UNITED STATES SECURITIES AND EXCHANGE COMMISSION February 3, 2016

ORDER GRANTING CONFIDENTIAL TREATMENT UNDER THE SECURITIES EXCHANGE ACT OF 1934

Blueprint Medicines Corporation

File No. 001-37359 - CF#33185

Blueprint Medicines Corporation submitted an application under Rule 24b-2 requesting confidential treatment for information it excluded from the Exhibits to a Form 10-Q filed on November 9, 2015.

Based on representations by Blueprint Medicines 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(s) will not be released to the public for the time period(s) specified:

Exhibit 10.1 through November 9, 2018

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

Brent J. Fields Secretary