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): December 23, 2008

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 1.01 Entry into a Material Definitive Agreement.

On December 23, 2008, Synta Pharmaceuticals Corp. ("Synta") entered into a Collaboration and License Agreement (the "Agreement") with F. Hoffmann-La Roche Ltd, a Swiss corporation, and its affiliate, Hoffman-La Roche Inc., a New Jersey corporation (together, "Roche"). Under the Agreement, Synta and Roche have agreed to collaborate on the discovery, development and commercialization of compounds targeting calcium release-activated calcium modulator ("CRACM") channels, initially directed to the treatment of inflammatory diseases.

Under the Agreement, Roche will fund research to be conducted by Synta during an initial two-year research period. Roche will receive worldwide rights to develop and commercialize certain products identified prior to the end of this research period. For these licensed products, Roche is responsible for development and commercialization, while Synta retains the right, in indications other than rheumatoid arthritis, to co-develop, by conducting preclinical development and early clinical trials, and to co-promote in the USA, both at Roche's expense.

Synta will receive $25 million in upfront cash license fees and committed research support, of which $9 million will be provided in the form of research support over the initial research period. Synta will also be eligible to receive additional payments, for each of three licensed products, should specified development and commercialization milestones be successfully achieved: for development milestones achieved across multiple indications, up to $245 million for the first product and half of this amount for each of the second and third products, and for commercialization milestones, up to $170 million for each of three products. Synta will receive tiered royalties on all product sales.

The foregoing is a summary description, that does not purport to be complete, of certain terms of the Agreement and is qualified in its entirety by reference to the full text of the Agreement, which Synta intends to file as an exhibit to its Annual Report on Form 10-K for the year ending December 31, 2008.

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: December 30, 2008

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