UNITED STATES SECURITIES AND EXCHANGE COMMISSION January 3, 2012

ORDER GRANTING CONFIDENTIAL TREATMENT UNDER THE SECURITIES ACT OF 1933

Synta Pharmaceuticals Corp.

File No. 333-138894 - CF# 27656

Synta Pharmaceuticals Corp. submitted an application under Rule 406 requesting an extension of a previous grant of confidential treatment for information it excluded from the Exhibits to a Form S-1 registration statement filed on November 22, 2006, as amended.

Based on representations by Synta Pharmaceuticals Corp. 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 will not be released to the public for the time period specified:

Exhibit 10.12 through November 22, 2016

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

Kathleen Krebs Special Counsel