UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): June 2, 2016

SYNTA PHARMACEUTICALS CORP.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) **001-33277** (Commission File Number) 04-3508648 (IRS Employer Identification No.)

125 Hartwell Avenue Lexington, MA 02421

(Address of principal executive offices and zip code)

Registrant's telephone number, including area code: (781) 274-8200

45 Hartwell Avenue Lexington, MA 02421

(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

□ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

□ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

ITEM 8.01 Other Events.

On April 13, 2016, Synta Pharmaceuticals Corp. ("Synta" or the "Company") entered into an Agreement and Plan of Merger and Reorganization with Madrigal Pharmaceuticals, Inc. ("Madrigal"), pursuant to which a wholly-owned subsidiary of Synta will be merged with and into Madrigal (the "Merger"), with Madrigal surviving the Merger as a wholly-owned subsidiary of the Company. On June 2, 2016, Synta announced that a member of its senior management team and representatives from Madrigal will be presenting at the Jefferies 2016 Healthcare Conference on Friday, June 10, 2016 at 2:00 p.m. (ET) in New York, NY and the JMP Securities Life Sciences Conference on Wednesday, June 22, 2016 at 12:00 p.m. (ET) in New York, NY. A copy of the press release is filed as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated by reference herein.

Additional Information about the Merger and Where to Find It

This Current Report on Form 8-K does not constitute an offer to sell or the solicitation of an offer to buy any securities or a solicitation of any vote or approval. A definitive proxy statement and a proxy card will be filed with the SEC and will be mailed to Synta's stockholders seeking any required stockholder approvals in connection with the proposed transactions. The proxy statement will contain important information about Synta, Madrigal, the transaction and related matters. BEFORE MAKING ANY VOTING OR INVESTMENT DECISION, INVESTORS AND STOCKHOLDERS ARE URGED TO READ THE PROXY STATEMENT (INCLUDING ANY AMENDMENTS OR SUPPLEMENTS THERETO) AND ANY OTHER RELEVANT DOCUMENTS THAT SYNTA MAY FILE WITH THE SEC WHEN THEY BECOME AVAILABLE BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT THE PROPOSED TRANSACTIONS. Stockholders may obtain, free of charge, copies of the definitive proxy statement and any other documents filed by Synta with the SEC in connection with the proposed transactions at the SEC's website (http://www.sec.gov), at Synta's website under the heading "Investors / SEC Filings", or by directing a written request to: Synta Pharmaceuticals Corp., 125 Hartwell Avenue, Lexington, MA 02421, Attention: Wendy Rieder, Esq.

Synta and its directors and executive officers and Madrigal and its directors and executive officers may be deemed to be participants in the solicitation of proxies from the stockholders of Synta in connection with the proposed transaction. Information regarding the special interests of these directors and executive officers in the Merger will be included in the proxy statement referred to above. Additional information regarding the directors and executive officers of Synta is also included in Synta's Annual Report on Form 10-K, as amended, which was filed with the SEC on March 15, 2016 and amended on April 29, 2016. These documents are available free of charge at the SEC web site (www.sec.gov), at Synta's website under the heading "Investors / SEC Filings", or by directing a written request to Synta as described above.

ITEM 9.01 Financial Statements and Exhibits.

(d)	Exhibits.			
Exhibit Number			Description	
99.1		Press Release, dated June 2, 2016		
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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

SYNTA PHARMACEUTICALS CORP.

Date:June 2, 2016

/s/ Marc Schneebaum Marc Schneebaum Senior Vice President and Chief Financial Officer

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Synta Pharmaceuticals to Present at Upcoming Investor Conferences in June

LEXINGTON, Mass. — June 2, 2016 - Synta Pharmaceuticals Corp. ("Synta") (NASDAQ: SNTA) today announced that Marc Schneebaum, Chief Financial Officer of Synta, will be joined by Paul Friedman, M.D., designated Chairman and Chief Executive Officer of Madrigal Pharmaceuticals, and Rebecca Taub, PhD, Founder and current Chief Executive Officer of Madrigal Pharmaceuticals, to present at the following upcoming investor conferences:

- The Jefferies 2016 Healthcare Conference on Friday, June 10th at 2:00 p.m. (ET) in New York
- The JMP Securities Life Sciences Conference on Wednesday, June 22nd at 12:00 p.m. (ET) in New York

A live audio webcast and replay of the presentation will be available on the "Investors" section of the Company's website, www.syntapharma.com.

About Synta Pharmaceuticals Corp.

On April 14, 2016, Synta Pharmaceuticals and Madrigal Pharmaceuticals, Inc., a privately-held company, announced that they have entered into a definitive merger agreement under which Madrigal will merge with a wholly-owned subsidiary of Synta in an all-stock transaction. The Merger is intended to create a company focused on the development of novel small-molecule drugs addressing major unmet needs in cardiovascular-metabolic diseases and non-alcoholic steatohepatitis (NASH). Madrigal's lead compound, MGL-3196, is a Phase 2-ready once-daily, oral, liver-directed selective thyroid hormone receptor-ß (THR-ß) agonist for the treatment of NASH and heterozygous and homozygous familial hypercholesterolemia (HeFH, HoFH). For more information, please visit www.syntapharma.com or www.madrigalpharma.com.

Additional Information about the Merger and Where to Find It

This press release does not constitute an offer to sell or the solicitation of an offer to buy any securities or a solicitation of any vote or approval. A definitive proxy statement and a proxy card will be filed with the SEC and will be mailed to Synta's stockholders seeking any required stockholder approvals in connection with the proposed transactions. The proxy statement will contain important information about Synta, Madrigal, the transaction and related matters. BEFORE MAKING ANY VOTING OR INVESTMENT DECISION, INVESTORS AND STOCKHOLDERS ARE URGED TO READ THE PROXY STATEMENT (INCLUDING ANY AMENDMENTS OR SUPPLEMENTS THERETO) AND ANY OTHER RELEVANT DOCUMENTS THAT SYNTA MAY FILE WITH THE SEC WHEN THEY BECOME AVAILABLE BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT THE PROPOSED TRANSACTIONS. Stockholders may obtain, free of charge, copies of the definitive proxy statement and any other documents filed by Synta with the SEC in connection with the proposed transactions at the SEC's website (http://www.sec.gov), at Synta's website under the heading "Investors / SEC Filings", or by directing a written request to: Synta Pharmaceuticals Corp., 125 Hartwell Avenue, Lexington, MA 02421, Attention: Wendy Rieder, Esq.

Synta and its directors and executive officers and Madrigal and its directors and executive officers may be deemed to be participants in the solicitation of proxies from the stockholders of Synta in connection with the proposed transaction. Information regarding the special interests of these directors and executive officers in the merger will be included in the proxy statement referred to above. Additional information regarding the directors and executive officers of Synta is also included in Synta's Annual Report on Form 10-K, as amended, which was filed with the SEC on March 15, 2016 and amended on

April 29, 2016. These documents are available free of charge at the SEC web site (www.sec.gov), at Synta's website under the heading "Investors / SEC Filings", or by directing a written request to Synta as described above.

Contact Information

Investors: Synta Pharmaceuticals Corp. Marc Schneebaum, 781-541-7224 mschneebaum@synta.com or Argot Partners Andrea Rabney/Kimberly Minarovich, 212-600-1902 andrea@argotpartners.com kimberly@argotpartners.com or Media: Argot Partners Eliza Schleifstein, 917-763-8106 eliza@argotpartners.com