

**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 2020
Commission File No.:001-35773

REDHILL BIOPHARMA LTD.

(Translation of registrant's name into English)

21 Ha'arba'a Street, Tel Aviv, 6473921, 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 shareholders of the Company scheduled for May 4, 2020.

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), on July 25, 2017 (Registration No. 333-219441), on May 23, 2018 (Registration No. 333-225122) and on July 24, 2019 (File No. 333-232776) and its Registration Statements on Form F-3 filed with the Securities and Exchange Commission on February 25, 2016 (Registration No. 333-209702), on July 23, 2018 (File No. 333-226278) and on July 24, 2019 (File No. 333-232777).

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, 2020

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

REDHILL BIOPHARMA LTD.
21 Ha'arba'a Street
Tel-Aviv 6473921
Israel

NOTICE OF ANNUAL GENERAL MEETING OF SHAREHOLDERS
To Be Held on May 4, 2020

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 4, 2020 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 auditors for the year 2020 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, 2019;
2. To approve the re-election of Mr. Rick D. Scruggs to the board of directors of the Company (the "Board of Directors"), and the election of Dr. Shmuel Cabilly and Mr. Giuseppe Cipriano to the Board of Directors for an additional three-year term until the annual general meeting to be held in 2023;
3. To approve the re-election of Mr. Nicolas Weinstein to the Board of Directors, for an additional one-year term until the annual general meeting to be held in 2021;
4. To approve an amendment to the Company's Compensation Policy;
5. To approve an amendment of the Company's Amended and Restated Award Plan (2010);
6. To approve the engagement by the Company of Mr. Dror Ben-Asher to serve as the Company's Chairman of the Board of Directors and the Company's Chief Executive Officer;
7. To approve a grant of options to purchase American Depository Shares ("ADSs") (each representing 10 ordinary shares, par value NIS 0.01 per share) of the Company to the non-executive directors of the Company;
8. To approve the grant of options to purchase ADS's of the Company to Mr. Dror Ben-Asher;
9. To approve revisions to the compensation terms and the grant of options to purchase ADS's of the Company to Mr. Rick D. Scruggs, the Company's Chief Commercial Officer;
10. To approve an extension of options to purchase ADSs of the Company granted to certain Company directors;
11. To approve an extension of options to purchase ADSs of the Company granted to Mr. Dror Ben-Asher;
12. To approve the repricing of options exercisable into ADSs of the Company granted to the Company's directors;
13. To approve the repricing of options exercisable into ADSs of the Company granted to Mr. Dror Ben-Asher; and
14. To approve an increase in the Company's authorized share capital.

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, 2019.

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 and holders of record of ADSs, evidenced by American Depository Receipts issued by The Bank of New York Mellon at the close of business on April 1, 2020 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 proxy to be provided separately.

Whether or not you plan to attend the General Meeting, it is important that your ADSs or ordinary shares be represented. Accordingly, you are kindly requested to complete, date, sign and mail the proxy to be provided separately in the envelope provided at your earliest convenience so that it will be received no later than four hours prior to the General Meeting. 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 it is exercised.

Shareholders who hold ordinary shares through members of the Tel-Aviv Stock Exchange Ltd. ("TASE"), who did not convert their ordinary shares to ADSs, may vote in the Meeting in person or vote through the form of proxy card to be provided separately, which also serves as their voting card, by completing, dating, signing and mailing the proxy card to the Company's offices so that it is received by the Company no later than May 4, 2020 at 9:00 a.m. Israel time, and must also provide the Company with a copy of their identity card, passport or certificate of incorporation (as the case may be), and 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.

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, 6473921 Israel, by no later than April 23, 2020. 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>.

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, Israel, Tel: +972 3 541 3131, Sunday through Thursday between 10:00-15:00, and also will be made available to the public on the Company's website <http://www.redhillbio.com>, the Commission's website at <http://www.sec.gov>.

By Order of the Board of Directors,

Dror Ben-Asher
Chairman of the Board of Directors

Tel-Aviv, Israel
March 26, 2020