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 2014

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): _____

On May 7, 2014, Can-Fite BioPharma Ltd. issued a press release announcing that it has been issued a patent in the European Union for treatment of liver function following surgery. A copy of the 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 7, 2014

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 May 7, 2014

By: /s/ Motti Farbstein

Motti Farbstein Chief Operating and Financial Officer



Can-Fite Receives Patent in European Union for Treatment of Liver Function Following Surgery

Preclinical studies show CF102 helps liver regenerate cells and repair itself following surgery or other injury

PETACH TIKVA, Israel, May 7, 2014 -- <u>Can-Fite BioPharma Ltd</u>. (NYSE MKT: CANF) (TASE:CFBI), a biotechnology company with a pipeline of proprietary small molecule drugs that address inflammatory and cancer diseases, announced today it has been issued European Patent No. 2227234 for its invention titled, "Method for inducing hepatocyte proliferation and uses thereof." The patent covers Can-Fite's drug, <u>CF102</u> in the treatment of the liver function following liver resection (surgery) by helping the liver to regenerate and repair itself.

Hepatocytes are the cells of the main tissues of the liver. The liver is the only internal human organ which can regenerate itself (hepatocellular proliferation) with functioning mass after liver injury or liver resection, instead of healing with biologically non-functional scar tissue like other organs. In healthy patients, the liver can return to its normal size in one to two weeks following the removal of greater than 50% of the liver by mass. However, in patients with preexisting liver diseases such as cirrhosis or cancer, hepatocellular proliferation is impaired, exposing patients to liver dysfunction and associated complications that can lead to liver failure which has a high mortality of 60% to 90%.

In preclinical studies, CF102 has induced proliferation of hepatocytes following liver resection, increased liver weight, and reduced elevated levels of serum liver enzymes, reflecting improved liver status.

"While CF102 is now entering Phase II trials for the treatment of liver cancer, our preclinical studies have found it offers potential efficacy in protecting the liver and helping it to regenerate following surgery. We believe this would be beneficial not only for cancer patients after a tumor has been surgically removed from the liver, it may also offer important health and prolonged survival benefits following liver resection in patients with other kinds of liver diseases," stated Can-Fite CEO Dr. Pnina Fishman. "Our intellectual property assets are a priority for us as we move our clinical development pipeline forward."

This patent is currently pending in several other markets including the United States, Israel, and other major markets. Can-Fite's intellectual property portfolio consists of 150 patents issued and pending.

About CF102

CF102 is a small orally bioavailable drug which binds with high affinity and selectivity to the A3 adenosine receptor. The latter 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 our pre-clinical and clinical studies, CF102 induces a robust anti-tumor effect via de-regulation 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 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 anticipated or expected events, activities, trends or results as of the date they are made. Because 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 anticipated or expected events, activities, trends or results as of the date they are made. Because forward-looking statements relate to anticipated or expected events, activities, and results 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

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