UNITED STATES SECURITIES AND EXCHANGE COMMISSION October 29, 2010

ORDER GRANTING CONFIDENTIAL TREATMENT UNDER THE SECURITIES EXCHANGE ACT OF 1934

Inspire Pharmaceuticals, Inc.

File No. 0-31135 - CF#25802

Inspire Pharmaceuticals, Inc. submitted an application under Rule 24b-2

Inspire Pharmaceuticals, Inc. submitted an application under Rule 24b-2 requesting an extension of a previous grant of confidential treatment for information it excluded from the Exhibits to a Form 8-K filed on June 29, 2001.

Based on representations by Inspire Pharmaceuticals, Inc. 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 10.1 through August 19, 2020

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

Daniel Greenspan Special Counsel