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 May 2017

Commission File Number: 001-36581

Vascular Biogenics Ltd.

(Translation of registrant's name into English)

6 Jonathan Netanyahu St.
Or Yehuda
Israel 6037604
(Address of principal executive offices)

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

Form 20-F ☒ Form 40-F ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): ☐

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

Yes ☐ No ☒

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): 82-

EXPLANATORY NOTE

Attached hereto and incorporated by reference herein is the registrant's press release issued on May 15, 2017, announcing financial results for the first quarter ended March 31, 2017, unaudited condensed interim financial statements as of March 31, 2017 and operating and financial review for the first quarter ended March 31, 2017. This Report of Foreign Private Issuer on Form 6-K shall be incorporated by reference into the Company's registration statement on Form F-3 (File No. 333-207250), filed with the Securities and Exchange Commission (the "SEC") on October 2, 2015, to the extent not superseded by information subsequently filed or furnished (to the extent the Company expressly states that it incorporates such furnished information by reference) by the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended.

SIGNATURE

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.

Date: May 15, 2017

VASCULAR BIOGENICS LTD.
By: /s/ Dror Harats
Name: Dror Harats
Title: Chief Executive Officer

VBL Therapeutics Announces First Quarter 2017 Financial Results

TEL AVIV, ISRAEL, May 15, 2017 -- VBL Therapeutics (NASDAQ: VBLT), a clinical-stage biotechnology company focused on the discovery, development and commercialization of first-in-class treatments for cancer, announced financial results for the first quarter ended March 31, 2017, as well as a corporate update.

- "We continue to execute on our strategy to develop VB-111, a targeted anti-cancer gene-therapy agent that is positioned to treat a wide range of solid tumors," said Professor Dror Harats, Chief Executive Officer of VBL Therapeutics. "Our GLOBE pivotal trial in rGBM has completed enrollment and the DSMB committee reviewed the GLOBE safety data collected through a cutoff date in March 2017 and unanimously recommended that the study continue as planned.

Based on the current event rate in this trial, we now expect the interim analysis to occur in the third quarter of 2017, with top line data from the full dataset becoming available in early 2018. Our planned Phase 3 clinical trial of VB-111 in ovarian cancer is expected to begin in the second half of 2017."

"We are also exploring the potential of VB-111 in other tumor types, and recently presented data at the ASGCT conference showing an enhanced benefit of VB-111 in combination with a checkpoint inhibitor in preclinical models of lung cancer and melanoma. Accordingly, we intend to launch an exploratory study of VB-111 in combination with a checkpoint inhibitor in lung cancer by year-end 2017", continued Prof. Harats. "Supporting this progress is a strong balance sheet, with $39.6 million in cash on hand at the end of the first quarter, which we believe will be sufficient to fund our operating expenses and capital expenditure requirements into 2019."

First Quarter and Recent Corporate Updates

- Completed enrollment in the pivotal GLOBE study investigating VB-111 in rGBM.
  - Enrollment in the study, 256 patients in total, was completed in December 2016, five months ahead of schedule.
  - The DSMB committee reviewed the GLOBE safety data collected through a cutoff date in March 2017 and unanimously recommended that the study continue as planned.
  - Company expects the GLOBE interim analysis to occur in the third quarter of 2017, with top-line results from the full dataset becoming available in early 2018.
- Presented preclinical data on VB-111 in combination with a checkpoint inhibitor at the 20th Annual American Society of Gene & Cell Therapy (ASGCT) meeting in Washington DC.
  - Combination of VB-111 and anti-PD-L1 resulted in an amplified antitumor effect in models of lung cancer and melanoma.
- Data from the prior Phase 2 clinical trial that investigated VB-111 in rGBM have been selected for presentation at the 2017 American Society of Clinical Oncology (ASCO) annual meeting on June 5.
  - The poster at ASCO will feature new data on individual patients who were enrolled in this trial.
- Announced full results from exploratory Phase 2 study of VB-111 in patients with advanced, differentiated thyroid cancer.
  - The study previously met its primary endpoint, defined as 6-month progression-free-survival (PFS-6) of 25%, with a dose response. An overall survival benefit was seen with a tail of more than 40% at 3.7 years for the therapeutic-dose cohort.
- Published research on MOSPD2, a potential novel immune-oncology target at the annual American Association of Cancer Research (AACR) meeting in Washington DC.
  - A paper discussing MOSPD2, was published online in *The Journal of Immunology* in January 2017.
  - Targeting of MOSPD2 may have several therapeutic applications, including inhibition of monocyte migration in chronic inflammatory conditions inhibition of tumor cell metastases and targeting of MOSPD2 tumor cells.
  - VBL's "VB-600 series" of pipeline candidates is being developed toward these applications.
- Announced new data supporting use of Lecinoxoids in NASH
  - In a retrospective analysis of five Phase 1 studies and three Phase 2 studies, liver enzyme tests were performed for subjects dosed with VB-201, and identified a statistically significant time- and dose-dependent reduction of alkaline phosphatase (ALP) blood levels as well as a reduction in levels of gamma-glutamyltransferase (GGT), in patients treated orally with VB-201. Reductions in these biomarkers may indicate improvement in liver fibrosis.

First Quarter 2017 Financial Results:

- **Cash Position**: At March 31, 2017, we had cash, cash equivalents and short-term bank deposits totaling $39.6 million and working capital of $37.2 million. We expect that our cash, cash equivalents and short-term bank deposits will enable us to fund our operating expenses and capital expenditure requirements into 2019 and is expected to be sufficient to enable us to complete our ongoing Phase 3 clinical trial of VB-111 in rGBM, to support our planned potential registration trial in ovarian cancer and an exploratory clinical study of VB-111 in combination with a checkpoint inhibitor in lung cancer, as well as to support the investment in the new Modiin facility to which we intend to relocate in a few months.
- **R&D Expenses:** Research and development expenses for the quarter ended March 31, 2017 were approximately $4.1 million, compared to approximately $4.0 million in the same period of 2016.

- **G&A Expenses:** General and administrative expenses for the quarter ended March 31, 2017 were approximately $1.1 million, compared to approximately $0.9 million in the same period of 2016.
- **Net Loss:** The Company reported a net loss for the quarter ended March 31, 2017 $5.0 million, or ($0.19) per share, compared to a net loss of $4.7 million, or ($0.21) per share in the quarter ended March 31, 2016.

Conference Call, Monday, May 15th @ 8:30am Eastern Time

Domestic: 866-409-1555
International: 913-661-9178
Conference ID: 7109868
Webcast: http://edge.media-server.com/m/p/hg84w5hv

Replays, available through May 29, 2017:
Toll Free: 844-512-2921
International: 412-317-6671
Conference ID: 7109868

About VBL
Vascular Biogenics Ltd., operating as VBL Therapeutics, is a clinical stage biopharmaceutical company focused on the discovery, development and commercialization of first-in-class treatments for cancer. The Company's lead oncology product candidate, ofranergene obadenovec (VB-111), is a first-in-class biologic agent that uses a dual mechanism to target solid tumors. It utilizes an angiogenesis-specific sensor (VBL's PPE-1-3x proprietary promoter) to specifically target the tumor vasculature, by induction of cell death in angiogenic endothelial cells in the tumor milieu. Moreover, it is an immune-stimulant that triggers a local anti-tumor immune response, which is accompanied by recruitment of CD8 T-cells and apoptosis of tumor cells. Ofranergene obadenovec is positioned to treat a wide range of solid tumors and is conveniently administered as an IV infusion once every two months. It has been observed to be well-tolerated in >200 cancer patients and we have observed its efficacy signals in an "all comers" Phase 1 trial as well as in three tumor-specific Phase 2 studies. Ofranergene obadenovec is currently being studied in a Phase 3 pivotal trial for recurrent Glioblastoma, conducted under an FDA Special Protocol Assessment (SPA).

Forward Looking Statements

This press release contains forward-looking statements. All statements other than statements of historical fact are forward-looking statements, which are often indicated by terms such as “anticipate,” “believe,” “could,” “estimate,” “expect,” “goal,” “intend,” “look forward to”, “may,” “plan,” “potential,” “predict,” “project,” “should,” “will,” “would” and similar expressions. These forward-looking statements include, but are not limited to, statements regarding the clinical development of ofranergene obadenovec (VB-111) and its therapeutic potential, ongoing and planned clinical trials and clinical results, including the timing thereof, our other pipeline candidates, including the clinical development and therapeutic potential of our VB-600 series of pipeline candidates and Lecinoxoids in NASH, our new Modiin facility and our cash position and financial outlook. These forward-looking statements are not promises or guarantees and involve substantial risks and uncertainties. Among the factors that could cause actual results to differ materially from those described or projected herein include uncertainties associated generally with research and development, clinical trials and related regulatory reviews and approvals, and the risk that historical clinical trial results may not be predictive of future trial results. In particular, results from our pivotal Phase 3 clinical trial of ofranergene obadenovec (VB-111) in rGBM may not support approval of ofranergene obadenovec for marketing in the United States, notwithstanding the positive results seen in prior clinical experience. A further list and description of these risks, uncertainties and other risks can be found in the Company’s regulatory filings with the U.S. Securities and Exchange Commission. Existing and prospective investors are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. VBL Therapeutics undertakes no obligation to update or revise the information contained in this press release, whether as a result of new information, future events or circumstances or otherwise.

INVESTOR CONTACT:
Michael Rice
LifeSci Advisors, LLC
(646) 597-6979

VASCULAR BIOGENICS LTD.

CONDENSED INTERIM STATEMENTS OF FINANCIAL POSITION

(UNAUDITED)

	March 31, 2017	December 31, 2016
	U.S. dollars in thousands	
Assets		
CURRENT ASSETS:		
Cash and cash equivalents	$ 5,947	$ 11,585
Short-term bank deposits	33,686	33,669
Other current assets	2,037	1,320
TOTAL CURRENT ASSETS	41,670	46,574
NON-CURRENT ASSETS:		
Property and equipment, net	878	687
Long-term prepaid expenses	187	13
TOTAL NON-CURRENT ASSETS	1,065	700
TOTAL ASSETS	$ 42,735	$ 47,274
Liabilities and equity		
CURRENT LIABILITIES—		
Accounts payable and accrued expenses:		
Trade	$ 2,916	$ 2,522
Other	1,604	2,266
TOTAL CURRENT LIABILITIES	4,520	4,788
NON-CURRENT LIABILITIES—		
Severance pay obligations, net	91	86
TOTAL LIABILITIES	4,611	4,874
EQUITY:		
Ordinary shares	50	50
Accumulated Other comprehensive income	40	40
Additional paid in capital	198,158	197,400
Warrants	2,960	2,960
Accumulated deficit	(163,084)	(158,050)
TOTAL EQUITY	38,124	42,400
TOTAL LIABILITIES AND EQUITY	$ 42,735	$ 47,274

The accompanying notes are an integral part of the condensed financial statements.

VASCULAR BIOGENICS LTD.

CONDENSED INTERIM STATEMENTS OF COMPREHENSIVE LOSS

(UNAUDITED)

	Three Months Ended March 31,	
	2017	2016
	U.S. dollars in thousands	
RESEARCH AND DEVELOPMENT EXPENSES, net	$ 4,144	$ 4,003
GENERAL AND ADMINISTRATIVE EXPENSES	1,105	863
OPERATING LOSS	5,249	4,866
FINANCIAL INCOME	(219)	(137)
FINANCIAL EXPENSES	4	—
FINANCIAL EXPENSES, net	(215)	(137)
COMPREHENSIVE LOSS	$ 5,034	$ 4,729
LOSS PER ORDINARY SHARE	U.S. dollars	
Basic and diluted	$ 0.19	$ 0.21
	Number of shares	
WEIGHTED AVERAGE ORDINARY SHARES OUTSTANDING—		
Basic and diluted	26,907,172	22,476,773

The accompanying notes are an integral part of the condensed financial statements.

VASCULAR BIOGENICS LTD.

CONDENSED INTERIM CASH FLOW STATEMENTS

(UNAUDITED)

	Three Months Ended March 31,	
	2017	2016
	U.S. dollars in thousands	
CASH FLOWS FROM OPERATING ACTIVITIES:		
Loss for the period	$ (5,034)	$ (4,729)
Adjustments required to reflect net cash used in operating activities (see Appendix A)	(713)	747
Interest received	71	12
Net cash used in operating activities	(5,676)	(3,970)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of property and equipment	(62)	(67)
Maturity of short-term deposits	—	5,000
Net cash (used in) generated from investing activities	(62)	4,933
CASH FLOWS FROM FINANCING ACTIVITIES:		
Exercise of employees stock options	18	21
Issuance of ordinary shares, net	—	(53)
Net cash generated from (used in) financing activities	18	(32)
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS	(5,720)	931
CASH AND CASH EQUIVALENTS AT BEGINNING OF THE YEAR	11,585	7,090
EXCHANGE GAINS ON CASH AND CASH EQUIVALENTS	82	61
CASH AND CASH EQUIVALENTS AT END OF THE PERIOD	$ 5,947	$ 8,082
APPENDIX A:		
Adjustments required to reflect net cash used in operating activities:		
Depreciation	$ 36	$ 30
Interest income	(88)	(66)
Exchange gains on cash and cash equivalents	(82)	(61)
Net changes in severance pay	5	—
Share based payments	740	281
	611	184
Changes in working capital:		
Decrease (increase) in other current assets	(717)	696
Decrease (increase) in long-term prepaid expenses	(174)	70
Increase (decrease) accounts payable and accrued expenses:		
Trade	229	(393)
Other	(662)	190
	(1,324)	563
	$ (713)	$ 747
APPENDIX B:		
Non cash activity-		
Purchase of property and equipment	(165)	

The accompanying notes are an integral part of the condensed financial statements.

NOTE 1 – GENERAL

Vascular Biogenics Ltd. (the "Company" or "VBL") was incorporated on January 27, 2000. The Company is a clinical-stage biopharmaceutical company focused on the discovery, development and commercialization of first-in-class treatments for cancer. VBL has also developed a proprietary platform of small molecules, Lecinoxoids, for the treatment of chronic immune-related indications, and is also conducting a research program exploring the potential of targeting of MOSPD2 for immuno-oncology applications.

VB-111 (ofranergene obadenovec), a Phase 3 drug candidate, is the Company's lead product candidate in the Company's cancer program. VB-201, a Phase 2-ready drug candidate, is the Company's lead Lecinoxoid-based product candidate. The Company's "VB-600 series" for targeting of MOSPD2 is at pre-clinical stage.

In 2015, the Company launched its Phase 3 clinical trial of VB-111 in rGBM, whereby the first patient was randomized in August 2015 and the trial enrollment was completed by December 2016. The Company is conducting its Phase 3 clinical trial of VB-111 in rGBM under a special protocol assessment concurred by the FDA.

Since its inception, the Company has incurred significant losses, and it expects to continue to incur significant expenses and losses for at least the next several years. As of March 31, 2017, the Company had an accumulated deficit of $163.1 million. The Company's losses may fluctuate significantly from quarter to quarter and year to year, depending on the timing of its clinical trials, the receipt of payments under any future collaboration agreements it may enter into, and its expenditures on other research and development activities.

As of March 31, 2017, the Company had cash, cash equivalents and short-term bank deposits of $39.6 million. The Company may seek to raise more capital to pursue additional activities. The Company may seek these funds through a combination of private and public equity offerings, government grants, strategic collaborations and licensing arrangements. Additional financing may not be available when the Company needs it or may not be available on terms that are favorable to the Company.

NOTE 2 - BASIS OF PREPARATION

The Company's condensed interim financial statements as of March 31, 2017 and for the three months then ended (the "interim financial statements") have been prepared in accordance with International Accounting Standard No. 34, "Interim Financial Reporting" ("IAS 34"). These interim financial statements, which are unaudited, do not include all disclosures necessary for a complete presentation of the Company's financial position, results of operations, and cash flows, in conformity with generally accepted accounting principles. The condensed interim financial statements should be read in conjunction with the Company's annual financial statements as of December 31, 2016 and for the year then ended, along with the accompanying notes, which have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB)." The results of operations for the three months ended March 31, 2017 are not necessarily indicative of the results that may be expected for the entire fiscal year or for any other interim period.

NOTE 3 - SIGNIFICANT ACCOUNTING POLICIES

The accounting policies and calculation methods applied in the preparation of the interim financial statements are consistent with those applied in the preparation of the annual financial statements as of December 31, 2016 and for the year then ended.

NOTE 4 - FINANCIAL RISK MANAGEMENT AND FINANCIAL INSTRUMENTS

The Company's activities expose it to a variety of financial risks: market risk (including currency risk, fair value interest rate risk, cash flow interest rate risk and price risk), credit risk and liquidity risk. The interim financial statements do not include all financial risk management information and disclosures required in the annual financial statements; therefore, they should be read in conjunction with the Company's annual financial statements as of

December 31, 2016. There have been no significant changes in the risk management policies since the year end.

NOTE 5 - CASH AND CASH EQUIVALENTS AND SHORT-TERM BANK DEPOSITS

Cash and cash equivalents and short-term bank deposits as of March 31, 2017 comprised of $5.9 million and $33.7 million, respectively. The short-term bank deposits as of March 31, 2017 were for terms of nine months to twelve months and carried interest at annual rates of 1.01%-1.56%.

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with the Company's annual financial statements as of and for the year ended December 31, 2016 (included in our Annual Report of Foreign Private Issuer on Form 20-F for the year ended December 31, 2016) and their accompanying notes and the related notes and the other financial information included elsewhere in this Form 6-K. This discussion contains forward-looking statements that involve risks, uncertainties and assumptions. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors. Our audited financial statements as of and for the year ended December 31, 2016 and our unaudited financial statements for the three months ended on March 31, 2017 (the "Period") have been prepared in accordance with IFRS, as issued by the IASB. Unless stated otherwise, comparisons included herein are made to the three months period ended on March 31, 2016 (the "Parallel Period").

Overview

We are a clinical-stage biopharmaceutical company focused on the discovery, development and commercialization of first-in-class treatments for cancer. Our program is based on our proprietary Vascular Targeting System, or VTS, platform technology, which utilizes genetically targeted therapy to destroy newly formed, or angiogenic, blood vessels, and which we believe will allow us to develop product candidates for multiple oncology indications.

Our lead product candidate, VB-111 (ofranergene obadenovec), is a gene-based biologic that we are developing for solid tumor indications, with an advanced program for recurrent glioblastoma, or rGBM, an aggressive form of brain cancer. We have obtained fast track designation for VB-111 in the United States for prolongation of survival in patients with glioblastoma that has recurred following treatment with standard chemotherapy and radiation. We have also received orphan drug designation in both the United States and Europe. Our pivotal Phase 3 GLOBE study in rGBM began in August 2015. The study is being conducted under a special protocol assessment, or SPA, agreement with the U.S. Food and Drug Administration, or FDA, with full endorsement by the Canadian Brain Tumor Consortium ("CBTC"). We completed enrollment for the trial in December 2016, five months ahead of our initial plan, with a total of 256 patients in the US, Canada and Israel.

We also have been conducting a program targeting anti-inflammatory diseases based on the use of our Lecinoxoid platform technology. Lecinoxoids are a novel class of small molecules we developed that are structurally and functionally similar to naturally occurring molecules known to modulate inflammation. As we reported in February 2015, the lead product candidate from this program, VB-201, failed to meet the primary endpoint in Phase 2 clinical trials for psoriasis and for ulcerative colitis. As a result, we have terminated our development of VB-201 in those indications. Nevertheless, based on recent pre-clinical studies, we believe that VB-201 and some second generation molecules such as VB-703 may be applicable for NASH and renal fibrosis. Since the Company intends to focus substantially all of our efforts and resources on advancing our oncology program, we will seek to monetize our Lecinoxoid assets via strategic deals.

We are also conducting a research program exploring the potential of targeting of MOSPD2 for immuno-oncology applications. We believe that targeting of MOSPD2 may have several therapeutic applications, including inhibition of monocyte migration in chronic inflammatory conditions, inhibition of tumor cell metastases and targeting of MOSPD2-expressing tumor cells. We are developing our "VB-600 series" of pipeline candidates towards these applications.

We are developing our lead oncology product candidate, VB-111, for solid tumor indications, with current clinical programs in rGBM, thyroid cancer and ovarian cancer. In interim analyses of data from our ongoing open-label Phase 2 clinical trial of VB-111 in rGBM, we observed dose-dependent attenuation of tumor growth and an increase in median overall survival, which is the time interval from initiation of treatment to the patient's death. The U.S. FDA has granted VB-111 fast track designation for prolongation of survival in patients with glioblastoma that has recurred following treatment with temozolomide, a chemotherapeutic agent commonly used to treat newly diagnosed glioblastoma, and radiation. On July 1, 2014, the FDA concurred with the design and planned analyses of our Phase 3 pivotal trial of VB-111 in rGBM pursuant to an SPA. We began our Phase 3 pivotal trial of VB-111 in rGBM in August 2015 and completed patient enrollment for the study in December 2016, five months ahead of our initial plan. According to the current study protocol, which was modified in December 2016 under FDA approval while maintaining the SPA status for the trial, an interim analysis will take place when 105 mortality events will occur in the trial and after 50% of the

patients have more than 12 months potential follow up, whichever occurs later. The timing of the interim analysis, which depends both on the timing of enrollment and on VB-111 activity, is currently expected in the third quarter of 2017. Top-line data will be available when 189 events will occur in the trial, which is expected in early 2018. Following positive safety reviews announced in December 2016 and in April 2017, the GLOBE trial continues as planned. Based on interactions with the FDA, we believe the current trial, if successful, will support a Biologics License Application (BLA) in 2018.

VB-111 was also being studied in a Phase 2 trial for recurrent platinum-resistant ovarian cancer and in a Phase 2 study in recurrent, iodine-resistant differentiated thyroid cancer. In a Phase 2 trial for recurrent platinum-resistant ovarian cancer, VB-111 demonstrated a statistically significant increase in overall survival and 60% durable response rate (as measured by reduction in CA-125), approximately twice the historical response with bevacizumab plus chemotherapy in ovarian cancer. In December 2016, we had an end-of-Phase-2 meeting with the FDA, following which we plan to advance VB-111 to a Phase 3 study in platinum-resistant ovarian cancer, which we intend to launch in the second half of 2017.

In February 2017, we reported full data from our exploratory Phase 2 study of VB-111 in recurrent, iodine-resistant differentiated thyroid cancer. The primary endpoint of the trial, defined as 6-month progression-free-survival (PFS-6) of 25%, was met with a dose response. Forty-seven percent of patients in the therapeutic-dose cohort reached PFS-6, versus 25% in the sub-therapeutic cohort, both groups meeting the primary endpoint. An overall survival benefit was seen, with a tail of more than 40% at 3.7 years for the therapeutic-dose cohort, similar to historical data for pazopanib (Votrient), a tyrosine kinase inhibitor; however, most patients in the VB-111 study had tumors that previously had progressed on pazopanib or other kinase inhibitors.

Based on support from pre-clinical data, which we recently presented at the American Society of Gene & Cell Therapy (ASGCT) conference, we also plan to conduct an exploratory study for VB-111 in combination with a checkpoint inhibitor in non-small cell lung cancer. Launch of this trial is expected by year-end 2017.

As of March 31, 2017, we had studied VB-111 in over 200 patients and have observed it to be well-tolerated. In December 2015, we have been granted a US composition of matter patents that provides intellectual property protection for VB-111 in the US until October 2033 before any patent term extension.

We commenced operations in 2000, and our operations to date have been limited to organizing and staffing our company, business planning, raising capital, developing our VTS, Lecinoxoids and MOSPD2-based platform technologies and developing our product candidates, including conducting pre-clinical studies and clinical trials of VB-111 and VB-201. To date, we have funded our operations through private sales of preferred shares, a convertible loan, public offerings and grants from the Israeli Office of Chief Scientist, or OCS, which has later transformed to the National Authority for Technology and Innovation, or NATI, under the Israel Encouragement of Research and Development in Industry, or the Research Law. We have no products that have received regulatory approval and accordingly have never generated revenue. Since our inception and through March 31, 2017, we had raised an aggregate of $211.9 million to fund our operations, of which $113.4 million was from sales of our equity securities, $40.5 from our initial public offering, or IPO, $15.0 million from a November 3, 2015 underwritten offering, approximately $24.0 million from a June 7, 2016 registered direct offering and $19.0 million from NATI grants.

Since inception, we have incurred significant losses. Our loss for the Period was $5.0 million. For the years ended December 31, 2016 and 2015, our loss was $16.0 million and $14.9 million, respectively. We expect to continue to incur significant expenses and losses for at least the next several years. As of March 31, 2017, we had an accumulated deficit of $163.1 million. Our losses may fluctuate significantly from quarter to quarter and year to year, depending on the timing of our clinical trials, the receipt of payments under any future collaborations we may enter into, and our expenditures on other research and development activities.

As of March 31, 2017, we had cash, cash equivalents and short-term bank deposits of $39.6 million. To fund further operations, we will need to raise additional capital. We may seek to raise more capital to pursue additional activities, which may be through a combination of private and public equity offerings, government grants, strategic collaborations and licensing arrangements. Additional financing may not be available when we specifically need it or may not be available on terms that are favorable to us. As of March 1, 2017, we had 34 employees. Our operations are currently located in a single facility in Or Yehuda, Israel, but we intend to relocate to a new facility in Modiin, Israel in the second half of 2017.

Various statements in this release concerning our 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 our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Some of these risks are incurred losses; dependence on the success of our lead product candidate, VB-111, its clinical development, regulatory approval and commercialization; the novelty of our technologies, which makes it difficult to predict the time and cost of product candidate development and potential regulatory approval; as well as potential delays in our clinical trials.

These and other factors are more fully discussed in the "Risk Factors" section of the Annual Report on Form 20-F for the year ended December 31, 2016. In addition, any forward-looking statements represent our views only as of the date of this release and should not be relied upon as representing our views as of any subsequent date. We do not assume any obligation to update any forward-looking statements unless required by law.

Financial Overview

Revenue

To date, we have not generated any revenue. We do not expect to receive any revenue from any product candidates that we develop unless and until we obtain regulatory approval and commercialize our products or enter into collaborative agreements with third parties.

Research and Development Expenses

Research and development expenses consist of costs incurred for the development of both of our platform technologies and our product candidates. Those expenses include:

- employee-related expenses, including salaries and share-based compensation expenses for employees in research and development functions;
- expenses incurred in operating our laboratories and small-scale manufacturing facility;
- expenses incurred under agreements with CROs and investigative sites that conduct our clinical trials;
- expenses relating to outsourced and contracted services, such as external laboratories, consulting and advisory services;
- supply, development and manufacturing costs relating to clinical trial materials;
- maintenance of facilities, depreciation and other expenses, which include direct and allocated expenses for rent and insurance; and
- costs associated with pre-clinical and clinical activities.

Research expenses are recognized as incurred. An intangible asset arising from the development of our product candidates is recognized if certain capitalization conditions are met. As of March 31, 2017, we did not have any capitalized development costs.

Costs for certain development activities are recognized based on an evaluation of the progress to completion of specific tasks using information and data provided to us by our vendors and clinical sites. Nonrefundable advance payments for goods or services to be received in future periods for use in research and development activities are deferred and capitalized. The capitalized amounts are then expensed as the related goods are delivered and the services are performed.

We have received grants from the NATI as part of the research and development programs for our VTS and Lecinoxoid platform technologies. The requirements and restrictions for such grants are found in the Research Law. These grants are subject to repayment through future royalty payments on any products resulting from these research and development

programs, including VB-111 and VB-201. The total gross amount of grants actually received by us from the NATI, including accrued LIBOR interest as of March 31, 2017 totaled $23.4 million. As of March 31, 2017, we had not paid any royalties to the NATI.

Information on our liabilities and the restrictions that we are subject to under the Research Law in connection with the NATI grants that we have received is detailed in the Annual Report on Form 20-F as of and for the year ended December 31, 2016.

Under applicable accounting rules, the grants from the NATI have been accounted for as an off-set against the related research and development expenses in our financial statements. As a result, our research and development expenses are shown on our financial statements net of the NATI grants.

General and Administrative Expenses

General and administrative expenses consist principally of salaries and related costs for personnel in executive and finance functions such as salaries, benefits and share-based compensation. Other general and administrative expenses include facility costs not otherwise included in research and development expenses, communication expenses, and professional fees for legal services, patent counseling and portfolio maintenance, consulting, auditing and accounting services.

Financial Expenses (Income), Net

Financial income is comprised of interest income generated from interest earned on our cash, cash equivalents and short-term bank deposits and gains and losses due to fluctuations in foreign currency exchange rates, mainly in the appreciation and depreciation of the NIS exchange rate against the U.S. dollar.

Financial expenses primarily consist of gains and losses due to fluctuations in foreign currency exchange rates.

Taxes on Income

We have not generated taxable income since our inception, and had carry forward tax losses as of December 31, 2016 of $139.5 million. We anticipate that we will be able to carry forward these tax losses indefinitely to future tax years. Accordingly, we do not expect to pay taxes in Israel until we have taxable income after the full utilization of our carry forward tax losses.

We recognize deferred tax assets on losses for tax purposes carried forward to subsequent years if utilization of the related tax benefit against a future taxable income is expected. We have not created deferred taxes on our tax loss carry forward since their utilization is not expected in the foreseeable future.

Critical Accounting Policies and Significant Judgments and Estimates

This management's discussion and analysis of our financial condition and results of operations is based on our financial statements, which have been prepared in accordance with IFRS. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported expenses incurred during the reporting periods. Estimates and judgments are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

We make estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

Share-Based Compensation

We operate a number of equity-settled, share-based compensation plans for employees (as defined in IFRS 2 "Share-Based Payments"), directors and service providers. As part of the plans, we grant employees, directors and service providers, from time to time and at our discretion, options and RSU's to purchase our ordinary shares. The fair value of

the employee and service provider services received in exchange for the grant of the options and RSU's is recognized as an expense in our statements of comprehensive loss and is carried to additional paid in capital in our statements of financial position. The total amount is recognized as an expense ratably over the vesting period of the options, which is the period during which all vesting conditions are expected to be met.

We estimate the fair value of our share-based awards to employees and directors using the Black-Scholes option pricing model, which requires the input of highly subjective assumptions, including (a) the expected volatility of our shares, (b) the expected term of the award, (c) the risk-free interest rate, and (d) expected dividends. Due to the lack of a public market for the trading of our shares until October 2014 and a lack of company-specific historical and implied volatility data, we have based our estimate of expected volatility on the historic volatility of a group of similar companies that are publicly traded. We will continue to apply this process until a sufficient amount of historical information regarding the volatility of our own share price becomes available. We estimate the fair value of our share-based awards to service providers based on the value of services received, which is based on the additional cash compensation that we would need to pay if such options were not granted.

Service conditions and performance vesting conditions are included in assumptions about the number of options and RSU's that are expected to vest. The total expense is recognized over the vesting period, which is the period over which all of the specified vesting conditions are to be satisfied.

We are also required to estimate forfeitures at the time of grant, and revise those estimates in subsequent periods if actual forfeitures differ from the estimates. Vesting conditions are included in assumptions about the number of options and RSU's that are expected to vest. At the end of each reporting period, we revise our estimates of the number of options and RSU's that are expected to vest based on the nonmarket vesting conditions. We recognize the impact of the revision to original estimates, if any, in profit or loss, with a corresponding adjustment to additional paid in capital.

Results of Operations

Comparison of three month periods ended March 31, 2017 and 2016:

	Three Months Ended March 31,		Increase (decrease)	
	2017	2016	$	%
	(in thousands) (unaudited)			
Expenses:				
Research and development, gross	$ 4,370	$ 4,003	$ 367	9 %
Government grants	(226)	—	(226)	100 %
Research and development, net	$ 4,144	$ 4,003	$ 141	4 %
General and administrative	1,105	863	242	28 %
Operating loss	5,249	4,866	383	8 %
Financial expense (income), net	(215)	(137)	(78)	57 %
Loss	$ 5,034	$ 4,729	$ 305	6 %

Research and development expenses, net. Research and development expenses are shown net of NATI grants. Research and development expenses, net were approximately $4.1 million for the Period, compared to approximately $4.0 million in the Parallel Period, an increase of approximately $0.1 million or 4%. The increase in gross research and development expenses of $0.4 million or 9% is related to an in increase in share based compensation expense and other payroll related costs, offset by an increase in NATI grants due in the Period compared to the Parallel Period of $0.2 million or 100% due to the realization of the May 2016 NATI approved grant for the GBM program.

General and administrative expenses. General and administrative expenses for the Period were $1.1 million, compared to $0.9 million for the Parallel Period, an increase of $0.2 million or 28%. This increase is mainly attributed to payroll related costs for management share-based compensation expense.

Financial expenses (income), net. Financial expenses (income), net for the Period were approximately ($215) thousand, compared to approximately ($137) thousand for the Parallel Period, a decrease of $78 thousand or 57%. The decrease was primarily attributable to favorable foreign exchange gains.

Liquidity and Capital Resources

Since our inception and through March 31, 2017, we have raised a total of $113.4 million from sales of our equity securities before the initial public offering, $40.5 million gross in the initial public offering itself ($34.9 million net), $15 million from a November 3, 2015 underwritten offering, $24.0 million from a June 7, 2016 registered direct offering and $19.0 million from OCS grants. Our primary uses of cash have been to fund working capital requirements and research and development, and we expect these will continue to represent our primary uses of cash. We expect our cash, cash equivalents and short-term bank deposits as of March 31, 2017 to be sufficient to fund our operations into 2019.

Funding Requirements

At March 31, 2017, we had cash, cash equivalents and short-term bank deposits totaling $39.6 million and working capital of $37.2 million. We expect that our cash, cash equivalents and short-term bank deposits will enable us to fund our operating expenses and capital expenditure requirements into 2019 and is expected to be sufficient to enable us to complete our on-going Phase 3 clinical trial of VB-111 in rGBM, to support our planned potential registration trial in ovarian cancer and an exploratory clinical study of VB-111 in combination with a checkpoint inhibitor in lung cancer, as well as to support the investment in the new Modiin facility. We are unable to estimate the amounts of increased capital outlays and operating expenses associated with completing the development of VB-111 and our other product candidates. Our future capital requirements will depend on many factors, including:

- the costs, timing and outcome of regulatory review of VB-111 and any other product candidates we may pursue;
- the costs of future development activities, including clinical trials, for VB-111 and any other product candidates we may pursue;
- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims;
- the extent to which we acquire or in-license other products and technologies; and
- our ability to establish any future collaboration arrangements on favorable terms, if at all.

Until such time, if ever, as we can generate substantial product revenue, we expect to finance our cash needs through a combination of equity offerings, debt financings, collaborations, strategic alliances and licensing arrangements. We do not have any committed external source of funds.

Cash Flows

The following table sets forth the primary sources and uses of cash for each of the periods set forth below:

	Period ended March 31	
	2017	2016
	(in thousands) (unaudited)	
Cash used in operating activities	$ (5,676)	$ (3,970)
Cash (used in) provided by investing activities	(62)	4,933
Cash provided by (used in) financing activities	18	(32)
Net increase (decrease) in cash and cash equivalents	$ (5,720)	$ 931

Operating Activities

Cash used in operating activities for the Period was $5.7 million and consisted primarily of net loss of $5.0 million arising primarily from research and development activities in addition to a net increase in working capital of $1.3 million, and partially offset by net aggregate non-cash charges of $0.6 million.

Cash used in operating activities for the Parallel Period was $4.0 million and consisted primarily of net loss of $4.7 million arising primarily from research and development activities, partially offset by a net decrease in working capital

of $0.5 million, and net aggregate non-cash charges of $0.2 million.

Investing Activities

Net cash used by investing activities was $62 thousand for the Period.

Net cash provided by investing activities was $4.9 million for the Parallel Period. This was primarily due to the maturation of short-term bank deposits.

Financing Activities

Net cash provided by and used in financing activities was $18 thousand for the Period and ($32) thousand for the Parallel Period.

Contractual Obligations and Commitments

The following tables summarize our contractual obligations and commitments as of March 31, 2017 that will affect our future liquidity:

	Total	Less than 1 Year	1-3 Years	4-5 Years	More than 5 Years
			(in thousands)		
Licenses	$ 321	$ 107	$ 214	$ —	$ —
Operating Leases	2,582	390	733	661	798
Total	$2,903	$ 497	$ 947	$ 661	$ 798

In October 2016, we entered into a long-term lease contract for approximately $2.0 million in lease payments over seven years for a new facility in Modiin, Israel. The site will house our local biological drugs manufacturing facility, headquarters, discovery research and clinical development. We intend to operate and relocate to the new site in the second half of 2017.

Off-Balance Sheet Arrangements

Since our inception, we have not engaged in any off-balance sheet arrangements, as defined in the rules and regulations of the SEC, such as relationships with unconsolidated entities or financial partnerships, which are often referred to as structured finance or special purpose entities, established for the purpose of facilitating financing transactions that are not required to be reflected on our statement of financial positions.

Quantitative and Qualitative Disclosures about Market Risk

We are exposed to market risks in the ordinary course of our business. Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily a result of foreign currency exchange rates. Approximately 28% of our expenses in the first three months of 2017 were denominated in New Israeli Shekels. Changes of 5% in the US$/NIS exchange rate will increase or decrease the operation expenses by up to 1%.

Foreign Currency Exchange Risk

Fluctuations in exchange rates, especially the NIS against the U.S. dollar, may affect our results, as some of our assets are linked to NIS, as are some of our liabilities. In addition, the fluctuation in the NIS exchange rate against the U.S. dollar may impact our results, as a portion of our operating cost is NIS denominated.

Inflation Risk

We do not believe that inflation had a material effect on our business, financial condition or results of operations in the last two fiscal years. If our costs were to become subject to significant inflationary pressures, we may not be able to fully offset such higher costs through hedging transactions. Our inability or failure to do so could harm our business, financial condition and results of operations.

Recently Issued and Adopted Accounting Pronouncements

IFRS 9, Financial Instruments, addresses the classification, measurement and recognition of financial assets and financial liabilities. The complete version of IFRS 9 was issued in July 2014. It replaces the guidance in IAS 39 that relates to the classification and measurement of financial instruments. IFRS 9 retains but simplifies the mixed measurement model and establishes three primary measurement categories for financial assets: amortized cost, fair value through other comprehensive income I and fair value through the statement of comprehensive loss. There is now a new expected credit losses model that replaces the incurred loss impairment model used in IAS 39. For financial liabilities, there were no changes to classification and measurement except for the recognition of changes in own credit risk in other comprehensive income for liabilities designated at fair value through profit or loss. The standard is effective for accounting periods beginning on or after January 1, 2018. Early adoption is permitted. We have yet to assess IFRS 9's full impact.

In January 2016, the IASB issued IFRS 16—Leases which sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract and replaces the previous leases standard, IAS 17—Leases. IFRS 16 eliminates the classification of leases for the lessee as either operating leases or finance leases as required by IAS 17 and instead introduces a single lessee accounting model whereby a lessee is required to recognize assets and liabilities for all leases with a term that is greater than 12 months, unless the underlying asset is of low value, and to recognize depreciation of leases assets separately from interest on lease liabilities in the income statement. As IFRS 16 substantially carries forward the lessor accounting requirements in IAS 17, a lessor will continue to classify its leases as operating leases or finance leases and to account for those two types of leases differently. IFRS 16 is effective from January 1, 2019 with early adoption allowed only if IFRS 15—Revenue from Contracts with Customers is also applied. The Company is currently evaluating the impact of adoption on its Financial Statements.

JOBS Act

On April 5, 2012, the JOBS Act was signed into law. The JOBS Act contains provisions that, among other things, reduce certain reporting requirements for an "emerging growth company." As an "emerging growth company," we are electing to not take advantage of the extended transition period afforded by the JOBS Act for the implementation of new or revised accounting standards, and as a result, we will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth companies. Section 107 of the JOBS Act provides that our decision to not take advantage of the extended transition period for complying with new or revised accounting standards is irrevocable. In addition, we are in the process of evaluating the benefits of relying on the other exemptions and reduced reporting requirements provided by the JOBS Act.