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 May 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): _____

The first and second paragraph and the bullet language below the second paragraph 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. 333-195124, 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333-209037 and 333-220644), to be a part thereof from the date on which this report is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.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 May 18, 2020, Can-Fite BioPharma Ltd. issued a press release announcing additional findings from its Phase II study of Namodenoson in the treatment of patients with non-alcoholic fatty liver disease (NAFLD) with or without non-alcoholic steatohepatitis (NASH). A copy of this press release is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

Exhibit Index

Exhibit No. Description
99.1 Press Release dated May 18, 2020

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: May 18, 2020 By: /s/ Pnina Fishman

Pnina Fishman Chief Executive Officer

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Can-Fite Reports Additional Findings from Successful Phase II NASH Study:

25 mg Dose of Namodenoson Significantly Reduced Liver Fat and Fibrosis

- All cases of NASH significantly resolved after 12 weeks of treatment with Namodenoson 25 mg
- Namodenoson's safety profile and efficacy in Phase II position the drug for advanced clinical trials in the treatment of NAFLD/NASH, a projected \$35 billion market by 2025

PETACH TIKVA, Israel, May 18, 2020 -- <u>Can-Fite BioPharma Ltd</u> (NYSE American: CANF) (TASE:CFBI), a biotechnology company advancing a pipeline of proprietary small molecule drugs that address inflammatory, cancer and liver diseases, today announced additional findings from its Phase II study of Namodenoson in the treatment of patients with non-alcoholic fatty liver disease (NAFLD) with or without non-alcoholic steatohepatitis (NASH). On April 7, the Company reported topline results from the Phase II study indicating Namodenoson had achieved its efficacy endpoints in a dose dependent and statistically significant manner, while continuing to demonstrate a good safety profile. Most significantly, a more recent in-depth review of the Phase II data reveal 25 mg of Namodenoson was found to resolve significantly all cases of NASH, representing 25% of the 25 mg treated group, as compared to an increase in new NASH cases in the placebo group from a baseline of 0 to 5.9%.

In the Phase II study, 25 mg of Namodenoson was shown to reduce hepatic fibrosis (scar tissue in the liver resulting from the liver trying to repair itself), reduce steatosis (fat buildup in the liver), and improve the FAST score, a measure for NASH (liver stiffness and an enzymatic biomarker of liver damage).

Hepatic Fibrosis Reduced

Patients treated with 25 mg of Namodenoson had a statistically significant reduction in hepatic fibrosis as measured by the Fibrosis-4 (FIB-4) score, as compared to placebo. FIB-4 change from baseline improved by -0.089 in patients dosed with 25 mg of Namodenoson, as compared to the placebo group which deteriorated from baseline by 0.042 points, with p=0.026. FIB-4 is a non-invasive marker of hepatic fibrosis consisting of four parameters including age, platelet counts, and two liver enzymes, aspartate aminotransferase (AST) and alanine aminotransferase (ALT), which are elevated in a damaged liver.

• Steatosis Reduced

In the Namodenoson 25 mg treated group, the proportion of patients with high steatosis scores declined from 37.5% to 13.3% of the population, as compared to the placebo treated group in which the proportion of patients with high steatosis scores decreased from 37.5% to 35.3% of the population, with p=0.08. Steatosis was assessed by Controlled Attenuation Parameter (CAP) measurement of the FibroScan, a non-invasive marker of hepatic steatosis.

• NASH - All Cases Resolved

25% of patients randomized into the Namodenoson 25 mg dosed group had NASH at baseline, as compared to none in the placebo group, which comprised of patients who had NAFLD without NASH at baseline. Following 12 weeks of treatment, all NASH cases were resolved in patients treated with 25 mg of Namodenoson, as compared to new NASH that developed in the placebo group representing 5% of that population, with p<0.009. NASH was evaluated by FibroScan-AST (FAST) score, a noninvasive marker of NASH, the severe form of NAFLD (equivalent to biopsy findings of NAS \geq 4, \geq 2), measured by FibroScan elastography, CAP and serum AST.

"The data show that Namodenoson reversed and eliminated NASH, and may prevent the progression of NAFLD into NASH. We are very pleased and impressed by these results. Given the clear need for approved drugs in this indication, we believe Namodenoson is a strong candidate for advanced stage clinical development as a treatment for both NAFLD and NASH," stated Prof. Rifaat Safadi of Hadassah Medical Center, the Principal Investigator of the study.

The Phase II double-blind, placebo-controlled, dose-finding efficacy and safety study enrolled 60 patients with NAFLD with or without NASH in three clinical sites in Israel Patients with evidence of an active inflammation were treated twice daily with 12.5 mg (n=21) or 25 mg (n=19) of oral Namodenoson vs. placebo (n=20). The patients were treated for 12 weeks and followed-up until week 16. The study's end points included alanine aminotransferase (ALT) and aspartate aminotransferase (AST) blood level, % of liver fat, liver stiffness, serum adiponectin, leptin and patient's weight loss. Based on topline results, 25 mg was determined to be the optimal dosage.

An estimated 85 million Americans have NAFLD, which may lead to an exponential rise in incidence of NASH, a more severe form of NAFLD, to close to 43 million Americans in the next five years. The NASH treatment market is estimated to reach \$35-40 billion by 2025.

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 COVID-19. The Company's lead drug candidate, Piclidenoson, is currently in Phase III trials for rheumatoid arthritis and psoriasis. Piclidenoson has been approved for a pilot clinical trial in Israel to treat COVID-19 infected patients with moderate-to-severe symptoms. Can-Fite's liver drug, Namodenoson, is headed into a Phase III trial for hepatocellular carcinoma (HCC), the most common form of liver cancer, and successfully achieved its primary endpoint 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 of 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. These drugs have an excellent safety profile with experience in over 1,500 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 impact of the recent outbreak of coronavirus; 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.

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