

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
April 16, 2014**

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

RXi Pharmaceuticals Corporation

File No. 001-36304 - CF#30923

RXi Pharmaceuticals Corporation submitted an application under Rule 24b-2 requesting confidential treatment for information it excluded from the Exhibits to a Form 10-K filed on March 28, 2014.

Based on representations by RXi 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 will not be released to the public for the time period specified:

Exhibit 10.21 through March 28, 2024

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

Kevin M. O'Neill
Deputy Secretary