UNITED STATES SECURITIES AND EXCHANGE COMMISSION September 18, 2017

ORDER GRANTING CONFIDENTIAL TREATMENT UNDER THE SECURITIES ACT OF 1933

Xenon Pharmaceuticals Inc.

File No. 333-198666 - CF#35492

Xenon Pharmaceuticals Inc. 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 September 10, 2014, as amended.

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

Exhibit 10.1 through September 10, 2020

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

Brent J. Fields Secretary