
**UNITED STATES
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 November 2019

Commission File Number: 001-36581

Vascular Biogenics Ltd.
(Translation of registrant's name into English)

**8 HaSatat St.,
Modi'in,
Israel 7178106**
(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):

Yes No

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):

Yes No

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

On November 1, 2019, Vascular Biogenics Ltd. (the “Company”) announced its annual general meeting of shareholders (the “Meeting”) and made available to its shareholders certain other materials in connection with such meeting. Furnished herewith as Exhibits 99.1 and 99.2, respectively, are the following documents relating to the Meeting:

1. Notice of the 2019 Annual General Meeting of Shareholders to be Held on December 23, 2019.
2. Proxy Statement and Proxy Card for use in connection with the Company’s Meeting.

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: November 1, 2019

By: /s/ Dror Harats

Name: Dror Harats

Title: Chief Executive Officer

EXHIBIT INDEX

The following exhibits are furnished as part of this Form 6-K:

| <u>Exhibit</u> | |
|----------------|--|
| 99.1 | Notice of Annual General Meeting of Shareholders to be held on December 23, 2019 |
| 99.2 | Proxy Statement and Proxy Card for use in connection with the Company's Meeting. |



VASCULAR BIOGENICS LTD.

8 HaSatat St. Modi'in, Israel Tel. +972-8-9935000 Fax. +972-8-9935001

**NOTICE OF ANNUAL GENERAL MEETING OF SHAREHOLDERS
TO BE HELD ON DECEMBER 23, 2019**

Dear Vascular Biogenics Ltd. Shareholders:

We cordially invite you to attend an Annual General Meeting of shareholders of Vascular Biogenics Ltd., or the Company, to be held at 4:00 p.m. (Israel time) on December 23, 2019, at our offices at 8 HaSatat St. Modi'in, Israel (the "Meeting").

The Meeting is being called for the following purposes:

- (1) To approve the nomination of Dr. Bennett M. Shapiro, Prof. Dror Harats, Prof. Ruth Arnon, Ms. Ruth Alon, Dr. Shmuel (Muli) Ben Zvi, Dr. Ron Cohen, Mr. David Hastings and Dr. Susan Kelley to the Board, to serve until the next annual general meeting of shareholders of the Company, under the existing terms of appointment as previously approved, aside from the resolutions herein, until each of their successors is duly appointed and qualified, or until any of their earlier resignation or removal (voting will take place in relation to each director nominee separately);
- (2) To approve the re-appointment of Kesselman & Kesselman, a member firm of PricewaterhouseCoopers International Limited, as the Company's independent registered public accounting firm for the year ending December 31, 2019, and until the next annual general meeting of shareholders of the Company and authorize the Board (with power of delegation to its audit committee) to fix the said independent registered public accounting firm's remuneration in accordance with the volume and nature of its services; and
- (3) To approve a compensation policy for the directors and other office holders of the Company, in accordance with the requirements of the Israeli Companies Law, 5759-1999.
- (4) To approve the grant of options and performance share units under the Company's 2014 Employee Share Ownership and Option Plan (the "2014 Plan") according to the standard agreements as follows: (i) grant of an option to purchase 240,000 of our ordinary shares to Prof. Harats; (ii) grant of an option to purchase 100,000 of our ordinary shares to Dr. Shapiro; (iii) grant of an option to purchase 50,000 of our ordinary shares to Dr. Cohen; (iv) grant of an option to purchase 50,000 of our ordinary shares to Prof. Arnon; (v) grant of an option to purchase 50,000 of our ordinary shares to Ms. Alon; (vi) grant of an option to purchase 50,000 of our ordinary shares to Mr. Hastings; (vii) grant of an option to purchase 50,000 of our ordinary shares to Dr. Kelley; and (viii) grant of an option to purchase 20,000 of our ordinary shares to Dr. Ben Zvi, each of which shall vest upon and in the manner approved by the Compensation Committee and the Board of Directors;

At the Meeting, we will also present and discuss our annual audited consolidated financial statements for the year ended December 31, 2018, as previously made available to our shareholders as part of our Form 20-F filed with the Securities and Exchange Commission and available at www.sec.gov and in the "Investor Relations" section of our Company's website, www.vblrx.com. We will also transact such other business as may properly come before the Meeting or any adjournment thereof.

The affirmative vote of the holders of a majority of the voting power represented at the Meeting in person or by proxy and voting thereon (which excludes abstentions) is necessary for the approval of each of the proposals.

The proposals and details with respect to the Meeting are described more fully in the enclosed proxy statement, which the Company will send (together with this notice) to its shareholders, which we urge you to read in its entirety. This notice, proxy statement and related proxy card are also being furnished to the U.S. Securities and Exchange Commission, or the SEC, in a report on Form 6-K, which may be obtained for free from the SEC's website at www.sec.gov or at the Company's website — at www.vblrx.com. The full text of the proposed resolutions, together with the form of proxy card for the Meeting, may also be viewed beginning on November 1, 2019 at the registered office of the Company, 8 HaSatat St. Modi'in, Israel, upon prior coordination with the Company. Our telephone number at our registered office is +972-8-9935000.

Shareholders of record of shares as of the close of business on November 25, 2019 are entitled to notice of and to vote at the Meeting (with one vote per share held).

Shareholders who are unable to attend the Meeting in person will be requested to complete, date and sign all enclosed proxy cards and return them promptly by mail to the registered office of the Company, 8 HaSata St. Modi'in, P.O.Box 9141, Israel 7178106, by Fax. +972-8-9935001, or by e-mail to our Company Secretary: amos@vblrx.com. If you are sending your proxy cards to us by mail, the proxy cards must be received at our registered office at least 48 hours prior to the appointed time of the Meeting to be validly included in the tally of shares voted at the Meeting, unless we waive that requirement. Your proxy cards, if properly executed, will be voted in the manner directed by you. Detailed proxy voting instructions will be provided both in the proxy statement and on the proxy cards.

If your ordinary shares are held in "street name", that is, in a brokerage account or by a trustee or nominee, you may be able to utilize the control number appearing on the voting instruction form to submit your voting instruction to their brokers, trustees or nominees by other means, including via the internet.

Sincerely,

Dr. Bennett M. Shapiro
Chairman of the Board of Directors



VASCULAR BIOGENICS LTD.

8 HaSatat St. Modi'in, Israel Tel. +972-8-9935000 Fax. +972-8-9935001

PROXY STATEMENT

ANNUAL GENERAL MEETING OF SHAREHOLDERS

This Proxy Statement is being furnished in connection with the solicitation of proxies on behalf of the Board of Directors of Vascular Biogenics Ltd. (the "**Board**"), to which we refer as Vascular Biogenics, or the Company, to be voted at an Annual General Meeting of shareholders, or the Meeting, and at any adjournment thereof, pursuant to the accompanying Notice of Annual General Meeting of shareholders. The Meeting will be held at 4:00 p.m. (Israel time) on December 23, 2019 at our offices at 8 HaSatat St. Modi'in, Israel Tel. +972-8-9935000 Fax. +972-8-9935001.

This Proxy Statement, the attached Notice of Annual General Meeting of shareholders and the proxy card or voting instruction card are being made available to holders of Vascular Biogenics ordinary shares, on or about November 1, 2019.

You are entitled to notice of, and to vote at, the Meeting, if you hold ordinary shares as of the close of business on November 25, 2019, the record date for the Meeting. You can vote your shares by attending the Meeting or by following the instructions under "How You Can Vote" below. Our Board urges you to vote your shares so that they will be counted at the Meeting or at any postponements or adjournments of the Meeting.

Agenda Items

The Meeting is being called for the following purposes:

- (1) To approve the nomination of Dr. Bennett M. Shapiro, Prof. Dror Harats, Prof. Ruth Arnon, Ms. Ruth Alon, Dr. Shmuel (Muli) Ben Zvi, Dr. Ron Cohen, Mr. David Hastings and Dr. Susan Kelley to the Board, to serve until the next annual general meeting of shareholders of the Company, under the existing terms of appointment as previously approved, aside from the resolutions herein, until each of their successors is duly appointed and qualified, or until any of their earlier resignation or removal (voting will take place in relation to each director nominee separately);
- (2) To approve the re-appointment of Kesselman & Kesselman, a member firm of PricewaterhouseCoopers International Limited, as the Company's independent registered public accounting firm for the year ending December 31, 2019, and until the next annual general meeting of shareholders of the Company and authorize the Board (with power of delegation to its audit committee) to fix the said independent registered public accounting firm's remuneration in accordance with the volume and nature of its services; and
- (3) To approve a compensation policy for the directors and other office holders of the Company, in accordance with the requirements of the Israeli Companies Law, 5759-1999.
- (4) To approve the grant of options and performance share units under the Company's 2014 Employee Share Ownership and Option Plan (the "2014 Plan") according to the standard agreements as follows: (i) grant of an option to purchase 240,000 of our ordinary shares to Prof. Harats; (ii) grant of an option to purchase 100,000 of our ordinary shares to Dr. Shapiro; (iii) grant of an option to purchase 50,000 of our ordinary shares to Dr. Cohen; (iv) grant of an option to purchase 50,000 of our ordinary shares to Prof. Arnon; (v) grant of an option to purchase 50,000 of our ordinary shares to Ms. Alon; (vi) grant of an option to purchase 50,000 of our ordinary shares to Mr. Hastings; (vii) grant of an option to purchase 50,000 of our ordinary shares to Dr. Kelley; and (viii) grant of an option to purchase 20,000 of our ordinary shares to Dr. Ben Zvi, each of which shall vest upon and in the manner approved by the Compensation Committee and the Board of Directors;

At the Meeting, we will also present and discuss our audited annual consolidated financial statements for the year ended December 31, 2018, as previously made available to our shareholders as part of our Form 20-F filed with the Securities and Exchange Commission and available at www.sec.gov and in the "Investor Relations" section of our Company's website, www.vblrx.com. We will also transact such other business as may properly come before the Meeting or any adjournment thereof.

Board Recommendation

Our Board unanimously recommends that you vote “FOR” each of the above proposals.

Quorum

On November 1, 2019, we had 35,881,128 ordinary shares issued and outstanding (excluding treasury shares). Each ordinary share outstanding as of the close of business on the record date, November 25, 2019 is entitled to one vote upon the proposal to be presented at the Meeting. Under our Articles of Association, the Meeting will be properly convened if at least two shareholders attend the Meeting in person or sign and return proxies, provided that they hold shares representing at least twenty- five percent (25%) of our voting power. If such quorum is not present within half an hour from the time scheduled for the Meeting, the Meeting will be adjourned for one week (to the same day, time and place), or to a day, time and place proposed by the Chairman with the consent of the holders of a majority of the voting power represented at the Meeting in person or by proxy and voting on the adjournment. At such adjourned meeting the presence of at least two shareholders in person or by proxy (regardless of the voting power represented by their shares) will constitute a quorum.

Vote Required for Approval of the Proposal

The affirmative vote of the holders of a majority of the voting power represented at the Meeting in person or by proxy and voting thereon (which excludes abstentions) is necessary for the approval of proposals.

In addition, the approval of Proposals 3 and 4 (only with respect to Prof. Harats) requires that either of the following two voting requirements be met as part of the approval by an ordinary majority of shares present and voting thereon:

- the majority voted in favor of the proposal includes a majority of the shares held by non-controlling shareholder or shareholder who do not have a personal interest in the approval of the proposal that is voted at the Meeting, excluding abstentions; or
- the total number of shares held by non-controlling shareholders and disinterested shareholders (as described in the previous bullet-point) voted against the proposal does not exceed two percent (2%) of the aggregate voting rights in the Company.

For purposes of the foregoing, a “controlling shareholder” is any shareholder that has the ability to direct a company’s activities (other than by means of being a director or other office holder of the company). A person is presumed to be a controlling shareholder if it holds 50% or more of the voting rights in a company or has the right to appoint the majority of the directors of a company or its general manager, but excludes a shareholder whose power derives solely from his or her position as a director of the Company or from any other position with the company.

For the purpose of Proposals 3 and 4, including a person who holds 25% or more of the voting rights in the Meeting of the Company if there is no other person who holds more than fifty percent of the voting rights in the company; for the purpose of a holding, two or more persons holding voting rights in a company each of which has a personal interest in the approval of the transaction being brought for approval of the company shall be considered to be joint holders.

A “Personal Interest” of a shareholder (i) includes an interest of any member of the shareholder’s immediate family (i.e., spouse, sibling, parent, parent’s parent, descendent, the spouse’s descendent, sibling or parent, and the spouse of each of these) or an interest of an entity with respect to which the shareholder (or such a family member thereof) serves as a director or the chief executive officer, owns at least 5% of the shares or its voting rights or has the right to appoint a director or the chief executive officer; and (ii) excludes an interest arising solely from the ownership of shares of the company. In determining whether a vote cast by proxy is disinterested, the “personal interest” of the proxy holder is also considered and will cause that vote to be treated as the vote of an interested shareholder, even if the shareholder granting the proxy does not have a personal interest in the matter being voted upon

A shareholder must inform our Company before the vote (or if voting by proxy, indicate on the proxy card) whether or not such shareholder is a controlling shareholder (as applicable) or has a Personal Interest (within the meaning as aforementioned), and FAILURE TO DO SO in relation to the vote on Proposals 3 and 4 (only with respect to Prof. Harats) SHALL BE DEEMED by the Company (absent of statement or other form of written explanation to indicate otherwise, and if voting by proxy, indication on the proxy card) as if such shareholder HAS A PERSONAL INTEREST in said proposals. Therefore, a shareholder who signs and returns a proxy card or voting instruction without actively confirming not to have Personal Interest, will be deemed TO be confirming that such shareholder, and any related party of such shareholder has a personal interest with respect to Proposals 3 and 4 (only with respect to Prof. Harats) If you believe that you, or a related party of yours, DO NOT possess a Personal Interest and you wish to participate in the vote on Proposals 3 and 4 (only with respect to Prof. Harats), you should indicate the no-existence of a Personal Interest on the enclosed proxy card (if applicable) and should furthermore contact our general counsel, at +972-8-9935000 or Fax; +972-8-9935001, who will advise you as to how to submit your votes for the proposals. If you hold your shares in “street name” (i.e., shares that are held through a bank, broker or other nominee) and believe that you possess a Personal Interest in the approval of Proposals 3 and 4 (only with respect to Prof. Harats) , you may also contact the representative managing your account, who could then contact our general counsel on your behalf.

How You Can Vote

You can vote your shares by attending the Meeting. If you do not plan to attend the Meeting, the method of voting will differ for shares held as a record holder and shares held in “street name” (through a broker, trustee or nominee). Record holders of shares can vote by proxy cards. Holders of shares in “street name” will have to instruct their banks, brokers or other nominees on how to vote.

Shareholders of Record

If you are a shareholder of record (that is, you hold a share certificate that is registered in your name), you can submit your vote by completing, signing and submitting a proxy card, which will be accessible at the “Investor Relations” portion of the Company’s website, as described below under “Availability of Proxy Materials.” You may change your mind and cancel your proxy card by sending us written notice, by signing and returning a proxy card with a later date, or by voting in person or by proxy at the Meeting. Except if the Chairman of the Meeting determines otherwise, we will not be able to count a proxy card unless we receive it at our principal executive offices at the above address, not less than forty-eight (48) hours prior to the time fixed for the Meeting (i.e. prior to 4:00 p.m. (Israel time) on December 21, 2019).

Please follow the instructions on the proxy card. If you provide specific instructions (by marking a box) with regard to the proposals, your shares will be voted as you instruct. If you sign and return your proxy card without giving specific instructions with respect to Proposal 1 and Proposal 2 your shares will be voted in accordance with the recommendations of the Board. The persons named as proxies in the enclosed proxy card will furthermore vote in accordance with the recommendations of the Board on any other matters that properly come before the Meeting.

Shareholders Holding in “Street Name”

If you hold ordinary shares in “street name”, that is, you are an underlying beneficial holder who holds ordinary shares through a bank, broker or other nominee, the voting process will be based on your directing the bank, broker or other nominee to vote the ordinary shares in accordance with your voting instructions (by completing and mailing the enclosed proxy card or voting instruction card). Because a beneficial owner is not a shareholder of record, you may not vote those shares directly at the Meeting unless you obtain a “legal proxy” from the broker, trustee or nominee that holds your shares, giving you the right to vote the shares at the Meeting.

If no instructions are received by the bank, broker or other nominee from you on or before the date established for such purpose with respect to Proposals 1, 3 and 4 the bank, broker or other nominee will not vote your shares (commonly referred to as a “broker non-vote”). If no instructions are received by the bank, broker or other nominee from you with respect to Proposal 2, it may vote at its discretion on that proposal.

Where a beneficial owner has executed and returned a proxy card or voting instruction card, but has not provided voting instructions with respect to any proposals, and the broker, trustee or nominee may not (in the case of Proposals 1, 3 and 4), or does not (in the case of Proposal 2) cast a vote with respect to the proposals, the shares held by the beneficial owner will be included in determining the presence of a quorum at the Meeting, but are not considered “present” for the purpose of voting on the particular proposals. Such shares have no impact on the outcome of the voting on any of the proposals.

Who Can Vote

You are entitled to notice of the Meeting and to vote at the Meeting if you are a shareholder of record at the close of business on November 25, 2019. You are also entitled to notice of the Meeting and to vote at the Meeting if you held ordinary shares through a bank, broker or other nominee that is one of our shareholders of record at the close of business on November 25, 2019 or which appear in the participant listing of a securities depository on that date.

Solicitation of Proxies

Proxies are being distributed to shareholders on or about November 1, 2019. Certain officers, directors, employees, and agents of the Company, none of whom will receive additional compensation therefor, may solicit proxies by telephone, emails, or other personal contact. We will bear the cost for the solicitation of the proxies, including postage, printing, and handling, and will reimburse the reasonable expenses of brokerage firms and others for forwarding material to beneficial owners of shares.

Availability of Proxy Materials

Copies of the proxy card, the notice of the Meeting and this Proxy Statement are available in the “Investor Relations” section of our Company’s website, www.vblrx.com. The contents of that website are not a part of this Proxy Statement.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information with respect to the beneficial ownership of our ordinary shares as of September 30, 2019:

- each person or entity known by us to own beneficially more than 5% of our outstanding ordinary shares;
- each of our executive officers and directors individually; and
- all of our executive officers and directors as a group.

| Name | Number of Ordinary Shares Beneficially Owned | Percentage of Ownership |
|--|--|----------------------------|
| 5% Shareholders | | |
| The Thai Lee Family Trust | 5,447,811 | 15.18% |
| Aurum Ventures M.K.I. Ltd (1) | 4,254,778 | 11.86% |
| Nira Gonczarowski (2) | 2,168,337 | 6.04% |
| Executive Officers and Directors | | |
| | 333,809 | * |
| Dr. Bennett M. Shapiro (3) | | |
| Prof. Dror Harats (4) | 1,760,498 | 3.99% |
| Dr. Erez Feige | 118,066 | * |
| Mr. Amos Ron | 202,666 | * |
| Dr. Eyal Breitbart | 137,781 | * |
| Dr. Tamar Rachmilewitz | 15,625 | * |
| Dr. Naamit Sher | 90,750 | * |
| Adv. Ayelet Horn | 41,601 | * |
| Dr. Ron Cohen | 63,792 | * |
| Dr. Shmuel (Muli) Ben Zvi | 7,500 | * |
| Ms. Ruth Alon | 14,625 | * |
| Prof. Ruth Arnon | 59,417 | * |
| Mr. David Hastings | 13,125 | * |
| Dr. Susan Kelley | 13,125 | * |
| All directors and executive officers as a group (15 individuals total) (5) | 2,872,380 | 6.37% |

* Less than 1%.

** Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission (the "SEC"), and generally includes voting or investment power with respect to securities. Ordinary shares relating to options currently exercisable or exercisable within 60 days of September 30, 2019 are deemed outstanding for computing the percentage of the person holding such securities but are not deemed outstanding for computing the percentage of any other person. Except as indicated by footnote, and subject to community property laws where applicable, the persons named in the table above have sole voting and investment power with respect to all shares shown as beneficially owned by them.

*** The percentages shown are based on ordinary shares issued and outstanding as of September 30, 2019.

- (1) Consists of 4,254,778 ordinary shares held by Aurum Ventures M.K.I. Ltd. Voting and investment power over such shares are vested with Mr. Morris Kahn, who controls Aurum Ventures M.K.I. Ltd. As such, Mr. Kahn may be deemed to have beneficial ownership over our shares held by Aurum Ventures M.K.I. Ltd. This is based on information set forth in various Schedule 13 filings with the SEC current as of November 1, 2019. The address of Aurum Ventures M.K.I. Ltd. is 16 Abba Hillel Silver Rd., Ramat Gan, 5250608, Israel.
- (2) Consists of 664,558 shares held by D.S.N.I. Investments Ltd. and Inspe Aktiengesellschaft. These shares may be deemed to be beneficially owned by Ms. Nira Gonczarowski. In addition, this number consists of: (a) 1,497,674 shares held directly by Ms. Nira Gonczarowski
- (3) Consists of (a) 24,440 ordinary shares held by Puretech Ventures LLC, which may be deemed to be beneficially owned by Bennett M. Shapiro, our chairman and a senior partner and chairman of Puretech Ventures LLC; (b) 42,808 outstanding shares held by Bennett M. Shapiro and Fredericka F. Shapiro, JTWROS; and (c) options to purchase 266,561 shares exercisable as of November 30, 2019 held by Bennett M. Shapiro.
- (4) Consists of (a) 705,907 ordinary shares held by or for Prof. Harats; (b) options to purchase 1,022,659 shares exercisable as of November 30, 2019; and (c) warrants exercisable for 31,932 shares as of November 30, 2019.
- (5) Consists of (a) options to purchase 1,996,114 shares exercisable as of November 30, 2019; (b) warrants exercisable for 31,932 shares exercisable as of November 30, 2019; and (c) 844,334 outstanding shares.

PROPOSAL 1

ELECTION OF EIGHT DIRECTORS

Background

We currently have a board of directors composed of eight directors. Following the adoption by the Company of certain exceptions provided under the Companies Law, the Company is exempt from the requirement to appoint external directors. Our Board is comprised of one class of directors. Except for Prof. Dror Harats, our Chief Executive Officer (“CEO”), all other directors are Independent Directors, as such term is defined by Nasdaq Marketplace Rules. A director is elected annually and holds office until the next annual general meeting of shareholders following the general meeting at which such director was elected or until his or her earlier resignation or removal pursuant to a resolution of a general meeting of shareholders or applicable law.

Our board of directors has nominated Dr. Shapiro, Prof. Harats, Prof. Arnon, Ms. Alon, Dr. Ben Zvi, Dr. Cohen, Mr. Hastings and Dr. Kelley for election as directors at the Meeting.

The Companies Law requires that a person will not be elected and will not serve as a director in a public company if he or she does not have the required qualifications and the ability to dedicate an appropriate amount of time for the performance of his or her position as director of the company, taking into consideration, among other factors, the special needs and size of the company. A general shareholder meeting of a public company at which the appointment of a director is to be considered may not be held unless the nominee has declared to the company, inter alia, that he or she complies with the above-mentioned requirements, and provides details of his or her applicable qualifications.

The following information is supplied with respect to each nominee for election to the Board and is based upon the records of the Company and information provided to us by the nominees:

Dr. Bennett M. Shapiro, M.D. has served on our board of directors since September 2004 and as Chairman since 2007. In addition to serving on our Board, Dr. Shapiro has been a senior partner at Puretech Ventures, an innovation enterprise, since 2004, and as chairman from 2009-2015; he now continues as a Non-Executive Director of PureTech HealthPLC-PRTC. From 1990 to 2003, Dr. Shapiro served as executive vice president, Merck Research Laboratories. Prior to that, from 1970 to 1990, Dr. Shapiro was a professor of the Department of Biochemistry at the University of Washington and served as chairman from 1985 to 1990. Prior to joining the University of Washington, from 1965 to 1970 Dr. Shapiro served as a research associate, then section head, in the Laboratory of Biochemistry of the National Heart Institute of the U.S. National Institutes of Health. Dr. Shapiro also currently serves as an external director on the board of directors of Momenta Pharmaceuticals, various private companies and the Drugs for Neglected Diseases Initiative, an independent, non-profit drug development partnership. Dr. Shapiro previously served on the board of directors of Celera Corporation prior to its acquisition by Quest Diagnostics Inc. Dr. Shapiro received his B.S. in chemistry from Dickinson College and his M.D. from Jefferson Medical College. Dr. Shapiro has been a Guggenheim Fellow, a fellow of the Japan Society for the Promotion of Science and a visiting professor at the University of Nice. We believe Dr. Shapiro is qualified to serve on our Board because of his extensive technical and industry background, and his experience serving on boards of directors of companies in our industry, including public companies.

Prof. Dror Harats founded our Company in 2000 and has served as our CEO since our inception. He has been a member of our Board since January 2001. Prof. Harats is the Chairman of the Bert W. Strassburger Lipid Center at the Chaim Sheba Medical Center at Tel Hashomer and chairman of its Institute Review Board. Prof. Harats received his M.D. from Hadassah Medical School at the Hebrew University of Jerusalem, Israel, following which he conducted post-doctoral work at the University of California, San Francisco. Prof. Harats is also a Professor of Medicine in the Departments of Internal Medicine and Biochemistry at the Sackler Faculty of Medicine of Tel-Aviv University, Israel. Prof. Harats has also served as a visiting scientist at Syntax Discovery Research. Prof. Harats currently serves as an observer on the board of directors of Art Healthcare Ltd. We believe Prof. Harats is qualified to serve on our Board because of his extensive technical and industry experience, as well as his knowledge of our company.

Prof. Ruth Arnon has served on our Board since August 2007. Prof. Arnon is an immunologist with the Weizmann Institute of Science in Israel. Prof. Arnon joined the staff of the Weizmann Institute in 1960, and served as vice president of the Institute from 1988 to 1997. Prof. Arnon is a member of the Israel Academy of Sciences, and from 2010 until 2015 served as its president. Prof. Arnon is also an elected member of the European Molecular Biology Organization. She has served as president of the European Federation of Immunological Societies, and as secretary-general of the International Union of Immunological Societies. Her awards and honors include the Robert Koch Prize in Medical Sciences, Spain's Jimenez Diaz Memorial Award, France's Legion of Honor, the Hadassah World Organization's Women of Distinction Award, the Wolf Prize for Medicine, the Rothschild Prize for Biology, and the Israel Prize. Prof. Arnon earned her M.Sc. in Chemistry from the Hebrew University, Jerusalem, Israel, and her Ph.D. from the Hebrew University. We believe Prof. Arnon is qualified to serve on our Board because of her extensive technical and industry background.

Ruth Alon has served on our Board since March 2010. Ms. Alon is the Founder and CEO of Medstrada, , Israel's new venture capital fund investing in the Food Tech sector. From 1997 until 2016,, Ms. Alon has served as a general partner in Pitango Venture Capital , where she headed the Life Sciences activities and has led several of its portfolio companies to successful acquisitions, among them Disc-O-Tech, Colbar, Vantor and Optonol. Prior to her tenure at Pitango, Ms. Alon held senior positions with Montgomery Securities from 1981 to 1987, Genesis Securities, LLC from 1993 to 1996, and Kidder Peabody & Co. from 1987 to 1993, and managed her own independent consulting business in San Francisco, providing broad-based services to early- stage companies and venture capitalists in the medical devices industry. Ms. Alon is the force behind the establishment in 2005 of ILSI, Israel Life Science Industry, a not-for-profit organization representing the mutual goals of approximately 1000 Israeli life science companies. She is the Co-founder of IATI, an umbrella organization established in 2012, representing Israel's High Tech and Life Sciences industries.. Ms. Alon has a B.A. in Economics from the Hebrew University of Jerusalem, Israel, an M.B.A. from Boston University, and an M.S. from the Columbia University School of Physicians and Surgeons. We believe Ms. Alon is qualified to serve on our Board because of her extensive business and industry background, as well as her experience as a seasoned investor.

Dr. Shmuel (Multi) Ben Zvi joined our board in September 2018. Dr. Ben Zvi is currently a board member at Bank Leumi, the second largest bank in Israel, and a member of its audit, risk management, and strategy committees. Dr. Ben Zvi is also a board member of SOL-GEL Technologies (NASDAQ SLGL) and a member of the audit and compensation committees. From 2004 to 2014, Dr. Ben Zvi held various managerial positions at Teva Pharmaceuticals Industries Ltd., dual listed on Nasdaq and the TASE, including VP Finance and VP Strategy. From 2000 to 2004, Dr. Ben Zvi was the financial advisor to the Chief of General Staff of the Israel Defense Forces and head of the Defense Ministry budget department. Dr. Ben Zvi holds a Ph.D. in economics from Tel- Aviv University, Israel and participated in the Harvard Business School Advanced Management Program (AMP). We believe Dr. Ben Zvi is qualified to serve on our Board because of his extensive financial and business background.

Dr. Ron Cohen, M.D. joined our Board in February 2015. In addition to serving on our board of directors, Dr. Cohen has served as President, Chief Executive Officer and founder of Acorda Therapeutics, Inc., since 1995. Previously he was a principal in the startup and an officer of Advanced Tissue Sciences, Inc., a biotechnology company engaged in the growth of human organ tissues for transplantation, from 1986 to 1992. Dr. Cohen received his B.A. with honors in Psychology from Princeton University, and his M.D. from the Columbia College of Physicians & Surgeons. He completed his residency in Internal Medicine at the University of Virginia Medical Center, and is Board Certified in Internal Medicine. Dr. Cohen is Chair of the Board of the Biotechnology Innovation Organization (BIO). He previously served as a Director of Dyax Corporation until the end of 2015, and also previously served as Director and Chair of the New York Biotechnology Association. He is a recipient of the NY CEO Lifetime Achievement Award and the Ernst & Young Entrepreneur of the Year Award for the New York Metropolitan Region, and has been recognized by PharmaVOICE Magazine as one of the 100 Most Inspirational People in the Biopharmaceutical Industry. We believe Dr. Cohen is qualified to serve on our Board because of his extensive business and industry background.

Mr. David Hastings joined our Board in January 2018. Mr. Hastings has more than 18 years of finance, accounting and operations experience in the biopharmaceutical industry. He was the Executive Vice President and Chief Financial Officer at Incyte from October 2003 until 2014. Recently he was the Chief Financial Officer of Unilife Corporation. From February 2000 to September 2003. Mr. Hastings served as Vice President, Chief Financial Officer and Treasurer of ArQule Inc. Prior to his employment with ArQule, Mr. Hastings was Vice President and Corporate Controller at Genzyme Inc., and Director of Finance at Sepracor. David Hastings received his B.A. in Economics at the University of Vermont. He is a member of the Board Director of SCYNEXIS, Inc. and chairs its Audit Committee. We believe Mr. Hastings is qualified to serve on our Board because of his extensive financial and business background.

Dr. Susan Kelley, M.D. joined our Board in January 2018. Dr. Kelley is an oncologist with extensive experience in drug development and commercialization. Dr. Kelley worked with Bristol-Myers Squibb in Oncology and Immunology drug development from 1987 to 2001. From 2001 to 2008, Dr. Kelley worked with Bayer Healthcare Pharmaceuticals as Vice President, Global Clinical Development and Therapeutic Area Head – Oncology. From 2008 to 2011, she was Chief Medical Officer of the Multiple Myeloma Research Consortium. Dr. Kelley served as a member of the Board of Directors of Alchemia from 2013-2015, and Cerulean Pharma from 2014-2017. She is currently a Director at ArQule, Immune Design, and Daré Bioscience, all publicly-traded, US-based biotechnology companies. Susan Kelley received her M.D. from Duke University School of Medicine and completed oncology training at the Dana-Farber Cancer Institute in Boston. She was also a Fellow in Medical Oncology and Pharmacology at Yale University School of Medicine. We believe Dr. Kelley is qualified to serve on our Board because of her extensive industry background.

Proposed Resolutions

We are proposing the adoption by our shareholders of the following resolutions:

- (a) “**RESOLVED**, that Dr. Bennett M. Shapiro be, and hereby is, re-elected to serve as a director of the Company, effective from the date hereof and until the next annual general meeting of shareholders or until his earlier resignation or removal.”
- (b) “**RESOLVED**, that Prof. Dror Harats be, and hereby is, re-elected to serve as a director of the Company, effective from the date hereof and until the next annual general meeting of shareholders or until his earlier resignation or removal.”
- (c) “**RESOLVED**, that Prof. Ruth Arnon be, and hereby is, re-elected to serve as a director of the Company, effective from the date hereof and until the next annual general meeting of shareholders or until his earlier resignation or removal.”
- (d) “**RESOLVED**, that Ms. Ruth Alon be, and hereby is, re-elected to serve as a director of the Company, effective from the date hereof and until the next annual general meeting of shareholders or until her earlier resignation or removal.”
- (e) “**RESOLVED**, that Dr. Shmuel (Muli) Ben Zvi be, and hereby is, elected to serve as a director of the Company, effective from the date hereof and until the next annual general meeting of shareholders or until his earlier resignation or removal.”
- (f) “**RESOLVED**, that Dr. Ron Cohen be, and hereby is, re-elected to serve as a director of the Company, effective from the date hereof and until the next annual general meeting of shareholders or until his earlier resignation or removal.”
- (g) “**RESOLVED**, that Mr. David Hastings be, and hereby is, re-elected to serve as a director of the Company, effective from the date hereof and until the next annual general meeting of shareholders or until his earlier resignation or removal.”
- (h) “**RESOLVED**, that Dr. Susan Kelley be, and hereby is, re-elected to serve as a director of the Company, effective from the date hereof and until the next annual general meeting of shareholders or until her earlier resignation or removal.”

Required Vote

Shareholders may vote for or against, or may abstain from voting, in connection with the re-election of any of the said nominees. The affirmative vote of holders of a majority of the voting power represented at the Meeting in person or by proxy and voting thereon is necessary for the approval of each of the resolutions included in Proposal 1.

Board Recommendation

The Board unanimously recommends a vote FOR the foregoing resolutions approving the re-election of each of Dr. Shapiro, Prof. Harats, Prof. Arnon, Ms. Alon and the election of Mr. Hastings, Dr. Cohen, and Dr. Kelley and Dr. Ben Zvi.

PROPOSAL 2

APPROVAL OF THE REAPPOINTMENT OF KESSELMAN AND KESSELMAN

Background

Kesselman & Kesselman, a member firm of PricewaterhouseCoopers International Limited, independent registered public accounting firm, or Kesselman & Kesselman, served as our independent registered public accounting firm since its appointment in 2001. Our audit committee and board of directors resolved to nominate Kesselman & Kesselman for reappointment as our independent registered public accounting firm for the year ending December 31, 2019, and until the close of the next annual general meeting of shareholders of the Company.

Our shareholders are being requested to approve Kesselman & Kesselman's reappointment and authorize our board of directors (with power of delegation to our audit committee) to fix Kesselman & Kesselman's compensation in accordance with the volume and nature of its services.

Proposed Resolution

We are proposing the adoption by our shareholders of the following resolution at the Meeting:

"RESOLVED, (i) Kesselman & Kesselman, a member firm of PricewaterhouseCoopers International Limited be and hereby is reappointed as the Company's independent registered public accounting firm for the year ending December 31, 2019, and until the next annual general meeting of shareholders of the Company, and (ii) the Board (with power of delegation to the audit committee) be, and hereby is, authorized, to fix the remuneration of such independent registered public accounting firm in accordance with the volume and nature of its services."

Required Vote

Shareholders may vote for or against, or may abstain from voting, in connection with the re-appointment of Kesselman & Kesselman. The affirmative vote of holders of a majority of the voting power represented at the Meeting in person or by proxy and voting thereon is necessary for the approval of the resolution included in Proposal 2.

Board Recommendation

The Board unanimously recommends a vote FOR the foregoing resolution approving the reappointment of, and authorizing the board of directors to fix the remuneration of, the Company's independent registered public accounting firm.

PROPOSAL 3

APPROVAL OF THE COMPANY'S COMPENSATION POLICY

Background

Pursuant to the Companies Law, every public Israeli company is required to adopt a compensation policy (the "Compensation Policy") that sets forth guidelines for the compensation of office holders (as defined in the Companies Law). In 2015, the shareholders of the Company approved the compensation policy for the Company's officers and directors (the "Compensation Policy"). The Companies Law requires the Board of Directors to reevaluate the compensation policy from time to time, and upon any material change in the circumstances that existed at the time the policy was formulated; the compensation policy must be reviewed and re-approved at least once every three years.

The compensation policy must serve as the basis for decisions concerning the financial terms of employment or engagement of office holders of a company, including exculpation, insurance, or any monetary payment or obligation of payment in respect of employment or engagement. The compensation policy must relate to certain factors, including advancement of a company's objectives, a company's business and its long-term strategy, and creation of appropriate incentives for office holders. It must also consider, among other things, a company's risk management, size and the nature of its operations. The Companies Law describes what factors have to be considered by, and what principles must be included in, a compensation policy.

Under the Companies Law, the compensation committee of a company's Board of Directors is responsible for (a) recommending the Compensation Policy to the Board of Directors for its approval (and subsequent approval by its shareholders) and (b) duties related to the Compensation Policy and to the compensation of a Company's office holders as well as functions previously fulfilled by the audit committee of the Board of Directors with respect to approval of the terms of engagement of office holders. In light of these requirements, our compensation committee has recommended, and our Board of Directors has approved, a Compensation Policy for the office holders of our Company, in the form attached as Annex A to this Proxy Statement, that covers the matters described in the Companies Law and the regulations promulgated thereunder and that is aimed at balancing between short-term and long-term incentives to the office holders of our Company.

We recommend that our shareholders refer to the Compensation Policy, which is attached as Annex A to this Proxy Statement.

Proposed Resolution

We are proposing the adoption by our shareholders of the following resolution at the Meeting:

"RESOLVED, that the Compensation Policy for the directors and other office holders of Vascular Biogenics Ltd. attached as Annex A to the Proxy Statement, as approved by the Board of Directors of the Company, be, and hereby is, approved by the shareholders of the Company."

Required Vote

As described above, the approval of the Compensation Policy requires the affirmative vote of shareholders present in person or by proxy and holding ordinary shares representing a majority of the votes cast with respect to such proposal. Furthermore, under the Companies Law, the approval of such proposal requires that either: (i) such majority includes at least a majority of the voting power of the non-controlling and non-interested shareholders who are present in person or by proxy and who vote on such proposal; or (ii) the total votes cast in opposition to the proposal by the non-controlling and non-interested shareholders does not exceed 2% of all of the voting power in our Company.

A shareholder that possesses a personal interest or is a controlling shareholder is qualified to participate in the vote; however, the vote of such shareholder may not be counted towards the majority requirement described in clause (i) above and will not count towards the 2% threshold described in clause (ii) above.

A shareholder must inform the Company before the vote (or if voting by proxy or voting instruction form, indicate on the proxy card or voting instruction form) whether or not such shareholder has a Personal Interest (within the meaning as aforementioned) in approval of the Proposal, and failure to do so in relation to the vote shall be deemed by the Company (absent of statement or other form of written explanation to indicate otherwise, and if voting by proxy, indication on the proxy card) as if such shareholder HAS A PERSONAL INTEREST in the Proposal. Therefore, a shareholder who signs and returns a proxy card without actively confirming not to have Personal Interest, will be deemed to be confirming that such shareholder, and any related party of such shareholder, has a Personal Interest with respect to the approval of the proposal. If you believe that you, or a related party of yours, do not possess a Personal Interest and you wish to participate in the vote on the Proposal, you should indicate the non-existence of such personal interest in the space provided on the proxy card, and you should contact our Company's General Counsel at +972-8- 9935000 or Fax; +972-8-9935001, who will advise you as to how to submit your vote for the Proposal. If you hold your shares in "street name" and believe that you, or a related party of yours, possesses a Personal Interest in the approval of the Proposal, you should contact the representative managing your account, who should then contact our General Counsel on your behalf.

Board Recommendation

The Board unanimously recommends a vote FOR the foregoing resolution approving the Compensation Policy.

PROPOSAL 4

GRANTS OF OPTIONS AND PSUs TO BOARD MEMBERS

Background

The Compensation Committee and the Board of Directors approved the grant of options and performance share units under the 2014 Plan according to the standard agreements as follows: (i) grant of an option to purchase 240,000 of our ordinary shares to Prof. Harats; (ii) grant of an option to purchase 100,000 of our ordinary shares to Dr. Shapiro; (iii) grant of an option to purchase 50,000 of our ordinary shares to Dr. Cohen; (iv) grant of an option to purchase 50,000 of our ordinary shares to Prof. Arnon; (v) grant of an option to purchase 50,000 of our ordinary shares to Ms. Alon; (vi) grant of an option to purchase 50,000 of our ordinary shares to Mr. Hastings; (vii) grant of an option to purchase 50,000 of our ordinary shares to Dr. Kelley; and (viii) grant of an option to purchase 20,000 of our ordinary shares to Dr. Ben Zvi, each of which shall vest upon and in the manner approved by the Compensation Committee and the Board of Directors;

Proposed Resolution

We are proposing the adoption by our shareholders of the following resolution at the Meeting:

“RESOLVED, to approve the grant of options and performance share units under the 2014 Plan according to the standard agreements as follows: (i) grant of an option to purchase 240,000 of our ordinary shares to Prof. Harats; (ii) grant of an option to purchase 100,000 of our ordinary shares to Dr. Shapiro; (iii) grant of an option to purchase 50,000 of our ordinary shares to Dr. Cohen; (iv) grant of an option to purchase 50,000 of our ordinary shares to Prof. Arnon; (v) grant of an option to purchase 50,000 of our ordinary shares to Ms. Alon; (vi) grant of an option to purchase 50,000 of our ordinary shares to Mr. Hastings; (vii) grant of an option to purchase 50,000 of our ordinary shares to Dr. Kelley; and (viii) grant of an option to purchase 20,000 of our ordinary shares to Dr. Ben Zvi, each of which shall vest upon and in the manner approved by the Compensation Committee and the Board of Directors.”

Required Vote:

Shareholders may vote for or against, or may abstain from voting, in connection with the grant of the grant of option to the directors. The affirmative vote of holders of a majority of the voting power represented at the Meeting in person or by proxy and voting thereon is necessary for the approval of each of the resolutions included in Proposal 4, except for the grant of options to Prof. Harats, which requires that either: (i) such majority includes at least a majority of the voting power of the non-controlling and non-interested shareholders who are present in person or by proxy and who vote on such proposal; or (ii) the total votes cast in opposition to the proposal by the non-controlling and non-interested shareholders does not exceed 2% of all of the voting power in our Company.

A shareholder that possesses a personal interest or is a controlling shareholder is qualified to participate in the vote; however, the vote of such shareholder may not be counted towards the majority requirement described in clause (i) above and will not count towards the 2% threshold described in clause (ii) above.

Board Recommendation

The Board unanimously recommends a vote FOR the foregoing resolution approving the grant of options and performance share units.

COMPENSATION

Summary Compensation Table

The table below reflects the compensation granted to our five most highly compensated officers during or with respect to the year ended December 31, 2018. All amounts reported in the table reflect the cost to the Company, as recognized in our financial statements for the year ended December 31, 2018.

| Name and Position | Salary & Social Benefits (1) | Bonus | Share- Based Payment (2) | Other Compensation (3) | Total | Total (4) <small>(US Dollars in thousands)</small> |
|---|---|-------|-----------------------------------|---------------------------|-------|---|
| | <small>(New Israeli Shekels in thousands)</small> | | | | | |
| Prof. Dror Harats <i>Chief Executive Officer</i> | 1,401 | 288 | 1,126 | 234 | 3,048 | 848 |
| Amos Ron <i>Chief Financial Officer</i> | 815 | 102 | 599 | 116 | 1,633 | 454 |
| Dr. Eyal Breitbart <i>Vice President, Research and Operations</i> | 777 | 98 | 567 | 211 | 1,654 | 460 |
| Dr. Erez Feige <i>Vice President, Business Operations</i> | 703 | 82 | 599 | 76 | 1,461 | 406 |
| Dr. Naamit Sher <i>Vice President, Clinical Drug Development</i> | 704 | 88 | 492 | 70 | 1,353 | 376 |

- (1) Represents the officer's gross salary plus payment of mandatory social benefits made by the Company on behalf of such officer. Such benefits may include, to the extent applicable to the executive, payments, contributions and/or allocations for savings funds (e.g., Managers' Life Insurance Policy), education funds (referred to in Hebrew as "keren hishtalmut"), pension, severance, risk insurances (e.g., life, or work disability insurance) and payments for social security.
- (2) Represents the equity-based compensation expenses recorded in the Company's consolidated financial statements for the year ended December 31, 2018 based on the options' grant date fair value in accordance with accounting guidance for equity-based compensation.
- (3) Represents the other benefits to such officer, which includes either or both of (i) car expenses, including lease costs, gas and maintenance, provided to the officers and (ii) vacation benefits.
- (4) Translated from NIS into U.S. dollars at the rate of NIS 3.5998 = U.S.\$ 1.00, based on the average daily representative rate of exchange between the NIS and the U.S. dollar reported by the Bank of Israel for the full year of 2018.

ADDITIONAL INFORMATION

The Company's annual report for the year ended December 31, 2018, filed on Form 20-F on March 28, 2019 are available for viewing and downloading on the SEC's website at www.sec.gov as well as under the Investor Relations section of the Company's website at www.vblrx.com.

The Company is subject to the information reporting requirements of the U.S. Securities Exchange Act of 1934, as amended, applicable to foreign private issuers. The Company fulfills these requirements by filing reports with the SEC. The Company's SEC filings are available to the public on the SEC's website at www.sec.gov. As a foreign private issuer, the Company is exempt from the rules under the Exchange Act related to the furnishing and content of proxy statements. The circulation of this Proxy Statement should not be taken as an admission that the Company is subject to those proxy rules

By order of the Board of Directors:

Modi'in, Israel
November 1, 2019

Dr. Bennett M. Shapiro,
Chairman of the Board of Directors

VASCULAR BIOGENICS LTD.

**PROXY FOR THE ANNUAL GENERAL MEETING OF
SHAREHOLDERS**

TO BE HELD ON December 23, 2019

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

The undersigned hereby constitutes and appoints Amos Ron as the true and lawful attorney, agent and proxy of the undersigned, with full power of substitution, to represent and to vote, on behalf of the undersigned, all of the ordinary shares of Vascular Biogenics Ltd. (the "Company"), held of record in the name of the undersigned at the close of business on November 25, 2019, at the Annual General Meeting of Shareholders of the Company (the "Meeting") to be held at the offices of the Company at 8 HaSarat St. Modi'in, Israel at 4:00 p.m. (local time), and at any and all adjournments or postponements thereof on the following matter, which is more fully described in the Notice of the Annual General Meeting of Shareholders and Proxy Statement relating to the Meeting.

The undersigned acknowledges receipt of the Notice of the Annual General Meeting of Shareholders and Proxy Statement of the Company relating to the Meeting.

This Proxy, when properly executed, will be voted in the manner directed herein by the undersigned. If no direction is made with respect to any proposal described below, this Proxy will be voted FOR such proposal and in such manner as the holder of the proxy may determine with respect to any other business as may properly come before the Meeting or all and any adjournments or postponements thereof. Any and all proxies heretofore given by the undersigned are hereby revoked.

(Continued and to be signed on the reverse side)

ANNUAL GENERAL MEETING OF SHAREHOLDERS OF

VASCULAR BIOGENICS LTD.

November 1, 2019

NOTICE OF INTERNET AVAILABILITY OF PROXY MATERIAL:

The Notice of Meeting, proxy statement and proxy card
are available at - <http://www.vblrx.com>

**Please date, sign and mail
your proxy card as soon
as possible.**

**THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE ELECTION OF ALL
NOMINEES TO DIRECTORS LISTED IN PROPOSAL 1 AND "FOR" PROPOSALS 2, 3 AND 4.
PLEASE SIGN, DATE AND RETURN PROMPTLY IN THE ENCLOSED
ENVELOPE. PLEASE MARK YOUR VOTE IN BLUE OR BLACK INK AS SHOWN HERE [X]**

1. Election of the following eight directors:

- | | | | |
|-------------------------------|--------------------------|--------------------------|--------------------------|
| (a) Dr. Bennett M. Shapiro | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (b) Prof. Dror Harats | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (c) Prof. Ruth Arnon | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (d) Ms. Ruth Alon | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (e) Dr. Shmuel (Muli) Ben Zvi | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (f) Dr. Ron Cohen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (h) Mr. David Hastings | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (i) Dr Susan Kelley | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

2. To ratify the reappointment of Kesselman & Kesselman, a member firm of PricewaterhouseCoopers International Limited, as the Company's independent registered public accounting firm for the year ending December 31, 2019, and until the next annual general meeting of shareholders of the Company and authorize the Board (with power of delegation to its audit committee) to fix the said independent registered public accounting firm's remuneration in accordance with the volume and nature of its services.

3. To approve a Compensation Policy for the directors and other office holders of the Company, in accordance with the requirements of the Israeli Companies Law, 5759-1999.

Are you a "controlling shareholder" or do you have a "personal interest" (as defined in the Proxy Statement) with respect to the subject matter of Proposal 3? * YES No

*** Kindly note that failure to mark the appropriate indication shall be deemed as if you have a personal interest in said Proposal.**

4. To approve the grant of options and performance share units under the 2014 Plan according to the standard agreements as follows:

- (i) grant of an option to purchase 240,000 of our ordinary shares to Pr. Dror Harats, a member of our Board of Directors;

Are you a "controlling shareholder" or do you have a "personal interest" (as defined in the Proxy Statement) with respect to the subject matter of Proposal 4(i)? * YES No

*** Kindly note that failure to mark the appropriate indication shall be deemed as if you have a personal interest in said Proposal.**

- | | | | |
|---|--------------------------|--------------------------|--------------------------|
| (ii) grant of an option to purchase 100,000 of our ordinary shares to Dr. Bennett M. Shapiro, a member of our Board of Directors; | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (iii) grant of an option to purchase 50,000 of our ordinary shares to Mr. Dr. Ron Cohen, a member of our Board of Directors; | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (iv) grant of an option to purchase 50,000 of our ordinary shares to Prof. Ruth Arnon, a member of our Board of Directors; | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (v) grant of an option to purchase 50,000 of our ordinary shares to Ms. Ruth Alon, a member of our Board of Directors; | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (vi) grant of an option to purchase 50,000 of our ordinary shares to Mr. David Hastings, a member of our Board of Directors; | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (vii) grant of an option to purchase 50,000 of our ordinary shares to Dr. Susan Kelley, a member of our Board of Directors; | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (viii) grant of an option to purchase 20,000 of our ordinary shares to Dr. Shmuel (Muli) Ben Zvi, a member of our Board of Directors; | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Signature of shareholder Date Signature of shareholder Date

Note: Please sign exactly as your name or names appear on this Proxy. When shares are held jointly, each owner should sign. When signing as executor, administrator, attorney, trustee or guardian, please give full title as such. If the signer is a corporation, please sign full corporate name by a duly authorized officer, giving full title as such. If the signer is a partnership, please sign in partnership name by authorized person.

