
SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 6-K

**REPORT OF FOREIGN PRIVATE ISSUER
PURSUANT TO RULE 13a-16 OR 15d-16 OF
THE SECURITIES EXCHANGE ACT OF 1934**

For the month of January 2018

BioLineRx Ltd.

(Translation of registrant's name into English)

**2 HaMa'ayan Street
Modi'in 7177871, Israel**
(Address of Principal Executive Offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F:

Form 20-F Form 40-F

Indicate by check mark whether the registrant by furnishing the information contained in this form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934:

Yes No

On January 19, 2018, BioLineRx Ltd. (the "Company") filed a prospectus supplement with regard to a previously announced "at-the-market" sales program. Previously, the Company had entered into an at-the-market sales agreement with BTIG, LLC ("BTIG"), pursuant to which the Company may, in its discretion and at such times as it shall determine from time to time, offer and sell through BTIG, acting as sales agent, American Depository Shares (the "ADSs") of the Company, having an aggregate offering price up to \$30,000,000, through an "at-the-market" program (the "ATM Program").

In order to register for sale the ADSs sold through the ATM Program, the Company filed, pursuant to Rule 424(b)(5), a prospectus supplement on October 31, 2017. That filing was a supplement to the Company's Prospectus filed October 16, 2015 as part of a shelf registration statement on Form F-3 (the "2015 F-3").

On January 19, 2018, the Securities and Exchange Commission declared the Company's registration statement on Form F-3 (File no. 333-222332) effective (the "2018 F-3"). The 2018 F-3 is a shelf registration statement intended to renew and replace the 2015 F-3. Therefore, on January 19, 2018, the Company filed a new prospectus supplement with regard to the ATM Program in order to transfer the registration of the remaining ADSs to be sold through the ATM Program to the 2018 F-3.

This Form 6-K, including all exhibits hereto, is hereby incorporated by reference into all effective registration statements filed by the Company under the Securities Act of 1933.

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

BioLineRx Ltd.

By: /s/ Philip Serlin
Philip Serlin
Chief Executive Officer

Dated: January 19, 2018
