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 Under the Securities Exchange Act of 1934

For the Month of April 2020

001-36203

(Commission File Number)

CAN-FITE BIOPHARMA LTD.

(Exact name of Registrant as specified in its charter)

10 Bareket Street Kiryat Matalon, P.O. Box 7537 Petach-Tikva 4951778, 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):

This Report on Form 6-K (including exhibits thereto) is hereby incorporated by reference into the registrant's Registration Statements on Form S-8 (File No. 333-227753) and Form F-3 (File Nos. 333-195124, 333-199033, 333- 236064, 333-209037 and 333-220644), to be a part thereof from the date on which this report is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.

On April 1, 2020, Can-Fite BioPharma Ltd. (the "Company") announced that it will hold a Special Meeting of Shareholders on April 21, 2020 at 4:00 P.M. (Israel time) at the Company's offices in Petach-Tikva, Israel. In connection with the meeting, the Company furnishes the following documents:

- 1. A copy of the Notice and Proxy Statement with respect to the Company's Special Meeting of Shareholders describing the proposal to be voted upon at the meeting, the procedure for voting in person or by proxy at the meeting and various other details related to the meeting, attached hereto as Exhibit 99.1;
- 2. A form of Proxy whereby holders of ordinary shares of the Company may vote at the meeting without attending in person, attached hereto as Exhibit 99.2; and
- A form of Voting Instruction Card whereby holders of American Depositary Shares of the Company may vote at the meeting without attending in person, attached hereto as Exhibit 99.3.

Exhibit Index

Exhibit No.	Description
99.1	Notice and Proxy Statement with respect to the Company's Special Meeting of Shareholders
99.2	Proxy for holders of ordinary shares with respect to the Company's Special Meeting of Shareholders
99.3	Voting Instruction Card for American Depositary Share holders with respect to the Company's Special Meeting of Shareholders
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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.

Date: April 1, 2020

Can-Fite BioPharma Ltd.

By: /s/ Pnina Fishman

Pnina Fishman Chief Executive Officer

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NOTICE OF SPECIAL MEETING OF SHAREHOLDERS TO BE HELD ON APRIL 21, 2020

To the shareholders and ADS holders of Can-Fite BioPharma Ltd. (the "Company"):

Notice is hereby given that a Special Meeting of Shareholders will be held on Tuesday, April 21, 2020, at 4:00 P.M. Israel time at our offices, 10 Bareket Street, Petach-Tikva, Israel.

The agenda of the special meeting will be to increase our authorized share capital by NIS 125,000,000, such that following the increase, the authorized share capital shall equal NIS 250,000,000 divided into 1,000,000,000 ordinary shares, par value NIS 0.25 each, and to amend our articles of association accordingly.

Only shareholders and holders of American Depositary Shares at the close of business on April 6, 2020 (the "Record Date") are entitled to notice of, and to vote at, the special meeting and any adjournment or postponement thereof. You are cordially invited to attend the special meeting in person.

If you are unable to attend the special meeting in person, you are requested to complete, date and sign the enclosed proxy and to return it promptly in the pre-addressed envelope provided. Shareholders who attend the special meeting may revoke their proxies and vote their shares in person.

Beneficial owners who hold ordinary shares through members of the Tel Aviv Stock Exchange, or the TASE, may either vote their shares in person at the special meeting by presenting a certificate signed by the TASE Clearing House member through which the shares or are held, which complies with the Israel Companies Regulations (Proof of Ownership for Voting in General Meetings)-2000 as proof of ownership of the shares on the Record Date, or send such certificate along with a duly executed proxy (in the form filed by us on MAGNA, the distribution site of the Israeli Securities Authority, at www.magna.isa.gov.il), to us at 10 Bareket Street, Kiryat Matalon, PO Box 7537, Petach-Tikva, 4951778, Israel Attention: Chief Financial Officer.

By Order of the Board of Directors

Ilan Cohn

Chairman of the Board April 1, 2020



10 Bareket Street, Kiryat Matalon PO Box 7537 Petach-Tikva 4951778 Israel

PROXY STATEMENT

FOR SPECIAL MEETING OF SHAREHOLDERS TO BE HELD ON APRIL 21, 2020

This Proxy Statement is furnished to our holders of ordinary shares, par value NIS 0.25 per share, including holders of our ordinary shares that are represented by American Depository Shares, or ADSs, in connection with the Special Meeting of Shareholders, to be held on Tuesday, April 21, 2020, at 4:00 P.M. Israel time at our offices, 10 Bareket Street, Petach-Tikva, Israel, or at any adjournments thereof.

Throughout this Proxy Statement, we use terms such as "Can-Fite", "we", "us", "our" and the "Company" to refer to Can-Fite BioPharma Ltd. and terms such as "you" and "your" to refer to our shareholders and ADS holders.

Agenda Items

The agenda of the special meeting will be to increase our authorized share capital by NIS 125,000,000, such that following the increase, the authorized share capital shall equal NIS 250,000,000 divided into 1,000,000,000 ordinary shares, par value NIS 0.25 each, and to amend our articles of association accordingly.

We currently are unaware of any other matters that may be raised at the special meeting. Should any other matters be properly raised at the special meeting, the persons designated as proxies shall vote according to their own judgment on those matters.

Board Recommendation

Our board of directors unanimously recommends that you vote "FOR" the proposal on the agenda.

Who Can Vote

Only shareholders and ADS holders at the close of business on April 2, 2020, shall be entitled to receive notice of and to vote at the special meeting.

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How You Can Vote

You can vote your ordinary shares by attending the special meeting. If you do not plan to attend the special meeting, the method of voting will differ for shares held as a record holder, shares held in "street name" (through a Tel Aviv Stock Exchange, or TASE, member) and shares underlying ADSs that you hold. Holders of ADSs (whether registered in their name or in "street name") will receive voting instruction cards in order to instruct their banks, brokers or other nominees on how to vote.

Shareholders of Record

If you are a shareholder of record, you can submit your vote by completing, signing and submitting an applicable proxy, which has been published at www.magna.isa.gov.il and www.maya.tase.co.il and which will be accessible at the "Investor Information" portion of our website, as described below under "Shareholder Meetings".

Shareholders Holding in "Street Name," Through the TASE

If you hold ordinary shares in "street name," that is, through a bank, broker or other nominee that is admitted as a member of the TASE, your shares will only be voted if you provide instructions to the bank, broker or other nominee as to how to vote, or if you attend the special meeting in person.

If voting by mail, you must sign and date a proxy and attach to it a certificate signed by the TASE Clearing House member through which the shares are held, which complies with the Israel Companies Regulations (Proof of Ownership for Voting in General Meetings)-2000 as proof of ownership of the shares, as applicable, on the Record Date, and return the proxy, along with the proof of ownership certificate, to us, as described in the instructions available on MAGNA.

If you choose to attend the special meeting (where ballots will be provided), you must bring the proof of ownership certificate from the TASE's Clearing House member through which the shares are held, indicating that you were the beneficial owner of the shares, as applicable, on the Record Date.

Holders of ADSs

Under the terms of the Deposit Agreement between the Company, The Bank of New York Mellon, as depositary, or BNY Mellon, and the holders of our ADSs, BNY Mellon shall endeavor (insofar as is practicable) to vote or cause to be voted the number of shares represented by ADSs in accordance with the instructions provided by the holders of ADSs to BNY Mellon. For ADSs that are held in "street name", through a bank, broker or other nominee, the voting process will be based on the underlying beneficial holder of the ADSs directing the bank, broker or other nominee to arrange for BNY Mellon to vote the ordinary shares represented by the ADSs in accordance with the beneficial holder's voting instructions. If no instructions are received by BNY Mellon from any holder of ADSs (whether held directly by a beneficial holder or in "street name") with respect to any of the shares represented by the ADSs on or before the date established by BNY Mellon for such purpose, BNY Mellon shall not vote or attempt to vote the shares represented by such ADSs.

Multiple Record Holders or Accounts

You may receive more than one set of voting materials, including multiple copies of this document or voting instruction cards. For example, shareholders who hold ADSs in more than one brokerage account will receive a separate voting instruction card for each brokerage account in which ADSs are held. You should complete, sign, date and return each voting instruction card you receive.

Our board of directors urges you to vote your shares so that they will be counted at the special meeting or at any postponements or adjournments of the special meeting.

Solicitation

Shareholders and ADS holders may vote at the special meeting whether or not they attend. If a properly executed proxy is received by us at least 48 hours prior to the special meeting (and received by BNY Mellon no later than the date indicated on the voting instruction card, in the case of ADS holders), all of the shares represented by the proxy shall be voted as indicated on the form or, if no preference is noted, shall be voted in favor of the matter described above, and in such manner as the holder of the proxy may determine with respect to any other business as may come before the special meeting or any adjournment thereof. Shareholders and ADS holders may revoke their proxy at any time before the deadline for receipt of powers of attorney by filing with us (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 duly executed proxy bearing a later date.



Quorum

At the close of business on March 31, 2020, we had outstanding 263,181,243 ordinary shares. Each ordinary share (including ordinary shares represented by ADSs) outstanding as of the close of business on the Record Date is entitled to one vote upon each of the matters to be voted on at the special meeting.

Under our articles of association, the special 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 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 later date if so specified in the notice of the meeting. At the reconvened meeting, if there is no quorum within half an hour from the time scheduled for the meeting, any number of our shareholders present in person or by proxy shall constitute a lawful quorum.

Vote Required

The approval of the proposal is subject to the affirmative vote of the holders of a majority of the voting power represented and voting on this proposal in person or by proxy.

If you provide specific instructions (mark boxes) with regard to the proposal, your shares will be voted as you instruct. If you sign and return your proxy or voting instruction form without giving specific instructions, your shares will be voted in accordance with the recommendations of our Board of Directors. The proxy holders will vote in their discretion on any other matters that properly come before the meeting.

If you are a shareholder of record and do not return your proxy, your shares will not be voted. If you hold shares (or ADSs representing shares) beneficially in street name, your shares will also not be voted at the meeting if you do not return your proxy or voting instruction card to instruct your broker or BNY Mellon how to vote. For the proposal, a broker (and BNY Mellon) may only vote in accordance with instructions from a beneficial owner of shares or ADSs.

Availability of Proxy Materials

Copies of the voting instruction card, the Notice of the Special General Meeting and this Proxy Statement are available at the "Investor Information" portion of our website, www.canfite.com. The contents of that website are not a part of this Proxy Statement.

Reporting Requirements

We are subject to the information reporting requirements of the Securities Exchange Act of 1934, as amended, or Exchange Act, applicable to foreign private issuers. We fulfill these requirements by filing reports with the Securities and Exchange Commission, or Commission. Our 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. Our filings are also available to the public on the Commission's website at http://www.sec.gov.

As a foreign private issuer, we are 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 we are subject to the proxy rules under the Exchange Act.

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PROPOSAL TO INCREASE AUTHORIZED SHARE CAPITAL

Background

Our authorized share capital is NIS 125,000,000 divided into 500,000,000 ordinary shares, par value NIS 0.25 each. As of March 31, 2020, 263,181,243 ordinary shares were outstanding, 1,278,090 ordinary shares are issuable or will become issuable upon the exercise of stock options out of which 148,400 ordinary shares are available for issuance under our 2013 Share Option Plan, and 162,455,326 ordinary shares represented by 5,415,178 ADSs are issuable upon exercise of outstanding warrants. Accordingly, 73,085,341 ordinary shares remain unissued and unreserved.

The previous increase of our authorized share capital was over two years ago. The proposal to increase the authorized share capital of the Company is designed to enable us to have sufficient authorized share capital for the upcoming years and in order that the increase in authorized share capital would allow us to meet our future business needs as they arise. These needs could include, among other things, the sale of shares in public and private offerings to raise additional capital, the purchase of property or assets, the acquisition of other companies, the use of shares for various equity compensation and other employee benefit plans and arrangements, the declaration of share splits or dividends, and other bona fide corporate purposes.

The possible future issuance of equity securities consisting of ordinary shares, ADSs or securities convertible into ordinary shares could affect our current shareholders in a number of ways, including the following: (i) diluting the voting power of the current holders of ordinary shares or ADSs; (ii) diluting the market price of the ordinary shares or ADSs, to the extent that the new ordinary shares or ADSs are issued and sold at prices below current trading prices of the existing ordinary shares or ADSs, or if the issuance consists of equity securities convertible into ordinary shares or ADSs, to the extent that the securities provide for the conversion into ordinary shares or ADSs at prices that could be below current trading prices of the ordinary shares or ADSs; and (iii) diluting the book value per share of the outstanding ordinary shares or ADSs.

Proposed Resolution

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

"RESOLVED, that the increase to our authorized share capital by NIS 125,000,000, such that following the increase, the authorized share capital shall equal NIS 250,000,000 divided into 1,000,000,000 ordinary shares, par value NIS 0.25 each., and the corresponding amendment to our articles of association be, and hereby is, approved in all respects."

Required Vote

Under the Israeli Companies Law and our articles of association, the affirmative vote of the holders of a majority of the ordinary shares represented at the special meeting, in person or by proxy, entitled to vote and voting on the matter, is required for this proposal.

Board Recommendation

Our Board of Directors recommends a vote FOR the increase in our authorized share capital and corresponding amendment to our articles of association as specified above.

YOU SHOULD RELY ONLY ON THE INFORMATION CONTAINED IN THIS PROXY STATEMENT OR THE INFORMATION FURNISHED TO YOU IN CONNECTION WITH THIS PROXY STATEMENT WHEN VOTING ON THE MATTERS SUBMITTED TO SHAREHOLDER AND ADS HOLDERS VOTE HEREUNDER. WE HAVE NOT AUTHORIZED ANYONE TO PROVIDE YOU WITH INFORMATION THAT IS DIFFERENT FROM WHAT IS CONTAINED IN THIS DOCUMENT. THIS PROXY STATEMENT IS DATED APRIL 1, 2020. YOU SHOULD NOT ASSUME THAT THE INFORMATION CONTAINED IN THIS DOCUMENT IS ACCURATE AS OF ANY DATE OTHER THAN APRIL 1, 2020, AND THE MAILING OF THIS DOCUMENT TO SHAREHOLDERS AND ADS HOLDERS SHOULD NOT CREATE ANY IMPLICATION TO THE CONTRARY.

OTHER BUSINESS

Other than as set forth above, as of the mailing of this Proxy Statement, management knows of no business to be transacted at the special meeting, but, if any other matters are properly presented at the special 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

Ilan Cohn

Chairman of the Board Dated: April 1, 2020

CAN-FITE BIOPHARMA LTD.

PROXY FOR THE SPECIAL MEETING OF SHAREHOLDERS TO BE HELD ON APRIL 21, 2020

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS.

The undersigned hereby appoints Ilan Cohen, Chairman of the Board and Dr. Pnina Fishman, Chief Executive Officer and each of them, attorneys, agents and proxies of the undersigned, with full power of substitution to each of them, to represent and to vote on behalf of the undersigned all the ordinary shares in Can-Fite BioPharma Ltd. (the "Company") which the undersigned is entitled to vote at the Special Meeting of Shareholders (the "Annual Meeting") to be held at the offices of the Company, 10 Bareket Street, Petach Tikva, Israel, on Tuesday, **April 21, 2020** at 4:00 p.m. (Israel time), and at any adjournments or postponements thereof, upon the following matter, which is more fully described in the Notice of Special Meeting of Shareholders (the "Notice") and Proxy Statement relating to the Special Meeting ("Proxy Statement").

The undersigned acknowledges receipt of the Notice of the Special Meeting of Shareholders and Proxy Statement of the Company relating to the Meeting. All terms that are not defined in this Proxy shall have the same meaning of such terms in the Notice and/or the Proxy Statement.

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 matter, this Proxy will be voted FOR such matter. Any and all proxies heretofore given by the undersigned are hereby revoked.

(Continued and to be signed on the reverse side)

SPECIAL MEETING OF SHAREHOLDERS OF CAN-FITE BIOPHARMA LTD.

April 21, 2020, 4.00 p.m. (Israel time)

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE PROPOSAL FOR THE MEETING

PLEASE SIGN, DATE AND RETURN PROMPTLY IN THE ENCLOSED ENVELOPE. PLEASE MARK YOUR VOTE IN BLUE OR BLACK INK AS SHOWN HERE \boxtimes

1. To increase our authorized share capital by NIS 125,000,000, such that following the increase, the authorized share capital shall equal NIS 250,000,000 divided into 1,000,000 ordinary shares, par value NIS 0.25 each, and to amend our articles of association accordingly.

SIGNATURE

□ for □ against □ abstain

In their discretion, the proxies are authorized to vote upon such other matters as may properly come before the Special Meeting or any adjournment or postponement thereof.

SIGNATURE

Date: _____, 2020

______, 2020

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

Special Meeting of Shareholders of	f	Special Meeting of Shareho			
Can-Fite BioPharma Ltd. Date: April 21, 2020 See Voting Instructions On Reverse Side. Please make your marks like this: 🖾 Use pen only		Can-Fite BioPharma Ltd. to be Held on April 21, 2020			
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0.25 each, and to amend our articles of association accordingly.	n the envelop				
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Authorized Signatures - This section must be completed for your instructions to be executed.	•				
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Proof 1

Can-Fite BioPharma Ltd. Instructions to The Bank of New York Mellon, as Depositary (Must be received prior to 12:00 p.m. E.S.T. on April 16, 2020)

The undersigned registered owner of American Depositary Shares hereby requests and instructs The Bank of New York Mellon, as Depositary, to endeavor, in so far as practicable, to vote or cause to be voted the amount of Shares or other Deposited Securities represented by such Shares of Can-Fite BioPharma Ltd. (the "Company"), registered in the name of the undersigned on the books of the Depositary as of the close of business on April 2, 2020 at the Special Meeting of Shareholders of the Company to be held on April 21, 2020 at 4:00 p.m. (Israel time), at the offices of the Company, located at 10 Bareket Street, Petach Tikva, Israel, and at any adjournments or postponements thereof, in respect of the resolutions specified on the reverse side.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" ON EACH OF THE PROPOSALS AT THE MEETING

NOTE:

- 1. Please direct the Depositary how to vote by placing an X in the box opposite each agenda item.
- It is understood that, if this form is signed and returned but no instructions are indicated in the boxes, then a discretionary proxy will be given to a person designated by the Company.
- 3. If no voting instructions are received by the Depositary from a Holder (either because no voting instructions are returned to the Depositary by a Holder or because the voting instructions are incomplete, illegible, or unclear), the depositary shall have no obligation to, and shall not, exercise any voting rights attaching to such Deposited Shares.

(Continued and to be marked, dated and signed, on the other side)

PROXY TABULATOR FOR Can-Fite BioPharma Ltd. P.O. Box 8016 CARY, NC 27512-9903

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