Filed by Flex Pharma, Inc. pursuant to Rule 425 under the Securities Act of 1933 and deemed filed pursuant to Rule 14a-6(b) under the Securities Exchange Act of 1934

Form S-4 File No.: 333-229666

Subject Company: Salarius Pharmaceuticals, LLC

SEC File No.: 001-36812

Flex Pharma, Inc. intends to issue the following press release.

Flex Pharma Announces Rights Dividend

BOSTON—(BUSINESS WIRE)—July 18, 2019— Flex Pharma, Inc. (Nasdaq: FLKS) announced that its Board of Directors today declared a special dividend on the Company's common stock of one right per share of outstanding common stock. The rights will be paid on July 19, 2019 to shareholders of record as of close of business on July 18, 2019.

Flex Pharma has not listed, and does not intend to list, the rights for trading on any exchange. The terms of the rights are described in Flex Pharma's definitive proxy statement / prospectus / information statement dated April 29, 2019 (the "Proxy Statement"), as supplemented by the Supplement dated June 27, 2019 (the "Supplement"), both of which Flex Pharma filed with the Securities and Exchange Commission.

About Salarius Pharmaceuticals

Salarius Pharmaceuticals, LLC is a clinical-stage oncology company targeting the epigenetic causes of cancers and is developing treatments for patients that need them the most. The company's lead candidate, Seclidemstat, is currently in clinical development for treating Ewing sarcoma, for which it has Orphan Drug Designation and Rare Pediatric Disease Designation by the U.S. Food and Drug Administration. Salarius believes that Seclidemstat is one of only two reversible inhibitors of the epigenetic modulator LSD1 currently in human trials, and that it could have potential for improved safety and efficacy compared to other LSD1-targeted therapies. Salarius is also developing Seclidemstat for a number of cancers with high unmet need, with an ongoing clinical study in advanced solid tumors including, but not limited to, prostate, breast and ovarian cancers. Salarius receives financial support from the National Pediatric Cancer Foundation to advance the Ewing sarcoma clinical program and is also the recipient of an \$18.7M Product Development Award from the Cancer Prevention and Research Institute of Texas (CPRIT). For more information, please visit salariuspharma.com.

About Flex Pharma

Flex Pharma, Inc. is a biotechnology company that was founded in 2014 by National Academy of Science members Rod MacKinnon, M.D. (2003 Nobel Laureate) and Bruce Bean, Ph.D., recognized leaders in the fields of ion channels and neurobiology.

Additional Information and Where to Find It. This communication may be deemed to be solicitation material in respect of the proposed transaction. In connection with the proposed transaction, Flex Pharma filed with the Securities and Exchange Commission (SEC) a registration statement on Form S-4 (File No. 333-229666) containing a proxy statement / prospectus / information statement, which took effect on April 29, 2019. On April 30, 2019, Flex Pharma filed a definitive proxy statement / prospectus / information statement with the SEC. On or around May 3, 2019, Flex Pharma began mailing the definitive proxy statement / prospectus / information statement to Flex Pharma stockholders of record as of the close of business on April 17, 2019. FLEX PHARMA URGES INVESTORS AND EQUITYHOLDERS OF FLEX PHARMA AND SALARIUS TO READ THE DEFINITIVE PROXY STATEMENT / PROSPECTUS / INFORMATION STATEMENT REGARDING THE PROPOSED TRANSACTION, AS WELL AS OTHER DOCUMENTS FILED OR THAT WILL BE FILED WITH THE SEC, BECAUSE THEY CONTAIN OR WILL CONTAIN IMPORTANT INFORMATION ABOUT FLEX PHARMA, SALARIUS AND THE PROPOSED TRANSACTION. This communication is not a substitute for the registration statement, definitive proxy statement / prospectus / information statement or any other documents that Flex Pharma has filed or may file with the SEC or send to Flex Pharma or Salarius equityholders in connection with the proposed transaction.

You may obtain free copies of the registration statement, definitive proxy statement / prospectus / information statement, the Supplement and all other documents filed or that will be filed with the SEC regarding the proposed transaction at the website maintained by the SEC, www.sec.gov. Once they are filed, copies of the registration statement, definitive proxy statement / prospectus / information statement and the Supplement will be available free of charge on Flex Pharma's website at www.flex-pharma.com or by contacting John McCabe at jmccabe@flex-pharma.com.

Non-Solicitation. This communication shall not constitute an offer to sell or the solicitation of an offer to sell or the solicitation of an offer to buy any securities, nor shall there be any sale of securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. No public offer of securities in connection with the merger shall be made except by means of a prospectus meeting the requirements of Section 10 of the Securities Act of 1933, as amended.

Forward-Looking Statements. Certain statements in this communication constitute "forward-looking statements" within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act. These forward-looking statements reflect Flex Pharma's current views about its plans. Although Flex Pharma believes that its plans as reflected in or suggested by those forward-looking statements are reasonable, it can give no assurance that the plans, intentions, expectations or strategies will be attained or achieved. Furthermore, actual results will be affected by a variety of risks and uncertainties that are beyond its control. Risks and uncertainties include, but are not limited to: inability to complete the proposed transaction; and other risks and uncertainties detailed in the risk factors section of Flex Pharma's registration statement on Form S-4 (File No. 333-229666), Form 10-K and Forms 10-Q filed with the SEC, as well as other filings Flex Pharma makes with the SEC from time-to-time. Many of these factors that will determine actual results are beyond Flex Pharma's ability to control or predict. Flex Pharma disclaims any obligation to update information contained in these forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

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