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 2016

001-36203 (Commission File Number)

CAN-FITE BIOPHARMA LTD.

(Exact name of Registrant as specified in its charter)

10 Bareket Street KiryatMatalon, 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 \boxtimes Form 40-F \square

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 F-3 (File Nos. 333-195124, 333-199033, 333-204795 and 333-209037), to be a part thereof from the date on which this report is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.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 25, 2016, Can-Fite BioPharma Ltd. (the "Company") announced that it will hold a Special General Meeting of Shareholders on May 30, 2016 at 4.00 p.m. (Israel time) at the Company's offices in Petach Tikva, Israel and a Special General Meeting of Series 11 Warrant Holders on the same day at 4.30 p.m. (Israel time) at the Company's offices in Petach Tikva, Israel. In connection with the meetings, the Company furnishes the following documents:

1. A copy of the Notice and Proxy Statement with respect to the Company's Special General Meeting of Shareholders and Series 11 Warrant Holders 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 Card whereby holders of ordinary shares of the Company may vote at the meeting without attending in person, attached hereto as Exhibit 99.2;

3. 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; and

4. A form of Proxy Card whereby holders of Series 11 Warrants of the Company may vote at the meeting without attending in person, attached hereto as Exhibit 99.4.

Exhibit Index

Exhibit No. Description

99.1	Notice and Proxy Statement with respect to the Company's Special General Meeting of Shareholders and Series 11 Warrant Holders
99.2	Proxy Card for holders of ordinary shares with respect to the Company's Special General Meeting of Shareholders
99.3	Voting Instruction Card for American Depositary Share holders with respect to the Company's Special General Meeting of Shareholders
99.4	Proxy Card for holders of Series 11 Warrants with respect to the Company's Special General Meeting of Series 11 Warrants

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 25, 2016

Can-FiteBioPharma Ltd.

By: /s/ Pnina Fishman

Pnina Fishman Chief Executive Officer



NOTICE OF SPECIAL GENERAL MEETING OF SHAREHOLDERS AND HOLDERS OF SERIES 11 WARRANTS TO BE HELD ON MAY 30, 2016

To the shareholders, ADS holders and Series 11 Warrant holders of Can-Fite BioPharma Ltd.:

Notice is hereby given that a Special Meeting of Shareholders will be held on Monday May 30, 2016, at 4.00 p.m. Israel time at our offices, 10 Bareket Street, Petach Tikva, Israel and a Special Meeting of Series 11 Warrant Holders will be held on Monday, May 30, 2016, at 4.30 p.m. Israel time at our offices, 10 Bareket Street, Petach Tikva.

The agenda of the special general meeting will be to amend the terms of our Series 11 Warrants by extending the expiration date of the Series 11 Warrants from April 30, 2016 to October 31, 2016 and allowing the Series 11 Warrants to be exercised on any trading day.

Only shareholders, holders of American Depositary Shares, and Series 11 Warrant holders at the close of business on May 1, 2016 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 or Series 11 Warrant holders who attend the special meeting may revoke their proxies and vote their shares in person.

Beneficial owners who hold ordinary shares or Series 11 Warrants through members of the Tel Aviv Stock Exchange, or the TASE, may either vote their shares or Series 11 Warrants in person at the special meeting by presenting a certificate signed by the TASE Clearing House member through which the shares or Series 11 Warrants 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

IlanCohen Chairman of the Board April 25, 2016



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

PROXY STATEMENT

FOR SPECIAL GENERAL MEETING OF SHAREHOLDERS AND HOLDERS OF SERIES 11 WARRANTS TO BE HELD ON MAY 30, 2016

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, and holders of Series 11 Warrants in connection with the Special General Meeting of Shareholders and Holders of Series 11 Warrants, to be held on Monday, May 30, 2016 at our offices, 10 Bareket Street, Petach Tikva, Israel, or at any adjournments thereof. The Special General Meeting of Shareholders shall be held at 4.00 p.m., Israel time, on such day 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 Bio Pharma Ltd. and terms such as "you" and "your" to refer to our shareholders, ADS holders and our holders of Series 11 Warrants.

Agenda Items

The agenda of the special meeting will be to amend the terms of our Series 11 Warrants by extending the expiration date of the Series 11 Warrants from April 30, 2016 to October 31, 2016 and allowing the Series 11 Warrants to be exercised on any trading day.

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.

Who Can Vote

Only shareholders, ADS holders and Series 11 Warrant holders at the close of business on May 1, 2016, shall be entitled to receive notice of and to vote at the special meeting.

How You Can Vote

You can vote your ordinary shares and Series 11 Warrants by attending the special meeting. If you do not plan to attend the special meeting, the method of voting will differ for shares or Series 11 Warrants held as a record holder, shares or Series 11 Warrants held in "street name" (through a Tel Aviv Stock Exchange, or TASE, member) and shares underlying ADSs that you hold. Record holders of shares and Series 11 Warrants will receive proxy cards. Holders of shares or Series 11 Warrants in "street name" through a TASE member will also vote via a proxy card, but through a different procedure (as described below). 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/Series 11 Warrant Holders of Record

If you are a shareholder or Series 11 Warrant holder of record, you can submit your vote by completing, signing and submitting an applicable proxy card, which has been published at <u>www.magna.isa.gov.il</u> and <u>www.maya.tase.co.il</u> and which will be accessible at the "Investor Information" portion of our website, as described below under "Shareholder Meetings".

Please follow the instructions on the applicable proxy card.

Shareholders/Series 11 Holders Holding in "Street Name," Through the TASE

If you hold ordinary shares or Series 11 Warrants in "street name," that is, through a bank, broker or other nominee that is admitted as a member of the TASE, your shares or Series 11 Warrants 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 an applicable proxy card in the form filed by us on MAGNA on or around April 25, 2016 and attach to it a certificate signed by the TASE Clearing House member through which the shares or Series 11 Warrants 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 or Series 11 Warrants, as applicable, on the record date, and return the applicable proxy card, 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 or Series 11 Warrants are held, indicating that you were the beneficial owner of the shares or Series 11 Warrants, 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 and multiple proxy cards 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. Shareholders or Series 11 Warrant holders of record whose shares or Series 11 Warrants are registered in more than one name will receive more than one proxy card. You should complete, sign, date and return each proxy card and voting instruction card you receive.

Our board of directors urges you to vote your shares or Series 11 Warrants so that they will be counted at the special meeting or at any postponements or adjournments of the special meeting.



Solicitation of Proxies

By appointing "proxies", shareholders, ADS holders and Series 11 Warrant holders may vote at the special meeting whether or not they attend. If a properly executed proxy in the attached form 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 or Series 11 Warrants 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, ADS holders and Series 11 Warrant holders may revoke their proxies at any time before the deadline for receipt of proxies by filing with us (in the case of holders of ordinary shares or Series 11 Warrants) or with BNY Mellon (in the case of holders of ADSs), a written notice of revocation or duly executed proxy bearing a later date.

Proxies are being distributed to shareholders, ADS holders and Series 11 Warrant holders on or about April 26, 2016. Certain officers, directors, employees, and agents of ours, 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, ADSs and Series 11 Warrants.

To the extent you would like to submit a position statement with respect to the proposal described in this proxy statement pursuant to the Israeli Companies law, 1999, or the Israeli Companies Law, you may do so by delivery of appropriate notice to the our offices (Attention: Chief Financial Officer) located at 10 Bareket Street, Kiryat Matalon, PO Box 7537, Petach Tikva 4951778, Israel, not later than ten days before the special meeting (i.e., May 19, 2016). Response of the Board to the position statement may submitted not later than five days after the deadline for sending the position statement (i.e., May 24, 2016).

Quorum

At the close of business on April 22, 2016, we had outstanding 27,672,901 ordinary shares, of which 17,496,590 were represented by ADSs. The foregoing number of outstanding ordinary shares excludes 446,827 ordinary shares that are held in treasury and have no voting rights. Each ordinary share (including ordinary shares represented by ADSs) outstanding as of the close of business on the record date are 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 with respect to the shareholders 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 shareholder voting power. The special meeting with respect to the Series 11 Warrant holders meeting will be properly convened if at least two Series 11 Warrant holders attend the meeting in person or sign and return proxies, provided that they hold Series 11 Warrants representing at least 25% of our Series 11 Warrant 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 or Series 11 Warrant holders, as applicable, present in person or by proxy shall constitute a lawful quorum.

Vote Required for the Proposal

The affirmative vote of the our shareholders, ADS holders and Series 11 Warrant holders of at least 75% of the voting power represented at the special meeting in person or by proxy and voting thereon (which excludes abstentions) is necessary for the approval of the proposal. Shareholders, ADS holders and Series 11 Warrant holders will be required to declare concurrent holdings of both shares or ADSs on the one hand and Series 11 Warrants on the other. If necessary, results will be calculated on the basis of unmingling of the share and Series 11 Warrant votes.

If you provide specific instructions (mark boxes) with regard to certain proposals, your shares will be voted as you instruct.

If you are a shareholder or Series 11 Warrant holder of record and do not return your proxy card, your shares will not be voted. If you hold shares (or ADSs representing shares) or Series 11 Warrants beneficially in street name, your shares will also not be voted at the meeting if you do not return your proxy card or voting instruction card to instruct your broker or the Depositary how to vote. A broker (and BNY Mellon) may only vote in accordance with instructions from a beneficial owner of shares, ADSs or Series 11 Warrants.

Availability of Proxy Materials

Copies of the applicable proxy card and voting instruction card, the Notice of the Special General Meeting and this Proxy Statement are available at the "Investor Information" portion of our website, <u>www.canfite.com</u>. 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.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information regarding the beneficial ownership of our outstanding ordinary shares as of April 24, 2016 by the members of our senior management, and board of directors, individually and as a group, and each person who we know beneficially owns 5% or more of our outstanding ordinary shares. The beneficial ownership of ordinary shares is based on the 27,672,901 ordinary shares outstanding as of April 24, 2016 (which excludes 446,827 ordinary shares held in treasury) and is determined in accordance with the rules of the Commission and generally includes any ordinary shares over which a person exercises sole or shared voting or investment power. For purposes of the table below, we deem shares subject to options or warrants that are currently exercisable or exercisable within 60 days of April 24, 2016, to be outstanding and to be beneficially owned by the person holding the options or warrants for the purposes of computing the percentage ownership of that person but we do not treat them as outstanding for the purpose of computing the percentage ownership of any other person.

Name of Beneficial Owner	Number of Ordinary Shares	Percentage of Class*
Senior Management		
Ilan Cohn, PhD.		
Chairman of the Board	214,852(1)	* %
Pnina Fishman, PhD.		
Chief Executive Officer and Director	599,603(2)	2.1%
Motti Farbstein		
Chief Operating Officer	38,308(3)	* %
Guy Regev		
Director	54,240(4)	* %
Abraham Sartani, Ph.D.		
Director	11,733(5)	* %
Gil Oren		
Director	5,833(6)	* %
Israel Shamay		
Director	-	-
Directors and Executive Officers as a group (7 persons)	924,569	3.3%

- * Denotes less than 1%
- (1) Represents (i) 133,567 ordinary shares, and (ii) 2,032,136 unregistered options to purchase 81,285 ordinary shares at an exercise price of NIS 1.247 per option and expire on March 20, 2017. All such warrants and options are fully vested.
- (2) Represents (i) 263,433 ordinary shares, (ii) 7,570,761 unregistered options to purchase 302,830 ordinary shares, of which 4,890,761 options have an exercise price of NIS 0.50 per option and expire on August 23, 2016 and 2,680,000 options have an exercise price of NIS 0.644 per option and expiring on January 13, 2021 and (iii) 200,000 unregistered options to purchase 33,340 ordinary shares at an exercise price of NIS 3.573 per option and expire on October 22, 2025. Excludes 166,660 unregistered options to purchase 166,660 ordinary shares that vest in more than 60 days from April 24, 2016.
- (3) Includes (i) 1,133 ordinary shares, (ii) 735,637 unregistered options to purchase 29,425 ordinary shares, of which (1) 554,387 are exercisable into 22,175 ordinary shares at an exercise price of NIS 0.307 per option and expire on November 26, 2018, (2) 100,000 are exercisable into 4,000 ordinary shares at an exercise price of NIS 0.385 per option and expire on May 2, 2022, and (3) 87,500 are exercisable into 3,500 ordinary shares at an exercise price of NIS 0.326 per option and expire on March 20, 2023, (iii) 3,750 unregistered options to purchase 3,750 ordinary shares at an exercise price of NIS 8.1205 per option and expire on March 18, 2025, and (iv) 3,750 unregistered options to purchase 3,750 ordinary shares at an exercise price of NIS 4.317 per option and expire on February 18, 2026. Excludes 12,500 unregistered options to purchase 500 ordinary shares and 62,500 unregistered options to purchase 62,500 ordinary shares that vest in more than 60 days from April 24, 2016.
- (4) Represents (i) 24,240 ordinary shares, (ii) 250,000 registered warrants (Series 10) to purchase 10,000 ordinary shares at an exercise price of NIS 0.394 per warrant and expire on October 31, 2016, (iii) 250,000 registered warrants (Series 11) to purchase 10,000 ordinary shares at an exercise price of NIS 0.392 per warrant and expiring on April 30, 2016, and (iv) 250,000 unregistered options are exercisable into 10,000 ordinary shares at an exercise price of NIS 0.60 per option and expire on May 2, 2023. All such warrants and options are fully vested.
- (5) Represents 293,305 unregistered options to purchase 11,733 ordinary shares, of which 193,305 are exercisable into 7,732 ordinary shares at an exercise price of NIS 0.45 per option and expire on August 23, 2016, and 100,000 are exercisable into 4,000 ordinary shares at an exercise price of NIS 0.385 per option and expire on August 14, 2022. All such options are fully vested.
- (6) Represents 5,833 unregistered options to purchase 5,833 ordinary shares at an exercise price of NIS 12 per option and expire on July 14, 2024. Excludes 4,167 unregistered options to purchase 4,167 ordinary shares that vest in more than 60 days from April 24, 2016.

PROPOSAL TO AMEND THE TERMS OF THE SERIES 11 WARRANTS

Background

As of April 24, 2016, there are outstanding 37,372,500 Series 11 Warrants to purchase 1,494,900 ordinary shares, NIS 0.25 per share, outstanding, exercisable at NIS 0.392 per ordinary share. Under the terms of these warrants, the expiration date was originally April 30, 2016 and these warrants can be exercised on any trading day except the 12th and 16th of each calendar month.

On April 5, 2016, we filed an application with the Lod District Court in Israel, or the Court, to approve the convening of a special general meeting of our shareholders and a general meeting of our Series 11 Warrant holders to approve an extension of the term of our Series 11 Warrants until October 31, 2016 which was set to expire on April 30, 2016, and to eliminate the restrictions upon the days in which the warrants can be exercised such that the warrants can be exercised on any trading day. The application was made in accordance with the provisions of Section 350 of the Israeli Companies Law -1999. On April 7, 2016, the Court approved our application to convene the meetings. As part of the application, we also requested the Court to extend the term of our Series 11 Warrants until June 30, 2016 as temporary relief, which the Court approved on April 11, 2016.

The amendment to the terms of the Series 11 Warrants is being made primarily to allow more time for the holders to exercise their warrants with a view to providing us with additional funds if and when such warrants are exercised.



Proposed Resolution

It is proposed that at the special meeting the following resolution be adopted:

"RESOLVED, that the amendment to the terms of the Series 11 Warrants by extending the expiration date of the Series 11 Warrants from April 30, 2016 to October 31, 2016 and allowing the Series 11 Warrants to be exercised on any trading day, be, and hereby is, approved in all respects."

Board Recommendation

Our board of directors recommends a vote FOR the foregoing proposal.

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 Cohen Chairman of the Board Dated: April 25, 2016

CAN-FITE BIOPHARMA LTD.

PROXY FOR A SPECIAL GENERAL MEETING OF SHAREHOLDERS TO BE HELD ON MAY 30, 2016

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

The undersigned hereby appoints Dr. Pnina Fishman, Chief Executive Officer, Motti Farbstein, Chief Operating and Financial Officer, and Ronen Kantor, Adv., 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 General Meeting of Shareholders (the "**Special Meeting**") to be held at the offices of the Company, 10 Bareket Street, Petach Tikva, Israel, on Monday, **May 30, 2016** at 4:00 p.m. (Israel time), and at any adjournments or postponements thereof, upon the following matters, which are 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 and Proxy Statement of the Company relating to the Special 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 GENERAL MEETING OF SHAREHOLDERS OF CAN-FITE BIOPHARMA LTD.

May 30, 2016, 4.00p.m. (Israel time)

Please date, sign and mail your proxy card in the envelope provided as soon as possible.

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

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

To amend the terms of our Series 11 Warrants by extending the expiration date of the Series 11 Warrants from April 30, 2016 to October 31, 2016 and allowing the Series 11 Warrants to be exercised on any trading day.

□ FOR

□ AGAINST

□ ABSTAIN

Concurrent Holdings

I hold/do not hold Series 11 Warrants (circle one)

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.

 Date:
 , 2016
 Date:
 , 2016

 SIGNATURE
 SIGNATURE
 Date:
 , 2016

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.

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Authorized Signatures - This section must be completed for your instructions to be executed.	EVENT #	
Please Sign Here Please Date Above Please Date Above	Copyright © 2016 Mediant Communications Inc. All Rights Reserved.	
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Can-Fite BioPharma Ltd. Instructions to The Bank of New York Mellon, as Depositary (Must be received prior to 5:00 p.m. EST on May 24, 2016)

(Must be received prior to 5:00 p.m. EST on May 24, 2016) 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. registered in the name of the undersigned on the books of the Depositary as of the close of business on May 1, 2016 at the Special General Meeting of the Shareholders of Can-Fite BioPharma Ltd., to be held on May 30, 2016 or any postponement or adjournment thereof in respect of the resolutions specified on the reverse.

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

- NOTE:
 NOTE:
 Please direct the Depositary how it is to vote by placing an "X" in the appropriate box opposite each signed attem. 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.
 If no voting instructions are received by the Depositary from a Holder (either because no voting instructions are received by a Holder or because the 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 Carr-File BioPharma Ltd. P.O. Box 8916 CARY, NC 27512-8903

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CAN-FITE BIOPHARMA LTD.

PROXY FOR A SPECIAL GENERAL MEETING OF SERIES 11 WARRANT HOLDERS TO BE HELD ON MAY 30, 2016

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

The undersigned hereby appoints Dr. Pnina Fishman, Chief Executive Officer, Motti Farbstein, Chief Operating and Financial Officer, and Ronen Kantor, Adv., 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 Series 11 Warrants in Can-Fite BioPharma Ltd. (the "**Company**") which the undersigned is entitled to vote at the Special General Meeting of Series 11 Warrants Holders (the "**Special Meeting**") to be held at the offices of the Company, 10 Bareket Street, Petach Tikva, Israel, on Monday, **May 30, 2016** at 4:30 p.m. (Israel time), and at any adjournments or postponements thereof, upon the following matters, which are more fully described in the Notice of Special Meeting of Series 11 Warrant Holders (the "**Notice**") and Proxy Statement relating to the Special Meeting ("**Proxy Statement**").

The undersigned acknowledges receipt of the Notice and Proxy Statement of the Company relating to the Special 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 GENERAL MEETING OF SERIES 11 WARRANT HOLDERS OF CAN-FITE BIOPHARMA LTD.

May 30, 2016, 4.30 p.m. (Israel time)

Please date, sign and mail your proxy card in the envelope provided as soon as possible.

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

To amend the terms of our Series 11 Warrants by extending the expiration date of the Series 11 Warrants from April 30, 2016 to October 31, 2016 and allowing the Series 11 Warrants to be exercised on any trading day.

□ FOR

□ AGAINST

□ ABSTAIN

Concurrent Holdings

I hold/do not hold ordinary shares (circle one)

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.

 Date:
 , 2016
 Date:
 , 2016

 SIGNATURE
 SIGNATURE
 Date:
 , 2016

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.