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 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333-195124 and 333-199033), to be a part thereof from the date on which this report is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.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 May 4, 2015, Can-Fite BioPharma Ltd. issued a press release announcing that its subsidiary, OphthaliX, signed a non-binding term sheet to acquire Israel-based Improved Vision Systems, Ltd. A copy of this press release is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

Exhibit Index

F	Exhibit No.	Description		
	99.1	Press Release, dated May 4, 2015		
			3	

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 4, 2015

By: /s/ Pnina Fishman

Pnina Fishman Chief Executive Officer

Can-Fite subsidiary, OphthaliX, Signs Term Sheet to Acquire Improved Vision Systems Ltd.

New OphthaliX strategy aims to combine ophthalmic medical devices and pharmaceutical products to address multi-billion dollar markets in treating ophthalmic diseases

PETACH TIKVA, Israel, May 4, 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, announced today that its subsidiary, OphthaliX, Inc. (OTCQB: OPLI), has signed a non-binding term sheet to acquire Israel-based Improved Vision Systems Ltd. (I.V.S.).

I.V.S. develops breakthrough medical device technologies to improve sight, diagnose and offer therapy for a variety of ocular diseases including glaucoma, age related macular degeneration (AMD), diabetic retinopathy and oculo-motor pathologies, addressing multi-billion dollar markets. I.V.S. is developing two types of products: (1) an indoor eye tracking solution, attachable to any screen including TVs, computers, tablets, etc., that manipulates the image shown to the user in such a way as to best compensate for such user's specific clinical impairment; and (2) a goggles-based mobile device which generates high definition displays that are manipulated and moved based on the device's ability to track each eye individually, thus restoring mobility and independence to visually impaired people.

OphthaliX announced it is committed to continuing its development program for its drug candidate CF101, a neuro-protective and antiinflammatory drug, for the treatment of glaucoma. Patients are currently enrolled for the second segment of the Phase II study and are treated orally with CF101.

The proposed acquisition of I.V.S is subject to the signing of definitive transaction documents and the completion of closing conditions which are expected to include the satisfactory completion of customary due diligence, obtaining of necessary approvals, the raising of capital by OphthaliX and an up-listing of OphthaliX to a national securities exchange in the United States. Upon closing of the acquisition, I.V.S. executives Ran Yam and Dan Oz are expected to join OphthaliX's Board of Directors. Additionally, upon closing Ran Yam is expected to be appointed Chief Executive Officer of OphthaliX and Dan Oz Chief Technology Officer, bringing their long and successful track records in the medical device field to OphthaliX.

"I.V.S. is a very innovative company that is developing truly breakthrough medical devices to address a range of ophthalmic conditions. We believe this proposed acquisition would re-position OphthaliX as a company that addresses substantial ophthalmologic markets through both medical devices and pharmaceutical products," stated Dr. Pnina Fishman, Can-Fite and OphthaliX CEO. "We are diligently working on moving this acquisition transaction forward and if completed, we believe the synergies of the two companies will enhance OphthaliX's overall value."

There can be no assurance that the transactions contemplated by the term sheet will be completed.

About CF101

CF101, an A3 adenosine receptor agonist, is a novel, first in class, small molecule, orally bioavailable drug with a favorable therapeutic index demonstrated in Phase II clinical studies. CF101 is currently developed for the treatment of autoimmune inflammatory diseases including rheumatoid arthritis (completed Phase II) and psoriasis (Phase II/III).

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 recently completed its 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 in 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. 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 contains forward-looking statements, about Can-Fite's expectations, beliefs or intentions. 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 or OphthaliX's actual results to differ materially from any future results expressed or implied by the forward-looking statements. Factors that may cause actual results to differ from those contemplated by such forward-looking statements include, but are not limited to, the following: failure to enter into definitive transaction documents; failure to enter into a potential financing transaction, failure to up-list to a national securities exchange, reaction to the proposed acquisition by strategic partners and employees; the diversion of management's time on issues relating to the proposed acquisition; the inability to integrate I.V.S.'s operations into those of OphthaliX, the inability to realize expected synergies from the proposed acquisition; changes in the stock price of OphthaliX prior to closing; material adverse changes in OphthaliX's or I.V.S.'s operations; a decline in the economy, as well as the risk factors set forth in Can-Fite's and OphthaliX's filings with the SEC and Can-fite's periodic filings with TASE. In addition, Can-Fite and OphthaliX operate in an industry sector where securities values are highly volatile and may be influenced by economic and other factors beyond its control. Can-Fite undertakes no obligation to publicly update these forward-looking statements, whether as a result of new information, future events or otherwise.

Contact:

Motti Farbstein motti@canfite.co.il +972-3-9241114