

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

AMENDMENT NO. 5
to
FORM S-4
REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

Vascular Biogenics Ltd.
(Exact name of registrant as specified in its charter)

Israel
(State or other jurisdiction of
incorporation or organization)

2834
(Primary Standard Industrial
Classification Code Number)

Not Applicable
(I.R.S. Employer
Identification Number)

**8 HaSatat St.
Modi'in
Israel 7178106
+972-8-9935000**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Sam Backenroth
Chief Financial Officer
VBL, Inc.
1 Blue Hill Plaza, Suite 1509
Pearl River, NY 10965
+1-845-474-8411**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

**Mitchell S. Bloom, Esq.
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Andrew H. Goodman, Esq.
Tevia K. Pollard, Esq.
Goodwin Procter LLP
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(617) 570-1000**

**Yuval Horn, Adv.
Shimrit Roznek, Adv.
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Amot Investment Tower,
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Tel Aviv, Israel
+972-3-637-8200**

**Thomas Bock
Chief Executive Officer
Notable Labs, Inc.
320 Hatch Drive
Foster City, CA 94404
(415) 851-2410**

**Evan Kipperman, Esq.
Michael Grunde, Esq.
Elishama Rudolph, Esq.
Wiggin and Dana LLP
281 Tresser Boulevard, 14th
Floor
Stamford, CT 06901
(203) 363-7600**

Approximate date of commencement of proposed sale of the securities to the public: **As soon as practicable after the effectiveness of this registration statement and the satisfaction or waiver of all other conditions under the Merger Agreement described herein.**

If the securities being registered on this Form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer
Non-accelerated filer Smaller reporting company
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act

If applicable, place an X in the box to designate the appropriate rule provision relied upon in conducting this transaction:

Exchange Act Rule 13(e)-4(i) (Cross-Border Issuer Tender Offer)

Exchange Act Rule 14d-1(d) (Cross-Border Third-Party Tender Offer)

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

Vascular Biogenics Ltd. is filing this Amendment No. 5 to its registration statement on Form S-4 (File No. 333-271826) as an exhibits-only filing. Accordingly, this amendment consists only of the facing page, this explanatory note, Item 21 of Part II of the Registration Statement, the signature page to the Registration Statement and the filed exhibits. The remainder of the Registration Statement is unchanged and has therefore been omitted.

PART II

INFORMATION NOT REQUIRED IN PROXY STATEMENT/PROSPECTUS/INFORMATION STATEMENT

Item 21. Exhibits and Financial Statement Schedules

(a) Exhibits

The following exhibits are filed as part of this Registration Statement:

Exhibit No.	Description
2.1*++	<u>Agreement and Plan of Merger, dated as of February 22, 2023, by and among Vascular Biogenics Ltd., Vibrant Merger Sub, Inc., and Notable Labs, Inc. (included as Annex A to the proxy statement/prospectus/information statement forming a part of this registration statement).</u>
2.2*	<u>Form of Support Agreement, by and between Vascular Biogenics Ltd. and Notable Labs, Inc. and certain directors and officers of Notable Labs, Inc.</u>
2.3*	<u>Form of Support Agreement, by and between Vascular Biogenics Ltd., Notable Labs, Inc., and certain directors and officers of Vascular Biogenics Ltd.</u>
2.4*	<u>Form of Lock-Up Agreement, by and among Notable Labs, Inc., Vascular Biogenics Ltd., and certain directors and officers of Notable Labs, Inc.</u>
2.5*	<u>Form of Lock-Up Agreement, by and among Notable Labs, Inc., Vascular Biogenics Ltd., and certain directors and officers of Vascular Biogenics Ltd.</u>
3.1	<u>Articles of Association of Vascular Biogenics Ltd. (incorporated by reference to Exhibit 3.1 of the Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 14, 2023).</u>
3.2	<u>Memorandum of Association of Vascular Biogenics Ltd. (incorporated by reference to Exhibit 3.2 of the Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 14, 2023).</u>
4.1	<u>Form of Certificate for Ordinary Shares (incorporated by reference to Exhibit 4.2 of Registration Statement on Form F-1 filed with the Securities and Exchange Commission on July 29, 2014).</u>

- 5.1 [Opinion of Horn & Co., Israeli counsel to Vascular Biogenics Ltd.](#)
- 8.1* [Tax Opinion of Goodwin Procter LLP, U.S. tax counsel to Vascular Biogenics Ltd.](#)
- 8.2* [Tax Opinion of Wiggin and Dana LLP, tax counsel to Notable Labs, Inc.](#)
- 10.1 [Employee Ownership and Share Option Plan \(2011\) of Vascular Biogenics Ltd., and form of agreement thereunder \(incorporated by reference to Exhibit 10.1 of the Registration Statement on Form F-1 filed with the Securities and Exchange Commission on June 6, 2014\).](#)
- 10.2 [Employee Share Ownership and Option Plan \(2014\) of Vascular Biogenics Ltd., and form of Capital Gains Option Agreement thereunder \(incorporated by reference to Exhibit 10.17 of the Registration Statement on Form F-1 filed with the Securities and Exchange Commission on June 25, 2014\).](#)
- 10.3 [Vascular Biogenics Ltd. Inducement Plan \(2022\) of Vascular Biogenics Ltd. and form of award agreements thereunder \(incorporated by reference to Exhibit 99.1 of the Current Report on Form 6-K filed with the Securities and Exchange Commission on February 15, 2022\).](#)
- 10.4 [Form of Release and Indemnification Agreement to be entered into between Vascular Biogenics Ltd. and its officers and directors \(incorporated by reference to Exhibit 10.3 of the Registration Statement on Form F-1 filed with the Securities and Exchange Commission on June 25, 2014\).](#)
- 10.5 [Restated Executive Employment Agreement between Vascular Biogenics Ltd. and Dror Harats, dated January 20, 2022 \(incorporated by reference to Exhibit 10.5 of the Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 14, 2023\).](#)
- 10.6 [Restated Consulting and Services Agreement between Vascular Biogenics Ltd. and Grand H Services Ltd., dated January 20, 2022, as amended on August 23, 2022 \(incorporated by reference to Exhibit 10.6 of the Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 14, 2023\).](#)
- 10.7 [Employment Offer Letter between Vascular Biogenics Ltd. and Sam Backenroth, dated October 4, 2021 \(incorporated by reference to Exhibit 10.7 of the Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 14, 2023\).](#)
- 10.8 [Form of Pre-Funded Warrant \(incorporated by reference to Exhibit 4.1 of the Current Report on Form 6-K filed with the Securities and Exchange Commission on April 12, 2021\).](#)
- 10.9*+ [Exclusive License Agreement by and between Notable Labs, Inc. and Oncoheroes Biosciences Inc. dated October 1, 2021.](#)
- 10.10* [Side Letter by and between Boehringer Ingelheim International GmbH and Oncoheroes Biosciences Inc. dated August 1, 2019, as amended by Amendment #1 effective on April 5, 2020.](#)
- 10.11*+ [Co-Development and Profit-Sharing Agreement between Notable Labs, Inc. and CicloMed LLC dated July 20, 2021.](#)
- 10.12* [Standard Industrial/Commercial Single-Tenant Lease by and between Hatch Drive Associates and the Notable Labs, Inc., dated as of March 25, 2019.](#)
- 10.13* [First Amendment to Lease Agreement by and between Hatch Drive Associates, LLC and Notable Labs, Inc., dated as of April 27, 2023.](#)
- 10.14* [Amended and Restated Employment Agreement by and between Notable Labs, Inc. and Thomas Bock dated April 30, 2021.](#)
- 10.15* [Employment Agreement by and between Notable Labs, Inc. and Joseph Wagner dated June 15, 2020.](#)
- 10.16* [Engagement Letter by and between Notable Labs, Inc. and Scott A. McPherson dated March 1, 2023.](#)
- 10.17* [2015 Stock Plan of Notable Labs, Inc.](#)

10.18*	Form of Series C Warrant Agreement between Notable Labs, Inc. and purchasers of Series C-1 Preferred Stock, dated June 2021.
10.19*	Form of Stock Option Award Agreement between Notable Labs, Inc. and purchasers of Series C-1 Preferred Stock, dated June 2021.
10.20**+	Stock Purchase Agreement between Notable and investors party thereto dated February 22, 2023
10.21*	Non-Binding Term Sheet between Vascular Biogenics Ltd. and Wellbeing Group Ltd., dated June 30, 2023, as amended July 25, 2023 included as Annex D to the proxy statement/prospectus/information statement forming a part of this registration statement).
23.1*	Consent of Kesselman & Kesselman, a member firm of PricewaterhouseCoopers International Ltd., independent registered public accounting firm to Vascular Biogenics Ltd.
23.2*	Consent of Deloitte & Touche LLP, Independent Auditors of Notable Labs, Inc.
23.3	Consent of Horn & Co. (contained in Exhibit 5.1).
23.4*	Consent of Goodwin Procter LLP (contained in Exhibit 8.1).
23.5*	Consent of Wiggin and Dana LLP (contained in Exhibit 8.2).
24.1*	Power of Attorney (included on signature page to this Registration Statement).
99.1*	Form of Proxy Card for Special Meeting of Shareholders of Vascular Biogenics Ltd.
99.2*	Opinion of Chardan Capital Markets LLC, financial advisor to Vascular Biogenics Ltd. (included as Annex B to the proxy statement/prospectus/information statement forming part of this registration statement).
99.3*	Consent of Chardan Capital Markets LLC, financial advisor to Vascular Biogenics Ltd.
99.4*	Consent of Dr. Thomas A. Bock to be named as director.
99.5*	Consent of Thomas I. H. Dubin to be named as director.
99.6*	Consent of Thomas Graney to be named as director.
99.7*	Consent of Peter Feinberg to be named as director.
99.8*	Consent of Michele Galen to be named as director.
99.9*	Consent of Tuomo Pätssi to be named as director.
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document.
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104	Cover Page Interactive Data File.
107*	Filing Fee Table.

* Previously filed.

** To be filed by amendment.

+ Portions of this Exhibit (indicated with [****]) have been omitted as the Registrant has determined that (i) the omitted information is not material and (ii) the omitted information would likely cause competitive harm to the Registrant if publicly disclosed.

++ Certain schedules and exhibits have been omitted pursuant to Item 601(b)(2) of Regulation S-K. A copy of any omitted schedule and/or exhibit will be furnished to the SEC upon request.

(b) Financial Statements

The financial statements filed with this registration statement on Form S-4 are set forth on the Financial Statement Index and is incorporated herein by reference.

SIGNATURES

Pursuant to the requirements of the Securities Act, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the city of Modi'in, country of Israel, on the 5th day of September, 2023.

VASCULAR BIOGENICS LTD.

By: /s/ Dror Harats
Dror Harats, M.D.
Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Dror Harats</u> Dror Harats, M.D.	Chief Executive Officer, and Director (Principal Executive Officer)	September 5, 2023
<u>/s/ Sam Backenroth</u> Sam Backenroth	Chief Financial Officer (Principal Accounting Officer)	September 5, 2023
<u>*</u> Marc Kozin	Chairman of the Board of Directors	September 5, 2023
<u>*</u> Ruth Alon, MBA	Director	September 5, 2023
<u>*</u> Shmuel Ben Zvi, Ph.D.	Director	September 5, 2023
<u>*</u> David Hastings	Director	September 5, 2023
<u>*</u> Michael Rice	Director	September 5, 2023

* By: /s/ Dror Harats
Name: Dror Harats, M.D.
Title: Attorney-in-fact



**Yuval Horn, Keren Kanir*, Roy Ribon, Paz Abercohen, Shimrit Roznek, Yonatan Levinstein,
Assaf Unger, Uri Dotan, Danielle Wassner, Yael Bar Hillel*, Victoria Zilberman,
Tal Gazanda, Shira Brami, Shiran Glantz, Revital Guttman, Ana Eiskov, Tal Belkin**

* Also admitted in New York

Tel-Aviv, September 5, 2023

Ref: 6066/60

To:
Vascular Biogenics Ltd.
8 HaSatat St.
Modi'in, Israel 7178106

Ladies and Gentlemen:

Re: **Form S-4**

We have acted as Israeli counsel for Vascular Biogenics Ltd., an Israeli company (the “**Company**”), in connection with the filing by the Company of a Registration Statement on Form S-4 (Registration No. 333-271826) (as amended or supplemented, the “**Registration Statement**”) pursuant to the Securities Act of 1933, as amended (the “**Securities Act**”), relating to the registration of the offering by the Company of approximately 249,041,467 ordinary shares of the Company, NIS 0.01 par value per share (the “**Shares**”). The Shares are being issued to the stockholders of Notable Labs, Inc., a Delaware corporation (“**Notable**”) pursuant to the merger contemplated by the Agreement and Plan of Merger, dated February 22, 2023, by and among the Company, Vibrant Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of the Company, and Notable (as may be amended and/or restated from time to time, the “**Merger Agreement**”).

In connection herewith, we have examined the originals, or photocopies or copies, certified or otherwise identified to our satisfaction, of: (i) the Registration; (ii) a copy of the memorandum of association and the articles of association of the Company, as currently in effect; (iii) resolutions of the board of directors (the “**Board**”) which have heretofore been approved and, in each case, which relate to the Registration Statement and other actions to be taken in connection with the Merger Agreement (the “**Resolutions**”); and (iv) such other corporate records, agreements, documents and other instruments, and such certificates or comparable documents of public officials and of officers and representatives of the Company as we have deemed relevant and necessary as a basis for the opinions hereafter set forth. We have also made inquiries of such officers and representatives as we have deemed relevant and necessary as a basis for the opinions hereafter set forth.

In rendering an opinion on the matters hereinafter set forth, we have assumed the authenticity and completeness of all documents submitted to us as originals, the conformity to original documents of all photocopies, conformed copies, email or facsimiles submitted to us, the genuineness of all signatures and the legal capacity and due authenticity of all persons executing such documents. We have assumed the same to have been properly given and to be accurate, and we have assumed the truth of all facts communicated to us by the Company, and have assumed that all actions by written consents, minutes and protocols of meetings of the Board which have been provided to us are true and accurate.

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Amot Investments Tower 24th Floor, 2 Weizmann St., Tel Aviv 6423902, Israel

In connection herewith, we have assumed that, other than with respect to the Company, all of the documents referred to in this opinion letter have been duly authorized by, have been duly executed and delivered by, and constitute the valid, binding and enforceable obligations of, all of the parties to such documents, all of the signatories to such documents have been duly authorized and all such parties are duly organized and validly existing and have the power and authority (corporate or other) to execute, deliver and perform such documents.

This opinion is limited to the matters stated herein and no opinion is implied or may be inferred beyond the matters expressly stated herein.

Based upon the foregoing, in reliance thereon and subject to the assumptions, comments, qualifications, limitations and exceptions stated herein and the effectiveness of the Registration Statement under the Securities Act, we are of the opinion that the Shares have been duly authorized and, upon issuance and delivery in exchange for the outstanding shares of capital stock of Notable, in accordance with the terms of the Merger Agreement the Shares will be legally and validly issued, fully paid and non-assessable.

Members of our firm are admitted to the Bar in the State of Israel, and we do not express any opinion as to the laws of any other jurisdiction. The opinions set forth herein are made as of the date hereof and are subject to, and may be limited by, future changes in the factual matters set forth herein, and we undertake no duty to advise you of the same. The opinions expressed herein are based upon the law in effect (and published or otherwise generally available) on the date hereof, and we assume no obligation to revise or supplement these opinions should such law be changed by legislative action, judicial decision or otherwise. In rendering our opinions, we have not considered, and hereby disclaim any opinion as to, the application or impact of any laws, cases, decisions, rules or regulations of any jurisdiction, court or administrative agency other than those of the State of Israel.

We hereby consent to the use of this opinion as an exhibit to the Registration Statement and to the reference to our firm appearing under the caption "Legal Matters" in the Registration Statement. In giving this consent, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act, the rules and regulations of the SEC promulgated thereunder, or Item 509 of the SEC's Regulation S-K promulgated under the Securities Act.

Sincerely yours,

/s/ Horn & Co. - Law Offices

Horn & Co. - Law Offices
