

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 2017

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 ☒

Item 7.01. Regulation FD Disclosure

A copy of the Management Presentation of BioLineRx Ltd. (the “Company”) is furnished as Exhibit 99.1 to this Item 7.01.

The information contained in Item 7.01 of this report and in Exhibit 99.1 shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), or incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such a filing.

Item 8.01 Other Events.

On March 30, 2017, the Company issued a press release announcing that it has commenced an underwritten offering of American Depositary Shares (“ADSs”), each representing 1 of its ordinary shares, par value NIS 0.10 per share, pursuant to a preliminary prospectus supplement, dated March 30, 2017, to the Company’s prospectus dated October 16, 2015, filed as part of its effective shelf registration statement on Form F-3 (File No. 333-205700) previously filed with, and declared effective by, the Securities and Exchange Commission.

The Company expects to grant the underwriters an option to purchase up to an additional 15 percent of its ADSs, exercisable for 30 days after the pricing date of the ADSs offering. The offering is subject to market conditions, and there can be no assurance as to whether or when the offering may be completed, or as to the actual size or terms of the offering. A copy of the press release is furnished as Exhibit 99.2.

This Current Report on Form 6-K shall not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of ADSs in any state in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state.

Item 9.01 Financial Statements and Exhibits.**(d) Exhibits**

The following Exhibits are filed as part of this report:

Exhibit No.	Description of Exhibit
99.1	Company Presentation
99.2	Press Release dated March 30, 2017

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.

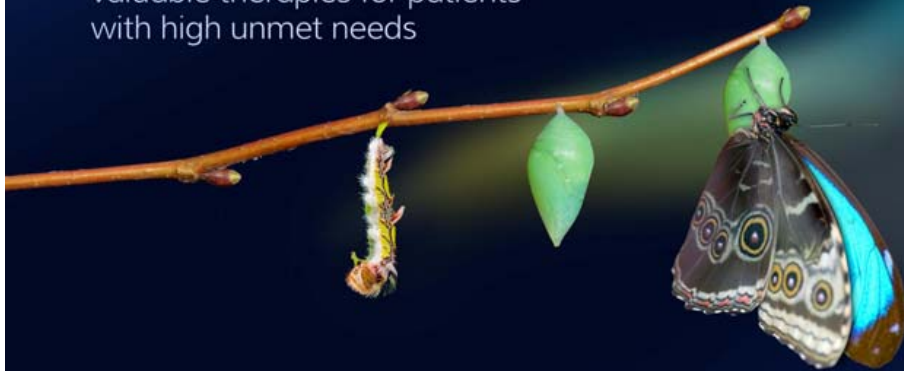
BioLineRx Ltd.

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

Dated: March 30, 2017

Transforming Science Into Medicine

We advance early oncology and immunology compounds into valuable therapies for patients with high unmet needs



Corporate Presentation

March 2017

BIOLINE AX

Forward-Looking Statements



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.

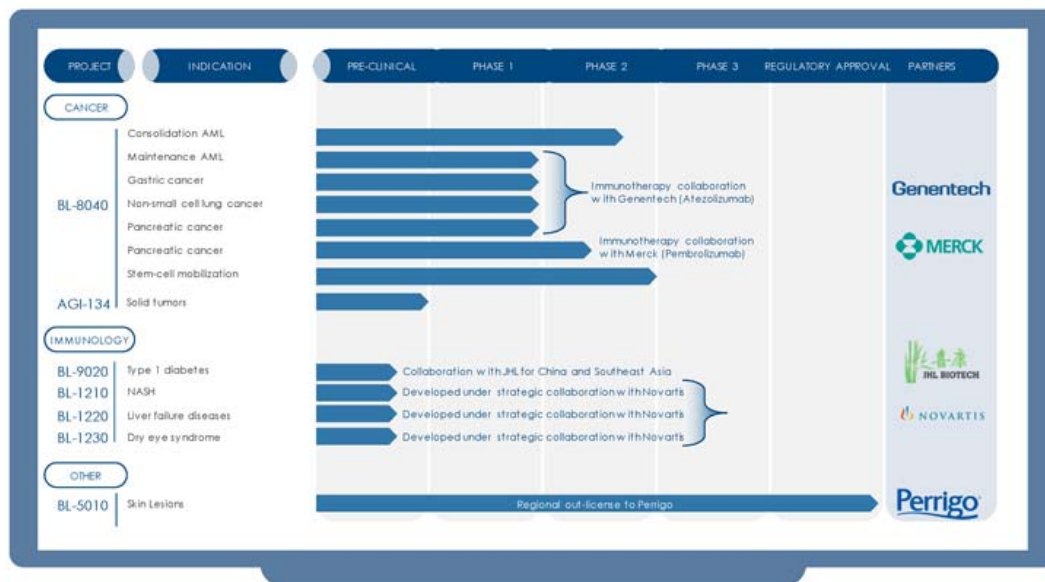
BioLineRx has filed a registration statement (including a prospectus) with the SEC for the offering to which this presentation relates. Before you invest, you should read the prospectus for more complete information about BioLineRx and the offering. You may get these documents for free by visiting EDGAR on the SEC website at www.sec.gov. Alternatively, BioLineRx, any underwriter or any dealer participating in the offering will arrange to send you the prospectus, when available, if you request it from JMP Securities LLC, 600 Montgomery Street, Suite 1100, San Francisco, CA 94111, Attention: Equity Syndicate or by calling (415) 835-8900.

BioLineRx Snapshot



- Drug development company focused on oncology & immunology:
 - BL-8040 (CXCR4 antagonist) with robust clinical program in immuno-oncology, AML and bone marrow transplantation
 - AGI-134 (alpha-Gal immunotherapy) activating a patient-specific, anti-tumor response to patient's own cancer neo-antigens
 - Immunology/fibrosis franchise under collaboration with Novartis Pharma
- Significant collaborations with leading pharma companies
 - Strategic collaboration with **Novartis** for joint development of innovative assets
 - Immunotherapy collaboration with **Genentech** in multiple oncology indications (BL-8040 & Atezolizumab)
 - Immunotherapy collaboration with **Merck** in pancreatic cancer (BL-8040 & Keytruda)

Main Pipeline Assets





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BL-8040

Best-in-class CXCR4 antagonist for treatment of
multiple oncology indications

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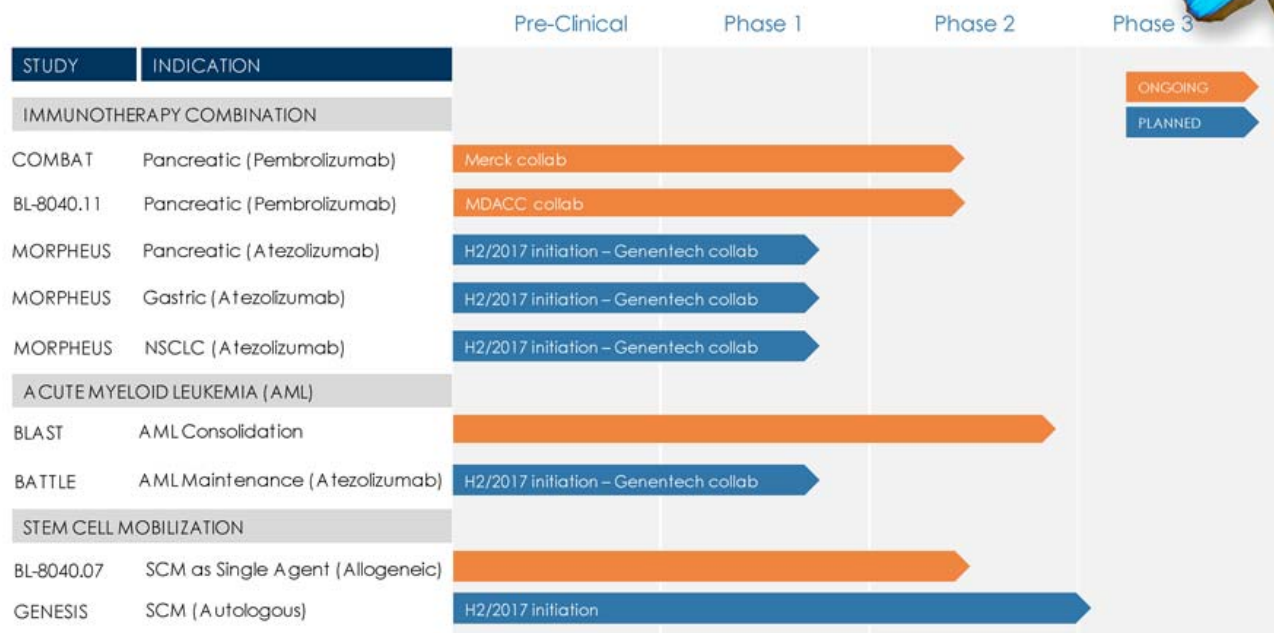
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BL-8040 Highlights

- Best-in-class CXCR4 antagonist
 - Platform molecule with MOA relevant in multiple tumors
 - Most advanced compound targeting CXCR4
- Partnerships with leading companies and institutions (Genentech, Merck, MDACC)
- Multiple clinical studies ongoing or in final planning stages
 - Multiple studies under immunotherapy partnerships with Genentech and Merck
 - Data readouts in 2017 and 2018
 - Large phase 2b study in AML consolidation treatment line running at full steam
 - Data readout in H2 2019; potential interim analysis in H2 2018
 - Initiation of phase 3 registrational study in autologous SCM planned for H2 2017
- Received Orphan Designation from FDA for AML & SCM
- Potential for multiple phase 3 studies under immunotherapy partnerships



BL-8040 Clinical Development Program





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BL-8040 in Immuno-Oncology

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Immunotherapy Collaboration with Genentech

- Four phase 1b studies planned to investigate combination of BL-8040 with Genentech's Tecentriq™ (Atezolizumab - anti-PDL1 immune checkpoint inhibitor)
 - Genentech to sponsor and conduct three phase 1b studies in multiple solid tumors
 - BioLineRx to sponsor and conduct phase 1b study in (maintenance) AML
 - Open-label, repeated administration studies in up to 60 patients each
- Study endpoints
 - Clinical response, safety and tolerability
 - Multiple pharmacodynamic parameters
- Studies are expected to commence in H2 2017; partial results in H2 2018



Immunotherapy Collaboration with Merck

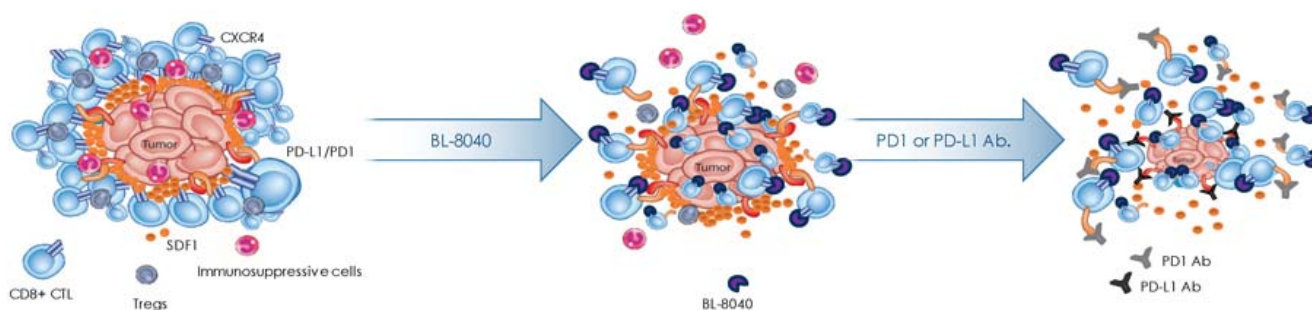
- Phase 2a study to examine combination of BL-8040 with Merck's Keytruda® (anti-PD1 immune checkpoint inhibitor)
 - Up to 30 patients with metastatic pancreatic adenocarcinoma
 - Open-label, single-arm trial with sites in the US, Israel and South Korea
- Study endpoints
 - Clinical response, safety and tolerability
 - Multiple pharmacodynamic parameters, including ability to improve infiltration of T cells into tumor and their reactivity
- Study commenced at end of Q3 2016
 - Partial results expected H2 2017
 - Top-line results expected H2 2018



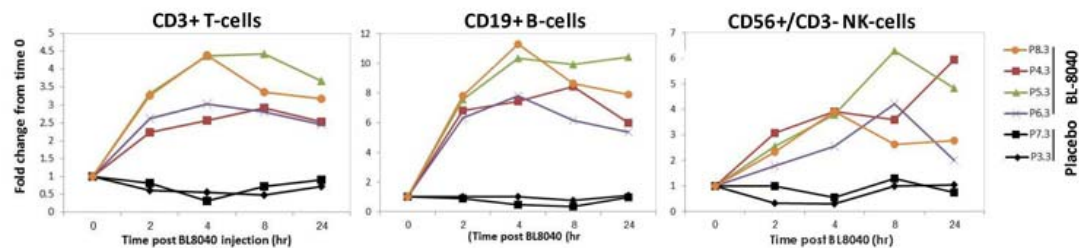
BL-8040's MoA in Cancer Immunotherapy



- **Immunostimulant** - BL-8040 is a powerful mobilizer of immune cells from the bone marrow and lymph nodes (T-cells, B-cells, immature dendritic-cells and NK-cells)
- **Potentiator** - BL-8040 increases infiltration of immune cells into tumors (exhibiting a synergistic effect with anti PD1/PD-L1 immune checkpoint inhibitors)
- **Microenvironment modifier** - BL-8040 affects the tumor microenvironment by decreasing CXCR4-mediated migration of immune suppressor cells (i.e. MDSCs, Tregs)



BL-8040 is a Powerful Mobilizer of Immune Cells (clinical data)

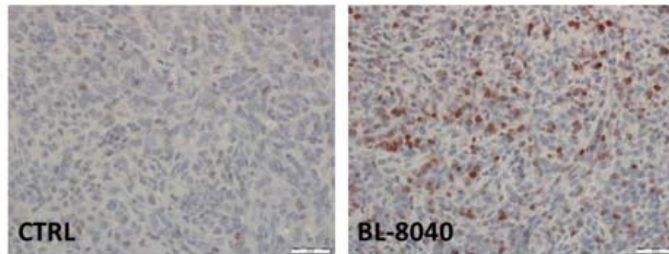


- Healthy volunteers were treated with BL-8040 or placebo
- Single administration of BL-8040 triggered substantial mobilization
- Long receptor occupancy results in prolonged effect (≥ 24 hours)

BL-8040 Increases T-Cell Infiltration into Tumors (mice model)

- Model: Orthotropic syngeneic tumors in pancreas of C57BL/6 male mice
- Treatment with BL-8040 for 10 consecutive days, starting PD1 Ab on d3 (-/+)

Treatment with BL-8040 induces accumulation of CD3+ T-cells in PDA tumors

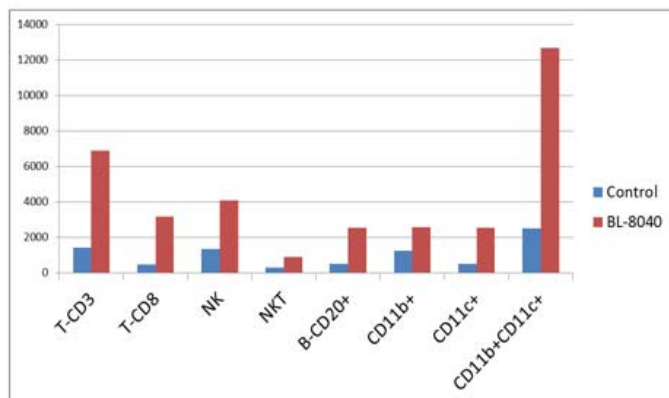


IHC: α CD3

BL-8040 Increases T-Cell Infiltration into Tumors (cont.)

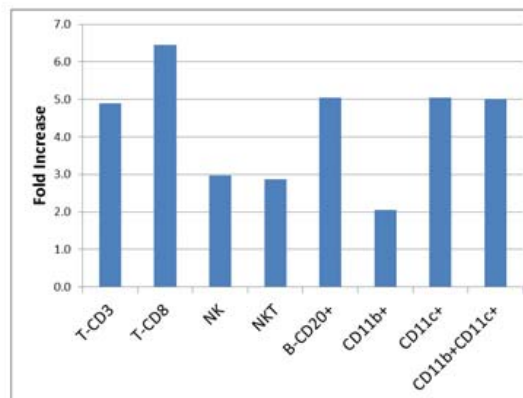


- FACS analysis confirmed enrichment of immune cells within the tumor



* Tumor sections were enzymatically digested and single cell suspensions were analyzed by FACS

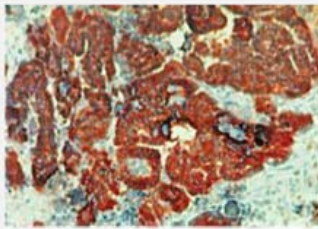
** Values in the table represent absolute cell count



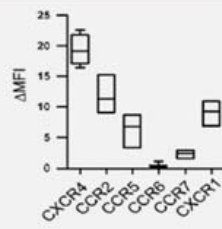
BL-8040 Affects the Tumor Microenvironment (CXCR4 - SDF-1 Immuno-Suppressive Role in Cancer)



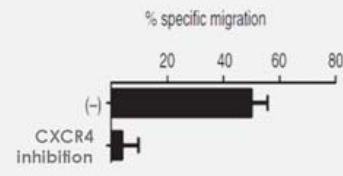
- SDF-1 expression is an independent predictor of poor survival in cancer patients
- CXCR4/SDF-1 axis is the key pathway mediating the attraction of immuno-suppressive cells (MDSCs, Tregs, pDCs) to the tumor environment
- CXCR4 inhibition selectively reduces infiltration of Tregs into tumors and inhibits the migration of MDSCs to the tumor



Ovarian epithelial carcinoma cells express functional SDF-1



High CXCR4 expression in cancer-isolated MDSCs



MDSCs migration is inhibited by CXCR4 blockade

Righi E. et al., *Cancer Res* 2011;
Zou W et al., *Nature Medicine*, 2001;
Obermajer et al., *Cancer Res*, 2011



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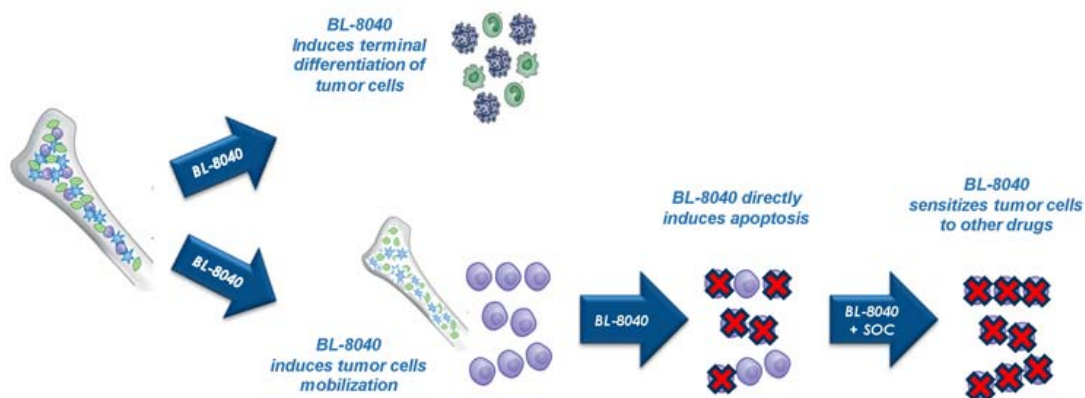
BL-8040 in AML

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BL-8040 Mechanism of Action in AML

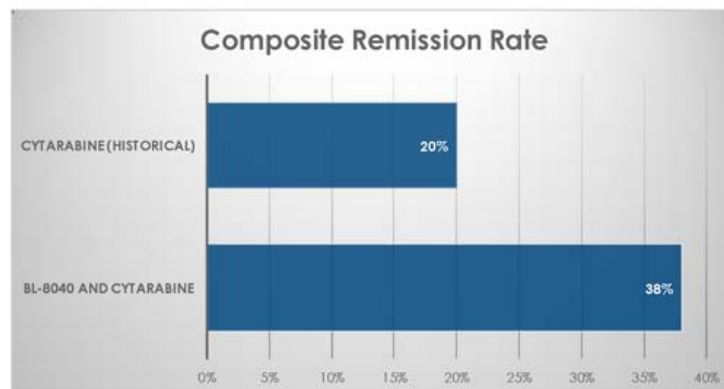
- Binds CXCR4 with high affinity (1-10 nM)
- Maintains extended inhibition of CXCR4 through long receptor occupancy (>24 hours)
- BL-8040 induces apoptosis of AML blasts by down-regulation of survival factors
- Bone-marrow clearance - eliminates minimal residual disease





BL-8040 in AML – Background and Direction

- Company conducted successful proof-of-concept phase 2a study in relapsed/refractory AML (45 patients)
 - Showed robust bone marrow clearance, induction of apoptosis and terminal differentiation of AML cells
 - Excellent safety and tolerability



AML – Clinical Development Status



- Results support accelerated development in AML space with potential for elimination of minimal residual disease (MRD)
- Consolidation AML phase 2b study ongoing
 - 194 patients, double-blind, placebo controlled at ~25 sites in Germany
 - Enrollment ongoing: potential interim results in 2018; top-line results by end of 2019
- Maintenance AML phase 1b study (under Genentech collaboration) in late planning stages
 - Combination with Atezolizumab as maintenance therapy for high-risk, elderly AML patients
 - Up to 60 patients, open label study at multiple leading sites in the US
 - Expected to commence in H2 2017



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BL-8040 in SC Mobilization

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Stem Cell Mobilization for Autologous Transplantation

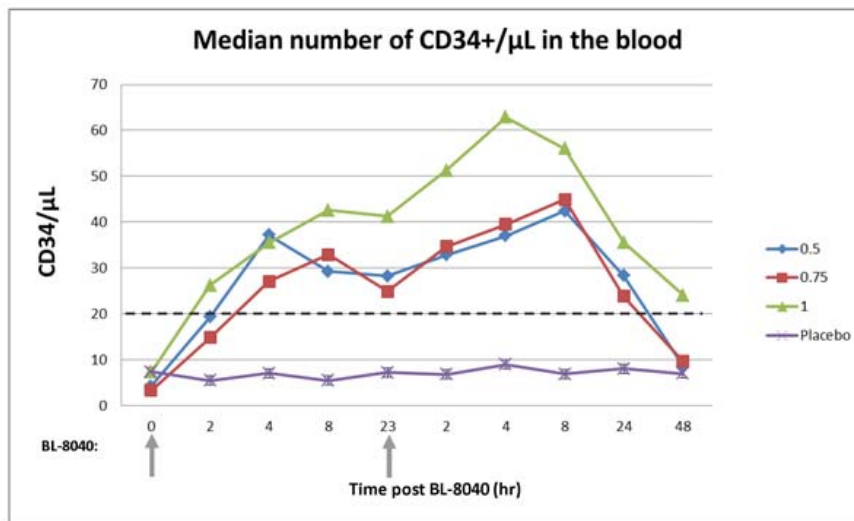
- G-CSF is current standard for autologous stem cell mobilization
 - 4-6 daily injections of G-CSF, plus 1-4 apheresis sessions required
 - 50-70% of patients are poor mobilizers
 - For poor mobilizers, 1-4 daily injections of Mozobil on top of G-CSF are required
- Fast route to registration in autologous SCM
 - Prior understandings with regulatory authorities in multiple myeloma and NHL
 - Confirmatory meeting with FDA planned for Q2 2017
 - Registrational study planned to commence in H2 2017
- Phase 2 allogeneic transplantation study ongoing as complementary indication
 - Successful partial results recently announced
 - Single injection of BL-8040 mobilizes sufficient amounts of cells without need for G-CSF
 - All transplant recipients experienced successful neutrophil engraftment
 - Recipients to be followed for one year to assess acute and chronic GVHD events
 - Topline results by end of 2017





BL-8040 is Powerful Mobilizer of CD34+ Cells

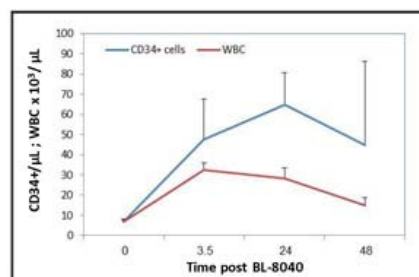
- Substantial HSC mobilization from BM to PB was recorded
- Consistent pattern of mobilization across all subjects treated with BL-8040



Single BL-8040 Administration Results in Robust Collection of Stem Cells Using Single Apheresis



Subject #	Whole blood processed (L)	% CD34+ cells	CD34+/KG (Donor weight)	CD34+/KG (70kg recipient weight)
5001	9.8	0.75	4,091,848	5,091,429
5002	16.0	1.01	11,964,615	11,998,800
5003	16.6	0.85	13,667,866	14,917,500
5004	16.2	0.76	10,154,834	11,794,114
5005	16.6	0.78	11,366,255	15,230,781
5006	16.5	0.87	13,068,548	14,711,451
5007	17.5	0.64	11,076,197	9,652,114
5008	16.7	0.61	9,623,736	9,994,937
Median	16.5 ± 2.3 L	0.77 ± 0.13 %	11.2 × 10 ⁶ (± 2.8 × 10 ⁶)	11.9 × 10 ⁶ (± 3.5 × 10 ⁶)



CD34+ PB levels 24 hr post BL-8040 are still high even after leukapheresis

- Leukapheresis started 4 hrs post BL-8040 injection using the Spectra Optia® Apheresis System
- The amount of collected stem cells was higher than 11 × 10⁶ per kg

CXCR4 Competitor Landscape



Compound (Company)	Dev. Stage	Molecule Type	Indications (under development)	AML	SCM	IO
BL-8040 (BioLineRx)	Phase 2	Peptide (sc)	Auto/Allo SCM; AML (r/r, consolidation, maintenance); Solid tumors (gastric, pancreatic, NSCLC)	Ph 2	Ph 3 ready	Ph 1/2 (+Pembro/+Atezo)
Mozobil (Genzyme\, Sanofi)	Launched	Small molecule (IV)	Auto SCM; AML; Solid tumors (pancreatic, ovarian and colorectal cancers)	Ph 1/2	Launched	-
LY-2510924 (Eli Lilly)	Phase 2	Peptide (IV)	r/r AML; solid tumors	Ph 1	-	Ph 1 (+Durvalumab)
Ulocuplumab (BMS)	Phase 2	Ab (IV)	AML	Ph 1/2	-	Terminated
X4P-001 (X4 Pharmaceuticals)	Phase 2/3	Small molecule (oral)	WHIM syndrome; RCC, melanoma; ovarian cancer	-	-	Ph 1/2 (+Pembro/+Nivo)

BL-8040 is Best-in-Class vs. Competitors



	BL-8040	Mozobil	Ulocuplumab
Affinity for CXCR4	1-10 nM	84 nM	5nM
CXCR4 Binding site	Extracellular domains in the CXCR4 receptor	Trans-membrane regions in the CXCR4 receptor	Extracellular domains in the CXCR4 receptor
Molecule Type	Peptide	Small molecule	Ab
Plasma half-life	1-3 hr	~3-5 hr	More than 24hr
Receptor occupancy	More than 24 hr	~2 hr	Not published
Cancer Cell Death	Remarkable apoptosis in samples from clinical study patients (Phase 2 study <i>mAML</i>)	Has no effect on cancer cell apoptosis (Reum H et al., 2015)	Apoptosis of AML cells. Modest effect in patients. (ASH 2013)
Mobilization (fold increase leukocytes/ blast)	4/8 (Phase 2 in <i>mAML</i>)	1.8/2.8 (Uy G.L. et al., Blood 2017; Phase 1/2 in <i>mAML</i>)	2/5 (Becker P.S. et al; Blood 2014; Phase1 in <i>mAML</i>)
T-Cell Infiltration into Tumors	Infiltration was demonstrated in preclinical murine models	Infiltration was demonstrated in preclinical murine models	Not published

Other remarks re BL-8040 (Abraham M et al., 2017):

- BL-8040 induces apoptosis of AML blasts by down-regulating ERK BCL-2, MCL-1 and cyclin-D1
- BL-8040 synergizes with FLT3 and BCL-2 inhibitors to induce AML cell death



BL-8040 Summary



- Most advanced antagonist of CXCR4, an exciting and validated target
- Robust platform for multiple oncology indications
 - Immunotherapy
 - AML
 - Stem-cell mobilization/transplantation
- Significant efficacy demonstrated in numerous clinical studies
- Partnerships with Genentech and Merck in immuno-oncology
- Registrational study in autologous SCM expected to start in H2 2017



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AGI-134

Alpha-Gal immunotherapy, activating anti-tumor
response to patient's own neoantigens

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Agalimmune Acquisition Overview



- Agalimmune is privately-held, UK-based immuno-oncology company
 - Early-stage alpha-Gal-related immuno-oncology pipeline
 - Complementary R&D capabilities, strengthening BLRX immunology/oncology focus and expertise
 - Established collaborations with leading UK research institutions
- Principal asset – AGI-134, a novel immuno-oncology agent for solid tumors
 - Unique technology: Transforming cold into hot tumors, targeting patient's own neoantigens
 - Near-clinical stage (<12 months to Phase 1 initiation)
- Agalimmune becomes wholly owned subsidiary of BLRX
 - Upfront payment - \$6M; 50/50 split cash and BLRX shares
 - Future development and commercial milestones payments – 50/50 split cash and BLRX shares

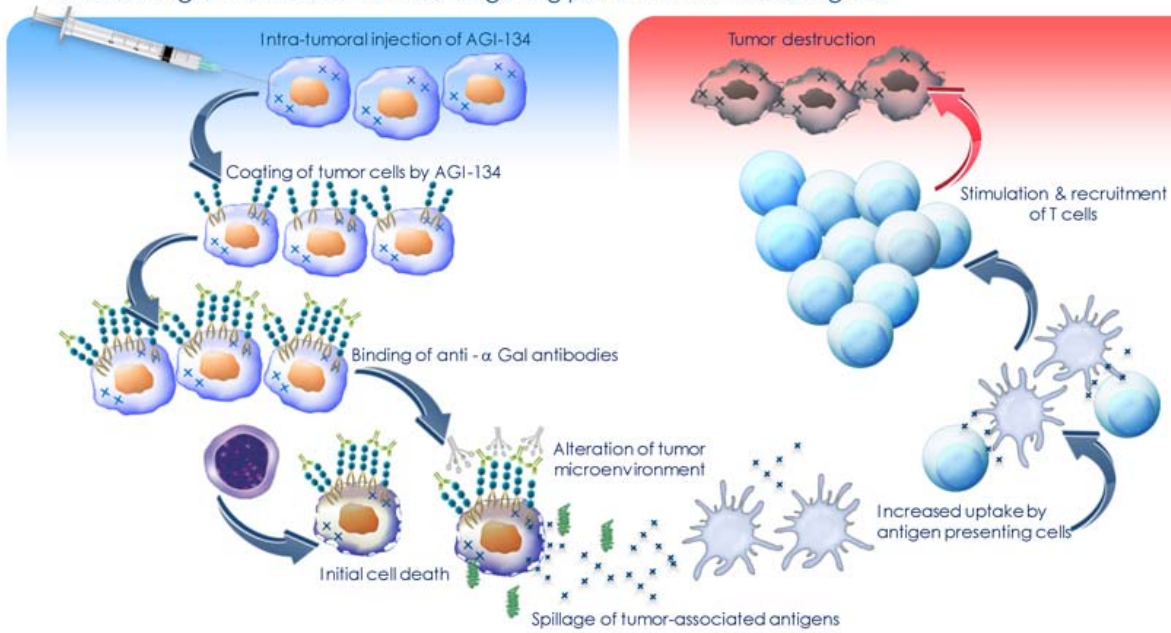
AGI-134 Highlights



- Unique mechanism harnessing naturally occurring immune machinery
- Promotes systemic anti-tumor response against patient's own tumor antigens
- Applicable for large array of tumors
- Targets primary tumor, as well as existing and potentially future metastases
- Reduces immuno-suppressive nature of tumor microenvironment
- Near-clinical stage (following pre-IND meeting)
 - Phase 1 in multiple solid tumors expected to initiate in H1 2018; final preparations underway
- Proposed initial indications: melanoma, liver, head and neck, colorectal, breast cancer, lymphoma
 - Studies to include substantial biomarker identification

AGI-134 Mechanism of Action

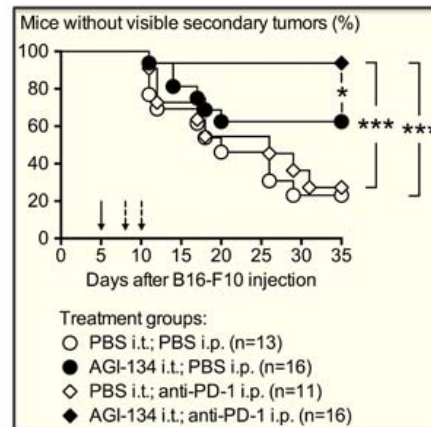
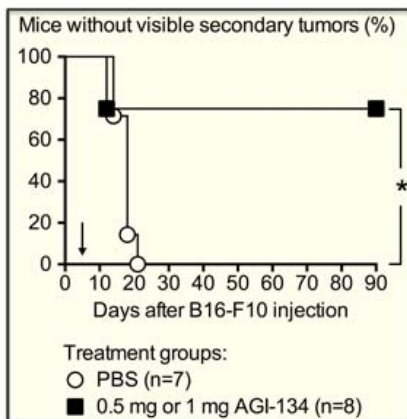
Transforming cold into hot tumors, targeting patient's own neoantigens



AGI-134: Key Efficacy Findings



- In vitro and in vivo studies have validated the underlying steps of the MOA
- A single dose of AGI-134 demonstrated a systemic effect by protecting mice from secondary tumor development for over 90 days
- Combination of AGI-134 with immune checkpoint inhibitor (PD-1) gave increased efficacy over either agent alone



AGI-134: Unique MOA Among Intratumoral Agents



	Oncolytic viruses	PAMPs	AGI-134
Injected tumor cells identified by naturally occurring pre-existing antibodies			✓
Antibody-bound tumor cells destroyed by activated complement and ADCC			✓
Tumor neoantigens release by spilling	✓		✓
Antibody-activated complement system creates pro-inflammatory milieu in the tumor microenvironment			✓
Complement chemo-attractants recruit immune cells to the tumor			✓
Activation of antigen presenting cells and increased (APCs) uptake of tumor antigens	✓	✓	✓
APCs induce a follow-on systemic immune response by the stimulation and clonal expansion of T cells	✓	✓	✓

AGI-134 Summary



- Novel and demonstrated mechanism of action
- Technology potential
 - Addresses a wide range of poorly treated solid tumors
 - Transforms “cold” into “hot” tumors
 - Targets patient’s neoantigens
- Clinical lead with strong pre-clinical efficacy and safety profile
- Clear development pathway discussed with MHRA and FDA
- Near-clinical stage, with first-in-man study expected to initiate H1 2018
- Phase 1/2 development plan designed to provide clear efficacy signals via comprehensive biomarker strategy
- Demonstrated synergy with immune checkpoint inhibitors



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BioLineRx Management



- Philip A. Serlin, CPA, MBA – Chief Executive Officer
 - Served as the Company's CFO and COO from 2009 to 2016. Previously CFO and COO of Kayote Networks and CFO of Tescom Software Systems Testing. Background includes senior positions at Chiaro Networks and at Deloitte in Tel Aviv, and at the SEC in Washington, D.C.
- Mali Zeevi, CPA – Chief Financial Officer
 - Served as the Company's Senior Director of Finance and Reporting 2009-2016. Previously Vice President Finance at Tescom Software Systems Testing and manager at PriceWaterhouseCoopers.
- David Malek, MBA – Chief Business Officer
 - Joined the Company in 2011 as Vice President of Business Development. Previously in various management positions at Sanofi-Aventis, including Director of Oncology - New Products and Business Development.
- Ella Sorani, PhD – VP Development
 - Joined the Company in January 2017. Previous 16 years served in a number of management positions in the global R&D division at Teva Pharmaceutical Industries. In most recent position, led global development of one of Teva's leading innovative late stage compounds.
- Abi Vainstein, MD – VP Clinical and Medical Affairs
 - Served as the Company's Senior Medical Director from 2014 to 2016. Previously Director and Clinical Program Leader for COPAXONE®, and several other senior medical positions at Teva Pharmaceutical Industries.

Strategic Collaboration with Novartis



- Novartis selected BLRX as its partner for asset identification and early development
 - Exclusive first look at all Israeli-based projects scouted by BioLineRx
 - Co-develop selected projects through clinical proof-of-concept (POC)
- Unique collaboration provides lasting shareholder value and key insights
- Financial highlights:
 - Upfront \$10 million equity investment in BLRX
 - Upon selection of clinical project (or when a project reaches IND), BioLineRx receives:
 - \$5 million option fee (non-dilutive)
 - 50% of remaining R&D expenses up to POC (in equity at a premium to market)
 - Novartis receives right of first negotiation for full out-license upon clinical POC

Financial Summary



- Cash position
 - \$36 million as of December 31, 2016
 - Existing financial resources fund operational requirements into 2019

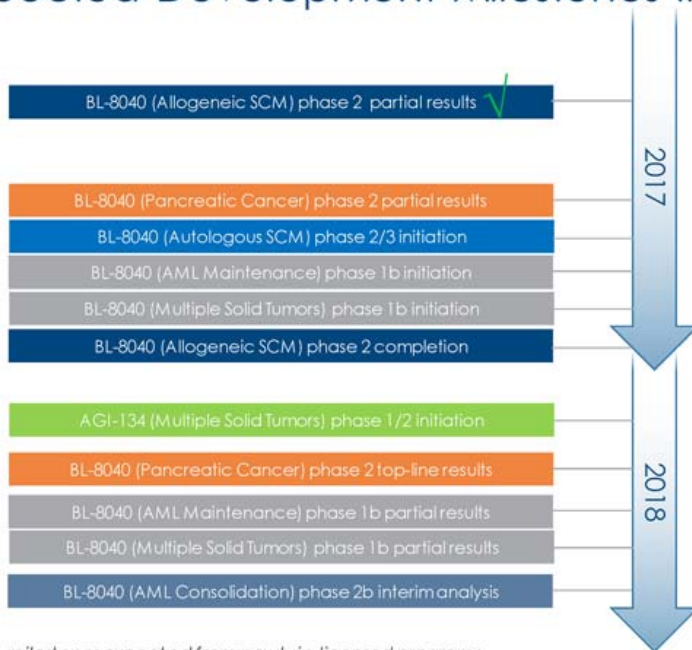


- Capital structure
 - Traded on NASDAQ and TASE (Symbol: BLRX)
 - 62 million shares outstanding; 70 million fully diluted
 - US shareholders represent ~70% of investor base, including key life-sciences investors
 - Novartis is largest shareholder; holds ~8% of Company



- Other
 - ~50 employees, approximately 2/3 with advanced degrees
 - Analyst coverage: JMP Securities, HC Wainwright, Maxim Group, Roth Capital

Principal Expected Development Milestones in 2017/2018



Does not include milestones expected from newly in-licensed programs

Takeaways.....



- Focus on oncology and immunology (mainly immuno-oncology)
- 9 clinical studies ongoing or planned for next 12-18 months
- Read-out from 3-4 phase 2 studies over next 12-18 months
- Significant collaborations with 3 of the leading pharma companies in the world
- Anticipated new clinical and advanced pre-clinical compounds to enter pipeline
- Continued execution of strategic transactions as opportunities arise

Thank You

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BIOLINE RX

r/r AML – Phase IIa Study (completed)

A Phase IIa, Multicenter, Open-label Study Designed to Evaluate Safety and Efficacy Profile of Repeated Escalating Doses of BL-8040 in Adult Subjects with Relapsed or Refractory Acute Myeloid Leukemia



Study design:

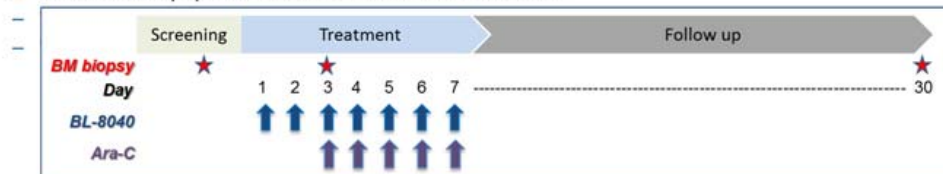
- Dose escalation phase – 3+3 design, 6 escalating doses (6 cohorts, 0.5-2mg/kg)
- Expansion phase: expand safe, efficacious dose group (1.5mg/kg)

Treatment:

- 2 consecutive days of BL-8040 monotherapy
- 5 days of BL-8040 + Chemotherapy

Endpoints:

- To assess the safety and tolerability of BL-8040 as monotherapy and when combined with high-dose Ara-C in AML adult subjects with relapsed or refractory disease
- To assess the clinical efficacy (response rates)
- To assess the apoptotic effect of BL-8040 on leukemic blasts



Phase IIb - Consolidation Treatment for AML Patients

A Phase II, double-blind, placebo controlled, randomized, multicenter study to assess the efficacy of BL-8040 in AML patients in first complete remission

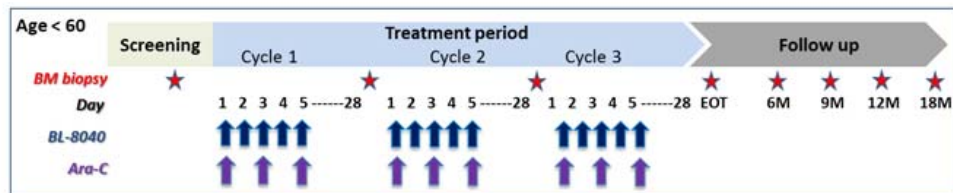


Treatment

- Two or three cycles (age based) of consolidation with high-dose Ara-C together with BL-8040 or Placebo.
- Ara-C 1 g/m² per dose for patients older than 60 years and 3 g/m² for patients younger than 60 years. Ara-C is administered IV twice a day (10 am and 10 pm) over 3 hours on day 1, 3 and 5.
- BL-8040 or Placebo is administered SC at 8 a.m. on days 1, 2, 3, 4 and 5 of each consolidation cycle.

Endpoints

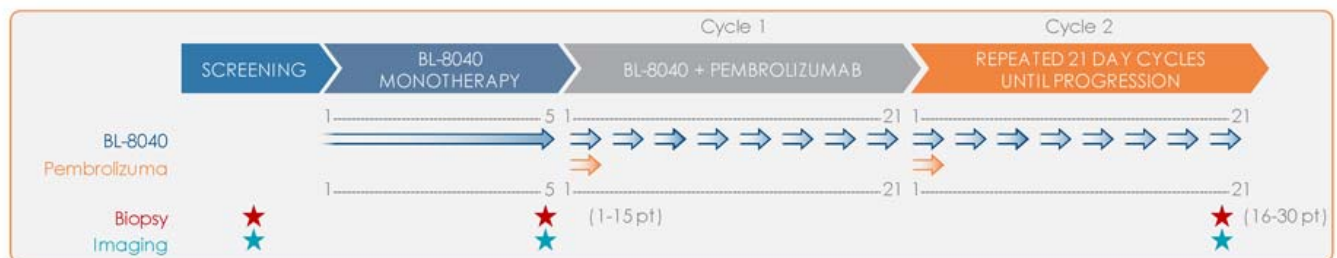
- To compare the Relapse Free Survival (RFS) 3, 6, 9, 12 and 18 months after randomization
- To assess the toxicity, safety and tolerability of BL-8040 in combination with high-dose Ara-C
- To assess MRD (by FACS/PCR) at time of enrollment and during the follow up period (3, 6, 9, 12 and 18 months)
- To assess overall survival (OS) as an open label extension



Phase IIa - Combination with Keytruda for PDAC



- A phase IIa, multicenter, open-label study to Assess the Safety and Efficacy of BL-8040 in Combination with Pembrolizumab in Patients with Advanced Pancreatic Cancer – The COMBAT study
- Study Design
 - Open label, repeated administrations, multiple treatment cycles until progression
- Treatment
 - Daily SC BL-8040 injection as monotherapy for five consecutive days
 - Combination part - On day 8 start combination therapy consisting of SC BL-8040 TIW and IV of Pembrolizumab E3W
 - The combination therapy will continue for up to two years, or until progression, clinical deterioration or early termination, whichever comes first
- Endpoints
 - To assess Objective Response Rate (ORR) according to RECIST 1.1 criteria.
 - Progression-free and Overall survival
 - Safety and tolerability of the combination
 - Multiple pharmacodynamics parameters



Phase Ib/II - BL-8040 and Atezolizumab Combination for Maintenance Treatment in AML patients

A Phase Ib/II, Multicenter, Single Arm, Open-Label Study, To Evaluate the Safety and Efficacy of the BL-8040 and Atezolizumab Combination for Maintenance Treatment in Subjects with Acute Myeloid Leukemia who are 60 Years or Older - The BATTLE Study

Treatment

- BL-8040-1.25mg/kg. SC, days 1- 3
- ATEZO-1200mg IV day 2 of each cycle
- 1 Cycle =21 Days treatment up to relapse
- Up to 60 patients

Endpoints

Primary:

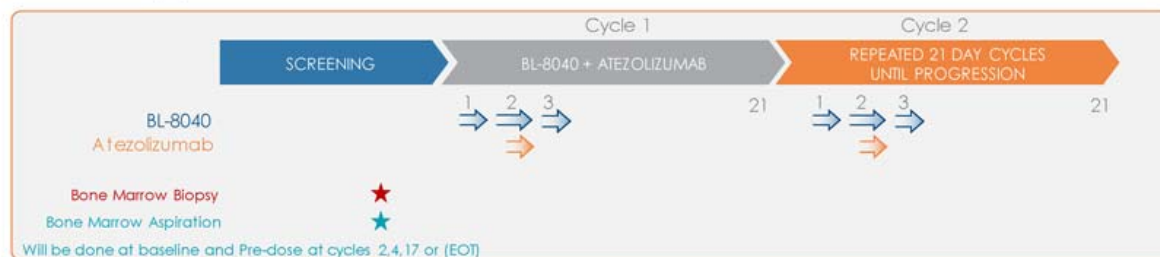
- To demonstrate that the combination of BL-8040 and atezolizumab prolongs the relapse free survival (RFS) time as compared to historical data.

Secondary:

- To demonstrate that the combination of BL-8040 and atezolizumab reduces the Minimal Residual Disease (MRD) as compared to baseline.
- To demonstrate that the combination of BL-8040 and atezolizumab prolongs the Overall Survival (OS) time as compared to historical data.
- To demonstrate that the combination of BL-8040 and atezolizumab prolongs the time to first relapse as compared to historical data.

Safety:

- To demonstrate that the proposed combination is safe and tolerable.



**For Immediate Release****BioLineRx Announces Underwritten Public Offering
of its American Depositary Shares**

Tel Aviv, Israel - March 30, 2017 - BioLineRx Ltd. (NASDAQ/TASE: BLRX), a clinical stage biopharmaceutical development company focused on oncology and immunology, today announced that it has commenced an underwritten public offering of American Depositary Shares ("ADSs"), each representing one (1) of its ordinary shares. All of the ADSs in the offering are to be sold by BioLineRx.

JMP Securities is acting as sole book-running manager for the offering. BioLineRx intends to grant the underwriters a 30-day option to purchase up to an additional 15 percent of the amount of ADSs sold in the public offering on the same terms and conditions. The offering is subject to market conditions, and there can be no assurance as to whether or when the offering may be completed, or as to the actual size or terms of the offering.

The ADSs will be issued pursuant to a shelf registration statement that was previously filed with, and declared effective by, the Securities and Exchange Commission ("SEC"). A final prospectus supplement related to the offering will be filed with the SEC and will be available on the SEC's website located at www.sec.gov.

This press release does not constitute an offer to sell or a solicitation of an offer to buy nor shall there be any sale of these securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction. Any offer, if at all, will be made only by means of a prospectus supplement and accompanying prospectus forming a part of the effective registration statement, copies of which may be obtained, when available, from JMP Securities LLC, 600 Montgomery Street, Suite 100, San Francisco, California 94111, Attention: Prospectus Department, or by telephone: (415) 835-8985.

About BioLineRx

BioLineRx is a clinical-stage biopharmaceutical company focused on oncology and immunology. The Company in-licenses novel compounds, develops them through pre-clinical and/or clinical stages, and then partners with pharmaceutical companies for advanced clinical development and/or commercialization.

BioLineRx's leading therapeutic candidates are: BL-8040, a cancer therapy platform, which has successfully completed a Phase 2a study for relapsed/refractory acute myeloid leukemia ("AML") and is in the midst of a Phase 2b study as an AML consolidation treatment and a Phase 2 study in stem cell mobilization for allogeneic transplantation; and AGI-134, an immunotherapy treatment in development for multiple solid tumors, which is expected to initiate a first-in-man study in the first half of 2018. In addition, BioLineRx has a strategic collaboration with Novartis Pharma AG for the co-development of selected Israeli-sourced novel drug candidates; a collaboration agreement with MSD (known as Merck in the US and Canada), on the basis of which the Company has initiated a Phase 2a study in pancreatic cancer using the combination of BL-8040 and Merck's KEYTRUDA®; and a collaboration agreement with Genentech Inc., a member of the Roche Group, to investigate the combination of BL-8040 and Genentech's Atezolizumab in several Phase 1b studies for multiple solid tumor indications and AML.

For additional information on BioLineRx, please visit the Company's website at www.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 23, 2017. 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.

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