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**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 March 2013*

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**BioLineRx Ltd.**

(Translation of Registrant's name into English)

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**P.O. Box 45158  
19 Hartum Street  
Jerusalem 91450, Israel**

(Address of Principal Executive Offices)

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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**

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On March 20, 2013, at 11:00 EDT, the Registrant will conduct a conference call concerning the results from the interim analysis of the Registrant's Phase II/III CLARITY trial of BL-1020 for schizophrenia. The presentation with information relating to such conference call is filed as Exhibit 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 Company under the Securities Act of 1933.

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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 Financial and Operating Officer

Dated: March 20, 2013

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**BIOLINERX**

**BL-1020: CLARITY INTERIM  
ANALYSIS RESULTS**

## Forward Looking Statements

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*This presentation contains "forward-looking statements." These statements include words like "may," "expects," "believes," "plans," "scheduled," 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.*

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## Interim Analysis - General

- **Objective of interim analysis**

- To provide estimation on number of patients needed in order to reach statistical significance on cognition endpoints
  - Interim analysis based on 230 patients
- Risk mitigation - make early go/no-go decision regarding continuation of trial
  - Allows reallocation of resources to other projects
  - Enables longer cash runway

- **Statistical analysis**

- Analysis based on cognition data only
- Study endpoints:
  - Primary endpoint: cognitive benefits of treatment after 6 weeks
  - Secondary endpoints: long-term cognition as of 12 weeks and 24 weeks

## Procedure for Analysis

- **Establishment of independent Data Monitoring Committee (DMC)**
- **Closed session (only DMC members)**
  - Un-blinded analysis and sample size recommendations discussed within the DMC
  - DMC prepares final recommendations for management
- **Open session - DMC and BLRX management**
  - Blinded presentation and discussion of sample size recommendations with management
  - No un-blinded data disclosed

## Interim Analysis Recommendations

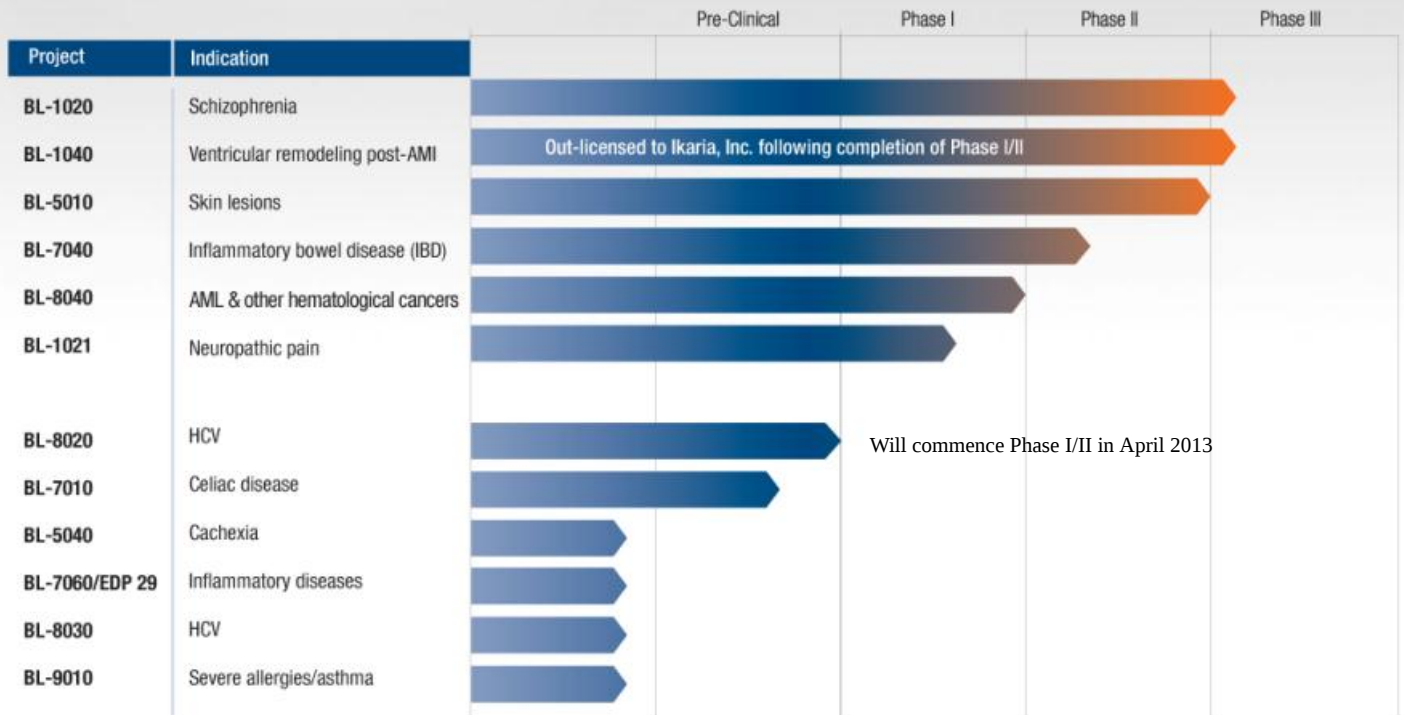
- **Primary cognition endpoint cannot be reached with any reasonable number of patients in current study**
- **Secondary cognition endpoints cannot be reached with any reasonable number of patients in current study**
- **Several statistical parameters specified in the statistical analysis plan (SAP) indicated positive trends**
  - Consistent timing
  - Social cognition test



## Next Steps

- **Discontinue CLARITY study**
  - No additional patients will be enrolled in the trial
- **Perform complete analysis of un-blinded study data on all patients enrolled to date**
- **Revise Company's operating plan for 2013**
  - Company's current cash balance is \$28 million
  - New operating plan expected to extend cash resources into 2015

# Current Pipeline



## BioLineRx's Main Programs

- **BL-1040: First-in-class myocardial implant for prevention of ventricular remodeling post AMI**
  - Classified as device by FDA and out-licensed worldwide to Ikaria, Inc.
    - Received \$7 million upfront payment from Ikaria, Inc.
    - \$10 million first milestone payment received in January 2010
    - \$115 million in developmental and regulatory milestones; \$150 million in commercial milestones; 11-15% sales royalties
  - PRESERVATION I CE Mark registration trial expected to be completed in 2014
  - Market opportunity: >\$1 billion worldwide
- **BL-5010: Novel formulation for non-surgical removal of skin lesions**
  - New formulation of approved components
  - Classified as a medical device Class IIa in Europe
  - Phase I/II trial demonstrated efficacy, good safety and cosmetic outcome
  - Finalizing development of unique applicator prototype; expect to commence pivotal CE Mark registration trial in H2 2013

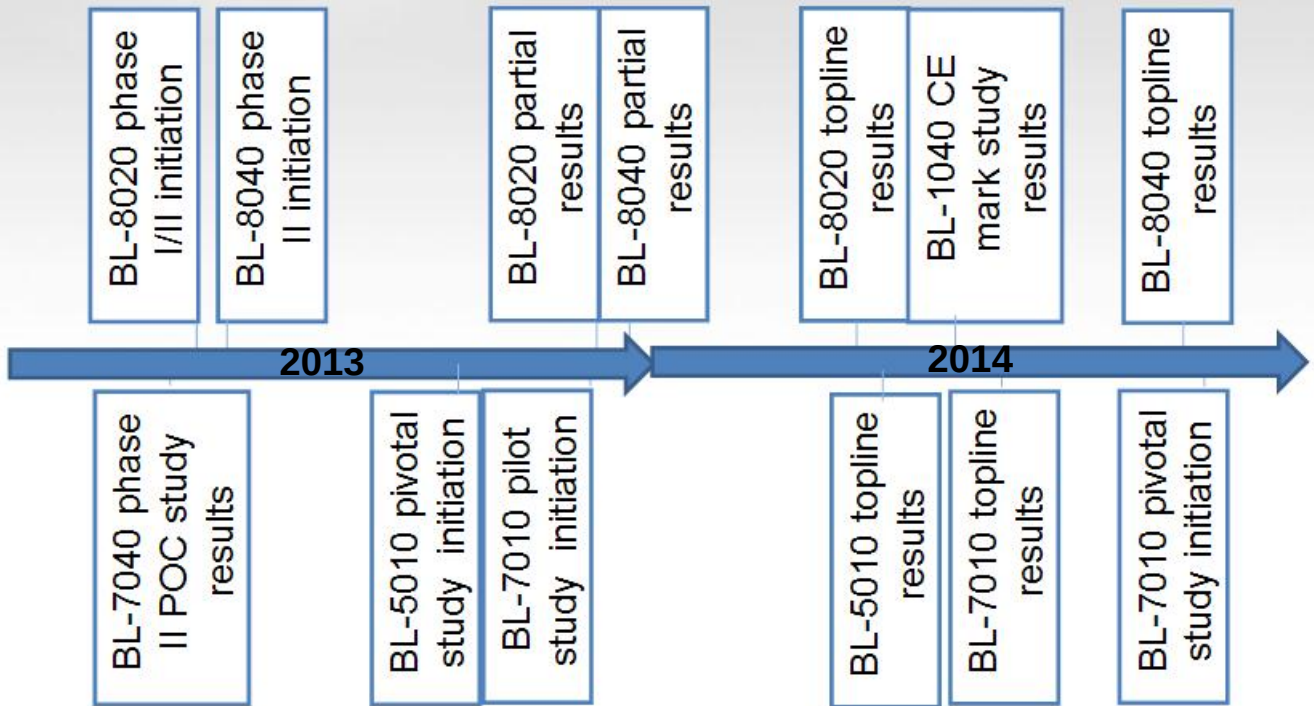
## BioLineRx's Main Programs (cont.)

- **BL-8040: Short peptide for leukemia/other hematological cancers**
  - Functions as high-affinity antagonist for CXCR4, a chemokine receptor directly involved in tumor progression, angiogenesis, metastasis and cell survival
  - Demonstrated excellent safety profile in Phase I/II trial
  - Phase II trial in acute myeloid leukemia expected to commence in Q2 2013
  - Market: total leukemia therapeutics market valued at \$6.3 billion in 2010, expected to reach \$11.3 billion by 2020.
- **BL-7040: Oligonucleotide for inflammatory bowel disease**
  - Orally available oligonucleotide
  - Efficacy demonstrated in animal models
  - Good safety profile
  - Commenced Phase IIa, expected to be completed April 2013
  - Market: \$4.5 billion worldwide in 2011

## BioLineRx's Main Programs (cont.)

- **BL-8020: Small molecule for hepatitis C**
  - Orally available treatment
  - Unique mechanism of action; synergistic with other therapies
  - Works on host; pan-genotypic
  - Completed pre-clinical development
  - Phase I/II clinical study expected to commence in April 2013; regulatory approval already received

## 2013-14 Major Clinical Milestones



# *Bench to Bedside to Partner*



**BIOLINERX**