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 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, 333-199033 and 333-204795), to be a part thereof from the date on which this report is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.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 23, 2015, Can-Fite BioPharma Ltd. issued a press release announcing compelling pre-clinical data of its drug candidate CF102 in the treatment of non-alcoholic steatohepatitis. 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 November 23, 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 November 23, 2015

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

Exhibit 99.1

Can-Fite Announces Compelling Pre-Clinical Data on CF102 in the Treatment of Non-Alcoholic Steatohepatitis (NASH)

- ***Files patent for CF102 in the treatment of NASH***
- ***Large unmet need for 2-5% of U.S. population living with NASH***
- ***Estimated $35-40 billion market by 2025***
- ***No FDA approved therapies currently exist***

PETACH TIKVA, Israel, November 23, 2015 -- 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 announced development of its drug candidate CF102, which is currently in Phase II trials for hepatocellular carcinoma (HCC) the most common form of liver cancer, will be expanded into treatment for non-alcoholic steatohepatitis (NASH).

NASH is characterized by excess fat in the liver along with inflammation and liver damage. It resembles alcoholic liver disease; however, it occurs in people who drink little or no alcohol. If untreated, NASH can lead to cirrhosis and liver cancer. According to the National Institutes of Health, NASH affects between 2% and 5% of Americans and the prevalence of NASH has been increasing, potentially due to increasing rates of obesity and diabetes. By 2025, Deutsche Bank estimates the addressable pharmaceutical market for NASH will reach $35-40 billion in size. As of today, while there are several companies developing drugs to treat NASH that are in preclinical and clinical development, no specific U.S. Food and Drug Administration (FDA) approved treatment for NASH exists.

“Results from our recently concluded preclinical study of CF102 in liver disease revealed compelling data. Based on these findings, we’ve filed a patent for CF102 in the treatment of NASH,” stated Can-Fite CEO Dr. Pnina Fishman. “Because the prevalence of NASH continues to grow and no treatment currently exists, our data support the development of CF102 for the treatment of NASH.”

CF102 revealed its capability to improve liver pathology in a NAFLD (non-alcoholic fatty liver disease)/diabetes animal model of NASH. The data showed:

- CF102 had a statistically significant reduction in NAFLD activity score compared to placebo.
- CF102 reduced liver-to-body weight compared to placebo.
- Representative photomicrographs of H&E-stained liver sections showed improved pathology in animals receiving CF102 vs. placebo.
- CF102 decreased plasma ALT and triglycerides levels in the livers of NASH-model compared to placebo.
- Liver sections from the placebo group exhibited severe micro- and macrovesicular fat deposits, hepatocellular ballooning and inflammatory cell infiltration, whereas the CF102 treated group showed a significant decrease in steatosis, ballooning and lobular inflammation compared to the placebo group.

In prior preclinical studies, CF102 has shown efficacy in the treatment of liver regeneration and function following liver surgery.

Can-Fite currently has a U.S. Investigational New Drug (IND) application active with the U.S. FDA for CF102. CF102 is currently being evaluated as a second-line treatment for HCC through a global Phase II trial. Can-Fite has received Orphan Drugs Designation for CF102 for this indication in Europe and the U.S., as well as Fast Track Status in the U.S. Data from the Phase II HCC study is expected in 2016.

About CF102

CF102 is a small orally bioavailable drug that binds with high affinity and selectivity to the A3 adenosine receptor (A3AR). A3AR is highly expressed in tumor cells whereas low expression is found in normal cells. This differential effect accounts for the excellent safety profile of the drug. In Can-Fite's pre-clinical and clinical studies, CF102 has demonstrated a robust anti-tumor effect via deregulation of the Wnt signaling pathway, resulting in apoptosis of liver cancer cells.

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 is preparing for a Phase III CF101 trial for rheumatoid arthritis and is preparing its protocol for its next advanced psoriasis clinical trial. Can-Fite's liver cancer drug CF102 is in Phase II trials and 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. The Company's CF602 has shown efficacy in the treatment of erectile dysfunction. Can-Fite has initiated a full pre-clinical program for CF602 in preparation for filing an IND with the U.S. FDA in this indication. 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.

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