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 2020

_____

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 22, 2020, the registrant issued the press release which is filed asExhibit 1 to this Report on Form 6-K.

This Form 6-K, including all exhibits hereto, is hereby incorporated by reference into all effective registration statements filed by the registrant 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 A. Serlin
Philip A. Serlin
Chief Executive Officer

Dated: January 22, 2020

Exhibit 1

BioLineRx Completes Recruitment in Triple Combination Arm of COMBAT/KEYNOTE-202 Study in Patients with Second-Line Metastatic Pancreatic Cancer

Tel Aviv**,** Israel – January 22, 2020 - BioLineRx Ltd. (NASDAQ/TASE: BLRX), a clinical-stage biopharmaceutical company focused on oncology, announced today the completion of patient recruitment in the triple combination arm of its ongoing Phase 2a COMBAT/KEYNOTE-202 study.

"We are pleased to see the triple combination arm of our Phase 2a pancreatic study advance according to plan," stated Philip Serlin, Chief Executive Officer of BioLineRx. "This follows very promising initial results that were presented last month at the ESMO IO conference, demonstrating robust and durable responses to the triple combination treatment. As previously stated, we remain on track to announce progression-free and overall survival data from the triple combination arm in mid-2020."

A total of 40 patients diagnosed with unresectable stage IV metastatic pancreatic adenocarcinoma (PDAC), who have progressed following first-line gemcitabine-based therapy, were enrolled as planned in the triple combination arm focusing on second-line pancreatic cancer patients. Patients receive Motixafortide (BL-8040) monotherapy priming treatment for five days, followed by combination cycles of chemotherapy (Onivyde®/5-fluorouracil/leucovorin), KEYTRUDA® and Motixafortide until progression. The primary endpoint of the study is the objective response rate (ORR). Secondary endpoints include overall survival, progression free survival, and disease control rate.

Last month, the Company shared preliminary data at the ESMO IO conference showing that the triple combination demonstrated a 32% overall response rate (ORR) and a 77% disease control rate (DCR) out of 22 evaluable patients at the time. This compares favorably to the current chemotherapy standard-of-care treatment in second-line patients with ORR of 17% and DCR of 52%. In addition, the median duration of clinical benefit for all 17 patients with disease control (7 partial response and 10 stable disease patients) was 7.8 months, compared to approximately three months of response duration with other treatments for second-line pancreatic cancer.

The COMBAT/KEYNOTE-202 Study

The Phase 2a COMBAT/KEYNOTE-202 study was originally designed as an open-label, multicenter, single-arm trial to evaluate the safety and efficacy of the dual combination of Motixafortide and KEYTRUDA® (pembrolizumab), an anti-PD-1 therapy marketed by Merck & Co., Inc., Kenilworth, N.J., USA (known as MSD outside the United States and Canada), in over 30 subjects with metastatic pancreatic adenocarcinoma. The study was primarily designed to evaluate the clinical response, safety and tolerability of the combination of these therapies, and was carried out in the US, Israel and additional territories. The study is being conducted by BioLineRx under a collaboration agreement signed in 2016 between BioLineRx and MSD, through a subsidiary.

In July 2018, the Company announced the expansion of its immuno-oncology collaboration with MSD to include the triple combination arm investigating the safety, tolerability and efficacy of Motixafortide, KEYTRUDA and chemotherapy as part of the Phase 2a COMBAT/KEYNOTE-202 study.

About Motixafortide in Cancer Immunotherapy

Motixafortide is targeting CXCR4, a chemokine receptor and a well validated therapeutic target that is over-expressed in many human cancers including PDAC. CXCR4 plays a key role in tumor growth, invasion, angiogenesis, metastasis and therapeutic resistance, and CXCR4 overexpression has been shown to be correlated with poor prognosis.

Motixafortide is a short synthetic peptide used as a platform for cancer immunotherapy with unique features allowing it to function as a best-in-class antagonist of CXCR4. It shows high-affinity, long receptor occupancy and acts as an inverse agonist.

In a number of clinical and preclinical studies, Motixafortide has been shown to affect multiple modes of action in “cold” tumors, including immune cell trafficking, tumor infiltration by immune effector T cells, and reduction in immunosuppressive cells (such as MDSCs) within the tumor niche, turning “cold” tumors, such as pancreatic cancer, “hot” (i.e., sensitizing them to immune checkpoint inhibitors and chemotherapy).

About BioLineRx

BioLineRx Ltd. (NASDAQ/TASE: BLRX) is a clinical-stage biopharmaceutical company focused on oncology. The Company’s business model is to in-license novel compounds, develop them through clinical stages, and then partner with pharmaceutical companies for further clinical development and/or commercialization.

The Company's lead program, Motixafortide, is a cancer therapy platform currently being evaluated in a Phase 2a study for the treatment of pancreatic cancer in combination with KEYTRUDA® and chemotherapy under a collaboration agreement with MSD. Motixafortide is also being evaluated in a Phase 2b study in consolidation AML and a Phase 3 study in stem cell mobilization for autologous bone-marrow transplantation. In addition, the Company has an ongoing collaboration agreement with Genentech, a member of the Roche Group, evaluating Motixafortide in combination with Genentech's atezolizumab in two Phase 1b/2 solid tumor studies.

BioLineRx is developing a second oncology program, AGI-134, an immunotherapy treatment for multiple solid tumors that is currently being investigated in a Phase 1/2a study.

For additional information on BioLineRx, please visit the Company's website atwww.biolinerx.com, where you can review the Company's SEC filings, press releases, announcements and events. BioLineRx industry updates are also regularly updated on Facebook, Twitter, and LinkedIn.

Various statements in this release concerning BioLineRx's future expectations constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These statements include words such as "may," "expects," "anticipates," "believes," and "intends," and describe opinions about future events. These forward-looking statements involve known and unknown risks and uncertainties that may cause the actual results, performance or achievements of BioLineRx to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Some of these risks are: changes in relationships with collaborators; the impact of competitive products and technological changes; risks relating to the development of new products; and the ability to implement technological improvements. These and other factors are more fully discussed in the "Risk Factors" section of BioLineRx's most recent annual report on Form 20-F filed with the Securities and Exchange Commission on March 28, 2019. In addition, any forward-looking statements represent BioLineRx's views only as of the date of this release and should not be relied upon as representing its views as of any subsequent date. BioLineRx does not assume any obligation to update any forward-looking statements unless required by law.

Contact:
Tim McCarthy
LifeSci Advisors, LLC
+1-212-915-2564
tim@lifesciadvisors.com

or

Tsipi Haitovsky
Public Relations
+972-52-598-9892
tsipihai5@gmail.com