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 2016

Commission File Number: 001-36581

Vascular Biogenics Ltd.

(Translation of registrant's name into English)

6 Jonathan Netanyahu St.
Or Yehuda
Israel 60376
(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 March 29, 2016 announcing financial results for the full year ended December 31, 2015 and business updates.

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.

VASCULAR BIOGENICS LTD.

Date: March 29, 2016

By: /s/ Dror Harats
Name: Dror Harats
Title: Chief Executive Officer

VBL Therapeutics Announces Full-Year 2015 Financial Results and Provides Business Update

Conference Call, Today @ 8:30am Eastern Time

TEL AVIV, Israel — March 29, 2016 — VBL Therapeutics (NASDAQ: VBLT), a clinical-stage biotechnology company focused on the discovery, development and commercialization of first-in-class treatments for cancer, today reported financial results and provided a business update for the year ended December 31, 2015.

“2015 was marked by major accomplishments in the clinic as we advanced VB-111, our first-in-class gene-therapy based agent for solid tumor indications,” said Dror Harats, M.D., Chief Executive Officer of VBL Therapeutics. “The positive data we reported in recurrent glioblastoma (rGBM), thyroid and ovarian cancers supports our conviction that VB-111 has the potential to become an important treatment option for various solid tumors cancer patients.”

“Our GLOBE™ study in rGBM, which we initiated in August 2015, continues to enroll patients in the U.S. and Israel. According to the study protocol, an interim analysis will take place when 91 mortality events have occurred in the trial, and we expect this to occur in the first half of 2017. As the GLOBE trial is conducted under an SPA with the FDA, we believe that this pivotal trial, if successful, will support a Biologics License Application (BLA) for VB-111 in 2018.”

“We look forward to additional data readouts and presentations on VB-111 in 2016. We expect to release updated results from the ovarian cancer trial, which will include data from tumor biopsies as well as survival data. In thyroid cancer, we will continue to observe the enrolled patients in the Phase 2 trial and expect to provide a full report by the end of the year.”

“VBL is well capitalized, with $37.1 million in cash and equivalents at year end 2015. We expect this will support our operations through the first half 2018, post the Phase 3 readout on the GLOBE pivotal trial,” Said Mr. Amos Ron, the Company’s CFO.

2015 Clinical and Corporate Highlights:

- **Initiated Pivotal Phase 3 GLOBE™ Study of VB-111 in Recurrent Glioblastoma:** The GLOBE™ Study is a Phase 3 trial of VB-111 in rGBM, that is proceeding under a special protocol assessment (SPA) granted by the U.S. Food and Drug Administration (FDA). The trial is expected to enroll 252 patients with rGBM and will recruit patients from about 50 sites in the United States, Canada and Israel. The primary efficacy endpoint is overall survival. The trial is recruiting according to plan and an interim analysis is expected to occur in the first half of 2017, based on enrollment and VB-111 activity.
- **Reported full Phase 2 Data from Clinical Trial of VB-111 in rGBM at the European Cancer Conference (ECC 2015):** Trial met primary endpoint, showing statistically significant overall survival benefit. Patients treated with VB-111 in combination with

Avastin™ upon disease progression (continuous exposure cohort) had a median overall survival (mOS) of 15 months, compared to mOS of 8 months in patients treated with VB-111 followed by Avastin™ alone (p=0.048). The Company also reported an overall response rate (ORR) data of 29%, with 2 complete responders in the continuous exposure cohort, compared to 9% with no complete responders in the limited exposure cohort.

- **Presented data on VB-111 at the 20th Annual Scientific Meeting and Education Day of the Society for Neuro-Oncology (SNO):** The results showed significant improvement of 12-month overall survival (OS), with 57% on VB-111 compared to data pooled from four different Avastin™ studies in rGBM reporting 28%, with a p-value of 0.007. Full formal comparison of VB-111 Phase 2 data to an independent academic meta-analysis of Avastin historical control data, will be presented in the 2nd quarter of 2016.
- **Announced positive results from the multi-cohort Phase 2 trial of VB-111 in advanced radioiodine-refractory differentiated thyroid cancer (RAIR-DTC):** The pre-specified primary trial endpoint of 6-month Progression Free Survival (PFS) for at least 25% of enrolled patients was met, showing a dose response for VB-111.
- **Presented positive interim results from VB-111 Phase 1/2 study in platinum-resistant ovarian cancer:** At the 2015 American Society of Clinical Oncology (ASCO) annual meeting in June, VBL announced promising interim results from the Phase 1/2, investigator-initiated trial of multiple-dose VB-111 in patients with recurrent, platinum-resistant ovarian cancer. The data demonstrated evidence of clinical benefit in patients who received VB-111 in conjunction with weekly paclitaxel, with 60% of high-dose patients meeting the GCIG response criteria based on a reduction of at least 50% in the CA-125 tumor-marker levels.
- **Presented data on proprietary gene therapy Vascular Targeting System (VTS)™:** At the Drug Discovery and World Therapy Congress (DDTWC), presented data on VTS, the Company's proprietary gene therapy technology which enables targeted and specific expression of a gene of choice in angiogenic blood vessels through unique "super enhancer" DNA regulatory sequences.
- **Strengthened intellectual property:** Granted US Patent No. 9,200,056, entitled "*A Fas-Chimera Adenovirus Vector*" covering VB-111. This composition of matter patent provides intellectual property protection for VB-111 in the US until October 2033, before any patent term extension.
- **Completed an underwritten offering, raising $15 million in gross proceeds:** In November 2015, the Company closed an underwritten offering of 2.5 million ordinary shares together with accompanying warrants to purchase an aggregate of 1.25 million shares. The aggregate net proceeds from this offering were approximately $14 million, after deducting underwriting discounts and commissions.

Full-Year 2015 Financial Results:

- **Cash Position**: Cash, cash equivalents and short-term bank deposits as of December 31, 2015 were $37.1 million, compared to $36.8 million at year-end 2014. The Company expects that the cash position is sufficient to complete the on-going Phase 3 clinical trial of VB-111 in rGBM, the Phase 2 clinical trial of VB-111 in thyroid cancer, and the Phase 2a clinical trial for VB-111 in ovarian cancer.

- **R&D Expenses**: Research and development expenses were $11.2 million for the year ended December 31, 2015, compared to $11.0 million in the year ended December 31, 2014. The bulk of the R&D Expenses was for the VB-111 subcontractors and consultants in 2015 as the Phase 3 pivotal trial of VB-111 in rGBM commenced in August 2015.
- **G&A Expenses**: General and administrative expenses were $3.7 million for the year ended December 31, 2015, compared to $3.8 million in the year ended December 31, 2014.
- **Net Loss**: Net loss was $14.9 million, or $0.73 per share for the year ended December 31, 2015, compared to net loss of $17.4 million, or $3.09 per share in the same period of 2014.

Avastin™ is a registered trademark of Genentech.

Conference Call, Tuesday, March 29, 2016 @ 8:30am Eastern Time

Domestic:	888-428-9480
International:	719-457-2648
Conference ID:	3465224
Webcast:	http://edge.media-server.com/m/p/a4mzgp3s

Replays, available through April 12, 2016

Toll Free:	877-870-5176
International:	858-384-5517
Conference ID:	3465224

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, VB-111, is a first-in-class, targeted anti-cancer gene-therapy agent that is positioned to treat a wide range of solid tumors. VB-111 is conveniently administered as an IV infusion once every two months. It has been observed to be well-tolerated in >170 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. The mechanism of VB-111 combines blockade of tumor vasculature with an anti-tumor immune response. This mechanism retains activity regardless of baseline tumor mutations or the identity of the pro-angiogenic factors secreted by the tumor. VB-111 is currently being studied in a Phase 3 pivotal trial for Recurrent Glioblastoma (rGBM). The trial is being conducted under an FDA Special Protocol Assessment (SPA), and VB-111 has obtained fast track and Orphan designations.

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 VB-111 and its therapeutic potential and clinical results, including statements related to the GLOBE study and the timing of our BLA, our intellectual property protection from our US Patent No. 9,200,056, and our cash position and funding requirements. 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 VB-111 in rGBM may not support approval of VB-111 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.
STATEMENTS OF FINANCIAL POSITION

	December 31	
	2015	2014
	U.S. dollars in thousands	
Assets		
CURRENT ASSETS:		
Cash and cash equivalents	$ 7,090	$36,783
Short-term bank deposits	30,056	—
Other current assets	1,446	961
TOTAL CURRENT ASSETS	38,592	37,744
NON-CURRENT ASSETS:		
Property and equipment, net	326	358
Long-term prepaid expenses	320	36
TOTAL NON-CURRENT ASSETS	646	394
TOTAL ASSETS	$ 39,238	$38,138
Liabilities and equity		
CURRENT LIABILITIES -		
Accounts payable:		
Trade	$ 2,050	$695
Other	2,108	2,235
TOTAL CURRENT LIABILITIES	4,158	2,930
NON-CURRENT LIABILITIES -		
Severance pay obligations, net	73	106
TOTAL LIABILITIES	4,231	3,036
COMMITMENTS		
EQUITY:		
Ordinary shares, NIS 0.01 par value; Authorized as of December 31, 2015 and 2014, 70,000,000 and 49,200,000 shares, respectively; issued and outstanding as of December 31, 2015 and 2014, 22,470,321 and 19,898,674 shares, respectively	38	32
Other comprehensive income	45	39
Additional paid in capital	174,012	162,191
Warrants	2,960	—
Accumulated deficit	(142,048)	(127,160)
TOTAL EQUITY	35,007	35,102
TOTAL LIABILITIES AND EQUITY	$ 39,238	$38,138

VASCULAR BIOGENICS LTD.
STATEMENTS OF COMPREHENSIVE LOSS

	2015	2014
	U.S. dollars in thousands	
RESEARCH AND DEVELOPMENT EXPENSES, net	$ 11,198	$ 10,974
GENERAL AND ADMINISTRATIVE EXPENSES	3,673	3,804
OPERATING LOSS	14,871	14,778
FINANCIAL INCOME	(100)	(15)
FINANCIAL EXPENSES:		
Loss from change in fair value of convertible loan	—	2,342
Other financial expenses	117	302
FINANCIAL EXPENSES (INCOME), net	17	2,629
LOSS FOR THE YEAR	14,888	17,407
OTHER COMPREHENSIVE INCOME -		
items that will not be reclassified to profit or loss -		
re-measurements of post-employment benefit obligation	(6)	(10)
COMPREHENSIVE LOSS	$ 14,882	$ 17,397
	U.S. dollars	
LOSS PER ORDINARY SHARE		
basic and diluted	$ 0.73	$ 3.09
WEIGHTED AVERAGE ORDINARY SHARES OUTSTANDING -		
basic and diluted	20,309,596	5,627,324