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 2013

000-55041
(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 October 22, 2013, Can-Fite BioPharma Ltd. (the "Company") issued press releases in Israel and the United States announcing, among other things, that the Company estimates that the results of its Phase II study in Europe and Israel for its drug CF101 for the treatment of Rheumatoid Arthritis and the results of a Phase III study for its drug CF101 for the treatment of Dry Eye Syndrome, which OphthaliX Inc., a subsidiary of the Company is conducting, are both expected to be published during the last two weeks of December 2013. A translation of the press release issued in Israel is attached hereto as Exhibit 99.1 and is incorporated herein by reference. A copy of the press release issued in the United States (the "U.S. Press Release") is attached hereto as Exhibit 99.2 and is incorporated herein by reference.

The description of the Company's existing out-license agreements included in the U.S. Press Release should be read in conjunction with the descriptions of such agreements contained in the Form 20-F filed by the Company with the United States Securities and Exchange Commission on September 9, 2013, as amended by Amendment No. 1 on Form 20-F/A filed by the Company with the United States Securities and Exchange Commission on September 10, 2013.

EXHIBIT INDEX

Exhibit No.	Description
99.1	Press Release, dated October 22, 2013, issued by the Company in Israel
99.2	Press Release, dated October 22, 2013, issued by the Company in the United States

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: October 23, 2013

By: /s/ Motti Farbstein
Motti Farbstein
Chief Operating and Financial Officer

Exhibit 99.1

Can-Fite BioPharma Announces Expected Clinical Activity Milestones through the end of 2013 and Listing on Major US Stock Exchange

Results from Two Clinical Trials at advanced stages is expected in last two weeks of 2013;

- **Conclusion and announcement of final results of Dry Eye Syndrome Phase III trial, with an estimated market share of $2 Billion dollars;**

- **Conclusion and announcement of final results of Rheumatoid Arthritis Phase II trial, with an estimated market share of $12 Billion dollars;**

The company is seeking to have its ADRs listed on the NYSE MKT prior to publication of the above trials

Petach Tikva, Israel - October 22, 2013 - Can-Fite BioPharma (TASE: CFBI), (OTC:CANFY), a biotechnology company engaged in the development and marketing of molecule drugs that address inflammatory and liver diseases, announced today its expected clinical activity milestones through the end of 2013 as well as its activity to have its American Depository Receipts (ADRs) listed on the NYSE MKT prior to publication of the above trials.

- Uplisting to NYSE MKT: Following the commencement of trading in Can-Fite's Level II ADRs in the U.S. in September 2013, Can-Fite is now actively seeking to have its ADRs listed on the NYSE MKT, and assumes that this process will be completed shortly prior to the publication of the results in the above two clinical trials.

- Dry Eye Syndrome Phase III Results: The Company anticipates that during the last 2 weeks of December 2013, it will conclude and announce the results of its Phase III trial for CF101 in the treatment of dry eye syndrome, which is being conducted by OphthaliX Inc. (OTCQB:OLPI), a subsidiary of Can-Fite. The estimated market share of this drug was $1.6 billion in 2010 and is expected to grow to $5.5 billion by 2022.

- Rheumatoid Arthritis Phase II Results: Can-Fite estimates the results of its Phase II study for its drug CF101 for the treatment of rheumatoid arthritis will be concluded and announced during the last 2 weeks of December 2013. The estimated market share of this drug was $12 billion in 2010 and is expected to grow to $18 billion by 2020.

- Beyond 2013 – Additional Clinical Trials and timetables: In addition to the study results slated for release in December, Can-Fite is conducting four other trials, including a Phase III trial for Psoriasis and Phase II trials for liver cancer, glaucoma and uveitis.

Professor Pnina Fishman, Can-Fite CEO said today that "we are excited about the imminent completion of two advanced clinical trials this year with respect to two drugs to be used in major markets, which generate a lot of interest among the medical community as well as the global pharmaceutical industry. Subject to successful completion of the clinical trials and regulatory approvals, we believe that listing of our stock at the NYSE MKT will assist the company in preparing for possible marketing and monetizing the business potential of these two crucial drugs, as well as other products being developed by Can-Fite and its subsidiary OphthaliX Inc., which are at advanced stages of clinical development."

About Can-Fite BioPharma Ltd.

Can-Fite BioPharma Ltd is an Israeli public company, the ordinary shares of which are traded on the Tel Aviv Stock Exchange (the "TASE") (TASE: CFBI). Level II American Depository Receipts of the company are traded on the U.S. Over-the-Counter Markets (the "OTC Markets") (OTCQB: CANFY). Can-Fite, which commenced business activity in 2000, was founded by Professor Pnina Fishman, Ph.D., researcher in the Rabin Medical Center, and Ilan Cohn Ph.D., patent attorney and senior partner at Reinhold Cohn Patent Attorneys in Israel. Professor Fishman serves as the Chief Executive Officer of Can-Fite. Professor Fishman founded Can-Fite on the basis of her scientific findings and Can-Fite is focused on the development of small molecule orally bioavailable drugs, in particular, ligands that bind to the A3 adenosine receptor. Such drugs mediate anti-inflammatory and anti-cancer effects and are suggested as a biological predictive marker. Can-Fite's lead drug candidate, CF101, is in advanced clinical development for the treatment of autoimmune inflammatory diseases. Can-Fite's second drug candidate, CF102, is being developed for the treatment of liver diseases including liver cancer and Hepatitis C. Can-Fite is highly experienced in clinical trials and as of today, hundreds of patients have participated in such trials conducted by the company. Can-Fite previously licensed its activity in the ophthalmic field to OphthaliX Inc., its subsidiary.

Exhibit 99.2

Can-Fite BioPharma Announces Clinical and Corporate Developments for Near-Term Events

Potential uplisting on to NYSE MKT and results from two clinical trials expected by end of 2013

Petach Tikva, Israel - October 22, 2013 - Can-Fite BioPharma (TASE: CFBI), (OTCQB:CANFY), a biotechnology company with a pipeline of proprietary small molecule drugs that address inflammatory and cancer diseases, announced today a series of clinical and corporate developments, with key events expected by the second week of December, 2013.

Near term events include:

- Uplisting to NYSE MKT: Following the commencement of trading in Can-Fite's Level II ADRs in the U.S. in September 2013, Can-Fite is now actively seeking to have its shares listed on the NYSE MKT. The Company is currently in the application process and believes e the listing is imminent.

- Rheumatoid Arthritis Phase II Results: Can-Fite estimates the results of its Phase II study in Europe and Israel for its drug CF101 for the treatment of rheumatoid arthritis will be concluded and announced during the last 2 weeks of December 2013.

- Dry Eye Syndrome Phase III Results: The Company also anticipates that during the last 2 weeks of December 2013, it will conclude and announce results of its Phase III trial for CF101 in the treatment of dry eye syndrome, which is being conducted by OphthaliX Inc. (OTCQB:OLPI), a subsidiary of Can-Fite.

Ongoing corporate and clinical developments:

- Licensing Deals: To date, Can-Fite has executed two out-licensing deals in the Asian market for $21.8 million in up-front fees based on milestone payments, with additional royalties to be earned following approvals and commercialization.

- Multiple Additional Clinical Trials: In addition to the study results slated for release in December, Can-Fite is conducting four other trials including Phase III trials for Psoriasis, Phase II trials for liver cancer, Phase II trials for glaucoma, and Phase II trials for uveitis.

- Market Addressed: Collectively, the markets addressed by Can-Fite’s drugs currently in various stages of clinical trials tops $30 billion.

"We are making significant advancements with our clinical development programs. This drives the progress in our corporate development which includes a larger presence for our Company in the U.S. markets. The commencement of trading for our Level II ADRs was an important first step to show our commitment to the U.S. market, both for our products and for our U.S.-based investors. We've been in very productive talks with the NYSE MKT and anticipate Can-Fite being listed there before the end of the calendar year," stated Can-Fite CEO Dr. Pnina Fishman.

Can-Fite's drugs are at advanced stages of clinical development in the U.S., Europe and Israel. The Company has also established a portfolio of patent families covering methods of use for treatment of a number of inflammatory diseases. The Company currently maintains 14 patent families that include 74 international patents issued and pending, and its science is well founded with articles in 48 peer reviewed journals.

About CF101

CF101, an A3 adenosine receptor agonist, is a novel, first in class, small molecule, orally bioavailable drug which demonstrated efficacy and an excellent safety profile in clinical studies. Through a service arrangement with its parent, Can-Fite, OphthaliX currently develops CF101 for the treatment of ophthalmic indications, including dry eye syndrome (Phase III), glaucoma (Phase II) and uveitis (initiating Phase II). CF101 is also developed by Can-Fite for the treatment of autoimmune inflammatory diseases, including, but not limited to, rheumatoid arthritis (Phase IIb) and psoriasis (Phase II/III).

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Safe Harbor Statement

This press-release contains 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 (the "SEC"), 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.

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