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 October 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 paragraphs 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333-209037 and 333-220644), to be a part thereof from the date on which this report is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.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 October 6, 2020, Can-Fite BioPharma Ltd. issued a press release entitled "Can-Fite Announces Positive Phase III Psoriasis Interim Data Analysis". 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 October 6, 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: October 6, 2020 By: /s/ Pnina Fishman

Pnina Fishman Chief Executive Officer

Can-Fite Announces Positive Phase III Psoriasis Interim Data Analysis

- Independent Data Monitoring Committee (IDMC) conducted a pre-planned interim analysis of the Company's Phase III ComfortTM trial of Piclidenoson for the treatment of psoriasis and recommended to continue with this psoriasis study
- A separate IDMC for the pre-planned interim analysis of the AcrobatTM Rheumatoid Arthritis (RA) Phase III study recommended not to continue this study. The Company plans to undertake a detailed analysis of the data of the RA study and decide on the next steps.

PETACH TIKVA, Israel, October 06, 2020 -- Can-Fite BioPharma Ltd. (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 that the Independent Data Monitoring Committee (IDMC) which conducted an interim analysis of the Company's Phase III Comfort™ trial of Piclidenoson in the treatment of moderate-to-severe plaque psoriasis, recommended, based on the positive data, to continue the study with the original sample size and drop one dose group. This means that an optimal dose has been found and that the study can be concluded earlier than has been originally planned.

A separate IDMC for the interim analysis of the AcrobatTM Rheumatoid Arthritis Phase III study recommended not to continue this study. The Company plans to undertake a detailed analysis of the data of the RA study and decide on the next steps.

Can-Fite's Comfort™ Phase III psoriasis study is designed to establish Piclidenoson's superiority compared to placebo and non-inferiority compared to Apremilast (Otezla®) in patients with moderate to severe plaque psoriasis. The randomized, double blind study is being conducted in Europe, Israel, and Canada. Patients were randomized into four groups: 2 mg Piclidenoson, 3 mg Piclidenoson, Otezla®, and placebo. The study's primary endpoint is the proportion of patients who achieve a PASI score response of ≥75% (PASI 75) vs. placebo at week 16. The secondary endpoints include non-inferiority to Otezla® on weeks 16 and 32.

"While the interim analysis data continue to be blinded to Can-Fite, and the results have only been available to the IDMC, their recommendation to continue the Phase III psoriasis study and also to drop one of the dosing groups are highly encouraging. There is a real market need for an efficacious and safe oral drug for this devastating disease. We thank the members of both of the IDMCs for their diligence in reviewing our Phase III interim data and for making their recommendations." stated Can-Fite CEO Dr. Pnina Fishman.

The majority of costs associated with the Phase III ComfortTM study were previously paid, and based on the Company's current cash and its anticipated uses, the Company believes it has sufficient runway to cover the completion of this study.

Piclidenoson has been out-licensed for the indication of psoriasis in Canada, South Korea, Spain, Austria, Switzerland, Hong Kong, Macau, Taiwan, and China. According to iHealthcareAnalyst, the psoriasis therapeutic market is estimated to reach \$11.3 billion by 2025.

About Piclidenoson

Piclidenoson is a novel, first-in-class, A3 adenosine receptor agonist (A3AR) small molecule, orally bioavailable drug with a favorable therapeutic index demonstrated in Phase II clinical studies. Piclidenoson is currently under development for the treatment of autoimmune inflammatory diseases and for the treatment of COVID-19. It is being evaluated in multinational Phase III studies as a first line treatment to replace methotrexate in the treatment of rheumatoid arthritis, and as a treatment for moderate-to-severe psoriasis.

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, liver, inflammatory disease and COVID-19. The Company's lead drug candidate, Piclidenoson, is currently in Phase III trials for rheumatoid arthritis and psoriasis. 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 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. 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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