

**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 March 2018
Commission File No.:001-35773

REDHILL BIOPHARMA LTD.

(Translation of registrant's name into English)

21 Ha'arba'a Street, Tel Aviv, 64739, Israel
(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): _____

Attached hereto and incorporated herein by reference is the notice and proxy statement for the annual general meeting of the Company scheduled for May 2, 2018.

This Form 6-K is incorporated by reference into the Company's Registration Statements on Form S-8 filed with the Securities and Exchange Commission on May 2, 2013 (Registration No. 333-188286), on October 29, 2015 (Registration No. 333-207654) and on July 25, 2017 (Registration No. 333-219441) and its Registration Statement on Form F-3 filed with the Securities and Exchange Commission on February 25, 2016 (Registration No. 333- 209702).

Signatures

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.

REDHILL BIOPHARMA LTD.
(the "Registrant")

Date: March 26, 2018

By: /s/ Dror Ben-Asher
Dror Ben-Asher
Chief Executive Officer

REDHILL BIOPHARMA LTD.
21 Ha'arba'a Street
Tel-Aviv 64739
Israel

NOTICE OF ANNUAL GENERAL MEETING OF SHAREHOLDERS
To Be Held on May 2, 2018

The Annual General Meeting of Shareholders of RedHill Biopharma Ltd. (the "Company"), will be held at the offices of the Company, 21 Ha'arba'a Street, 16th Floor, Tel-Aviv, Israel on May 2, 2018 at 3:00 p.m. Israel time, or at any adjournments thereof (the "General Meeting"), for the following purposes:

1. To appoint Kesselman & Kesselman, certified public accountants in Israel and a member of PricewaterhouseCoopers International Limited, as the Company's independent auditors for the year 2018 and for an additional period until the following annual general meeting; and to inform the shareholders of the aggregate compensation paid to the auditors for the year ended December 31, 2017;
2. To approve an increase in the authorized share capital of the Company by 300 million ordinary shares;
3. To approve the re-election of Mr. Ofer Tsimchi, Dr. Kenneth Reed and Mr. Eric Swenden to the board of directors of the Company (the "Board of Directors"), each for an additional three-year term until the annual general meeting to be held in 2021;
4. To approve an amendment to the Company's Amended and Restated Award Plan (2010);
5. To approve a grant of 500,000 options to purchase ordinary shares of the Company to Mr. Dror Ben-Asher, the Company's Chief Executive Officer and Chairman of the Board of Directors;
6. To approve the proposed extension of options to purchase ordinary shares of the Company granted to Mr. Dror Ben-Asher, the Company's Chief Executive Officer and Chairman of the Board of Directors; and
7. To approve the proposed extension of options to purchase ordinary shares of the Company granted to Mr. Ofer Tsimchi, a non-executive director of the Company.

In addition, shareholders at the General Meeting will have an opportunity to review and ask questions regarding the financial statements of the Company for the fiscal year ended December 31, 2017.

The Company is currently unaware of any other matters that may be raised at the General Meeting. Should any other matters be properly raised at the General Meeting, the persons designated as proxies shall vote according to their own judgment on those matters.

Only holders of record of ordinary shares, par value NIS 0.01 per share (the "Ordinary Shares"), and holders of record of American Depositary Shares ("ADSs"), evidenced by American Depositary Receipts issued by The Bank of New York Mellon by the close of business on March 26, 2018 shall be entitled to receive notice of and to vote at the General Meeting.

The Board of Directors recommends that you vote FOR the proposals, as specified on the enclosed form of proxy.

Whether or not you plan to attend the General Meeting, it is important that your Ordinary Shares be represented. Accordingly, for holders of our ADSs, you are kindly requested to complete, date, sign and mail the enclosed proxy in the envelope provided at your earliest convenience so that it will be received no later than the date and time indicated on the form of proxy. Execution of a proxy will not in any way affect a shareholder's right to attend the General Meeting and vote in person, and any person giving a proxy has the right to revoke it at any time before the deadline for receipt of proxies by filing with the Company (in the case of holders of Ordinary Shares) or with BNY Mellon (in the case of holders of ADSs) a written notice of revocation or a duly executed proxy bearing a later date.

Shareholders registered in the Company's shareholders' register in Israel and shareholders who hold Ordinary Shares through members of the Tel-Aviv Stock Exchange may also vote through the attached form of proxy by completing, dating, signing and mailing the proxy to the Company's offices so that it is received by the Company no later than Wednesday, May 2, 2018, at 11:00 a.m. Israel time. Shareholders registered in the Company's shareholders' register in Israel and shareholders who hold Ordinary Shares through members of the Tel-Aviv Stock Exchange who vote their Ordinary Shares by proxy must also provide the Company with a copy of their identity card, passport or certification of incorporation, as the case may be.

Shareholders who hold Ordinary Shares through members of the Tel-Aviv Stock Exchange and intend to vote their Ordinary Shares either in person or by proxy must deliver to the Company, no later than May 2, 2018, at 11:00 a.m. Israel time, an ownership certificate confirming their ownership of the Company's Ordinary Shares on the Record Date (as defined below). Such certificate must be approved by a recognized financial institution, as required by the Israeli Companies Regulations (Proof of Ownership of Shares for Voting at General Meeting) of 2000, as amended. Alternatively, shareholders who hold Ordinary Shares through members of the Tel-Aviv Stock Exchange may vote electronically via the electronic voting system of the Israel Securities Authority up to six (6) hours before the time fixed for the General Meeting (*i.e.*, 09:00 a.m. Israel time on May 2, 2018). You should receive instructions on electronic voting from the Tel-Aviv Stock Exchange member through which you hold your Ordinary Shares.

ADS holders should return their proxies by the date set forth on their form of proxy.

Shareholders wishing to express their position on an agenda item for this General Meeting may do so by submitting a written statement ("Position Statement") to the Company's offices, c/o Mr. Micha Ben Chorin, at 21 Ha'arba'a Street, Tel-Aviv, 64739 Israel, by no later than April 22, 2018. Any Position Statement received, that is in accordance with the guidelines set by the Israel Companies Law, will be furnished to the U.S. Securities and Exchange Commission (the "Commission") on Form 6-K, and will be made available to the public on the Commission's website at <http://www.sec.gov> and in addition at <http://www.magna.isa.gov.il> or <http://maya.tase.co.il>.

Postponement of General Meeting - If within half an hour from the time appointed for the General Meeting a quorum is not present, the General Meeting shall be adjourned to the next business day following the day of the scheduled General Meeting, at the same time and place, or at another day, time and place prescribed by the Board of Directors in a notification to the shareholders.

This notice and the documents mentioned therein, as well as the proposed resolutions on the agenda, can be viewed at the Company's registered office on 21 Ha'arba'a Street, Tel-Aviv, Tel: +972 3 541 3131, Sunday through Thursday between 10:00-15:00 Israel time, and also will be made available to the public on the Commission's website at <http://www.sec.gov> and in addition at <http://www.magna.isa.gov.il> or <http://maya.tase.co.il>.

By Order of the Board of Directors,

Dror Ben-Asher
Chairman of the Board of Directors

Tel-Aviv, Israel
March 26, 2018

REDHILL BIOPHARMA LTD.

**21 Ha'arba'a Street
Tel-Aviv 64739
Israel**

PROXY STATEMENT

**FOR ANNUAL GENERAL MEETING OF SHAREHOLDERS
TO BE HELD ON MAY 2, 2018**

This proxy statement is furnished to the holders of ordinary shares, par value NIS 0.01 per share (the "Ordinary Shares"), and to holders of American Depository Shares ("ADSS"), evidenced by American Depository Receipts issued by The Bank of New York Mellon ("BNY Mellon"), of RedHill Biopharma Ltd. (the "Company" or "RedHill") in connection with the solicitation by the board of directors of the Company (the "Board of Directors" or the "Board") of proxies for use at the Annual General Meeting of Shareholders (the "General Meeting"), to be held on Wednesday, May 2, 2018, at 3:00 p.m. Israel time at the offices of the Company, 21 Ha'arba'a Street, 16th Floor, Tel-Aviv, Israel, or at any adjournments thereof.

It is proposed at the General Meeting to adopt the following proposals or to consider the following items:

1. To appoint Kesselman & Kesselman, certified public accountants in Israel and a member of PricewaterhouseCoopers International Limited, as the Company's independent auditors for the year 2018 and for an additional period until the following annual general meeting; and to inform the shareholders of the aggregate compensation paid to the auditors for the year ended December 31, 2017;
2. To approve an increase in the authorized share capital of the Company by 300 million Ordinary Shares;
3. To approve the re-election of Mr. Ofer Tsimchi, Dr. Kenneth Reed and Mr. Eric Swenden to the Board of Directors, each for an additional three-year term until the annual general meeting to be held in 2021;
4. To approve an amendment to the Company's Amended and Restated Award Plan (2010);
5. To approve a grant of 500,000 options to purchase Ordinary Shares of the Company to Mr. Dror Ben-Asher, the Company's Chief Executive Officer and Chairman of the Board of Directors;
6. To approve the proposed extension of options to purchase Ordinary Shares of the Company granted to Mr. Dror Ben-Asher, the Company's Chief Executive Officer and Chairman of the Board of Directors; and
7. To approve the proposed extension of options to purchase Ordinary Shares of the Company to Mr. Ofer Tsimchi, a non-executive director of the Company.

In addition, shareholders at the General Meeting will have an opportunity to review and ask questions regarding the financial statements of the Company for the fiscal year ended December 31, 2017.

The Company is currently unaware of any other matters that may be raised at the General Meeting. Should any other matters be properly raised at the General Meeting, the persons designated as proxies shall vote according to their own judgment on those matters.

Shareholders may present proposals for consideration at the General Meeting by submitting their proposals to the Company no later than April 22, 2018.

Shareholders Entitled to Vote

Only shareholders and ADS holders of record at the close of business on March 26, 2018 (the "Record Date"), shall be entitled to receive notice of and to vote at the General Meeting. At the close of business on March 26, 2018, the Company had outstanding 213,439,434 Ordinary Shares, each of which is entitled to one vote on each of the matters to be presented at the General Meeting.

Proxies

A form of proxy for use at the General Meeting is attached to this proxy statement and has been sent to the ADS holders together with a return envelope for the proxy. By appointing “proxies”, shareholders and ADS holders may vote at the General Meeting, whether or not they attend. If a properly executed proxy in the enclosed form is received by the Company at least four (4) hours prior to the General Meeting or by such earlier time indicated on the form of proxy, all of the Ordinary Shares represented by the proxy shall be voted as indicated on the form. ADS holders should return their proxies to BNY Mellon by the date set forth on the form of proxy. Subject to applicable law and the rules of the NASDAQ Stock Market, in the absence of instructions, the Ordinary Shares represented by properly executed and received proxies will be voted FOR all of the proposed resolutions to be presented at the General Meeting for which the Board of Directors recommends a “FOR”. Shareholders and ADS holders may revoke their proxies at any time before the deadline for receipt of proxies by filing with the Company (in the case of holders of Ordinary Shares) or with BNY Mellon (in the case of holders of ADSs) a written notice of revocation or a duly executed proxy bearing a later date.

Shareholders registered in the Company's shareholders register in Israel and shareholders who hold Ordinary Shares through members of the Tel-Aviv Stock Exchange may also vote through the attached form of proxy by completing, dating, signing and mailing the proxy to the Company's offices so that it is received by the Company no later than Wednesday, May 2, 2018, at 11:00 a.m. Israel time. Shareholders registered in the Company's shareholders' register in Israel and shareholders who hold Ordinary Shares through members of the Tel-Aviv Stock Exchange who vote their Ordinary Shares by proxy must also provide the Company with a copy of their identity card, passport or certification of incorporation, as the case may be. Shareholders who hold Ordinary Shares through members of the Tel-Aviv Stock Exchange and intend to vote their Ordinary Shares either in person or by proxy must deliver to the Company, no later than Wednesday, May 2, 2018, at 11:00 a.m. Israel time, an ownership certificate confirming their ownership of the Company's Ordinary Shares on the Record Date. Such certificate must be approved by a recognized financial institution, as required by the Israeli Companies Regulations (Proof of Ownership of Shares for Voting at General Meeting) of 2000, as amended. Alternatively, shareholders who hold Ordinary Shares through members of the Tel-Aviv Stock Exchange may vote electronically via the electronic voting system of the Israel Securities Authority up to six (6) hours before the time fixed for the General Meeting (i.e., 09:00 a.m. Israel time on May 2, 2018). You should receive instructions on electronic voting from the Tel-Aviv Stock Exchange member through which you hold your Ordinary Shares.

ADS holders should return their proxies by the date set forth on their form of proxy.

Expenses and Solicitation

The Board of Directors is soliciting proxies for use at the General Meeting. The Company expects to mail this proxy statement and the accompanying form of proxy to ADS holders on or about March 28, 2018. In addition to solicitation of proxies to ADS holders by mail, certain officers, directors, employees and agents of the Company, may solicit proxies by telephone, mail or another personal contact. The Company shall bear the cost of the solicitation of the proxies, including postage, printing and handling and shall reimburse the reasonable expenses of brokerage firms and others for forwarding material to beneficial owners of Ordinary Shares or ADSs.

This proxy statement and form of proxy shall also serve as a voting deed (ktav hatzba'a), as such term is defined under the Israel Companies Law 1999 (the “Companies Law”).

Quorum and Voting

Two or more shareholders holding Ordinary Shares conferring in the aggregate at least twenty-five percent (25%) of the voting power of the Company, present in person or by proxy at the General Meeting and entitled to vote thereat, shall constitute a quorum. If within half an hour from the time appointed for the General Meeting a quorum is not present, the General Meeting shall be adjourned to the next business day following the day of the scheduled meeting, at the same time and place, or at such other day, time and place as shall be prescribed by the Board of Directors in a notification to the shareholders. At such reconvened meeting, any one shareholder present in person or by proxy shall constitute a quorum regardless of the number of Ordinary Shares represented.

The approval of Proposals 1, 2, 3, 4 and 7 each requires the affirmative vote of at least a majority of the voting power represented at the General Meeting, in person or by proxy, and voting on the matter presented.

The approval of Proposals 5 and 6 each requires the affirmative vote of at least a majority of the voting power represented at the General Meeting, in person or by proxy, and voting on the matter presented, provided that one of the following two alternatives must apply: (i) such majority vote at the General Meeting shall include at least a majority of the total votes of shareholders who are not controlling shareholders of the Company (as defined in the Companies Law) and do not have a personal interest in the approval of the proposal, participating in the voting at the General Meeting in person or by proxy, without taking abstentions into account; or (ii) the total number of votes of the non-controlling shareholders mentioned in clause (i) above that are voted against such proposal does not exceed two percent (2%) of the total voting rights in the Company.

For this purpose, "personal interest" is defined under the Companies Law as: (1) a shareholder's personal interest in the approval of an act or a transaction of the Company, including (i) a personal interest of any of his or her relatives (which includes for these purposes foregoing shareholder's spouse, siblings, parents, grandparents, descendants and spouse's descendants, siblings, parents, and the spouse of any of the foregoing); (ii) a personal interest of a corporation in which a shareholder or any of his/her aforementioned relatives serve as a director or the chief executive officer, owns at least 5% of its issued share capital or its voting rights or has the right to appoint a director or chief executive officer; and (iii) a personal interest of an individual voting via a power of attorney given by a third party (even if the empowering shareholder has no personal interest), and the vote of an attorney-in-fact shall be considered a personal interest vote if the empowering shareholder has a personal interest, and all with no regard as to whether the attorney-in-fact has voting discretion or not, but (2) excludes a personal interest arising solely from the fact of holding shares in the Company.

Please note that you are required to indicate on the proxy with respect to Proposals 5 and 6 whether or not you are a controlling shareholder of the Company, or acting on its behalf, and whether you have a personal interest in the approval of the proposals as provided above. If you fail to so indicate on the proxy, your vote may not be counted with respect to the proposal(s) for which you failed to provide notification.

Shareholders wishing to express their position on an agenda item for this General Meeting may do so by submitting a written statement ("Position Statement") to the Company's offices, c/o Mr. Micha Ben Chorin, at 21 Ha'arba'a Street, Tel-Aviv, 64739 Israel. Any Position Statement received, that is in accordance with the guidelines set by the Israel Companies Law, will be furnished to the U.S. Securities and Exchange Commission (the "Commission") on Form 6-K, and will be made available to the public on the Commission's website at <http://www.sec.gov> and in addition at <http://www.magna.isa.gov.il> or <http://maya.tase.co.il>.

Position Statements must be submitted to the Company by no later than April 22, 2018.

The rate of participation of each director in the Board of Directors meetings held during 2017 was as follows: (i) Dror Ben-Asher - 100%, (ii) Dan Suesskind - 89%, (iii) Shmuel Cabilly - 94%, (iv) Ofer Tsimchi - 94%, (v) Nurit Benjamini - 100%, (vi) Eric Swenden - 80%, (vii) Kenneth Reed - 100%, (viii) Rick Scruggs - 83% and (ix) Nicolas Weinstein - 71%. The rate of participation of each director in the Board of Directors meetings held during 2016 was as follows: (i) Dan Suesskind - 94%, (ii) Shmuel Cabilly - 93%, (iii) Ofer Tsimchi - 94%, (iv) Nurit Benjamini - 81%, (v) Eric Swenden - 91%, (vi) Kenneth Reed - 88% (vii) Dror Ben-Asher - 100%, and (viii) Rick Scruggs - 86%. Percentages reflect (i) meetings held at which time each such individual was serving as a director of the Company and (ii) meetings in which such director was permitted by applicable law to participate.

The rate of participation of each member of the audit committee in the audit committee meetings during 2017 was as follows: (i) Dan Suesskind - 86%, (ii) Ofer Tsimchi - 100% and (iii) Nurit Benjamini - 100% and during 2016 was 100% for each of Dan Suesskind, Ofer Tsimchi and Nurit Benjamini.

The rate of participation of the members of the Company's compensation committee in the compensation committee meetings during 2017 was 100% for each of Shmuel Cabilly, Ofer Tsimchi and Nurit Benjamini, and for 2016 was as follows: (i) Shmuel Cabilly - 67%, (ii) Ofer Tsimchi - 100% and (iii) Nurit Benjamini - 100%.

Reporting Requirements

The Company is subject to the information reporting requirements of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), applicable to foreign private issuers. The Company fulfills these requirements by filing reports with the Commission. The Company’s filings with the Commission may be inspected without charge at the Commission’s public reference room at 100 F Street, N.E., Washington, D.C. 20549. Information on the operation of the public reference room can be obtained by calling the Commission at 1-800-SEC-0330. The Company’s filings are also available to the public on the Commission’s website at <http://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 notice and proxy statement should not be taken as an admission that the Company is subject to the proxy rules under the Exchange Act.

THE BOARD OF DIRECTORS RECOMMENDS THAT YOU VOTE FOR EACH OF THE PROPOSALS.

Except as specifically provided herein, the lack of a required majority for the adoption of any resolution presented shall not affect the adoption of any other resolutions for which the required majority was obtained.

PROPOSAL NO. 1
APPOINTMENT OF AUDITORS

Under the Companies Law and the Company's Amended and Restated Articles of Association (the "Articles"), the shareholders of the Company are authorized to appoint the Company's independent auditors. Under the Articles, the Board of Directors, following receipt of the recommendation of the Company's audit committee, is authorized to determine the independent auditors' remuneration. In addition, the Listing Rules of The NASDAQ Stock Market require that the Company's audit committee approve the re-appointment and remuneration of the independent auditors.

At the General Meeting, shareholders will be asked to approve the re-appointment of Kesselman & Kesselman, certified public accountants in Israel and a member of PricewaterhouseCoopers International Limited, as the Company's auditors for the year ending December 31, 2018 and for an additional period until the next annual general meeting. Kesselman & Kesselman has no relationship with the Company or with any affiliate of the Company except to provide audit services and tax consulting services.

Information on fees paid to the Company's independent auditors may be found in the Company's Annual Report on Form 20-F filed with the Securities and Exchange Commission.

It is proposed that at the General Meeting the following resolution be adopted:

"RESOLVED, that Kesselman & Kesselman be, and hereby is, appointed as the independent auditors of the Company for the year 2018 and for an additional period until the next annual general meeting."

The affirmative vote of at least a majority of the voting power represented at the General Meeting, in person or by proxy and voting thereon, is required to adopt this resolution.

The Company's audit committee and the Board of Directors recommend a vote FOR approval of this resolution.

PROPOSAL NO. 2
INCREASE OF AUTHORIZED SHARE CAPITAL

The Company's authorized share capital is currently NIS 3 million, consisting of 300 million Ordinary Shares, NIS 0.01 par value per share. The Company had approximately 26,563,237 Ordinary Shares (the equivalent of 2,656,323 ADSs) available for future issuance after taking into account the shares available for issuance under existing options and warrants (consisting only 8.9% of its current authorized share capital).

The Board of Directors recommends that at the General Meeting, the shareholders approve an amendment to the Company's Articles of Association increasing the authorized share capital of the Company by an additional NIS 3 million such that the authorized share capital shall be NIS 6 million, consisting of 600 million Ordinary Shares, NIS 0.01 par value per share (the equivalent of 60 million ADSs). The Board of Directors believes that the proposed increase in the Company's share capital is necessary to ensure that the Company will have sufficient authorized share capital available to pursue opportunities in the future without undue delay and expenses. These opportunities could include, without limitation, subject to receipt of all requisite approvals under Israeli law, the issuance of additional shares and/or warrants to raise additional capital for the Company's business, to execute potential acquisitions, or to make future grants under the Company's Amended and Restated Award Plan (2010), as amended.

"RESOLVED, to approve an amendment to the Company's Articles of Association increasing the authorized share capital of the Company from NIS 3 million, consisting of 300 million Ordinary Shares, NIS 0.01 par value per share, to NIS 6 million, consisting of 600 million Ordinary Shares."

The affirmative vote of the holders of Ordinary Shares representing a majority of the votes cast is required to approve the above resolution.

The Board of Directors recommends that you vote "FOR" the approval of the increase of authorized share capital.

PROPOSAL NO. 3

RE-ELECTION OF MR. OFER TSIMCHI, DR. KENNETH REED AND MR. ERIC SWENDEN AS INDEPENDENT DIRECTORS

According to the Articles, the Company's non-external directors are divided into three groups with as equal number of directors as possible. The term of one group of directors expires at each annual general meeting, at which time the directors of such group are re-nominated to serve an additional three-year term that expires at the annual general meeting held in the third year following such election. At the General Meeting, the terms of three of the Company's independent directors, Mr. Ofer Tsimchi, Dr. Kenneth Reed and Mr. Eric Swenden expire, and the Board of Directors has nominated each of Mr. Ofer Tsimchi, Dr. Kenneth Reed and Mr. Eric Swenden to be re-elected as a director for an additional three-year term.

Proxies (other than those directing the proxy holders not to vote for the listed nominees) will be voted for the re-election of each of the nominees to hold office until the 2021 annual general meeting, or such earlier time as each may resign or be removed from the Board of Directors pursuant to the terms of the Articles. The Company is not aware of any reason why any of the nominees, if elected, should not be able to serve as a director.

Each of Mr. Ofer Tsimchi, Dr. Kenneth Reed and Mr. Eric Swenden has attested to the Board of Directors and to the Company that he meets all the requirements in connection with the election of directors under the Companies Law, per the statement substantially in the form attached hereto as Appendix A.

The nominees to serve on the Board of Directors are below and the following information with respect to the nominees is supplied based upon the information furnished to the Company by the nominees:

Name	Age	Position
Ofer Tsimchi	58	Director
Dr. Kenneth Reed	64	Director
Eric Swenden	74	Director

Ofer Tsimchi has served as a director on the Board of Directors since May 4, 2011 and a member of the Company's audit committee and as the Chairman of the Company's compensation committee since May 5, 2011. From 2008 to 2012, Mr. Tsimchi served as the Chairman of the board of directors of Polysack Plastic Industries Ltd. and Polysack-Agriculture Products, and since 2006, he has served as a Partner in the Danbar Group Ltd., a holding company. Mr. Tsimchi currently serves as the Chairman of the board of directors of Clal Concrete Products Ltd., and on the board of directors of Caesarstone Ltd., Amutat Zionut 2000, Danbar Group Ltd, and Maabarot Products Ltd. Mr. Tsimchi received his BA in Economics and Agriculture from the Hebrew University of Jerusalem, Israel. The Board of Directors has determined that Mr. Tsimchi is a financial and accounting expert under Israeli law.

Dr. Kenneth Reed has served as a member of the Board of Directors since December 15, 2009. Dr. Reed is a dermatologist practicing in a private practice under the name of Kenneth Reed M.D. PC. Dr. Reed currently serves on the board of directors of Minerva Biotechnologies Corporation. Dr. Reed received his B.A from Brown University in the U.S. and an M.D from the University of Medicine and Dentistry of New Jersey in the U.S. Dr. Reed is a board-certified dermatologist with over 25 years of clinical experience since completing the Harvard Medical School Residency Program in Dermatology. Dr. Reed is also a co-founder of Early Cell, a prenatal diagnostics company, and Prescient Pharma.

Eric Swenden has served as a member of the Board of Directors since May 3, 2010 and has served on the Company's investment committee since May 5, 2011. From 1966 until 2001 Mr. Swenden served in various positions, including Chief Executive Officer (since 1985) and Executive Chairman (since 1990) of Vandemoortele Food Group, a privately held Belgium-based European food group with revenue of approximately EUR 2 billion, and he currently serves on the board of directors of TBC S.A. and Maya Gold & Silver Ltd. Mr. Swenden holds an M.A. in Commercial Science from the University of Antwerp, Belgium. The Board of Directors has determined that Mr. Swenden is a financial and accounting expert under Israeli law.

It is proposed that at the General Meeting the following resolution be adopted:

“RESOLVED, that Mr. Ofer Tsimchi, Dr. Kenneth Reed and Mr. Eric Swenden be, and each of them hereby is, elected to hold office as a director of the Company for an additional three-year term until the annual general meeting to be held in 2021.”

The affirmative vote of at least a majority of the voting power represented at the General Meeting, in person or by proxy and voting thereon, is required to adopt this resolution.

The Board of Directors recommends a vote FOR the nominees to the Board of Directors.

PROPOSAL NO. 4

AMENDMENT TO THE COMPANY'S AMENDED AND RESTATED AWARD PLAN (2010)

On May 11, 2017, the Company's shareholders approved the adoption of the Company's Amended and Restated Award Plan (2010) (the "Plan"). The Company's compensation committee, followed by the Board of Directors, approved an amendment to the Plan, to increase the maximum number of Ordinary Shares of the Company that may be issued under the Plan by 10,000,000 (ten million) Ordinary Shares (equivalent to 1,000,000 ADSs) to 43,646,039 Ordinary Shares in the aggregate, which includes Ordinary Shares already issued under the Plan following exercise of options. The total number of Ordinary Shares reserved for future issuance under the Plan (including Ordinary Shares underlying outstanding options) would increase to 38,602,749 Ordinary Shares, which would represent 14.6% of the Company's issued and outstanding share capital on a fully-diluted basis). The compensation committee and Board of Directors have determined that an increase of 10,000,000 Ordinary Shares (equivalent 1,000,000 ADSs), representing approximately 3.8% of the Company's issued and outstanding share capital on a fully-diluted basis, is necessary to create a pool of options available to the Company in order to attract, retain and motivate eligible persons whose present and potential contributions are important to the success of the Company and to the subsidiary of the Company.

It is proposed that at the General Meeting, the following resolution be adopted:

“RESOLVED, to approve the increase in the maximum number of Ordinary Shares of the Company that may be issued under the Amended and Restated Award Plan (2010) by 10,000,000 Ordinary Shares (equivalent to 1,000,000 ADSs).”

The affirmative vote of at least a majority of the voting power represented at the General Meeting, in person or by proxy and voting thereon, is required to adopt this resolution.

The Board of Directors and the compensation committee recommend that you vote FOR the approval of the amendment of the Plan.

PROPOSAL NO. 5

GRANT OF OPTIONS TO PURCHASE SHARES OF THE COMPANY TO MR. DROR BEN-ASHER, THE COMPANY'S CHIEF EXECUTIVE OFFICER AND CHAIRMAN OF THE BOARD OF DIRECTORS

The Companies Law requires that the terms of service and employment of a company's chief executive officer be approved by the company's compensation committee, the board of directors and the shareholders of the company, except in the limited circumstances set forth in the Companies Law. In addition, the Companies Law provides that transactions between a company and its directors regarding their terms of office as director, and with respect to their terms of employment in other positions in the company, are subject to the approval of such company's audit committee or compensation committee, as applicable, board of directors and shareholders.

It is proposed to grant options to purchase Ordinary Shares of the Company to Mr. Dror Ben-Asher, the Company's Chief Executive Officer and Chairman of the Board of Directors.

Mr. Dror Ben-Asher has served as the Company's Chief Executive Officer and the Chairman of the Board of Directors since its incorporation. In light of Mr. Ben-Asher's contribution to the Company, and in accordance with the Company's compensation policy, the Board of Directors and compensation committee have determined that the proposed grant of options described below is appropriate, reasonable and reflect the significant contribution of Mr. Ben-Asher to the Company.

When discussing the proposed grant of options to Mr. Ben-Asher, the compensation committee and the Board of Directors took into consideration, *inter alia*: (a) Mr. Ben-Asher is one of the two entrepreneurs who founded the Company in August 2009 and has been leading the Company from the date of the Company's establishment until today; (b) the Company's strategic milestones achieved during the last year thanks to Mr. Ben-Asher's leadership and contribution; (c) the growing scale of the Company's operations and Mr. Ben-Asher's responsibilities related to R&D, commercial, operations, compliance, IR and HR, among others; and (d) the grant of options complies with the Company's compensation policy.

The proposal to grant to Mr. Ben-Asher options to purchase 500,000 Ordinary Shares of the Company is similar in amount to the grant of options to Mr. Ben-Asher in 2017. Each option granted represents an option to purchase one Ordinary Share of the Company at an exercise price of \$0.65 per Ordinary Share (or \$6.50 per ADS), which represents the average closing price of the Company's Ordinary Shares on the Tel-Aviv Stock Exchange in the last 30 trading days prior to the date of the Board of Directors meeting at which the grant was approved (March 21, 2018), plus 10% (but in no event less than the closing market price of the Company's Ordinary Shares on the date of such Board of Directors meeting). The options would vest quarterly over four (4) years in equal parts. The last date for exercise of the options will be ten (10) years following the grant date. First vesting is scheduled on June 30, 2018 and the options will become fully vested, in accordance with the terms of the grant, on March 31, 2022. The equity grants and related terms would be in accordance with the Company's Amended and Restated Award Plan (2010), as amended. The proposed equity grant to Mr. Ben-Asher would represent 0.2% of the total outstanding equity of the Company, on a fully-diluted basis.

It is proposed that at the General Meeting, the following resolution be adopted:

“RESOLVED, to approve the grant of 500,000 options to Mr. Dror Ben-Asher, the Company's Chief Executive Officer and Chairman of the Board of Directors, exercisable into Ordinary Shares of the Company.”

The approval of this proposal requires the affirmative vote of at least a majority of the voting power represented at the General Meeting, in person or by proxy, and voting on the matter presented, provided that one of the following two alternatives must apply: (i) such majority vote at the General Meeting shall include at least a majority of the total votes of shareholders who are not controlling shareholders of the Company (as defined in the Companies Law) and do not have a personal interest in the approval of the proposal, participating in the voting at the General Meeting in person or by proxy, without taking abstentions into account; or (ii) the total number of votes of the non-controlling shareholders mentioned in clause (i) above that are voted against such proposal does not exceed two percent (2%) of the total voting rights in the Company.

The Board of Directors and the compensation committee recommend that you vote FOR the approval of grant options to Mr. Dror Ben-Asher.

PROPOSAL NO. 6

APPROVAL OF THE PROPOSED EXTENSION OF OPTIONS TO PURCHASE ORDINARY SHARES OF THE COMPANY GRANTED TO MR. DROR BEN-ASHER, THE COMPANY'S CHIEF EXECUTIVE OFFICER AND CHAIRMAN OF THE BOARD OF DIRECTORS

The Companies Law requires that the terms of service and employment of a company's chief executive officer be approved by the company's compensation committee, the board of directors and the shareholders of the company, except in the limited circumstances set forth in the Companies Law. In addition, the Companies Law provides that transactions between a company and its directors regarding their terms of office as director, and with respect to their terms of employment in other positions in the company, are subject to the approval of such company's audit committee or compensation committee, as applicable, board of directors and shareholders.

Mr. Dror Ben-Asher has served as the Company's Chief Executive Officer and Chairman of the Board of Directors since its incorporation.

On February 3, 2011, the Company granted an aggregate of options to purchase 6,210,000 Ordinary Shares (the equivalent of 621,000 ADSs) to officers, directors, advisory board members, employees and consultants of the Company, including 1,540,000 options which were to Mr. Ben-Asher, at an exercise price of \$0.50 per ordinary share (the equivalent of \$5.00 per ADS). Such options had an expiration date of February 3, 2018. In order to incentivize the optionees, including Mr. Ben-Asher, and to reward them for their dedication and commitment to the Company, the Company's compensation committee and the Board of Directors earlier this year approved the extension of the options' exercise period until February 3, 2021. The extended options would have a one-year cliff and an exercise price of \$0.75 (the equivalent of \$7.50 per ADS), representing a 50% increase over the original exercise price per ordinary share.

In addition to approving the extension of options for the other optionees, the Company's compensation committee and the Board of Directors also approved the extension (or otherwise the allocation of new options to replace the originally granted options) of options to purchase 1,540,000 Ordinary Shares (the equivalent of 154,000 ADSs) that were granted to Mr. Ben-Asher at the same time as the options granted to the other optionees as described above and also had an expiration date of February 3, 2018. The extended options of Mr. Ben-Asher would have the same terms as the extended options for the other optionees whose option extension was approved by the compensation committee and the Board of Directors, and would have a one-year cliff and an exercise price of \$0.75 (equivalent of \$7.50 per ADS), representing a 50% increase over the original exercise price per Ordinary Share. The extension of the options of Mr. Ben-Asher are subject to shareholder approval at this General Meeting.

It is proposed that at the General Meeting, the following resolution be adopted:

"RESOLVED, to approve the extension of the exercise period of Mr. Dror Ben-Asher's options to purchase 1,540,000 Ordinary Shares (equivalent to 154,000 ADSs) until February 3, 2021 (or allocate new options with such expiration date) with an exercise date of February 3, 2019 and an exercise price of \$0.75 per Ordinary Share (equivalent of \$7.50 per ADS), representing a 50% increase over the original exercise price per Ordinary Share."

The approval of this proposal requires the affirmative vote of at least a majority of the voting power represented at the General Meeting, in person or by proxy, and voting on the matter presented, provided that one of the following two alternatives must apply: (i) such majority vote at the General Meeting shall include at least a majority of the total votes of shareholders who are not controlling shareholders of the Company (as defined in the Companies Law) and do not have a personal interest in the approval of the proposal, participating in the voting at the General Meeting in person or by proxy, without taking abstentions into account; or (ii) the total number of votes of the non-controlling shareholders mentioned in clause (i) above that are voted against such proposal does not exceed two percent (2%) of the total voting rights in the Company.

The compensation committee and the Board of Directors recommend a vote FOR the approval of the proposed extension of the options to purchase 1,540,000 Ordinary Shares granted to Mr. Dror Ben-Asher upon the terms described above.

PROPOSAL NO. 7

APPROVAL OF THE PROPOSED EXTENSION OF OPTIONS TO PURCHASE SHARES OF THE COMPANY TO MR. OFER TSIMCHI, A NON-EXECUTIVE DIRECTOR OF THE COMPANY

On May 3, 2011, the Company granted options to purchase 150,000 Ordinary Shares (the equivalent of 15,000 ADSs) to Mr. Ofer Tsimchi, a non-executive director of the Company, at an exercise price of \$1.05 per ordinary share (equivalent to \$10.50 per ADS), with an expiration date of May 3, 2018. In order to incentivize Mr. Tsimchi, and to reward him for his dedication and commitment to the Company, the Company's compensation committee and the Board of Directors approved during March 2018 the extension of these options until May 3, 2021. The extended options would have a one-year cliff and an exercise price of \$1.58 (equivalent to \$15.8 per ADS), representing a 50% increase over the original exercise price, per ordinary share. The extension of the options of Mr. Tsimchi is subject to shareholder approval at this General Meeting.

The proposed extension of the options would be on the same terms of extension as the extension of the options held by other optionees (officers, directors, advisory board members, employees and consultants), whose options were originally to expire on February 3, 2018, as described in Proposal 6 above, in that the extension of Mr. Tsimchi's options would be for additional three years, there would be a one-year cliff and the exercise price would be increased by 50% from the original exercise price.

The background and qualifications of Mr. Ofer Tsimchi are described in Proposal 3 of this Proxy Statement.

It is proposed that at the General Meeting, the following resolution be adopted:

"RESOLVED, to approve the extension of the exercise period of Mr. Ofer Tsimchi's options to purchase 150,000 Ordinary Shares (15,000 ADSs) until May 3, 2021 with an exercise date of May 3, 2019 and an exercise price of \$1.58 (equivalent of \$15.80 per ADS) per ordinary share, representing a 50% increase over the original exercise price per ordinary share."

The affirmative vote of at least a majority of the voting power represented at the General Meeting, in person or by proxy and voting thereon, is required to adopt this resolution.

The Board and the compensation committee recommend that you vote FOR the approval of the proposed extension of the options to purchase 150,000 Ordinary Shares granted to Mr. Ofer Tsimchi upon the terms described above.

Other than as set forth above, as of the mailing of this Proxy Statement, management knows of no business to be transacted at the General Meeting, but, if any other matters are properly presented at the General Meeting, the persons named in the enclosed form of proxy will vote upon such matters in accordance with their best judgment.

By Order of the Board of Directors

Dror Ben-Asher

Chairman of the Board of Directors

Dated: March 26, 2018

Appendix A - Form of Statement of a Candidate to Serve as a Director

The undersigned, _____, hereby declares to RedHill Biopharma Ltd. (the "Company"), effective as of _____, as follows:

I am making this statement as required under Section 224B of the Israeli Companies Law, 5759-1999 (the "Israeli Companies Law"). Such provision requires that I make the statements set forth below prior to, and as a condition to, the submission of my election as a director of the Company to the approval of the Company's shareholders.

I possess the necessary qualifications and skills and have the ability to dedicate the appropriate time for the purpose of performing my service as a director in the Company, taking into account, among other things, the Company's special needs and its size.

My qualifications were presented to the Company. In addition, attached hereto is a biographical summary as contained in the Company's most recent Form 20-F, which includes a description of my academic degrees, as well as previous experience relevant for the evaluation of my suitability to serve as a director.

I am not restricted from serving as a director of the Company under any items set forth in Sections 226¹, 226A² or 227³ of the Israeli Companies Law, which include, among other things, restrictions relating to the appointment of a minor, a person who is legally incompetent, a person who was declared bankrupt, a person who has prior convictions or anyone whom the administrative enforcement committee of the Israel Securities Law 5728-1968 (the "Israel Securities Law") prohibits from serving as a director.

I am aware that this statement shall be presented at the Annual General Meeting of Shareholders of the Company in which my election shall be considered, and that pursuant to Section 241 of the Israeli Companies Law it shall be kept in the Company's registered office and shall be available for review by any person.

Should a concern arise of which I will be aware and/or that will be brought to my attention, pursuant to which I will no longer fulfill one or more of the requirements and/or the declarations set forth above, I shall notify the Company immediately, in accordance with Section 227A of the Israeli Companies Law.

IN WITNESS WHEREOF, the undersigned has signed this statement as of the date set forth above.

Name: _____

Signature: _____

Date: _____

¹ As of the date hereof, Section 226 of the Israeli Companies Law generally provides that a candidate shall not be appointed as a director of a public company (i) if the person was convicted of an offense not listed below but the court determined that due to its nature, severity or circumstances, he/she is not fit to serve as a director of a public company for a period that the court determined which shall not exceed five years from judgment or (ii) if he/she has been convicted of one or more offences specified below, unless five years have elapsed from the date the convicting judgment was granted or if the court has ruled, at the time of the conviction or thereafter, that he/she is not prevented from serving as a director of a public company:

(1) offenses under Sections 290-297 (bribery), 392 (theft by an officer), 415 (obtaining a benefit by fraud), 418-420 (forgery), 422-428 (fraudulent solicitation, false registration in the records of a legal entity, manager and employee offences in respect of a legal entity, concealment of information and misleading publication by a senior officer of a legal entity, fraud and breach of trust in a legal entity, fraudulent concealment, blackmail using force, blackmail using threats) of the Israel Penal Law 5737-1997; and offences under sections 52C, 52D (use of inside information), 53(a) (offering shares to the public other than by way of a prospectus, publication of a misleading detail in the prospectus or in the legal opinion attached thereto, failure to comply with the duty to submit immediate and period reports) and 54 (fraud in securities) of the Israel Securities Law;

(2) conviction by a court outside of the State of Israel of an offense of bribery, fraud, offenses of directors/managers in a corporate body or exploiting inside information.

² As of the date hereof, Section 226A of the Israeli Companies Law provides that if the administrative enforcement committee of the Israel Securities Authority has imposed on a person enforcement measures that prohibited him/her from holding office as director of a public company, that person shall not be appointed as a director of a public company in which he/she is prohibited to serve as a director according to this measure.

³ As of the date hereof, Section 227 of the Israeli Companies Law provides that a candidate shall not be appointed as a director of a company if he/she is a minor, legally incompetent, was declared bankrupt and not discharged, and with respect to a corporate body – in case of its voluntary dissolution or if a court order for its dissolution was granted.