

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

SCHEDULE 14A

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

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

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

Payment of Filing Fee (Check the appropriate box):

- No fee required.
 - Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
 - (1) Title of each class of securities to which transaction applies: _____
 - (2) Aggregate number of securities to which transaction applies: _____
 - (3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined): _____
 - (4) Proposed maximum aggregate value of transaction: _____
 - (5) Total fee paid: _____
 - Fee paid previously with preliminary materials.
 - Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.
 - (1) Amount Previously Paid: _____
 - (2) Form, Schedule or Registration Statement No.: _____
 - (3) Filing Party: _____
 - (4) Date Filed: _____
-

EXPLANATORY NOTE

This filing is being made to provide updated information about the members of the Board of Directors of Synta Pharmaceuticals Corp. (“Synta”) who have been designated to serve as directors following the consummation of the proposed merger with Madrigal Pharmaceuticals, Inc. (“Madrigal”), including information about the most recently identified board designee, David Milligan, Ph.D.; anticipated board committee assignments for the combined company; and the classification of the post-closing directors within Synta’s director classes. With the designation of Dr. Milligan, six of the seven director positions for the combined company have been designated. The seventh director designee has not been determined and it is anticipated that such position will be designated after the closing of the proposed merger.

SUPPLEMENTAL DISCLOSURES

These supplemental disclosures should be read in conjunction with the definitive proxy statement, filed by Synta with the Securities and Exchange Commission on June 8, 2016 (the “Definitive Proxy Statement”), which should be read in its entirety. Without admitting in any way that the disclosures below are material or otherwise required by law, Synta makes the following amended and supplemental disclosures:

1. *The following disclosure supplements and restates the first two paragraphs under the section “Executive Officers and Directors of the Combined Company Following the Merger” on page 216 of the Definitive Proxy Statement, which is under the heading “Management Following the Merger — Executive Officers and Directors.”*

Executive Officers and Directors of the Combined Company Following the Merger

The combined company's board of directors will initially be fixed at seven (7) members, consisting of (i) one member designated by Synta, Keith R. Gollust, the current Chairman of the board of directors of Synta, (ii) one member to be mutually agreed upon by Synta and Madrigal meeting the SEC and NASDAQ Stock Market independence requirements, and (iii) five (5) members designated by Madrigal, namely Paul A. Friedman, M.D., who will be the Chairman, Rebecca Taub, M.D., Fred Craves, Ph.D., who will be the lead director and who currently is the founder and a managing director of Bay City Capital (which it and its affiliates will own approximately 52.5% of the combined company's outstanding shares of common stock immediately following the closing of the merger); Kenneth M. Bate and David Milligan, Ph.D. The staggered structure of the current Synta board of directors will remain in place for the combined company following the completion of the merger, provided that Keith R. Gollust will be re-appointed as a Class III director. Synta and Madrigal have agreed that, following the effective time of the merger, the Synta and Madrigal designees identified above shall mutually agree upon the seventh designee to the combined company's board of directors. The designee will be appointed as a Class III director.

The following table lists the names and ages as of July 1, 2016 and positions of the individuals who are expected to serve as executive officers and directors of the combined company upon completion of the merger:

Name	Age	Position
<i>Executive Officers</i>		
Paul A. Friedman, M.D.	73	Chief Executive Officer, Chairman of the Board and Class I Director
Rebecca Taub, M.D.	64	Chief Medical Officer, Executive Vice President, Research & Development and Class II Director
Marc R. Schneebaum	62	Chief Financial Officer
<i>Non-Employee Directors</i>		
Fred B. Craves, Ph.D.	70	Lead Director and Class II Director
Kenneth M. Bate	65	Class I Director
Keith R. Gollust	71	Class III Director
David Milligan, Ph.D.	75	Class III Director

2. *The following disclosure is hereby added on page 218 of the Definitive Proxy Statement, immediately before the heading "Controlled Company."*

David Milligan, Ph.D., currently works as an independent consultant. Previously, Dr. Milligan was a partner at Bay City Capital, LLC, a life sciences investment firm, a position he held from 1997 through 2013. From 1979 to 1996, Dr. Milligan served as Senior Vice President and Chief Scientific Officer at Abbott Laboratories, a publicly-held life sciences company. Dr. Milligan currently serves as a director of Inspiretech and Xoult, both privately-held life sciences companies. During the past five years, Dr. Milligan has served as a director of Caliper Life Sciences, a publicly-held pharmaceutical and biotechnology company that was acquired by PerkinElmer Company, and served as a director of WebLOQ, Inc. a privately-held

information technology security company. Dr. Milligan also served as Chairman and a director at Vicuron Pharmaceuticals, Inc., a privately-held biopharmaceutical company acquired by Pfizer, from 1997 to 2005, as a director of Reliant Pharmaceuticals, Inc., a privately-held pharmaceutical company acquired by GlaxoSmithKline, from 1999 to 2007, as a director of Pathway Diagnostics Corporation, a privately-held diagnostics company acquired by Quest Diagnostics, Inc., from 2002 to 2008, as a director of ICOS Corporation, a publicly-held pharmaceutical company acquired by Eli Lilly, from 1995 to 2007, and as a director of Maxia Pharmaceuticals, Inc., a privately-held pharmaceutical company acquired by Incyte Corporation, from 1999 to 2003. Dr. Milligan received an A.B. in Chemistry from Princeton University and an M.S. and Ph.D. in Organic Chemistry from the University of Illinois. We believe Dr. Milligan's qualifications to serve on the combined company board of directors include his operating, finance, commercial, transactional and senior management experience in the life sciences industry, as well as his experience serving on the boards of directors of publicly- and privately-held companies in the life sciences industry.

3. *The following disclosure supplements and restates the third and fourth paragraphs under the section "Board of Directors of the Combined Company Following the Merger" on page 219 of the Definitive Proxy Statement, which is under the heading "Management Following the Merger."*

Board of Directors of the Combined Company Following the Merger

The combined company's board of directors will initially be fixed at seven (7) members, consisting of (i) one member designated by Synta, Keith R. Gollust, the current Chairman of the board of directors of Synta, (ii) one member to be mutually agreed upon by Synta and Madrigal meeting the SEC and NASDAQ Stock Market independence requirements, and (iii) five (5) members designated by Madrigal, namely Paul A. Friedman, M.D., who will be the Chairman, Rebecca Taub, M.D., Fred Craves, Ph.D., who will be the lead director and who currently is the founder and a managing director of Bay City Capital (which it and its affiliates will own approximately 52.5% of the combined company's outstanding shares of common stock immediately following the closing of the merger); Kenneth M. Bate and David Milligan, Ph.D.. The staggered structure of the current Synta board of directors will remain in place for the combined company following the completion of the merger, provided that Keith R. Gollust will be re-appointed as a Class III director. Synta and Madrigal have agreed that, following the effective time of the merger, the Synta and Madrigal designees identified above shall mutually agree upon the seventh designee to the combined company's board of directors. The seventh designee will be appointed as a Class III director.

Pursuant to the terms of the Merger Agreement, it is anticipated that these directors will be appointed to the three staggered director classes of the combined company board of directors as follows:

- Class I directors (term ending 2017): Paul A. Friedman, M.D. and Kenneth M. Bate;
- Class II directors (term ending 2018): Rebecca Taub, M.D. and Fred Craves, Ph.D.; and

- Class III directors (term ending 2019): Keith R. Gollust, David Milligan, Ph.D. and one mutual designee.

4. *The following disclosure supplements and restates the section “Director Independence” on page 220 of the Definitive Proxy Statement, which is under the heading “Management Following the Merger — Board of Directors of the Combined Company Following the Merger.”*

Director Independence

NASDAQ’s listing standards require that the Synta board of directors consist of a majority of independent directors, as determined under the applicable NASDAQ listing standard.

Synta and Madrigal believe that each of Kenneth M. Bate, Fred B. Craves, Ph.D., Keith R. Gollust and David Milligan, Ph.D. will qualify as an independent director within the meaning of the rules and regulations of NASDAQ following the completion of the merger. It is also anticipated that the seventh board designee to be mutually agreed upon by the Synta and Madrigal designees, who will be a Class III director, will qualify as an independent director within the meaning of the rules and regulations of NASDAQ. However, neither Dr. Friedman nor Dr. Taub will qualify as an independent director.

5. *The following disclosure is hereby added as the last paragraph of the Section “Audit Committee” on page 220 of the Definitive Proxy Statement, which is under the heading “Management Following the Merger — Board of Directors of the Combined Company Following the Merger — Committees of the Board of Directors.”*

Upon the consummation of the merger, Messrs. Reardon (chairman), Morenstein and Wilson will resign from our Audit Committee, and the board of directors will appoint Kenneth M. Bate and David Milligan, Ph.D. to the Audit Committee. Mr. Gollust will continue to serve as a member of the Audit Committee. Synta and Madrigal believe that Mr. Bate is an “audit committee financial expert” within the meaning of the rules and regulations of the SEC, and that each Audit Committee member is “independent” within the meaning of the rules and regulations of NASDAQ and the SEC.

6. *The following disclosure is hereby added as the last paragraph of the Section “Compensation Committee” on page 221 of the Definitive Proxy Statement, which is under the heading “Management Following the Merger — Board of Directors of the Combined Company Following the Merger — Committees of the Board of Directors.”*

Upon the consummation of the merger, Messrs. Gollust, Kovner and Wilson (chairman) will resign from our Compensation Committee, and the board of directors will appoint Fred Craves, Ph.D., Kenneth M. Bate and David Milligan, Ph.D. to the Compensation Committee. Synta and Madrigal believe that each Compensation Committee member is “independent” within the meaning of the rules and regulations of NASDAQ and qualifies as an “outside director” within the meaning of Section 162(m) of the Internal Revenue Code and a “non-employee director” within the meaning of the rules of the SEC.

7. *The following disclosure is hereby added as the last paragraph of the Section “Nominating and Governance Committee” on page 221 of the Definitive Proxy Statement, which is under the heading “Management Following the Merger — Board of Directors of the Combined Company Following the Merger — Committees of the Board of Directors.”*

Upon the consummation of the merger, Mr. Kovner and Dr. Kufe will resign from the Nominating and Governance Committee, and the board of directors will appoint Fred Craves, Ph.D. to the Nominating and Governance Committee. Mr. Gollust will continue to serve as a member of the Nominating and Governance Committee. Synta and Madrigal believe that each Nominating and Governance Committee member is “independent” within the meaning of the rules and regulations of NASDAQ.

8. *The following disclosure is hereby added on page 221 of the Definitive Proxy Statement, immediately before the heading “Employment Arrangements with Dr. Friedman and Dr. Taub.”*

Director Compensation After the Merger

A new non-employee director compensation program is expected to be approved by the board of directors of the combined company after the consummation of the merger.