

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 of annual general meeting of the Company posted by the Company on its website.

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 21, 2018

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



March 21, 2018

Notice of Annual General Meeting of Shareholders

REDHILL BIOPHARMA LTD.

(the "Company")

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, Floor 16, Tel-Aviv, Israel on May 2, 2018 at 3:00 p.m. Israel time, or at any adjournments thereof (the "General Meeting").

The agenda of the meeting shall be as follows:

1. To appoint Kesselman & Kesselman, certified public accountants in Israel and a member of PricewaterhouseCoopers International Limited, as the Company's auditors for the year 2018 and for an additional period until the next 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 of 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 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;
5. To approve extension of options to purchase ordinary shares in the Company granted to Mr. Dror Ben-Asher, the Company's Chief Executive Officer and Chairman of the Board of Directors;
6. To approve extension of options to purchase ordinary shares in the Company granted to Mr. Ofer Tsimchi, a non-executive director of the Company;
7. To approve an amendment to the Company's Amended and Restated Award Plan (2010).

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.

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

The record date for determining the right of a shareholder of the Company to participate and vote at the Meeting will be the end of the business day on Monday, March 26, 2018 (the “**Record Date**”).

The approval of Proposals 1, 2, 3, 6 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 4 and 5 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.

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 a proxy card to be provided by the Company, 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, which 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 four hours before the time fixed for the General Meeting (*i.e.*, 11 a.m. Israel time on May 2, 2018). You should receive instructions about 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 the form of proxy to be provided to them by the Company.

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 Meeting - If within half an hour from the time appointed for the Meeting a quorum is not present, the Meeting shall be adjourned to the next business day following the day of the scheduled 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, 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

RedHill Biopharma Ltd.