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 January 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 January 9, 2017, entitled "VBL Therapeutics Provides Year End 2016 Corporate Update". 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No. 333-207250), filed with the Securities and Exchange Commission (the "SEC") on October 2, 2015, to the extent not superseded by information subsequently filed or furnished (to the extent the Company expressly states that it incorporates such furnished information by reference) by the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.

VASCULAR BIOGENICS LTD.

Date: January 9, 2017

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

Exhibit 99.1

VBL Therapeutics Provides Year End 2016 Corporate Update

TEL AVIV, ISRAEL, January 9, 2017 — VBL Therapeutics (NASDAQ: VBLT), provides corporate update and reviews anticipated highlights for 2017.

- Following positive EOP2 meeting on VB-111 in ovarian cancer, VBL plans to launch a Phase 3 trial of VB-111 in Ovarian Cancer during the second half of 2017.
- Interim analysis in the GLOBE pivotal study is expected in mid-2017, with top-line data expected in early 2018.
- VBL's novel immune-oncology target to be disclosed during 1H 2017

Dear Fellow Shareholders,

As we conclude 2016 and look forward to a busy year for the Company in 2017, I wanted provide you with a review of VBL Therapeutics' recent accomplishments and share the goals we have set for the coming year.

VBL Therapeutics is a Phase 3 stage biopharmaceutical company whose mission is to develop and commercialize first-in-class treatments for cancer. We are starting the new year in a strong position on all major fronts – clinical, regulatory, scientific and financial.

Our major focus during 2016 was on advancing clinical development of VB-111 (ofranergene obadenovec). VB-111 is a unique biologic agent that uses a dual mechanism to target solid tumors. Based on a non-integrating, non-replicating, Adeno 5 vector, VB-111 utilizes VBL's proprietary Vascular Targeting System (VTS™) to target the tumor vasculature for cancer therapy. Unlike anti-VEGF or TKIs, VB-111 does not aim to block a specific pro-angiogenic pathway; instead, it uses an angiogenesis-specific sensor (VBL's PPE-1-3x proprietary promoter) to specifically induce cell death in angiogenic endothelial cells in the tumor milieu. This mechanism retains activity regardless of baseline tumor mutations or the identity of the pro-angiogenic factors secreted by the tumor and shows efficacy even after failure of prior treatment with other anti-angiogenics. Moreover, VB-111 induces specific anti-tumor immune response, which is accompanied by recruitment of CD8 T-cells and apoptosis of tumor cells.

We made excellent progress in 2016 with VB-111 across three Phase 2 studies for different oncology indications – recurrent glioblastoma (rGBM), platinum-resistant ovarian cancer, and radio-iodine resistant thyroid cancer.

VBL's Phase 2 study of VB-111 in rGBM met its primary endpoint, almost doubling median Overall Survival (mOS). At ASCO 2016, we presented additional clinical analyses that demonstrate significant OS benefit in rGBM patients receiving VB-111 through progression, compared with historical meta-analysis data for the standard-of-care Avastin®. During 2016, we continued to advance our GLOBE pivotal study in rGBM and were pleased to announce that this study completed enrollment five months ahead of our initial projection. Earlier in 2016 the independent Data Safety Monitoring Committee (DSMC), which oversees this trial, recommended that the study continue as planned following their scheduled review.

In platinum-resistant Ovarian Cancer, we presented data at ASCO 2016 demonstrating a significant increase in OS with VB-111 given in combination with chemotherapy, along with 60% durable CA-125 response rate. This is approximately 2x the historical response with Avastin® plus chemotherapy in ovarian cancer. In December 2016 we had an End-of-Phase 2 meeting with the FDA to discuss the clinical path of VB-111 in Ovarian cancer. We have agreement with the FDA on our clinical plan, to proceed directly to a Phase 3 pivotal study in platinum-resistant patients, with OS as the primary endpoint. We are excited to advance VB-111 for this orphan indication, in which current therapies often fail to prolong patient survival, and plan to launch an Ovarian Cancer pivotal study in the second half of 2017.

In recurrent Thyroid Cancer, we reported overall survival data for VB-111 monotherapy in our Phase 2 study. The study previously met its primary endpoint, demonstrating disease stabilization and safety, along with a dose-response. The new data showed evidence of an overall survival benefit for patients treated with therapeutic dose of VB-111. We see these positive data as additional proof-of-concept for VB-111 in a third type of advanced solid tumor, particularly important for demonstrating potential VB-111 efficacy even as monotherapy. We intend to present the full data set from this trial during the first quarter of 2017. Our primary focus continues to be advancement of VB-111 towards commercialization in the rGBM and Ovarian Cancer indications.

In 2017, VBL anticipates a number of clinical development value enhancing milestones. The GLOBE trial has the potential to become a key inflection point for our company, as it is a pivotal study in an orphan indication with a huge unmet need. In addition to the successful operational efforts that allowed us to complete enrollment ahead of schedule, we also recently received FDA approval for adjustments in the protocol of the GLOBE trial under the Special Protocol Assessment (SPA), related to the timing of the interim and final analyses. We believe that these adjustments will provide better powering and increase the probability for a clearer efficacy signal. Given the faster-than-projected recruitment pace during 2016 and the completion of recruitment for the GLOBE study, we continue to expect that the interim analysis will occur in mid-2017 and that the top line data from the full dataset will be available in early 2018. In addition, we intend to launch a Phase 3 pivotal study in platinum-resistant Ovarian Cancer during the second half of 2017 and are also exploring the launch of an exploratory clinical study of VB-111 in combination with a checkpoint inhibitor.

As we plan ahead towards the potential commercialization of VB-111, we expect to enhance our manufacturing capabilities through operation of a new manufacturing facility in Modiin, Israel. The new facility will also include the company's headquarters, discovery research and clinical development. We signed a long-term lease contract last October and intend to operate and relocate to the new site in the second half of 2017.

Additional potential milestones may emerge from VBL's innovative pipeline. Our continuing research into the mechanisms of cancer biology led us to identify a cell surface protein which is involved in the motility of certain cancer cells and immune cells. Serving as the basis for VBL's "VB-600" series, our researchers have developed antibodies against this novel target, which may have potential in clinical applications. We intend to provide additional data about this target protein in first half of 2017.

VBL's pipeline also includes the Lecinoxoids family of anti-inflammatory small molecules. In 2016, we presented results for the Phase-2-ready VB-201 drug candidate and the next-generation molecule VB-703 for the treatment of non-alcoholic steatohepatitis (NASH) and liver fibrosis. We are exploring strategic collaborations that will advance the clinical and business potential of the Lecinoxoids, as well as pre-clinical assets from our VTS platform.

We begin 2017 with a solid financial position. In 2016, we successfully closed a $24 million registered direct offering, which further strengthened our capital. We are grateful for the support of existing and new investors and we now expect to be able to fund the company into 2019, beyond the readout of the GLOBE trial. In addition to the GLOBE trial, the budgeted work plan includes the Phase 3 study in ovarian cancer, the establishment of the new manufacturing site, an exploratory clinical study of VB-111 in combination with CPIs and the next stage of the preclinical development of our novel immune-oncology target.

In closing, we are excited by the progress we made in 2016 and by the promise of our technology as we actively advance novel drug candidates through multiple programs from the pre-clinical stage to a pivotal Phase 3 studies. I would like to thank our excellent team for their dedication and hard work, our board members for their guidance and contribution to the progress of the company, and our shareholders for their support of our strategy and potential. I look forward to another productive year in 2017.

Sincerely

Dror Harats,

Chief Executive Officer

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, targeted anti-cancer gene-therapy agent that is positioned to treat a wide range of solid tumors. It 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, clinical trials and clinical results, including the timing thereof, our other pipeline candidates, 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, including in our annual report on Form 20-F for the year ended December 31, 2015. 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.

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