
**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 January 2015

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): _____

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333-195124 and 333-199033), to be a part thereof from the date on which this report is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.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 January 27, 2015, Can-Fite BioPharma Ltd. issued a press release announcing it has received positive data regarding its CF602 drug candidate in preclinical studies conducted by a third party. 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 January 27, 2015

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-Fite BioPharma Ltd.

Date January 27, 2015

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

Can-Fite's CF602 Demonstrates Efficacy in Treatment of Sexual Dysfunction in Preclinical Studies

Treated group showed 118% improvement in erectile function measures as compared to placebo

PETACH TIKVA, Israel, January 27, 2015 -- Can-Fite BioPharma Ltd. (NYSE MKT: CANF) (TASE:CFBI), a biotechnology company with a pipeline of proprietary small molecule drugs that address inflammatory and cancer diseases, today reported it has received positive data regarding its CF602 drug candidate in preclinical studies conducted by a third party.

CF602 was tested in an experimental animal model of diabetic rats, which similar to diabetic patients, suffer from sexual dysfunction. Erectile dysfunction was assessed by monitoring the ratio between intra-cavernosal pressure (ICP) and mean arterial pressure (MAP) as a physiological index of erectile function. The ICP/MAP for the CF602 treated group improved by 118% over the placebo group. This data is similar to that achieved earlier by sildenafil (Viagra) in preclinical studies. In addition, treatment with CF602 reversed smooth muscle and endothelial damage, in a dose dependent manner, leading to the improvement in erectile dysfunction.

CF602 is a novel A3 adenosine receptor allosteric modulator, enhancing the affinity of the natural ligand adenosine to its A3 adenosine receptor.

“Our drugs, based on the A3 adenosine receptor platform, have been administered to over 1,200 patients in clinical studies and shown an excellent safety profile. We believe this has the potential to give us a huge advantage over current drugs in the erectile dysfunction market which are known to have adverse effects, hampering diabetic patients and other populations from using them on a daily basis,” stated Can-Fite CEO Dr. Pnina Fishman.

Based on positive results from this preclinical study, the Company recently announced its plans to initiate a pre-clinical development program for CF602 in order to file an investigational new drug application (IND) with the U.S. Food and Drug Administration to allow human Phase I studies for the indication of sexual dysfunction.

Can-Fite has a strong intellectual property position which includes an issued “composition of matter” patent and other pending patent applications protecting the use for sexual dysfunction. GlobalData estimates the value of the erectile dysfunction therapeutic market to be approximately \$2.7 billion with few drugs in the market which include Viagra, Cialis and Levitra.

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 and inflammatory diseases. The Company's CF101 is in Phase II/III trials for the treatment of psoriasis and the Company is preparing for a Phase III CF101 trial for rheumatoid arthritis. Can-Fite's liver cancer drug CF102 is commencing Phase II trials and has been granted Orphan Drug Designation 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. These drugs have an excellent safety profile with experience in over 1,200 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.

Contact

Can-Fite BioPharma

Motti Farbstein

info@canfite.com

+972-3-9241114
