CAN-FITE BIOPHARMA LTD.

PROXY FOR A SPECIAL GENERAL MEETING OF SHAREHOLDERS TO BE HELD ON JANUARY 12, 2017

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 General Meeting of Shareholders (the "Special Meeting") to be held at the offices of the Company, 10 Bareket Street, Petach Tikva, Israel, on Thursday, **January 12, 2017** 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 General 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 below)

SPECIAL GENERAL MEETING OF SHREHOLDERS OF CAN-FITE BIOPHARMA LTD.

January 12, 2017, 4.00 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 ☒

To approve a renewed version of the Company's Compensation Policy, in accordance with the requirements of the Israeli Companies Law 5759-1999, a copy of which is attached as Annex A in the accompanying proxy statement. ☐ AGAINST ■ ABSTAIN Are you a controlling shareholder in the Company, or have a personal interest in the approval of the Company's Compensation Policy other than a personal interest unrelated to relationships with a controlling shareholder of the Company? Please note: If you do not mark either Yes or No, your shares will not be voted for this proposal. YES No 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 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.