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 November 2019

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): ____

The first paragraph and "Forward Looking Statements" of the press release attached to this Form 6-K are hereby incorporated by reference into the registrant's Registration Statements on Form S-8 (File No. 333-227753) and Form F-3 (File Nos. 333-204795, 333-209037 and 333-220644), to be a part thereof from the date on which this report is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.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 November 4, 2019, Can-Fite BioPharma Ltd. issued a press release announcing that it has initiated its compassionate use program for Namodenoson in the treatment of hepatocellular cancer (HCC), the most common form of liver cancer. A copy of this press release is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

Exhibit Index

Exhibit No. 99.1 Description

Press Release dated November 4, 2019

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: November 4, 2019 By: /s/ Pnina Fishman

Pnina Fishman Chief Executive Officer

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Can-Fite Initiates Compassionate Use Program for Namodenoson in the Treatment of Liver Cancer, Enrolls and Treats Patients

Based on encouraging Phase II results, patients with underlying CPB7 cirrhosis who lack a viable treatment option are now provided Namodenoson

The Company recently completed a successful End-of-Phase II meeting with the U.S. FDA for a pivotal Phase III study in advanced liver cancer

PETACH TIKVA, Israel, November 4, 2019 -- Can-Fite BioPharma Ltd. (NYSE MKT: CANF) (TASE:CFBI), a biotechnology company with a pipeline of proprietary small molecule drugs that address inflammatory, cancer and liver diseases, announced today it has initiated its compassionate use program for Namodenoson in the treatment of hepatocellular cancer (HCC), the most common form of liver cancer. Can-Fite's compassionate use program has enrolled and started treating patients. The compassionate use program, which enables liver cancer patients not enrolled in Can-Fite's clinical study to be treated with Namodenoson, is being administered by Dr. Salomon Stemmer, the Principal Investigator of the Company's prior Phase II liver cancer study, and Professor at the Institute of Oncology, Rabin Medical Center, Israel.

Compassionate use allows doctors and their patients the option of early access to investigational new drugs, under closely controlled and monitored circumstances, when a patient who is facing serious illness has exhausted all available treatment options.

Can-Fite's completed Phase II liver cancer study found that Namodenoson increased overall survival in HCC patients with Child Pugh B7 (CPB7), the largest subpopulation of the study, as compared to placebo, even though the trial did not meet its primary endpoint. The Company recently completed a successful End-of-Phase II meeting with the U.S. Food and Drug Administration (FDA), in which the FDA agreed with Can-Fite's proposed pivotal Phase III trial design to support a New Drug Application (NDA) submission and approval of Namodenoson in the treatment of HCC.

"We are grateful to Dr. Stemmer for leading this compassionate use program, making Namodenoson available to patients who have exhausted all other treatment options. Based on the encouraging results of our recent Phase II trial, in which Namodenoson demonstrated clinical benefits in patients with underlying CPB7 cirrhosis, Can-Fite is committed to providing Namodenoson to fulfill the unmet medical need in this population," stated Can-Fite CEO Dr. Pnina Fishman.

About Namodenoson

Namodenoson is a small orally bioavailable drug that binds with high affinity and selectivity to the A3 adenosine receptor (A3AR). Namodenoson is being evaluated as a second line treatment for hepatocellular carcinoma, with a recently completed Phase II trial and planned Phase III trial in this indication. The drug is currently in an ongoing Phase II trial as a treatment for non-alcoholic fatty liver disease (NAFLD) and non-alcoholic steatohepatitis (NASH). A3AR is highly expressed in diseased cells whereas low expression is found in normal cells. This differential effect accounts for the excellent safety profile of the drug.

About Can-Fite BioPharma Ltd.

Can-Fite BioPharma Ltd. (NYSE American: CANF) (TASE: CFBI) is an advanced clinical stage drug development Company with a platform technology that is designed to address multi-billion dollar markets in the treatment of cancer, inflammatory disease and sexual dysfunction. The Company's lead drug candidate, Piclidenoson, is currently in Phase III trials for rheumatoid arthritis and psoriasis. Can-Fite's liver cancer drug, Namodenoson, recently completed a Phase II trial for hepatocellular carcinoma (HCC), the most common form of liver cancer, and is in a Phase II trial for the treatment of non-alcoholic steatohepatitis (NASH). Namodenoson has been granted Orphan Drug Designation in the U.S. and Europe and Fast Track Designation as a second line treatment for HCC by the U.S. Food and Drug Administration. Namodenoson has also shown proof of concept to potentially treat other cancers including colon, prostate, and melanoma. CF602, the Company's third drug candidate, has shown efficacy in the treatment of erectile dysfunction in preclinical studies and the Company is investigating additional compounds, targeting A3AR, for the treatment of sexual dysfunction. These drugs have an excellent safety profile with experience in over 1,000 patients in clinical studies to date. For more information please visit: www.can-fite.com.

Forward-Looking Statements

This press release may contain forward-looking statements, about Can-Fite's expectations, beliefs or intentions regarding, among other things, market risks and uncertainties, its product development efforts, business, financial condition, results of operations, strategies or prospects. In addition, from time to time, Can-Fite or its representatives have made or may make forward-looking statements, orally or in writing. Forward-looking statements can be identified by the use of forward-looking words such as "believe," 'expect," "intend," "plan," "may," "should" or "anticipate" or their negatives or other variations of these words or other comparable words or by the fact that these statements do not relate strictly to historical or current matters. These forward-looking statements may be included in, but are not limited to, various filings made by Can-Fite with the U.S. Securities and Exchange Commission, press releases or oral statements made by or with the approval of one of Can-Fite's authorized executive officers. Forward-looking statements relate to anticipated or expected events, activities, trends or results as of the date they are made. Because forward-looking statements relate to matters that have not yet occurred, these statements are inherently subject to risks and uncertainties that could cause Can-Fite's actual results to differ materially from any future results expressed or implied by the forward-looking statements. Many factors could cause Can-Fite's actual activities or results to differ materially from the activities and results anticipated in such forward-looking statements. Factors that could cause our actual results to differ materially from those expressed or implied in such forward-looking statements include, but are not limited to: our history of losses and needs for additional capital to fund our operations and our inability to obtain additional capital on acceptable terms, or at all; uncertainties of cash flows and inability to meet working capital needs; the initiation, timing, progress and results of our preclinical studies, clinical trials and other product candidate development efforts; our ability to advance our product candidates into clinical trials or to successfully complete our preclinical studies or clinical trials; our receipt of regulatory approvals for our product candidates, and the timing of other regulatory filings and approvals; the clinical development, commercialization and market acceptance of our product candidates; our ability to establish and maintain strategic partnerships and other corporate collaborations; the implementation of our business model and strategic plans for our business and product candidates; the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates and our ability to operate our business without infringing the intellectual property rights of others; competitive companies, technologies and our industry; statements as to the impact of the political and security situation in Israel on our business; and risks and other risk factors detailed in Can-Fite's filings with the SEC and in its periodic filings with the TASE. In addition, Can-Fite operates in an industry sector where securities values are highly volatile and may be influenced by economic and other factors beyond its control. Can-Fite does not undertake any obligation to publicly update these forward-looking statements, whether as a result of new information, future events or otherwise.

Contact

Can-Fite BioPharma

Motti Farbstein

info@canfite.com

+972-3-9241114