

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
August 27, 2008**

**ORDER GRANTING CONFIDENTIAL TREATMENT
UNDER THE SECURITIES EXCHANGE ACT OF 1934**

Synta Pharmaceuticals Corporation

File No. 1-33277 - CF#22452

Synta Pharmaceuticals Corporation submitted an application under Rule 24b-2 requesting confidential treatment for information it excluded from the Exhibits to a Form 10-Q filed on August 7, 2008.

Based on representations by Synta Pharmaceuticals Corporation that this information qualifies as confidential commercial or financial information under the Freedom of Information Act, 5 U.S.C. 552(b)(4), the Division of Corporation Finance has determined not to publicly disclose it. Accordingly, excluded information from the following exhibit(s) will not be released to the public for the time period(s) specified:

Exhibit 10.4 through March 20, 2018

For the Commission, by the Division of Corporation Finance, pursuant to delegated authority:

Patti J. Dennis
Chief, Office of Disclosure Support