UNITED STATES SECURITIES AND EXCHANGE COMMISSION October 26, 2018

ORDER GRANTING CONFIDENTIAL TREATMENT UNDER THE SECURITIES EXCHANGE ACT OF 1934

Ionis Pharmaceuticals, Inc.

File No. 0-19125 - CF#36611

Ionis Pharmaceuticals, Inc. (formerly Isis Pharmaceuticals, Inc.) submitted an application under 24b-2 requesting an extension of previous grants of confidential treatment for information it excluded from an Exhibit to a Form 10-Q filed on May 12, 2008.

Based on representations by Ionis 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 8, 2023

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

Brent J. Fields Secretary