	Vice President, Intellectual Property and Legal Affairs, General Counsel
Amar Singh	52	Senior Vice President, Chief Business Officer
Vojo Vukovic, M.D., Ph.D.	44	Senior Vice President, Chief Medical Officer

Keith S. Ehrlich 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.

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 PhotoFilm 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 anti-infectives, 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.

Amar Singh joined us as Senior Vice President, Business and Commercial Development in November 2010 and was named Chief Business Officer in February 2011. Prior to joining us, Mr. Singh was with Spectrum Pharmaceuticals from October 2008 to April 2009, where he most recently served as Chief Operating Officer, and previously as SVP and Chief Commercial Officer. At Spectrum, he led the commercial and business development teams responsible for the successful re-launch of Zevalin and completed major partnerships for Zevalin (Cell Therapeutics) and Belinostat (TopoTarget). Prior to joining Spectrum, Mr. Singh was Chief Commercial Officer at Novacea from February 2006 to October 2008, where he was responsible for securing major partnerships for the company's lead compound, Asentar. Prior to Novacea, Mr. Singh led the launch of the proprietary division of American Pharmaceutical Partners-Abraxis Oncology and provided leadership in all aspects of commercial, and strategic development of the company's flagship product, Abraxane from August 2003 to January 2006. Prior to Abraxis, Mr. Singh held multiple leadership positions in the oncology franchise at Hoffman-La Roche, where he led the launches of several oncology and supportive care products including Xeloda and Kytril. Mr. Singh holds an M.B.A. from the Stern School of Business at New York University and a B.A. from the University of North Carolina.

Vojo Vukovic, M.D., Ph.D. joined us as Vice President, Clinical Research in January 2009, and became our Senior Vice President, Chief Medical Officer in July 2009. Dr. Vukovic has over 17 years experience in oncology drug development. Prior to joining us, he was Global Medical Lead for Sutent® and axitinib in a number of cancer indications at Pfizer from September 2006 to January 2009. Prior to Pfizer, he served in key medical and regulatory roles at Aventis Pasteur from April 2001 to February 2002, Ortho Biotech from February 2002 to September 2003, ILEX Oncology from September 2003 to January 2005, and BioNumerik Pharmaceuticals from January 2005 to June 2006. Over the course of his career, Dr. Vukovic has been responsible for over 100 Phase 1 to Phase 4 clinical studies in cancer indications including melanoma, tumors of the lung, pancreas, breast, colorectal, ovarian, brain, as well as NHL and certain leukemias. Prior to his industry career, Dr. Vukovic was a post-doctoral fellow at the Ontario Cancer Institute, Toronto in Ontario and Institute for Cell Biology in Essen, Germany where he conducted basic and translational research in solid tumor microenvironments and oxidative stress. Dr. Vukovic received his Ph.D. and M.Sc. degrees from the University of Toronto and his M.D. degree from the University of Sarajevo, Bosnia and Herzegovina.

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.

Each year since its initial engagement in 2007 by the Compensation Committee, based on management's recommendation, W.T. Haigh & Company, Inc., or W.T. Haigh, acompensation consulting firm with experience in evaluating public biopharmaceutical companies, has helped 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. Specifically, we reviewed the data obtained from Radford Biotechnology Surveys, or the Radford Survey, prepared by AON Consulting, Inc. from companies in its overall survey totals having a comparable number of employees as us, which we use in certain instances to validate data from the peer companies. Each year, we, together with W.T. Haigh, develop a list of peer companies based on several characteristics, including 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. Prior to awarding any compensation to our named executive officers in 2010, we, with input from W.T. Haigh, developed the below list of peer companies. This group of peer companies consists of the same companies as our peer group developed in 2009, with the following exceptions: four companies were excluded in 2010 due to events or circumstances at those companies that resulted in our determination that those companies were no longer an appropriate source for compensation comparisons, and three other companies were identified and added in order to maintain the size of our peer group.

- Allos Therapeutics, Inc.
- Amicus Therapeutics, Inc.
- Ardea Biosciences, Inc.
- ARIAD Pharmaceuticals, Inc.
- ArQule, Inc.
- AVEO Pharmaceuticals, Inc.
- CombinatoRx Incorporated
- Cytokinetics, Inc.
- Dyax Corp.
- Geron Corporation
- Idenix Pharmaceuticals, Inc.
- ImmunoGen, Inc.

- Immunomedics, Inc.
- Infinity Pharmaceuticals, Inc.
- Momenta Pharmaceuticals, Inc.
- Novavax, Inc.
- Osiris Therapeutics, Inc.
- Pain Therapeutics, Inc.
- Pharmasset, Inc.
- ProGenics Pharmaceuticals, Inc.
- Rigel Pharmaceuticals, Inc.
- Sangamo BioSciences, Inc.
- Trubion Pharmaceuticals Inc.
- Vical Incorporated

The Compensation Committee has 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 that 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 executives.

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 his or her direct supervisor. The Chief Executive Officer approves 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 2010.

In February 2010, the Compensation Committee approved base salary increases for our then-employed executives effective March 1, 2010, including increasing the base salary of our Chief Executive Officer and other named executive officers as follows:

Name	2009 1	Base Salary	201	0 Base Salary	Percent Increase
Safi R. Bahcall, Ph.D.	\$	385,000	\$	405,000	5.2%
Keith S. Ehrlich	\$	245,000	\$	257,000	4.9%
Keizo Koya, Ph.D.	\$	286,000	\$	300,000	4.9%
Vojo Vukovic, M.D., Ph.D.	\$	260.000	\$	320,000	23.1%

The amount of the salary increases were determined, in part, 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. In the case of our named executive officers, excluding Dr. Vukovic, annual base salary increases were targeted at approximately 5% to be in line with increases being awarded by our peer companies. Dr. Vukovic's compensation adjustments, including his salary increase, reflect his time with the company, experience in his current role, and the increase in responsibilities associated with his promotion from Vice President, Clinical Research, to Senior Vice President, Chief Medical Officer in July 2009.

In February 2011, the Compensation Committee approved base salary increases for our employees effective March 1, 2011, including increasing the base salary of our Chief Executive Officer and other named executive officers as described below under the heading " *Post-2010 Compensation Actions*."

Annual Bonus

Our bonus plan, which the Compensation Committee approved in 2007, sets a target bonus as a percentage of base salary. Currently, employees are eligible for annual performance-based 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, specifically, 30% for Vice Presidents, 40% for Senior Vice Presidents and 50% for our Chief Executive Officer. These targets were developed in 2007 based on the recommendations of W.T. Haigh and the Radford Survey data available at that time and remain unchanged. In its sole discretion, the Compensation Committee may, however, award bonus payments above or below these amounts on a case-by-case basis and may elect to structure the bonus in cash, equity or a combination of both cash and equity, with the equity portion vesting immediately or at a later date, or may decide to not award bonus payments at all, notwithstanding the achievement of particular goals or individual contributions.

In February 2011, the Compensation Committee exercised its discretion to award bonuses for 2010 in the form of a combination of cash and restricted stock. While the cash component was paid at a level below the target bonus levels of our named executive officers, the overall cash value taking into account the restricted stock was in excess of our named executive officers' target bonus amounts. For the reasons discussed below, the Compensation Committee awarded Dr. Bahcall, our Chief Executive Officer, and Mr. Ehrlich, Dr. Koya and Dr. Vukovic, inaggregate, a cash bonus equal to 80% of their respective target bonus amounts and restricted stock totaling 30% of those target bonus amounts, as set forth in the below table. The restricted stock grants vest as to 100% of the shares on the first anniversary of the date of grant, provided the executive remains employed by us on such date. The restricted stock awards to our executives were issued on March 1, 2011 and the number of shares granted to each executive was determined by dividing 30% of the executive's target bonus amount by the closing price of our common stock on March 1, 2011.

Restricted Stock

<u>Name</u> Safi R. Bahcall, Ph.D.	20 \$	010 Target Bonus 202,500	Total 2010 Bonus \$ 222,750	 162,000	Gra 2 (c	ant Portion of 010 Bonus ash value of shares / of shares)(1)
President and Chief Executive Officer						11,549
Keith S. Ehrlich Vice President, Finance and Administration, Chief Financial Officer	\$	77,100	\$ 84,810	\$ 61,680	\$	23,130/ 4,397
Keizo Koya, Ph.D. Senior Vice President, Drug Development	\$	120,000	\$ 132,000	\$ 96,000	\$	36,000/ 6,844
Vojo Vukovic, M.D., Ph.D. Senior Vice President, Chief Medical Officer	\$	128,000	\$ 140,800	\$ 102,400	\$	38,400/ 7,300

⁽¹⁾ The number of shares granted was determined by dividing 30% of the executive's target bonus amount by \$5.26, the closing price of our common stock on March 1, 2011.

Because Amar Singh commenced employment with us on November 29, 2010, his performance was not evaluated in February 2011 and he received no compensation awards or adjustments.

Our primary corporate, financial and operational goals for our 2010 fiscal year were:

- achieving certain clinical goals for our ganetespib (formerly, STA-9090) program;
- achieving certain non-clinical operational goals for ganetespib, related to enhancing strategic positioning and establishing a supporting package to advance the program towards NDA filing;
- achieving certain additional research milestones with respect to our broader Hsp90 inhibitor program;

- restarting our elesclomol program and moving it towards proof-of-concept;
- advancing our CRACM ion channel program, which is partnered in part with Roche;
- making progress in creating partnership options and other sources of non-dilutive capital;
- enhancing our organizational capabilities, while continuing to manage our finances judiciously; and
- continuing to attract and retain the best employees.

In February 2011, the Compensation Committee considered our performance against the 2010 goals. The Compensation Committee reviewed progress against each of the specific corporate, financial, and operational goals and concluded that the progress made in 2010 merited awarding bonuses to our named executive officers and other employees at the vice president level or above in the form of a combination of cash and restricted stock. While the cash portion was limited to 80% of each executive's target bonus, the overall cash value of the bonus was 110% of those target bonuses after taking into account the value of the restricted stock that was granted. The Compensation Committee made this determination in an effort to preserve cash, while recognizing the strong contributions of our named executive officers and other executives in 2010. The Compensation Committee concluded that while we did not achieve all corporate goals in 2010 at optimal levels, including certain partnership objectives formulated at the beginning of the year, we successfully exceeded expectations with respect to others goals, in particular, enhancing the value and strategic position of both the ganetespib and elesclomol programs, and that, overall, the gain in long-term strategic position of the company at the end of 2010, relative to the end of 2009, exceeded expectations. Balancing these factors, the Compensation Committee decided that awarding a cash bonus at the 80% target level and a restricted stock grant at the 30% target level provided a shorter-term cash preservation strategy and a longer-term incentive to our executives. Thus, the Compensation Committee concluded that this structure would be an appropriate means to reward the progress that had been made in 2010 and align the long-term interests of these executives with the interests of our stockholders.

Long-Term Incentives

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 Amended and Restated 2006 Stock Plan, or 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 and occasionally upon the commencement of employment as part of negotiated employment arrangements with us. Restricted stock awards are made in anticipation of contributions that will create value in the company and are subject to a lapsing forfeiture right of 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.

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 option 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 during the first quarter of the year upon the achievement of the prior year's performance goals.

In October 2009, 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 revised target amounts for our executive officers in granting annual stock option awards for 2009 performance: 156% for Vice Presidents (previously 126%), 179% for Senior Vice Presidents (previously 156%), and 416% for the Chief Executive Officer (previously 380%). These increased target amounts were determined based on a review of the competitive and market data of the companies in our peer group and the recommendations of W.T. Haigh. The annual stock option awards for 2009 performance were granted on March 1, 2010 and were in line with these target amounts.

In December 2010, the Compensation Committee, based on the recommendation of W.T. Haigh's market review for executives, increased the target option grants to 163% for Vice Presidents, 194% for Senior Vice Presidents, and 420% for the Chief Executive Officer. In February 2011, the Compensation Committee authorized the grant of annual stock option awards for 2010 performance, which were granted on March 1, 2011, and are further described below under the heading "Post-2010 Compensation Actions."

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 non-executives 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 bonus 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. In connection with our employment of Dr. Vukovic and Mr. Singh, we agreed to reimburse the executive officer for up to \$50,000 and \$10,000, respectively, of his relocation expenses, which, in each case, was or is repayable to us in the event that the executive officer's employment with us had been or is terminated, voluntarily or otherwise, within 18 months of the commencement of his employment. 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, beginning on April 28, 2008, we have 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 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 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.

2009 Employee Retention Program

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, on April 13, 2009, the Compensation Committee implemented an employee retention program. The retention program included a pool of \$1,250,000 from which specified cash payments were made to certain employees and executive officers, 50% of which payments were paid on October 13, 2009 and 50% of which were paid on April 13, 2010, provided the recipient was still employed by us on such dates. The 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 vested 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 only payment made in 2010 under this program to a named executive officer was \$24,500 to Mr. Ehrlich. Drs. Bahcall and Koya voluntarily elected not to participate in the cash portion of the retention program, and the Compensation Committee determined to not award Dr. Vukovic a retention payment because at the time the retention program was established he had only been employed with us for approximately four months.

Post-2010 Compensation Actions

In February 2011, the Compensation Committee approved base salary increases for our employees effective March 1, 2011, including increasing the base salary of our Chief Executive Officer and our

named executive officers, other than Mr. Singh who commenced employment with us on November 29, 2010, as follows:

Name	2010	Base Salary	201	1 Base Salary	Percent Increase
Safi R. Bahcall, Ph.D.	\$	405,000	\$	430,000	6.2%
Keith S. Ehrlich	\$	257,000	\$	265,000	3.1%
Keizo Koya, Ph.D.	\$	300,000	\$	309,000	3.0%
Vojo Vukovic, M.D., Ph.D.	\$	320,000	\$	345,000	7.8%

In February 2011, the Compensation Committee also approved the issuance of annual stock option awards for our employees, which were granted on March 1, 2011 at an exercise price of \$5.26 per share, the closing price of our common stock on March 1, 2011, and vest as to 25% of the shares on March 1, 2012 and as to an additional 6.25% of the shares on the last day of each successive three-month period thereafter. Our Chief Executive Officer and our named executive officers, other than Mr. Singh who commenced employment with us on November 29, 2010, received the following stock option grants on March 1, 2011:

Name	# of Options
Safi R. Bahcall, Ph.D.	200,000
Keith S. Ehrlich	41,891
Keizo Koya, Ph.D.	58,200
Vojo Vukovic, M.D., Ph.D.	100,000

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, 2010, 2009 and 2008 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.

		Calamy	Damus	Stock	Option	All Other	Total
Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Awards (\$)(1)	(\$)(1)	Compensation (\$)	(\$)
Safi R. Bahcall, Ph.D.	2010	401,666(2)	162,000(3)(4)	55,633	524,800	82,312(5)	1,226,411
President and Chief Executive Officer	2009	385,000	123,585(6)(4)	0	277,970	82,674	869,229
	2008	380,000	0(7)	0	578,100	71,415	1,029,515
Keith S. Ehrlich	2010	255,000(2)	86,180(8)(4)	21,242	125,362	8,250(9)	496,034
Vice President, Finance and	2009	245,000	71,687(10)(4)	0	58,653	7,400	382,740
Administration, Chief Financial Officer	2008	242,500	0(7)	0	167,533	7,140	417,173
Keizo Koya, Ph.D.	2010	297,666(2)	96,000(3)(4)	33,060	250,467	8,250(9)	685,443
Senior Vice President, Drug Development	2009	286,000	73,445(6)(4)	0	84,770	8,659	452,874
C I	2008	283,333	0(7)	0	243,496	7,688	534,517
Vojo Vukovic, M.D., Ph.D.(11)	2010	310,000(2)	102,400(3)(4)	30,058	227,698	0	670,156
Senior Vice President, Chief Medical Officer	2009	248,333	66,768(6)(4)	0	294,244	36,740	646,085
Amar Singh(12)	2010	27,308	0	106,250	516,000	0	649,558
Senior Vice President, Chief Business							
Officer							

- These amounts represent the aggregate grant date fair value of stock awards and option awards, respectively, granted in each year presented calculated in accordance with FASB ASC Topic 718. 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, 2010 (the "Form 10-K") for details as to the assumptions used to determine the grant date fair value of the stock and option awards. See also our discussion of stock-based compensation under Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations—CriticaAccounting Policies and Estimates" of the Form 10-K.
- (2) Salaries earned in 2010 include two months at the 2009 salary level because annual salary adjustments are not made effective until March 1.
- (3) Represents a cash bonus for performance in 2010, which was paid in 2011.
- On April 13, 2009, the Compensation Committee implemented an employee retention program that included specified cash payments to certain employees and executive officers, 50% of which payments were paid on each of October 13, 2009 and April 13, 2010, provided the recipient was still employed by us on such dates. Drs. Bahcall and Koya voluntarily elected to not participate in the cash portion of the retention program. Mr. Ehrlich received a total retention payment of \$49,000. The Compensation Committee determined to not award Dr. Vukovic a retention payment because at the time the retention program

was established he had only been employed with us for approximately four months.

- Consists of \$36,000 of rental payments for a company apartment for Dr. Bahcall's use, \$30,960 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.
- (6) Represents a cash bonus for performance in 2009, which was paid in 2010.
- 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.
- (8) Consists of \$24,500 in a retention payment paid on April 13, 2010, as discussed in the Compensation Discussion and Analysis, and \$61,680 in a cash bonus for performance in 2010, which was paid in 2011.

- (9) Represents matching contributions made under our 401(k) plan.
- (10) Consists of \$24,500 in a retention payment paid on October 13, 2009 and \$47,187 in a cash bonus for performance in 2009, which was paid in 2010.
- (11) Compensation data disclosed for only those years in which the individual was a named executive officer.
- (12) Mr. Singh joined the Company on November 29, 2010.

2010 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, 2010 to each of the executive officers named in the Summary Compensation Table.

Name	Date	Date	All Other Stock Awards: Number of Shares of Stock or Units (#)	All Other Option Awards: Number of Securities Underlying Options (#)	Base Price of Option Awards (\$/Share)	Grant Date Fair Value of Stock and Option Awards(1)
Safi R. Bahcall, Ph.D. President and Chief Executive Officer	3/1/10 3/1/10	2/2/10 2/24/10	13,839	160,000	\$ 4.02	
Keith S. Ehrlich Vice President, Finance and Administration, Chief Financial Officer	3/1/10 3/1/10	2/2/10 2/24/10	5,284	38,220	\$ 4.02	
Keizo Koya, Ph.D. Senior Vice President, Drug Development	3/1/10 3/1/10	2/2/10 2/24/10	 8,224	76,362 —	\$ 4.02 —	
Vojo Vukovic, M.D., Ph.D. Senior Vice President, Chief Medical Officer	3/1/10 3/1/10	2/2/10 2/24/10	— 7,477	69,420		\$ 227,698 \$ 30,058
Amar Singh Senior Vice President, Chief Business Officer	11/29/10 11/29/10	11/22/10 11/22/10	25,000	150,000	\$ 4.25 —	

⁽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, 2010 (the "Form 10-K") for details as to the assumptions used to determine the grant date fair value of the equity awards. See also our discussion of stock-based compensation under Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations—CriticaAccounting Policies and Estimates" of the Form 10-K. Our executive officers will not realize the value of the option awards in cash until these awards are exercised and the underlying shares are subsequently sold.

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 \$430,000, 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 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. Pursuant to the terms of this agreement, we may apply for and purchase 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, with the exception of Amar Singh who commenced employment with us on November 29, 2010, 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 bonus up to a certain percentage of such executive'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. 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 \$265,000. Under our bonus policy, Mr. Ehrlich is eligible to receive an annual performance-based bonus of up to 30% 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 \$309,000. Under our bonus policy, Dr. Koya is eligible to receive an annual performance-based cash bonus of up to 40% of his base salary.

Amar Singh. Pursuant to a letter agreement dated November 19, 2010, between us and Mr. Singh, we agreed to employ Mr. Singh as Senior Vice President, Business and Commercial Development beginning on November 29, 2010. In February 2011, Mr. Singh was named Chief Business Officer. In addition to Mr. Singh's stock option award to purchase up to 150,000 shares of common stock granted on the commencement of his employment, we also granted Mr. Singh 25,000 restricted shares of common stock, which vest as to 50% on November 29, 2012 and as to 50% on November 29, 2013, provided he remains employed by us on such dates. Mr. Singh's annual base salary is currently \$300,000. Under our bonus policy, Mr. Singh is eligible to receive an annual performance-based bonus

of up to 40% of his base salary. In connection with the execution of the letter agreement, we agreed to reimburse Mr. Singh for up to \$10,000 of his relocation expenses, all of which is repayable to us in the event that Mr. Singh's employment with us is terminated, voluntarily or otherwise, within 18 months of November 29, 2010.

Vojo Vukovic, M.D., Ph.D. Pursuant to a letter agreement dated December 9, 2008, between us and Dr. Vukovic, we agreed to employ Dr. Vukovic as Vice President, Clinical Research, beginning on January 19, 2009. In July 2009, Dr. Vukovic was promoted to serve as our Senior Vice President, Chief Medical Officer. Dr. Vukovic's annual base salary is currently \$345,000. Under our bonus policy, Dr. Vukovic is eligible to receive an annual performance-based bonus of up to 40% of his base salary. In connection with the execution of the letter agreement, we agreed to reimburse Dr. Vukovic for up to \$50,000 of his relocation expenses.

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 Change of Control."

Fiscal Year 2010 Equity Awards

On February 2, 2010, the Compensation Committee authorized the option awards granted to our then employed executive officers on March 1, 2010 set forth in the 2010 Grants of Plan-Based Awards table as part of the annual option award grants to all of our executive 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 2009 performance, based on 100% performance level: 156% for Vice Presidents, 179% for Senior Vice Presidents, and 416% for the Chief Executive Officer.

On February 24, 2010, the Compensation Committee authorized the restricted stock awards granted to our executive officers employed with us on March 1, 2010 set forth in the 2010 Grants of Plan-Based Awards table, which awards were granted as part of the executive officer's bonus for 2009 performance.

The only other equity awards granted to a named executive officer in 2010 were the stock option to purchase up to 150,000 shares of common stock and 25,000 shares of restricted stock granted to Mr. Singh upon the commencement of his employment. Subject to the terms of the 2006 Stock Plan and the option agreement issued in connection with this grant, the option vests 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. Subject to the terms of the 2006 Stock Plan and the restricted stock agreement issued in connection with this grant, 50% of the shares vest on November 29, 2012 and 50% vest on November 29, 2013, provided he remains employed by us on such dates.

All of the stock options referenced above and set forth in the 2010 Grants of Plan-Based Awards table 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. Stock option and restricted stock 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 discussed below under "—Potential Payments Upon Termination or Change of Control."

Fiscal Year 2010 Bonuses

2010 Cash Payments Under Employee Retention Program

As discussed above in the Compensation Discussion and Analysis under "-2009 Employee Retention Program," on April 13, 2009, the Compensation Committee implemented an employee retention program that included cash retention payments to certain employees and executive officers, 50% of which amounts were paid on October 13, 2009 and the remaining 50% of which amounts were paid on April 13, 2010, provided that on each such date, the recipient was employed by us. The 50% portion of the cash payment that was paid on April 13, 2010 to Mr. Ehrlich, is reflected in the 2010 "Bonus" column of the Summary Compensation Table. The 50% portion of the cash payment that was paid on October 13, 2009 is reflected in the 2009 "Bonus" column of the Summary Compensation Table. Drs. Bahcall and Koya voluntarily elected not to participate in the cash portion of the retention program, and the Compensation Committee determined to not award Dr. Vukovic a retention payment because at the time the retention program was established he had only been employed with us for approximately four months.

Bonuses for 2010 Performance

As discussed above in the Compensation Discussion and Analysis under "-Annual Bonus," the Compensation Committee approved our executives' bonus awards for 2010 performance in February 2011 following a review of progress against each of thespecific 2010 corporate, financial, and operational goals. The Compensation Committee concluded that while we did not achieve all corporate goals in 2010 at optimal levels, including certain partnership objectives formulated at the beginning of the year, we successfully exceeded expectations with respect to others goals, in particular, enhancing the value and strategic position of both the ganetespib and elesclomol programs, and that, overall, the gain in long-term strategic position of the company at the end of 2010, relative to the end of 2009, exceeded expectations. Balancing these factors, the Compensation Committee decided that awarding a cash bonus at the 80% target level and a restricted stock grant at the 30% target level provided a shorter-term cash preservation strategy and a longer-term incentive to our executives. Thus, the Compensation Committee concluded that this structure would be an appropriate means to reward the progress that had been made in 2010 and merited awarding to our Chief Executive Officer and other named executive officers, in aggregate, a cash bonus equal to 80% of their respective target bonus amounts and restricted stock totaling 30% of those target bonus amounts. The restricted stock grants vest as to 100% of the shares on the first anniversary of the date of grant, provided the executive remains employed by us on such date. The restricted stock awards to our executives were issued on March 1, 2011 and the number of shares granted to each executive was determined by dividing 30% of the executive's target bonus amount by the closing price of our common stock on March 1, 2011, or \$5.26. The cash portion of the bonuses awarded to our named executive officers for fiscal year 2010, which were paid in 2011, is reflected in the Summary Compensation Table. The restricted stock grants to our named executive officers, which were granted on March 1, 2011, will be reflected in the compensation tables included in our compensation disclosure for the 2011 fiscal year, however the amounts of these restricted stock grants are set forth in the Compensation Discussion and Analysis.

Outstanding Equity Awards at 2010 Fiscal Year-End

The following table shows stock options and shares of unvested stock held by each of the executive officers named in the Summary Compensation Table as of December 31, 2010, the last day of our fiscal year.

		Option Awar	ds		Stock A	wards
Name	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. President and	37,500(2)	_	14.00(3)	2/15/15	_	_
Chief	50,000(4)	_	14.00	2/15/16	_	
Executive Officer	43,125	2,875(5)	8.53	2/28/17	_	_
	68,750	31,250(6)	8.82	2/27/18	_	_
	146,300(7)	_	2.49	4/13/19	_	_
	_	160,000(8)	4.02	3/1/20	_	_
	_	_	_	_	13,839(9)	84,695
Keith S. Ehrlich Vice President,	37,500(10)) —	14.00(11)) 5/27/14	_	_
Finance and Administration,	13,425(2)	_	14.00(3)	2/15/15	_	_
Chief	20,571(4)	_	14.00	2/15/16		_
Financial Officer	20,625	1,375(12)	8.75	2/26/17	_	_
	19,923	9,057(6)	8.82	2/27/18	_	_
	30,870(7)	_	2.49	4/13/19	_	_
	_	38,220(8)	4.02	3/1/20		_
			_	_	5,284(9)	32,338
Keizo Koya, Ph.D. Senior Vice President,	125,000(13) 50,000(14)		10.843	12/13/12	_	_
Drug						
Development	10,000(15) 17,900(2)		14.00(11) 14.00(3)) 5/27/14 2/15/15		
	26,785(4)	_	14.00(3)	2/15/16	_	_
	24,375	1,625(12)		2/26/17	_	_
	28,957	13,163(6)	8.82	2/27/18	_	_
	44,616(7)		2.49	4/13/19	_	_
	_	76,362(8)	4.02	3/1/20	_	_
		_	_	_	8,224(9)	50,331
Vojo Vukovic, M.D., Ph.D.	21 975	28,125(16)) 7.27	1/19/19		
Senior Vice President,	21,875 32,760(7)	20,123(10) —	2.49	4/13/19		_
*	/					

ledical					
er –	- 69,42	0(8) 4.02	3/1/20	_	_
_		_		7,477(9)	45,759
ngh –	- 150,00	0(17) 4.25	11/29/20	_	_
Vice					
dent, –			_	25,000(18)	153,000
usiness					
er					
i .	Medical eer — ingh — Vice dent, — dusiness eer	ingh — 150,000 Vice dent, — — —	ingh — 150,000(17) 4.25 Vice dent, — — —	reer — 69,420(8) 4.02 3/1/20 — — — — — — — — — — — — — — — — — — —	reer — 69,420(8) 4.02 3/1/20 — 7,477(9) ingh — 150,000(17) 4.25 11/29/20 — Vice dent, — — — 25,000(18) susiness

⁽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, 2010, the last day of our fiscal year.

- (2) 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.
- 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.
- (4) The option vested as to 25% of the shares on February 15, 2007 and as to an additional 6.25% of the shares on the last day of each calendar quarter thereafter.
- (5) 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.
- (6) 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.
- On April 13, 2009, the Compensation Committee implemented an employee retention program that included the award of stock options on April 13, 2009 to all employees, including our Chief Executive Officer and other executive officers, which vested as to 50% of the shares on each of January 13, 2010 and October 13, 2010.
- (8) The option vested as to 25% of the shares on March 1, 2011 and vests as to an additional 6.25% of the shares on the last day of each successive three-month period thereafter.
- (9) Represents a restricted stock grant that vested as to 100% of the shares on March 1, 2011.
- (10) 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.
- (11) 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.
- (12) 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.
- (13) 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.
- (14) 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.
- (15) 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.
- (16) The option vested as to 25% of the shares on January 19, 2010 and vests as to an additional 6.25% of the shares on the last day of each successive three-month period thereafter.
- (17) The option vests as to 25% of the shares on November 29, 2011 and as to an additional 6.25% of the shares on the last day of each successive three-month period thereafter.
- (18) Represents a restricted stock grant that vests as to 12,500 shares on each of November 29, 2012 and November 29, 2013.

2010 Option Exercises and Stock Vested

There were no exercises of options to purchase our common stock nor was there any vesting of stock awards held by any of the executive officers named in the Summary Compensation Table during the fiscal year ended December 31, 2010.

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 then-current 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 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.

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 Keizo Koya, Ph.D., Amar Singh and Vojo Vukovic, M.D., 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), Dr. Koya, Mr. Singh and Dr. Vukovic 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, Dr. Koya, Mr. Singh and Dr. Vukovic 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 Dr. Koya, Mr. Singh and Dr. Vukovic 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 the date that the severance and change of control agreement was executed, 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, at the time of such election or nomination (but shall not include an individual whose election or nomination 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 the principal location where he or she renders services to a location more than 50 miles from his or her location of service immediately prior to the 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 responsibility or authority than such participant's position was immediately prior to the change of control. Our 2006 Stock Plan allows the Board of Directors to make appropriate adjustments for other stock-based awards. The term "change of control" under our stock plans has the same definition as it does under our severance and change of control agreements.

Potential Payments Upon a December 31, 2010 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, 2010, 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, 2010 was \$6.12 per share.

		ination within ix Months	
Executive Benefits and Payments Upon Termination		0 0	Involuntary Not for Cause Termination
Base Salary	\$	810,000	\$ 810,000
Acceleration of Vesting of Equity		100%	0%
Number of Vesting In-The-Money Stock Options and	16	0,000 options	_
Value upon Termination(1)	\$	336,000	
Number of Vesting Shares and		13,839 shares	_
Value upon Termination(1)	\$	84,695	
Total	\$	1,230,695	\$ 810,000

⁽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, 2010 and, with respect to options, subtracting the applicable option exercise price.

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, 2010, 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, 2010 was \$6.12 per share.

<u>Name</u>	Executive Benefits and Payments upon Termination	wit or	ermination thout Cause Resignation Good Reason	fo	Termination without Cause or Resignation or Good Reason within One 'ear Following a Change of Control
Keith S. Ehrlich	Base Salary	\$	64,250	\$	257,000
Vice President, Finance					
and	Bonus		_	\$	77,100
	Number of Vesting In-The-				
Administration, Chief	Money Stock		9,555		38,220
Financial Officer	Options and Value upon Termination	\$	20,066(1)\$	80,262(2)
	Number of Vesting Shares and		_		5,284
	Value upon Termination		_	\$	32,338(3)
	Cobra Benefits	\$	3,283	\$	13,529
	Total	\$	87,599	\$	460,229
Keizo Koya, Ph.D.	Base Salary	\$	150,000	\$	300,000
Senior Vice President,	Bonus		_	\$	120,000
····,	Number of Vesting In-The-Money			·	-,
Drug Development	Stock		23,862		76,362
	Options and Value upon Termination	\$	50,110	4)\$	160,360(2)
	Number of Vesting Shares and Value		_		8,224
	upon Termination		_	\$	50,331(3)
	Cobra Benefits	\$	5,768	\$	10,734
	Total	\$	205,878	\$	641,425
Vojo Vukovic, M.D.,					
Ph.D.	Base Salary	\$	160,000	\$	320,000
Senior Vice President,	Bonus		_	\$	128,000
ŕ	Number of Vesting In-The-Money				ŕ
Chief Medical Officer	Stock		21,693		69,420
	Options and Value upon Termination	\$	45,556(4	4)\$	145,782(2)
	Number of Vesting Shares and		_		7,477
	Value upon Termination		_	\$	45,759(3)
	Cobra Benefits	\$	6,698	\$	13,529
	Total	\$	212,254	\$	653,070
Amar Singh	Base Salary	\$	150,000	\$	300,000
Senior Vice President,	Bonus	-		\$	120,000
Somor vice ricoldent,	Number of Vesting In-The-Money			Ψ	120,000
Chief Business Officer	Stock		0		150,000
	Options and Value upon Termination		0	\$	280,500(2)
	Number of Vesting Shares and		_		25,000
	Value upon Termination		_	\$	153,000(3)

Cobra Benefits	— ()5	— ()5
Total	\$ 150,000 \$	853,500

- (1) The value of the accelerated stock option vesting was calculated by multiplying the number of shares underlying in-the-money options that would have vested in the three months following December 31, 2010 by \$6.12 per share and subtracting the applicable option exercise price.
- (2) The value of the accelerated stock option vesting was calculated by multiplying the number of shares underlying all outstanding in-the-money unvested options as of December 31, 2010 by \$6.12 per share and subtracting the applicable option exercise price.

- (3) The value of the accelerated restricted stock vesting was calculated by multiplying the number of unvested shares as of December 31, 2010 by \$6.12.
- (4) The value of the accelerated stock option vesting was calculated by multiplying the number of shares underlying in-the-money options that would have vested in the six months following December 31, 2010 by \$6.12 per share and subtracting the applicable option exercise price.
- (5) As of December 31, 2010, Mr. Singh was not enrolled in our health benefit plans.

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 2010 pursuant to certain agreements we have with them, other than Dr. Bahcall:

	Fees Earned or	Stock Awards	Option Awards	All Other Compensation	Total
Name	Paid in Cash (\$)	(\$)(1)	(\$)(2)	(\$)	(\$)
Keith R. Gollust(3)	40,000(4)	40,000	16,800(5)	_	96,800
Lan Bo Chen, Ph.D.(3)	_	_	_	120,000(6)	120,000
Bruce Kovner(3)	10,000(7)	40,000	11,550(8)	_	61,550
Donald W. Kufe, M.D.(3)	10,326(9)	_	48,550(10)	5,000(11)	63,876
William S. Reardon,					
C.P.A.(3)	45,000(12)	10,000	11,550(8)	_	66,550
Robert N. Wilson(3)	40,000(13)	20,000	11,550(8)	_	71,550

- These amounts represent the aggregate grant date fair value of stock awards granted in fiscal year 2010 calculated in accordance with FASB ASC Topic 718. 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, 2010 (the "Form 10-K") for details as to the assumptions used to determine the grant date 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" of the Form 10-K.
- These amounts represent the aggregate grant date fair value of stock options granted in fiscal year 2010 calculated in accordance with FASB ASC Topic 718. See our discussion of "Stock-Based Compensation" under Note 2 to our audited consolidated financial statements included in the Form 10-K for details as to the assumptions used to determine the grant date fair value of the option 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" of the Form 10-K.
- (3) The following table shows the total number of outstanding and vested stock options, and shares of outstanding and restricted common stock as of December 31, 2010, the last day of our fiscal year, that have been issued as director compensation.

	# of Stock Options	# of Stock Options	Shares of Common	Shares of Common
<u>Name</u>	Outstanding	Vested	Stock Outstanding	Stock Restricted
Keith R. Gollust	224,000	220,000	50,750	7,722
Lan Bo Chen, Ph.D.	_	_	_	
Bruce Kovner	71,188	68,438	43,232	7,722
Donald W. Kufe, M.D.	15,000	_	_	
William S. Reardon, C.P.A.	31,500	28,750	12,237	1,930
Robert N. Wilson	79,000	76,250	31,926	3,861

- (4) Consists of \$20,000 in fees paid for committee service during the fiscal year ended December 31, 2010, \$10,000 as the elected form of payment for Board service from July 1, 2009 through June 30, 2010, and \$10,000 as the elected form of payment for Board service from July 1, 2010 through June 30, 2011.
- (5) Consists of \$5,250, representing the grant date fair value of an option to purchase 2,500 shares of common stock, and \$11,550, representing the grant date fair value of an option to purchase 5,500 shares of common stock, both of which were granted on July 1, 2010.
- (6) Represents fees paid in 2010 for consulting services pursuant to our consulting agreement with Dr. Chen which is further described below.
- (7) Represents fees paid for committee service during the fiscal year ended December 31, 2010.
- (8) Represents the grant date fair value of an option grant to purchase 5,500 shares of common stock granted on July 1, 2010.
- (9) Dr. Kufe was appointed to the Board of Directors on September 28, 2010. The fees paid represent the elected form of payment for Board service from September 28, 2010 through June 30, 2011.
- (10) Represents the grant date fair value of an option to purchase 15,000 shares of common stock granted on September 28, 2010 upon Dr. Kufe's appointment to the Board of Directors.
- (11) Represents a one-time consulting fee paid in 2010 prior to Dr. Kufe's appointment to the Board of Directors pursuant to a consulting agreement with Dr. Kufe that was terminated on September 27, 2010.
- (12) Consists of \$15,000 in fees paid for committee service during the fiscal year ended December 31, 2010, \$15,000 as the elected form of payment for Board service from July 1, 2009 through June 30, 2010, and \$15,000 as the elected form of payment for Board service from July 1, 2010 through June 30, 2011.
- (13) Consists of \$20,000 in fees paid for committee service during the fiscal year ended December 31, 2010, \$10,000 as the elected form of payment for Board service from July 1, 2009 through June 30, 2010, and \$10,000 as the elected form of payment for Board service from July 1, 2010 through June 30, 2011.

Director Compensation Policy

In January 2005, our Board of Directors approved our Director Compensation Policy, which was amended and restated in June 2008 and June 2009.

Initial Stock Option Grant Upon Election

Pursuant to this policy, each non-employee director automatically 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 restricted stock and stock option awards are granted automatically without any further action required by the Board of Directors on July 1 of each year, which is referred to below as the "Annual Grant Date."

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

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 Annual Grant Date; 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 Annual Grant Date, 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. 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 forfeiture 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 on the Annual Grant Date 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 on the Annual Grant Date 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 Annual Grant Date and vest as to 25% of the shares on each of September 30, December 31, March 31 and June 30 thereafter, 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 granted in 2010 and disclosed in the above Director Compensation table 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.

Consulting Agreement with Dr. Lan Bo Chen

In April 2005, we entered into a written consulting agreement with Dr. Chen pursuant to which he 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 superseded a prior verbal consulting agreement that we had in place with Dr. Chen. 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 2010 under this agreement.

Risks Related to Compensation Practices and Policies

The Compensation Committee maintains a pay-for-performance compensation philosophy, but also recognizes that providing certain types of compensation incentives may inadvertently motivate individuals to act in ways that could be detrimental to the organization as a whole in order to maximize personal compensation. To minimize such risk, the Compensation Committee reviews at least annually the overall structure and individual components of our compensation program. The Compensation Committee also performs an annual evaluation to ensure that salary levels, equity awards and other elements of compensation are benchmarked against appropriate standards and that incentives provided for achievement of target goals are balanced between short-term rewards and longer-term enhancement of shareholder value. Based on its review, the Compensation Committee has concluded that any risks created by our compensation policies and procedures are not reasonably likely to have a material adverse effect on our company or business.

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, 2010:

	(a)	(b)	(c)
Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	Weighted Average Exercise Price of Outstanding Options, Warrants and Rights	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(1)	5,326,979	\$ 7.95	1,341,670(2)
Equity			
Compensation			
Plans not			
Approved by			
Security			
Holders	_	_	_
Total	5,326,979	\$ 7.95	1,341,670

- (1) These plans consist of our Amended and Restated 2006 Stock Plan, or 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.
- (2) 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. This amount 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, 2011.

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 and incorporated by reference in our Annual Report on Form 10-K for the year ended December 31, 2010.

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 registered public accounting firm. In fulfilling its responsibilities for the financial statements for the fiscal year ended December 31, 2010, the Audit Committee took the following actions:

- Reviewed and discussed the audited financial statements for the fiscal year ended December 31, 2010 with management and Ernst & Young LLP, our independent registered public accounting firm;
- 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, 2010 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, except that one report, covering an aggregate of two transactions, was filed late by Vojo Vukovic. 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 below and in this proxy statement under the caption "Executive Officer and Director Compensation," there were no transactions to which we were a party since the beginning of 2009 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.

Participation in Issuer-Directed Registered Direct Offering

On April 14, 2011, we entered into common stock purchase agreements with investors with respect to the offer and sale of an aggregate of 7,191,731 shares of our common stock in an issuer-directed registered direct offering at \$4.89 per share, the closing price of our common stock on April 14, 2011. The offering closed on April 20, 2011, and included the purchase of an aggregate of 1,581,493 shares by the following members of our Board of Directors or their affiliates:

	Number of	
	Shares of	
	Common	
	Stock	Aggregate
Name	Purchased	Purchase Price
Bruce Kovner	1,431,493	\$ 7,000,000.77
Robert N. Wilson	50,000	\$ 244,500
Wyandanch Partners, L.P.(1)	100,000	\$ 489,000

(1) Keith Gollust is the president and sole stockholder of Gollust Management, Inc., which is the general partner of Wyandanch Partners, L.P.

In accordance with our policy for the approval of related person transactions described below, William S. Reardon, chairman of the Audit Committee and the sole non-interested member of the Audit Committee, pre-approved the participation of these directors in the offering on behalf of the Audit Committee.

Sale of Stock to Director and Stockholder

On November 10, 2010, we entered into a Subscription Agreement with our director and existing stockholder Bruce Kovner pursuant to which we sold 1,440,923 shares of our common stock to Mr. Kovner, at a purchase price of \$3.47 per share. The shares were sold directly to Mr. Kovner without a placement agent, underwriter, broker or dealer. The proceeds to us were approximately \$5.0 million after deducting estimated offering expenses payable by us. The shares were offered and sold pursuant to a prospectus supplement dated November 10, 2010 and an accompanying prospectus dated August 28, 2008, pursuant to our existing effective shelf registration statement on Form S-3 (File No. 333-152833), which was filed with the SEC on August 7, 2008 and declared effective by the SEC on August 28, 2008. The sale of the shares was settled on November 10, 2010. Mr. Kovner is our largest stockholder, beneficially owning approximately 23.7% of our issued and outstanding common stock prior to the closing of the sale and issuance of the shares under the Subscription Agreement, and approximately 26.4% of our issued and outstanding common stock following the sale and issuance of the shares.

In accordance with our policy for the approval of related person transactions described below, the Audit Committee pre-approved the sale of the shares to Mr. Kovner.

Participation in Public Offering

In January 2010, we completed an underwritten public offering of 6,388,889 shares of our common stock, which includes the purchase of an aggregate of 772,222 shares by the following members of our Board of Directors:

	Number of		
	Shares of		
	Common		
	Stock		Aggregate
Name	Purchased	Pι	rchase Price
Safi R. Bahcall	22,222	\$	99,999
Keith R. Gollust	100,000	\$	450,000
Bruce Kovner	550,000	\$	2,475,000
Robert N. Wilson	100,000	\$	450,000

The public offering price of \$4.50 per share was determined through negotiations between us and the representatives of the underwriters of the offering based on several factors, including our future prospects and those of our industry in general, our financial operating information in recent periods, and market prices of securities and financial and operating information of companies engaged in activities similar to ours.

In accordance with our policy for the approval of related person transactions described below, William S. Reardon, chairman of the Audit Committee and the sole non-interested member of the Audit Committee, pre-approved the participation of these directors in the offering on behalf of the Audit Committee.

Agreement and Release with Dr. Lan Bo Chen

In January 2005, we entered into an Agreement and Release with our director Dr. Lan Bo 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 paid Dr. Chen \$500,000 payable in \$25,000 installments quarterly for five years. We paid Dr. Chen the final \$100,000 payable under this agreement in 2009.

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-in-law, 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 seven 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 upcoming Annual Meeting of Stockholders; Keith R. Gollust and Robert N. Wilson constitute the Class II directors with a term ending at the 2012 Annual Meeting of Stockholders; and Safi R. Bahcall, Ph.D., Bruce Kovner, and Donald W. Kufe, M.D., constitute the Class III directors with a term ending at the 2013 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 28, 2011, the Board of Directors accepted the recommendation of the Nominating and Governance Committee and voted to nominate Lan Bo Chen, Ph.D. and William S. Reardon, C.P.A. for election at the Annual Meeting for a term of three years to serve until the 2014 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 Dr. Chen and Mr. Reardon. 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 DR. CHEN AND MR. REARDON AS DIRECTORS, AND PROXIES SOLICITED BY THE BOARD WILL BE VOTED IN FAVOR THEREOF UNLESSA STOCKHOLDER HAS INDICATED OTHERWISE ON THE PROXY.

PROPOSAL NO. 2—INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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, 2011. Ernst & Young LLP audited our financial statements for the fiscal year ended December 31, 2010. 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 registered public accounting firm, 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.

Accounting Fees and Services

The following table presents fees for professional audit services rendered by Ernst & Young LLP for the audit of our annual financial statements for the years ended December 31, 2010 and 2009 and fees billed for other services rendered by Ernst & Young LLP during those periods.

	2009	2010
Audit fees	\$ 373,000	\$ 322,000
Audit-related fees	0	0
Tax fees	0	15,000
All other fees	0	0
Total	\$ 373,000	\$ 337,000

Audit Fees

Audit services were comprised of services associated with the quarterly reviews and annual audits, as well as the required audit of the effectiveness of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act of 2002. In addition, audit services for 2009 included the services of Ernst & Young in connection with our public offering that was completed in January 2010.

Tax Fees

Tax services for 2009 were outsourced to a third party service provider. Tax fees for 2010 consisted of \$15,000 for services provided by Ernst & Young in connection with tax compliance.

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 our independent registered public accounting firm. In recognition of this responsibility, the Audit Committee has established a policy to pre-approve all audit and permissible non-audit services provided by our independent registered public accounting firm.

Prior to engagement of an independent registered public accounting firm 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 an independent registered public accounting firm 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 an independent registered public accounting firm, 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 an independent registered public accounting firm'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 our independent registered public accounting firm 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 our independent registered public accounting firm for additional services not contemplated in the original pre-approval. In those instances, the Audit Committee requires specific pre-approval before engaging our independent registered public accounting firm.

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 registered public accounting firm.

If our stockholders ratify the selection of Ernst & Young LLP, the Audit Committee may still, in its discretion, decide to appoint a different independent registered public accounting firm at any time during the year ending December 31, 2011, 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 OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM, 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 and employees, including our chief executive officer and chief financial and accounting officer. 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 2012 Annual Meeting of Stockholders, we must receive stockholder proposals (other than for director nominations) no later than January 5, 2012. To be considered for presentation at the 2012 Annual Meeting, although not included in the proxy statement, proposals (including director nominations that are not requested to be included in our proxy statement) must be received no earlier than February 19, 2012 and no later than March 20, 2012; provided, however, that in the event that the date of the 2012 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 (90th) 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 2012 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.

Lexington, Massachusetts April 29, 2011



IMPORTANT ANNUAL MEETING INFORMATION

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ENDORSEMENT LINE

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MR A SAMPLE DESIGNATION (IF ANY)

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Electronic Voting Instructions

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 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 2, 2011.



Vote by Internet

- · Log on to the internet and go to www.investorvote.com/SNTA
- . Follow the steps outlined on the secured website.



Vote by telephone

- · Call toll free 1-800-652-VOTE (8683) within the USA, US territories & Canada any time on a touch tone telephone. There is NO CHARGE to you for the call.
- · Follow the instructions provided by the recorded message.

Using a black ink pen, mark your votes with an X as shown in this example. Please do not write outside the designated areas.



Annual Meeting Proxy Card

1234 5678 9012 345

▼ IF YOU HAVE NOT VOTED VIA THE INTERNET OR TELEPHONE, FOLD ALONG THE PERFORATION, DETACH AND RETURN THE BOTTOM PORTION IN THE ENCLOSED ENVELOPE. ▼

A Proposals — The Board of Directors recommen 1. Election of Directors (or if any nominee is not available for election For Withhold 01 - Lan Bo Chen, Ph.D. 02 -		FOR Proposal 2.	
Proposal to ratify the selection of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2011.	For Against Abstain		
B Non-Voting Items Change of Address — Please print new address below.			
C Authorized Signatures — This section must be completed for your vote to be counted. — Date and Sign Below			
Please sign exactly as name(s) appears hereon. Joint owners shoul full title as such.	ld each sign. When signing as attorney, executor, administrator,	corporate officer, trustee, guardian, or custodian, please give	
Date (mm/dd/yyyy) — Please print date below.	Signature 1 — Please keep signature within the box.	Signature 2 — Please keep signature within the box.	
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▼ IF YOU HAVE NOT VOTED VIA THE INTERNET OR TELEPHONE, FOLD ALONG THE PERFORATION, DETACH AND RETURN THE BOTTOM PORTION IN THE ENCLOSED ENVELOPE. ▼

Proxy — SYNTA PHARMACEUTICALS CORP.

45 HARTWELL AVENUE LEXINGTON, MA 02421 PROXY FOR ANNUAL MEETING OF STOCKHOLDERS - JUNE 2, 2011

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 29, 2011 in connection with the Annual Meeting of Stockholders to be held at 9:00 a.m. EST on Thursday, June 2, 2011 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 2011 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 our independent registered public accounting firm for the fiscal year ending December 31, 2011.

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!