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): March 26, 2009

SYNTA PHARMACEUTICALS CORP.

(Exact name of registrant as specified in its charter)

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

45 Hartwell Avenue
Lexington, MA 02421
(Address of principal executive offices and zip code)

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

(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 2.02 Results of Operations and Financial Condition.

On March 26, 2009, Synta Pharmaceuticals Corp. issued a press release announcing its financial results for its fourth quarter and year ended December 31, 2008. A copy of the press release is furnished as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference.

The information in this Current Report on Form 8-K, including Exhibit 99.1, shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, except as shall be expressly set forth by specific reference in such filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.	Description
99.1	Press release dated March 26, 2009.

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.

Dated: March 26, 2009

/s/ Safi R. Bahcall
Safi R. Bahcall
President and Chief Executive Officer

Exhibit 99.1

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Synta Pharmaceuticals Reports Fourth Quarter and Full Year 2008 Financial Results

LEXINGTON, MA – March 26, 2009 – Synta Pharmaceuticals Corp. (NASDAQ: SNTA), a biopharmaceutical company focused on discovering, developing, and commercializing small molecule drugs to treat severe medical conditions, today reported financial results for the quarter and year ended December 31, 2008.

In the fourth quarter of 2008, the Company recorded $0.6 million of net collaboration revenues under its existing partnership agreement with GlaxoSmithKline (GSK) and its new partnership agreement with Hoffman-La Roche (Roche), which was entered into in December 2008. The Company reported a net loss attributable to common stockholders of $26.0 million or $0.77 per basic and diluted share for the fourth quarter in 2008, compared to a net loss of $15.5 million or $0.46 per basic and diluted share for the same period in 2007.

As of December 31, 2008, the Company had $89.6 million in cash, cash equivalents, marketable securities and collaboration payments receivable, which includes the $16 million non-refundable upfront payment that was paid in January 2009 under the agreement with Roche. This compares to $115.6 million in cash, cash equivalents and marketable securities as of December 31, 2007. There were no collaboration payments receivable as of December 31, 2007.

In the first quarter of 2009, the Company achieved and was paid a $10 million non-refundable operational milestone payment under the GSK Agreement related to the development of elesclomol for the treatment of metastatic melanoma. This payment is not included in the above total.

2009 Goals

"With a diversified pipeline, near-term inflection points, and a two-year or greater cash position, Synta is well-positioned despite the disappointing results from the Phase 3 SYMMETRY(SM) trial of elesclomol in metastatic melanoma," said Safi Bahcall, Ph.D., President and Chief Executive Officer of Synta. "Our strong balance sheet and our partnerships, which fund all research, preclinical, and clinical costs related to our CRACM program and the majority of costs related to elesclomol, create a solid financial position. The range of our unpartnered assets and discovery capabilities, together with near-term inflection points, create multiple partnering options and growth opportunities. The financial strength and strategic flexibility are an attractive platform from which to drive both near-term and long-term growth."

"In addition to elesclomol, we have two drugs in clinical development, three programs in preclinical development, and others in research stages," continued Dr. Bahcall. "It has always been our strategy to maintain a strong cash position through the careful management of our portfolio of programs, including the timing and choice of partnering to generate non-dilutive

capital. This strategy has led to our current position of numerous programs with near-term milestones and the resources with which to get them there. We are excited in particular by the results to date from our STA-9090 program, which have generated strong interest from investigators across a broad range of potential cancer indications. We have set ambitious goals for this program and our other drug candidates in 2009."

Dr. Bahcall said that the key priorities for Synta in 2009 are to:

- Complete the analysis of the results of the SYMMETRY trial with the goal of determining a possible path forward for elesclomol;
- Advance our STA-9090 program by:
  - Completing our on-going Phase 1 trials in solid tumors;
  - Advancing our Phase 1/2 twice-a-week dosing trial in hematologic cancers;
  - Initiating a Phase 2 once-a-week dosing trial in hematologic cancers;
  - Initiating additional Phase 2 trials in solid tumor cancers;
- Advance our Hsp90 inhibitor research effort, including follow-on and oral compounds;
- Complete enrollment and analyze data for our Phase 2a clinical trial of apilimod in rheumatoid arthritis;
- Advance the lead compound in our CRACM program, which is partnered with Roche, targeting Phase 1 start in 2010;
- Advance our CRACM research effort, including identifying new compounds for preclinical development in 2010;
- Identify at least one new partnership opportunity.

SYMMETRY Update

An analysis of the early results of the Phase 3 SYMMETRY trial, which was suspended in February after a meeting of an independent Data Monitoring Committee (DMC), is currently underway.

"To date, we have not identified any specific target organ toxicities or adverse events related to elesclomol that might explain the previously reported finding from an interim analysis, which showed an imbalance of deaths between the two arms in the Phase 3 SYMMETRY trial," said Eric Jacobson, M.D., Chief Medical Officer. "Because the survival data are preliminary and not yet mature, with no clear toxicity or adverse event findings, it is difficult to draw conclusions at this early stage. The DMC noted in its report that it 'cannot be sure whether this is an adverse treatment effect, an effect of differing post-progression (off-study) treatments or a chance effect not relating to the study drugs at all,' and our early review of the data is consistent with this view. We plan to continue collecting survival data, which should be more robust by the end of this year, as well as to complete additional analyses, together with our partner, GSK, which will inform our choices about the future direction of this program. In the interim, we continue to see substantial interest from investigators and researchers in evaluating elesclomol in a variety of cancers."

2008 and Recent Accomplishments

Synta made significant progress in advancing its diverse pipeline of small molecule drug candidates:

- Elesclomol (oxidative stress inducer):

    - Concluded enrollment in the pivotal, Phase 3 clinical trial (SYMMETRY) in approximately 150 centers in 15 countries;
    - Initiated a prostate and a monotherapy trial with the sodium salt formulation;
    - Received $40 million in milestone payments from our partner, GSK in 2008, and an additional $10 million in early 2009;
    - Made substantial progress in elucidating the mechanism of action and generating productive academic collaborations to further explore the science underlying this mechanism.
- STA-9090 (Hsp90 inhibitor):
    - Initiated and advanced two solid-tumor dose-escalating trials, which have shown encouraging signs of clinical and biological activity;
    - Initiated a Phase 1/2 trial in hematologic cancers;
    - Initiated preclinical development of a follow-on compound;
    - Initiated lead optimization for orally-bioavailable compounds;
    - Generated productive academic collaborations that have demonstrated certain advantages of STA-9090, which will continue to lead to peer-reviewed publications and scientific and medical meeting presentations, and are assisting in the initiation of a number of important exploratory clinical trials.
- STA-9584 (vascular disrupting agent):
    - Currently in preclinical development.
- Apilimod (IL12/IL23 inhibitor):
    - Continued enrolling patients at higher dose level in a Phase 2a rheumatoid arthritis clinical trial, following promising signs of biological and clinical activity at a lower dose level.
- Ion channel platform (CRACM) and Roche agreement:
    - Platform for developing small molecule, targeted inhibitors of a key pathway regulating immune cell function; potential applications include rheumatoid arthritis, asthma, chronic obstructive pulmonary disease (COPD), allergy, transplant rejection, and other autoimmune diseases and inflammatory conditions;
    - Conducted an in-depth partnership effort resulting in a favorable agreement with Roche. Agreement provides for a $16 million up-front payment; reimbursement for all research, preclinical, and clinical costs; substantial milestone payments; and royalties on sales from any resulting approved, marketed products;
    - Initiated preclinical development of lead orally-bioavailable compound, which has demonstrated potent in vivo inhibition of key pro-inflammatory cytokines.

Financial Results

In the fourth quarter of 2008, the Company recorded $0.6 million of net collaboration revenues under its partnership agreements with GSK and Roche, which was entered into in December 2008, compared to $0.7 million of net collaboration revenues for 2007. In the year ended December 31, 2008, the Company recorded $2.6 million of net collaboration revenues, compared to $0.7 million of net collaboration revenues for 2007.

The Company reported a net loss attributable to common stockholders of $26.0 million or $0.77 per basic and diluted share for the fourth quarter in 2008, compared to a net loss of $15.5 million or $0.46 per basic and diluted share for the same period in 2007.

The Company reported a net loss attributable to common stockholders of $92.6 million, or $2.75 per share for the year ended December 31, 2008, compared to $122.1 million or $3.76 per share for 2007. Included in the net loss to common shareholders for the year ended December 31, 2007 is a non-cash charge in the amount of $58.6 million for the beneficial conversion of preferred stock in connection with the Company's initial public offering in February 2007. The net loss before this non-cash charge was $92.6 million and $63.5 million in the years ended December 31, 2008 and 2007, respectively.

Research and development (R&D) expenses were $23.0 million for the fourth quarter in 2008 compared to $13.3 million for the same period in 2007. R&D expenses for the year ended December 31, 2008 were $81.6 million compared to $52.0 million for 2007.

General and administrative expenses (G&A) were $3.5 million for the fourth quarter in 2008 compared to $3.8 million for the same period in 2007. G&A expenses for the year ended December 31, 2008 were $14.7 million compared to $14.9 million for 2007.

More detailed financial information and analysis may be found in the Company's Annual Report on Form 10-K, which was filed with the Securities and Exchange Commission on March 26, 2009.

Conference Call

Management will conduct a conference call at 10:00 a.m. (ET) this morning to review the Company's fourth-quarter and full-year 2008 annual financial results. The conference call will be webcast live over the Internet and can be accessed by logging on to the "Investors" section of the Synta Pharmaceuticals website, www.syntapharma.com, prior to the event.

The call can also be accessed by dialing (877) 407-8035 or (201) 689-8035 prior to the start of the call. For those unable to join the live conference call, a replay will be available from 2:00 p.m. (ET) today through midnight (ET) on April 2. To access the replay, dial (877) 660-6853 or (201) 612-7415 and refer to both account number 286 and conference ID 310879. The webcast also will be archived on the Company's website.

About Synta Pharmaceuticals

Synta Pharmaceuticals Corp. is a biopharmaceutical company focused on discovering, developing, and commercializing small molecule drugs to extend and enhance the lives of patients with severe medical conditions, including cancer and chronic inflammatory diseases. Synta has a unique chemical compound library, an integrated discovery engine, and a diverse pipeline of clinical- and preclinical-stage drug candidates with distinct mechanisms of action and novel chemical structures. All Synta drug candidates were invented by Synta scientists using our compound library and discovery capabilities. For more information, please visit www.syntapharma.com.

Safe Harbor Statement

This media release may contain forward-looking statements about Synta Pharmaceuticals Corp. Such forward-looking statements can be identified by the use of forward-looking terminology such as "will", "would", "should", "expects", "anticipates", "intends", "plans", "believes", "may", "estimates", "predicts", "projects", or similar expressions intended to identify forward-looking

statements. Such statements, including statements relating to the timing, developments and progress of our clinical and preclinical programs, possible partnering and financing opportunities, and the sufficiency of our cash resources for two or more years, reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such forward-looking statements, including those described in "Risk Factors" of our Form 10-K for the year ended December 31, 2008 as filed with the Securities and Exchange Commission. Synta undertakes no obligation to publicly update forward-looking statements, whether because of new information, future events or otherwise, except as required by law.

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Synta Pharmaceuticals Corp.
Condensed Consolidated Statements of Operations
(in thousands, except share and per share amounts)

	Three months ended December 31,		Twelve months ended December 31,	
	2008	2007	2008	2007
Collaboration revenues:				
License and milestone revenue	$ 3,018	$ 743	$ 8,513	$ 743
Cost sharing reimbursements	(2,382)	—	(5,898)	—
Total collaboration revenues	636	743	2,615	743
Operating expenses:				
Research and development	23,031	13,326	81,581	52,025
General and administrative	3,470	3,761	14,742	14,934
Total operating expenses	26,501	17,087	96,323	66,959
Loss from operations	(25,865)	(16,344)	(93,708)	(66,216)
Other income:				
Investment income, net	(88)	820	1,090	2,721
Net loss	(25,953)	(15,524)	(92,618)	(63,495)
Convertible preferred stock beneficial conversion charge	—	—	—	58,585
Net loss attributable to common stockholders	$ (25,953)	$ (15,524)	$ (92,618)	$ (122,080)
Basic and diluted weighted average common shares outstanding	33,741,960	33,708,862	33,735,579	32,466,006
Basic and diluted net loss attributable to common stockholders per share	$ (0.77)	$ (0.46)	$ (2.75)	$ (3.76)

Synta Pharmaceuticals Corp.
Condensed Consolidated Balance Sheets Data
(in thousands)

	December 31, 2008	December 31, 2007
Assets		
Cash, cash equivalents, marketable securities	$ 73,563	$ 115,577
Collaboration receivable	16,000	—
Other current assets	1,658	1,420
Property, plant and equipment, net	5,929	5,576
Other non-current assets	103	76
Total assets	$ 97,253	$ 122,649
Liabilities and Equity		
Current liabilities	$ 33,323	$ 20,772
Long-term liabilities	122,721	76,981
Stockholders' (deficit) equity	(58,791)	24,896
Total liabilities and stockholders' (deficit) equity	$ 97,253	$ 122,649