UNITED STATES SECURITIES AND EXCHANGE COMMISSION OCTOBER 1, 2015

ORDER GRANTING CONFIDENTIAL TREATMENT UNDER THE SECURITIES EXCHANGE ACT OF 1933

Mirna Therapeutics, Inc.

File No. 333-206544 - CF#30961

Mirna Therapeutics, Inc. submitted an application under Rule 406 requesting confidential treatment for information it excluded from the exhibits to a Form S-1 registration statement filed on August 24, 2015, as amended.

Based on representations by Mirna Therapeutics, 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 exhibits will not be released to the public for the time periods specified:

Exhibit 10.2(A)	through April 4, 2019
Exhibit 10.2(B)	through April 4, 2019
Exhibit 10.3(A)	through April 4, 2019
Exhibit 10.3(B)	through April 4, 2019
Exhibit 10.3(C)	through April 4, 2019
Exhibit 10.3(D)	through April 4, 2019
Exhibit 10.3(E)	through April 4, 2019
Exhibit 10.3(G)	through April 4, 2019
Exhibit 10.4	through April 4, 2019
Exhibit 10.5	through April 4, 2019
Exhibit 10.6	through April 4, 2017
Exhibit 10.7	through April 22, 2019

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

Brent J. Fields Secretary