
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 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): ____

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333-204795 and 333-209037), to be a part thereof from the date on which this report is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.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 11, 2016, Can-Fite BioPharma Ltd. issued a press release announcing new findings for its drug candidate, CF602, showing statistically significant full recovery from erectile dysfunction after one single dose treatment in a pre-clinical diabetic model. 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 April 11, 2016

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.

Can-FiteBioPharma Ltd.

Date: April 11, 2016

By: /s/ Pnina Fishman
Pnina Fishman
Chief Executive Officer

Can-Fite Announces New Pre-Clinical Data for CF602 Demonstrating Statistically Significant Full Recovery from Erectile Dysfunction After a Single Dose

CF602 may provide benefits for patients who cannot take or do not respond to erectile dysfunction drugs currently on the market

PETACH TIKVA, Israel, April 11, 2016 -- Can-Fite BioPharma Ltd. (NYSE MKT: CANF) (TASE:CFBI), a biotechnology company with a pipeline of proprietary small molecule drugs that address inflammatory diseases, cancer, and sexual dysfunction, today reported new findings for its drug candidate, CF602, showing statistically significant full recovery from erectile dysfunction after one single dose treatment in a pre-clinical diabetic model. Can-Fite plans to file an Investigational New Drug (IND) application with the U.S. Food and Drug Administration (FDA) for CF602 in the fourth quarter of 2016 and plans to initiate a Phase I trial following IND approval.

In a recent study, CF602 induced a dose-dependent, linear effect in a diabetic mellitus rat model after treatment with one single dose of CF602. One hour after dosing, sexual function was measured. Statistically significant full recovery from erectile dysfunction took place in rats treated with a 500 μ /kg dose.

There is a significant segment of the erectile dysfunction market that is not addressed by PDE5 inhibitors, the class of drugs that are widely used in the market today. Due to CF602's novel mechanism of action, it may provide benefits for patients who do not respond to PDE5 inhibitors, or cannot take PDE5 inhibitors due to contraindications.

"These latest findings for CF602 are very encouraging and they add to the growing body of data that forms the basis of our planned IND submission to the FDA," stated Can-Fite CEO Dr. Pnina Fishman.

About Can-Fite BioPharma Ltd.

Can-Fite BioPharma Ltd. (NYSE MKT: 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 CF101 drug candidate is scheduled to enter Phase III trials in 2016 for two indications, rheumatoid arthritis and psoriasis. Can-Fite's liver cancer drug CF102 is in Phase II trials for patients with liver cancer and is slated to enter Phase II for the treatment of non-alcoholic steatohepatitis (NASH). CF102 has been granted Orphan Drug Designation in the U.S. and Europe and Fast Track Designation as a second line treatment for hepatocellular carcinoma by the U.S. Food and Drug Administration. CF102 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 is being prepared for an IND submission to the FDA and a Phase I trial. 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, 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, including, but not limited to, the factors summarized 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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