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2017 Annual Report **20 March, 2018**

Continued advancement and execution of BiolineRx's lead oncology project - BL-8040; sufficient funds to support clinical strategy; stock target price remains at NIS 5.15

Primary Exchange: TASE

Secondary exchange: NASDAQ (ADS/share 1:1)

Ticker: TLV, NASDAQ: BLRX

Sector: Biotechnology

Industry: Drug Development

Data as at 20 March, 2018
(Source: TASE)

Closing price: NIS 3.31

Market cap: NIS 352.5M

# of shares: 106.4M

Stock performance (YTD.): -20.5%

Daily-trading-vol. (12 mos.): NIS 423K

Stock target price: NIS 5.15

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Company Overview

BioLineRx Ltd. (hereinafter: "BioLineRx" or "the Company") is an Israeli clinical-stage biopharmaceutical company focused on oncology and immunology. In 2007, the company was listed on the Tel Aviv Stock Exchange (TASE). In July 2011, the company registered American Depositary Shares (ADSs) with the NASDAQ. The Company in-licenses 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 clinical platform is BL-8040, a cancer therapy platform. A Phase 2a study was successfully completed for relapsed/refractory AML, a Phase 2b study as an AML consolidation treatment is ongoing, a Phase 2 study in stem cell mobilization for allogeneic transplantation is also ongoing and a Phase 3 in autologous transplantation was initiated in Q4 2017.

In addition, BioLineRx has a strategic collaboration with Novartis for the co-development of selected 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, a member of the Roche Group, to investigate the combination of BL-8040 and Genentech's atezolizumab in several Phase 1b/2 studies for multiple solid tumor indications and AML. Genentech commenced a Phase 1b/2 study for the treatment of pancreatic cancer in July 2017, Phase 1b/2 study in gastric cancer in October 2017 as well as in September 2017, BioLineRx initiated a Phase 1b/2 study under this collaboration in acute myeloid leukemia. An additional Phase 1b/2 study in lung cancer will be initiated by early 2018.

Highlights & Analysis

BioLineRx released its annual report on March 6, 2018 detailing the following:

BiolineRx's progress is in line with our clinical development expectations for its Oncology programs, as per our Q3 report of 19 December, 2017.

- Initiation of pivotal Phase 3 GENESIS study with BL-8040 as novel stem cell mobilization treatment for autologous bone-marrow transplantation (Q4 2017)
- Partial results from Phase 2a COMBAT study, BL-8040 in pancreatic cancer (Q1 2018)
- Initiation of three Phase 1b/2 studies under collaboration with Genentech, exploring the combination of BL-8040 with Tecentriq® (atezolizumab), Genentech's anti-PD-L1 cancer immunotherapy agent (H2 2017)
- Overall long-term survival results in Phase 2a trial in relapsed/refractory AML (H2 2017)

BioLineRx has also acquired Agalimmune Ltd., a UK-based biopharmaceutical company developing cancer immunotherapy treatments.

We keep BioLineRx's equity value at $152.9M / NIS 527M corresponding to a target price ranging between NIS 5.01 and NIS 5.30; a mean of NIS 5.15. Thus, one ADS (representing one ordinary share) is equal to $1.49.

- The Company completed an underwritten public offering of ADSs generating gross proceeds of $28.9 million led by BVF Partners, L.P; the Company also received an additional $9.6 million direct investment from BVF Partners.
- BioLineRx has a strong balance with adequate cash ($49.5M as of 31 December, 2017) to further support its clinical and regulatory strategy throughout 2018 without additional capital raising.

Updates for Q4-2017

2017 Annual Financial Results

Research and development expenses for the year ending December 31, 2017 totaled $19.5 million, an increase of $8.3 million, compared to $11.2 million for the year ending December 31, 2016. The increase resulted primarily from higher expenses in 2017 associated with new BL-8040 clinical studies commenced during the third quarter of 2016 and during 2017, as well as spending on the Company's recently acquired AGI-134 near-clinical project.

Sales and marketing expenses for the year ending December 31, 2017 were $1.7 million, an increase of $0.3 million, or 25.2%, compared to $1.4 million for the year ending December 31, 2016. The increase resulted primarily from one-time legal fees related to AGI-134.

General and administrative expenses for the year ending December 31, 2017 were $4.0 million, similar to those for the year ending December 31, 2016.

Operating loss for the year ending December 31, 2017 amounted to $25.2 million, compared with an operating loss of $16.5 million for the year ending December 31, 2016. The increase in operating loss reflects the significant increase in research and development expenses during 2017.

Non-operating expenses amounted to $0.3 million for the year ending December 31, 2017, compared with non-operating income of $0.2 million for the year ending December 31, 2016. Non-operating expenses and income for both years primarily relate to fair-value adjustments of warrant liabilities on the Company's balance sheet.

Net financial income amounted to $1.1 million for the year ending December 31, 2017 compared to net financial income of $0.5 million for the year ending December 31, 2016. The increase in net financial income relates primarily to gains recorded on foreign currency hedging transactions and higher investment income due to higher levels of cash and short-term bank deposits.

Net loss for the year ending December 31, 2017 amounted to $24.4 million, compared with an operating loss of $15.8 million for the year ending December 31, 2016. The Company held $49.5 million in cash, cash equivalents and short-term bank deposits as of December 31, 2017.

Net cash used in operating activities for the year ending December 31, 2017 was $20.5 million, compared to $14.5 million for the year ending December 31, 2016. The $6.0 million increase in net cash used in operating activities in 2017 was primarily the result of increased research and development expenses.

R&D highlights

BioLineRx has operated according to schedule and in line with its strategy executing multiple clinical trials for the Company's lead oncology program, BL-8040:

Initiation of pivotal Phase 3 GENESIS study with BL-8040 as novel stem cell mobilization treatment for autologous bone-marrow transplantation, following a successful meeting with the FDA earlier in the year;

Partial monotherapy results from Phase 2a COMBAT study, investigating the combination of BL-8040 and Merck's PD-1 inhibitor, Keytruda® (pembrolizumab), in pancreatic cancer, which showed significantly increased infiltration of T cells into the tumor, as well as robust mobilization of immune cells;

Initiation of three Phase 1b/2 studies under collaboration with Genentech, exploring the combination of BL-8040 with Tecentriq® (atezolizumab), Genentech's anti-PD-L1 cancer immunotherapy agent;

Overall long-term survival results in Phase 2a trial in relapsed/refractory AML demonstrated that the combination of BL-8040 with high-dose Ara-C (HiDAC) significantly improved overall survival, compared with historical data of HiDAC monotherapy;

Partial results of Phase 2 study for BL-8040 as novel stem cell mobilization treatment for allogeneic bone-marrow transplantation support BL-8040 as a one-day dosing regimen for rapid mobilization of stem cells

The company also presented pre-clinical data at ASCO-SITC, which showed complete tumor regression in the majority of mice treated with AGI-134.

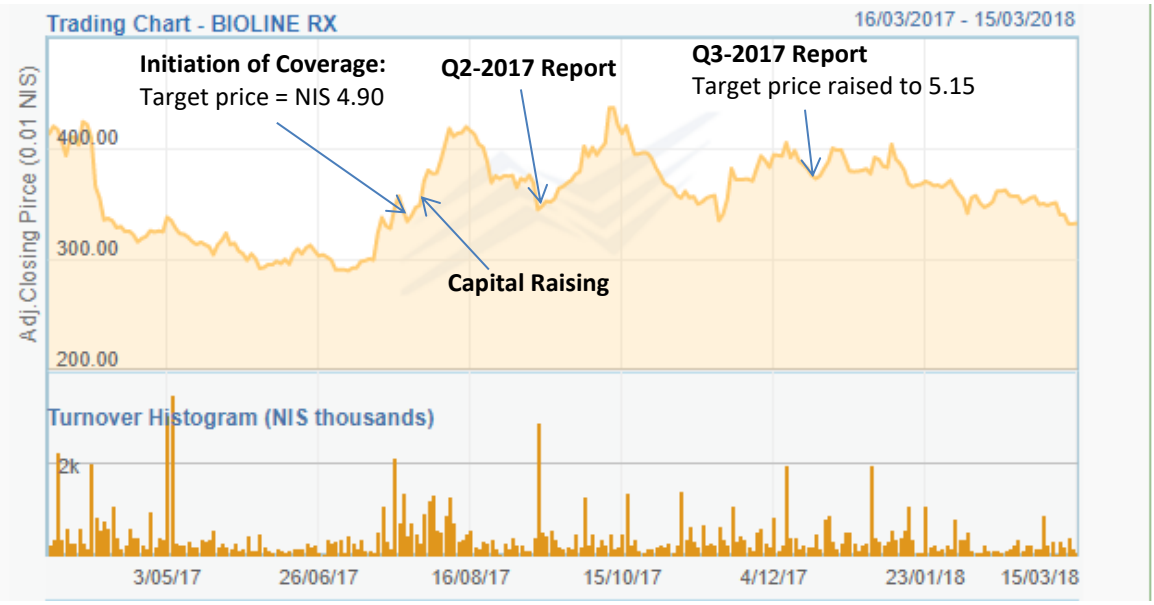
Analysis

With respect to the Company's clinical development of its Oncology programs, BioLineRx has progressed in line with our expectations as per our Q3-2017 analysis report (19 December, 2017). The Company has initiated several clinical studies for its lead asset, BL-8040; including a first pivotal Phase 3 study in autologous stem-cell mobilization, as well as a number of studies under the Company's immunotherapy collaborations with Genentech and MD Anderson Cancer Center.

We assume that by mid-2018, BioLineRx will have one Phase 3 and seven Phase 2 or 1b/2 clinical trials underway. Furthermore, the Company has announced partial results of its Phase 2 study in pancreatic cancer, under its immunotherapy collaboration with Merck. **Thus, clinical development is on track with the company's strategy being to continuously execute multiple clinical development programs for its lead asset – BL-8040**.

On the financial side, BioLineRx has a strong cash balance with adequate funds ($49.5M as of 31 December, 2017) to support clinical and regulatory strategy throughout 2018 without the need to raise additional capital.

We retain an equity value of $152.9M / NIS 539.8M for BioLineRx; corresponding to a target price ranging between NIS 5.01 and NIS 5.30; a mean of NIS 5.15. Thus, 1 ADS (representing 1 ordinary share) is equal to $1.49.[1]



[1] NIS/$ Calculation: NIS 5.15/3.46 = $1.49 (As at 18 March 2018)

Upcoming Potential Catalysts

Program	Event	Significance	Timeline	Status
BL-8040	Completion of Phase 2 (allogeneic SCM) Top-line results of Phase 2 (allogeneic SCM)	Medium Medium	H1-2018 H1-2018	On track Expected Mid-2018
	Initiation of Phase 3 (autologous SCM) Lead-in results (autologous SCM)	Medium High	Q4-2017 H2-2018	Achieved Expected H2-2018
	Partial results Phase 2 COMBAT (pancreatic cancer) Top-line results Phase 2 COMBAT (pancreatic cancer)	Medium High	Q1-2018 H2-2018	Achieved Expected H2-2018
	Initiation of Phase 1b/2 with Genentech (pancreatic cancer)	Low	Q3-2017	Achieved
	Initiation of Phase 1b/2 Genentech (gastric cancer)	Low	Q3-2017	Achieved
	Initiation of Phase 1b/2 Genentech (AML)	Low	Q4-2017	Achieved
	Initiation of Phase 1b/2 Genentech (non-small cell lung cancer)	Low	Q1-2018	On Track
	Partial results Phase 1b (AML maintenance)	Low	H2-2018	On Track
	Partial results Phase 1b/2 with Genentech (multiple solid tumors)	Low	H2-2018	On Track
	Interim Phase 2b results (AML consolidation) Top-Line Phase 2b results (AML consolidation)	High Low	H2-2018 2020	On Track
AGI-134	Initiation of Phase 1/2a (multiple solid tumors)	Low	Mid-2018	On Track

Sources: Frost & Sullivan Analysis; BioLineRx.

Appendix

Appendix I - Financial Reports

Balance Sheet (USD 000s)	31.12.2015	31.12.2016	31.12.2017
Current Assets			
Cash and cash equivalents	5,544	2,469	5,110
Short-term bank deposits	42,119	33,154	44,373
Prepaid expenses	229	255	307
Other receivables	291	223	586
Total current assets	**48,183**	**36,101**	**50,376**
Non-Current Assets			
Restricted deposits	0	0	61
Long-term prepaid expenses	58	52	1,000
Net PPE	2,909	2,605	2,505
Intangible assets, net	152	181	7,023
Total non-current assets	**3,119**	**2,838**	**10,589**
Total assets	**51,302**	**38,939**	**60,965**
Current Liabilities			
Current maturities of long-term bank loan	93	93	93
Accounts payable and accruals: Trade	1,910	2,590	5,516
Other Accounts payable and accruals	1,137	978	1,113
Total current liabilities	**3,140**	**3,661**	**6,722**
Non-Current Liabilities			
Long-term bank loan, net of current maturities	344	250	157
Warrants	208	1	1,205
Total non-current liabilities	**552**	**251**	**1,362**
Total liabilities	**3,692**	**3,912**	**8,084**
Total equity	**47,610**	**35,027**	**52,881**
Total liabilities and equity	**51,302**	**38,939**	**60,965**

Profit and Loss Statement USD 000s	31.12.2015	31.12.2016	31.12.2017
Research and Development Expenses, net	(11,489)	(11,177)	(19,510)
Sales and Marketing Expenses	(1,003)	(1,352)	(1,693)
General and Administrative Expenses	(3,704)	(3,984)	(4,037)
Operating Loss	**(16,196)**	**(16,513)**	**(25,240)**
Non-Operating Income, net	1,445	214	(260)
Financial Income	457	480	1,169
Financial Expenses	(106)	(22)	(21)
Net Loss	**(14,400)**	**(15,841)**	**(24,352)**
Comprehensive Loss	**(14,400)**	**(15,841)**	**(24,352)**
Loss per ordinary share – basic and diluted	(0.28)	(0.28)	(0.27)

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