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 2017

001-36203
(Commission File Number)

CAN-FITE BIOPHARMA LTD.

(Exact name of Registrant as specified in its charter)

10 Bareket Street
KiryatMatalon, 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, 333-204795 and 333-209037), to be a part thereof from the date on which this report is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.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 5, 2017, Can-Fite BioPharma Ltd. made available an updated investor presentation on its website. A copy of the investor presentation is attached hereto as Exhibit 99.1 and may be viewed in the Investor Information section of the Company's website at www.canfite.com.

Exhibit Index

Exhibit No.	Description
99.1	Investor Presentation dated January 2017

SIGNATURES

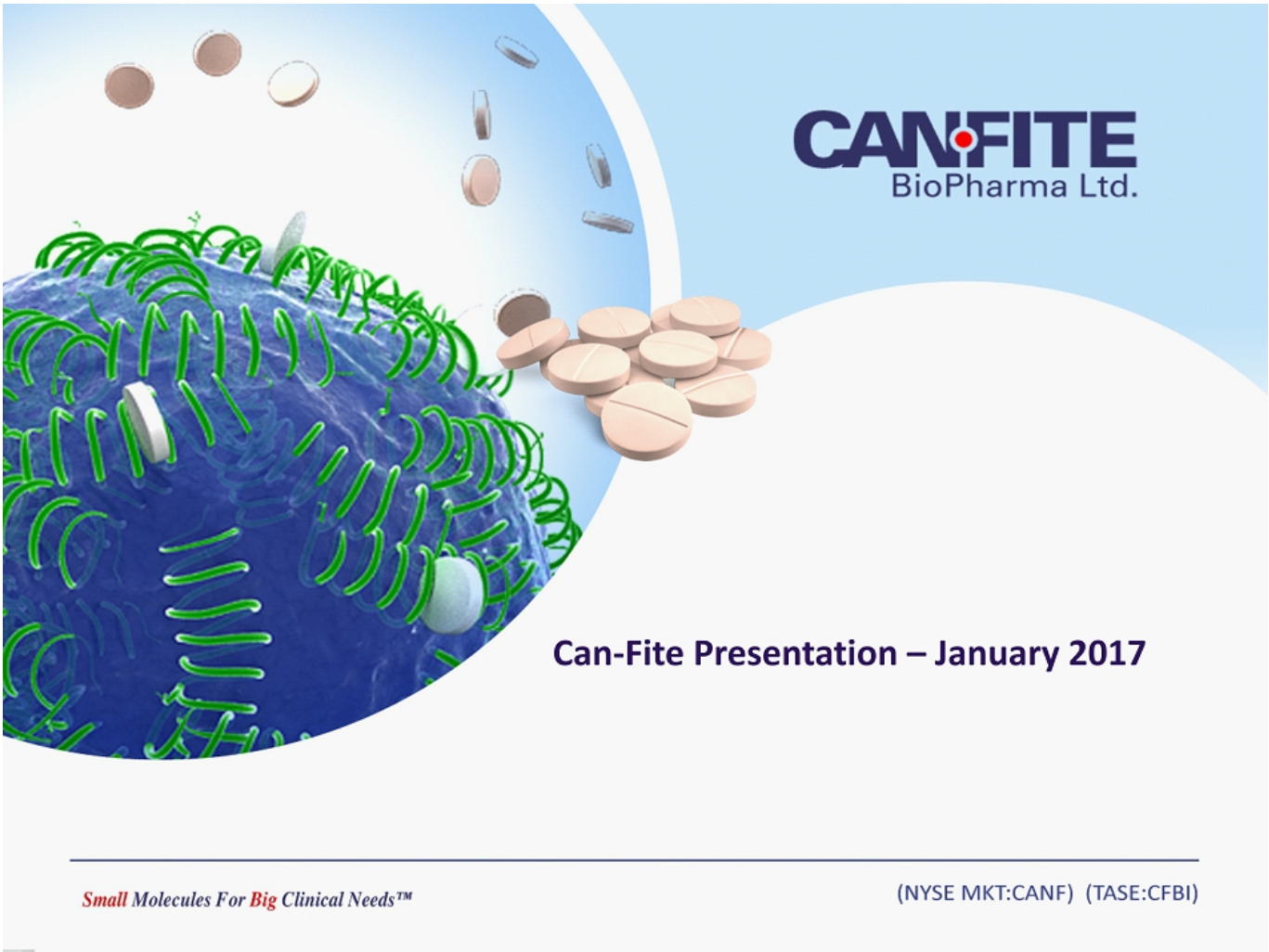
Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Can-Fite BioPharma Ltd.

Date: January 6, 2017

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

Exhibit 99.1


CAN-FITE
BioPharma Ltd.
Can-Fite Presentation – January 2017
Small Molecules For Big Clinical Needs™
(NYSE MKT:CANF) (TASE:CFBI)

Forward Looking Statement

This presentation 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 Tel-Aviv Stock Exchange.

Company Profile

Proprietary Core Technology

- Advanced clinical stage drug development company with a compelling platform technology
- Several small molecule drug products in Phase II and Phase III clinical studies covered by 14 Patent Families

Financial Summary

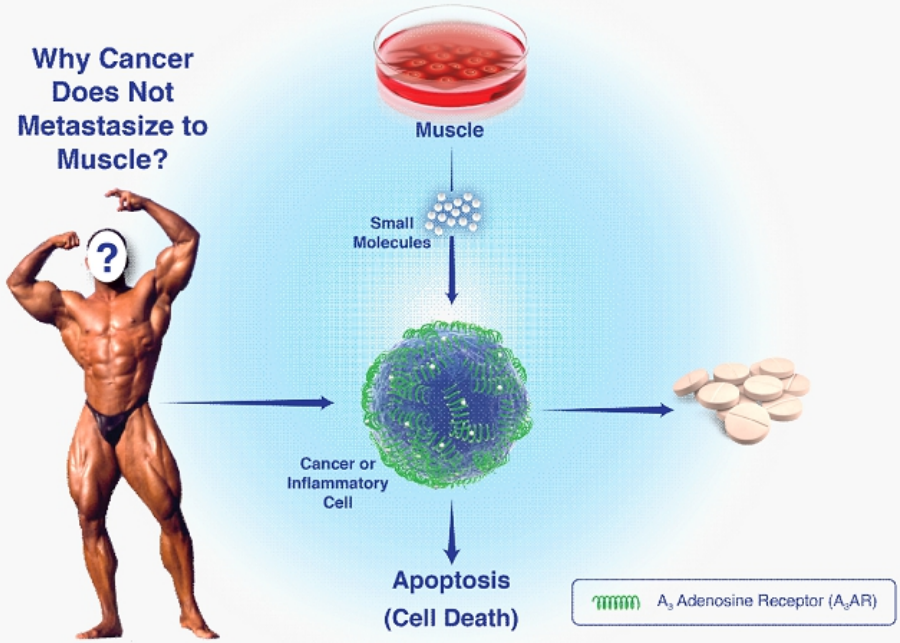
- Cash as of September 30, 2016: ~$10.0 million
- Listed on Tel-Aviv Stock Exchange (CFBI) and NYSE MKT (CANF)
- Price per ADR* traded on NYSE MKT = $2.39 (as of 01/04/2017)
- Market Cap = ~$32 million
- ~28 million ordinary shares outstanding; 40 million fully diluted
- US shareholders represent ~60% of investors

*1 ADR = 2 Ordinary Shares

Operations

- Headquarters & Discovery Labs – Petach-Tikva, Israel
- Drug Development & Clinical Trials Group – Boston
- Highly experienced team in clinical trials / regulatory

From Concept to Technology



Company platform technology mimics natural body mechanism to combat cancer and inflammation

(NYSE MKT:CANF) (TASE:CFBI)

CANFITE BioPharma Ltd.

Platform Technology

Therapeutic Target

- A_3 adenosine receptor (A_3AR)
- Highly expressed in inflammatory and cancer cells

Drug product

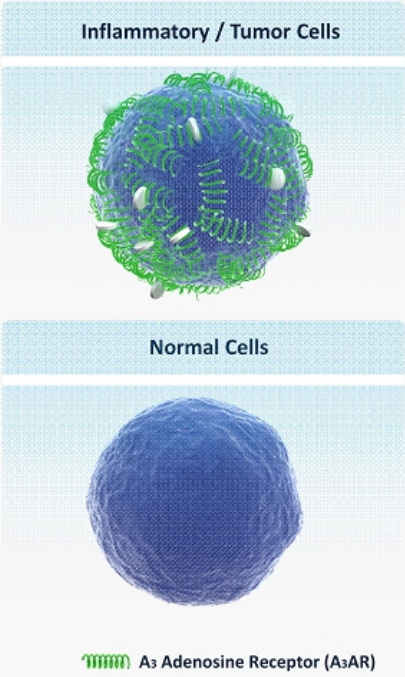
- Small molecules
- Orally bioavailable drugs

Therapeutic Effect

- Anti-inflammatory and anti-cancer effects in Phase II studies; Excellent safety profile

A_3AR is utilized as a Predictive Biomarker

- Utilized to predict patient's response to the drug



Targeted therapy, specifically aimed at diseased cells

Drug Development Pipeline

Indication/Drug	Pre-clinical	Phase I	Phase II	Phase III
Inflammation				
Rheumatoid Arthritis - Piclidenoson (CF101)	Phase III protocol - Reached Agreement with EMA			
Psoriasis - Piclidenoson (CF101)	Phase III protocol – IRB Submissions			
Oncology/Liver Diseases				
Liver Cancer - Namodenoson (CF102)	On-going			
NASH - Namodenoson (CF102)	IRB Submissions			
Erectile Dysfunction				
CF602	On-going			

Corporate Partnerships

Regional out-licensing deals ~$11 million* received to date

KWANG DONG PHARMACEUTICAL CO., LTD. [Traded on South Korean Stock Exchange (Ticker: A009290)]

- Exclusive regional license to develop and commercialize Piclidenoson for the treatment of rheumatoid arthritis in Korea
- Up to $1.5M in upfront and milestone payments ($0.5M received to date)
- 7% royalties

cipher PHARMACEUTICALS INC [Traded on Nasdaq (Ticker: CPHR); TSX: (Ticker: CPH]

- Exclusive regional license to distribute Piclidenoson for the treatment of rheumatoid arthritis and moderate to severe psoriasis in Canada
- Up to CDN$3.65M in upfront and milestone payments (CDN$1.65M received to date)
- 16.5% royalties

Chong Kun Dang Pharm. Seoul, Korea [Traded on South Korean Stock Exchange (Ticker: 185750)]

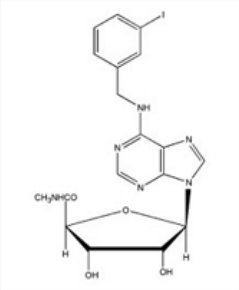
- Exclusive distribution agreement in South Korea for distribution of Namodenoson for treatment of liver cancer
- Up to $3.0M in upfront and milestone payments ($0.5M received to date)
- 20% + royalties

* $8.5M was from a license with a Japanese company ,SKK; the license was terminated due to SKK's strategic change of focus to indications not related to autoimmune diseases

Piclidenoson (CF101)– Anti-Inflammatory Effect

Properties

- Highly Selective A_3AR Agonist
- Nucleoside derivative
- Molecular weight - 510.29
- Water insoluble
- Orally bioavailable
- Half life time in blood – 8-9 hours
- Is not metabolized in the body; secreted unchanged



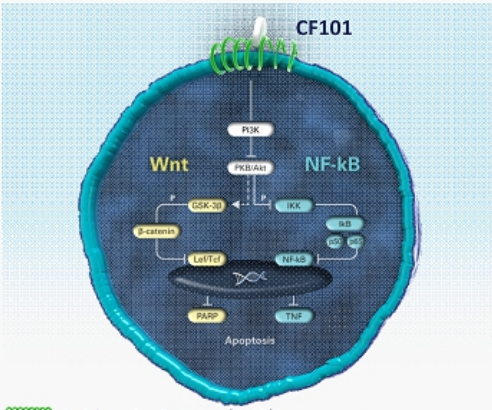
Fishman et al. Drug Discovery Today 17:359-366. 2011.

Anti-Inflammatory Effect

Proof of concept in pre-clinical pharmacology studies:

- Rheumatoid Arthritis
- Osteoarthritis
- Inflammatory Bowel Disease
- Uveitis

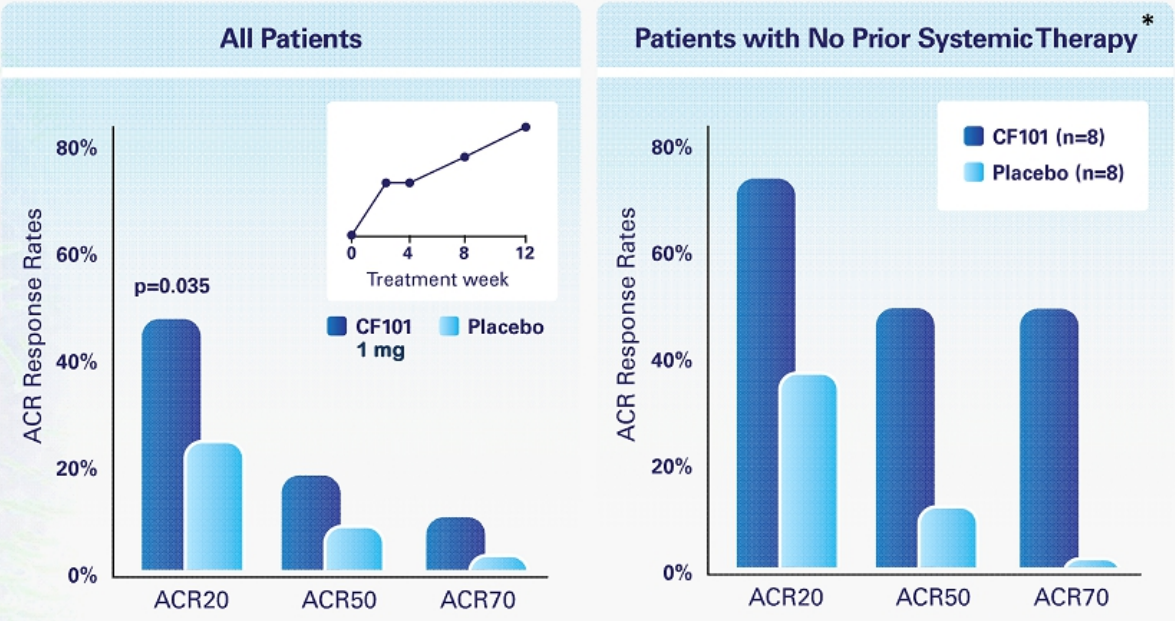
Mechanism of Action



A_3 Adenosine Receptor (A_3AR)

Rheumatoid Arthritis - Positive Data from Phase II Study

Phase IIb study, Placebo controlled; 79 patients



*MTX, Biological Drugs

CANFITE BioPharma Ltd.

Piclidenoson for Rheumatoid Arthritis

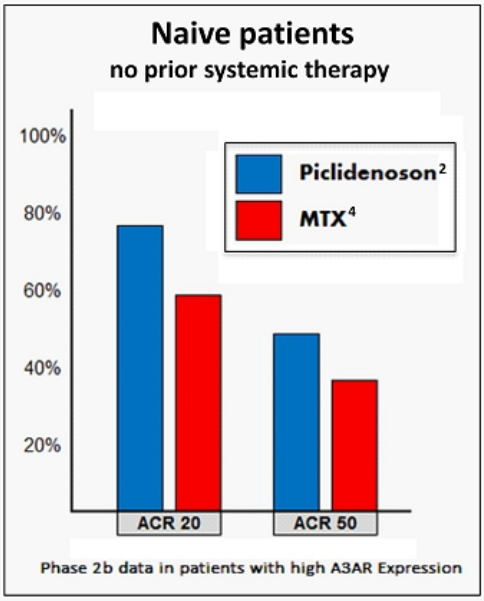
Methotrexate (MTX) is the recommended first-line therapy according to EULAR and ACR

Approximately 70% of RA patients requiring DMARD therapy will start on MTX[1]

- 40% in combination with other drugs

Piclidenoson opportunity to replace MTX as first-line oral DMARD therapy based on Phase II data

- 34% discontinuation rate for MTX due to adverse events[3]



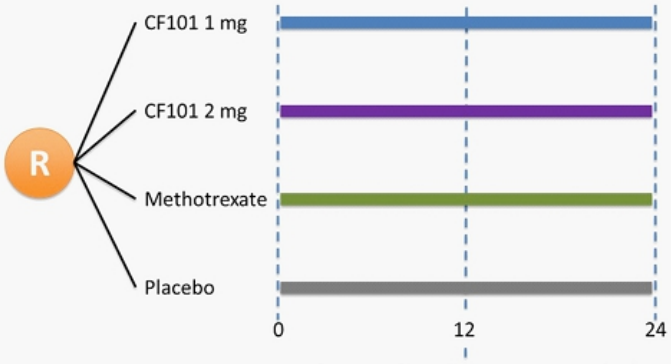
Sources: 1) Bassel K., et al., 2013, 2) Company filings, 3) Nikiphorou E, et al., 2014, 4) MTX data is average of six P3 trials of various RA drugs

Piclidenoson Rheumatoid Arthritis Phase III Design

Phase III clinical study designed to establish Piclidenoson is non-inferior to MTX in newly diagnosed patients with moderate-to-severe RA

- Randomized, double-blind, active and placebo-controlled
- Primary endpoint will be DAS at week 12
- Secondary endpoints will include ACR 20, 50, 70 scores
- 24 week total duration
- Correlation between A3AR expression and response to Piclidenoson will be analyzed

CF101 1 mg, CF101 2 mg, Methotrexate , or matching placebo tablets every 12 hours in a 2:2:2:1 ratio

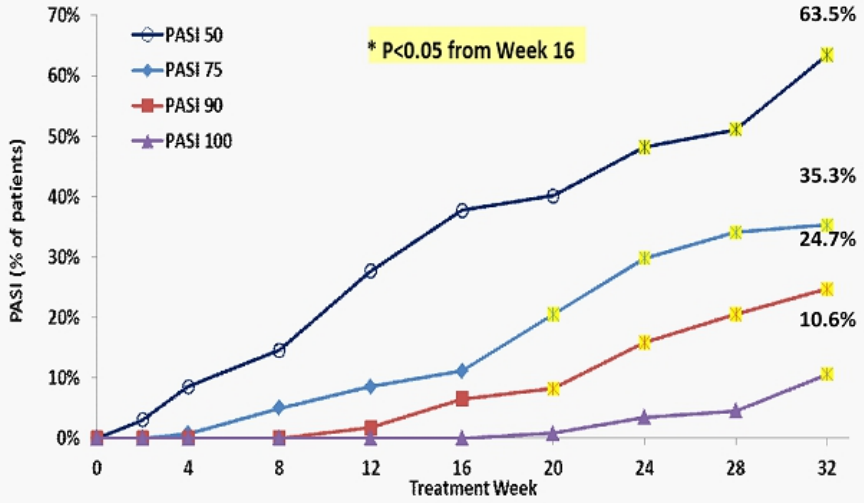


At Week 12, any subject who has not experienced at least 20% improvement in both the number of swollen and number of tender joints will be given escape therapy with open-label oral MTX

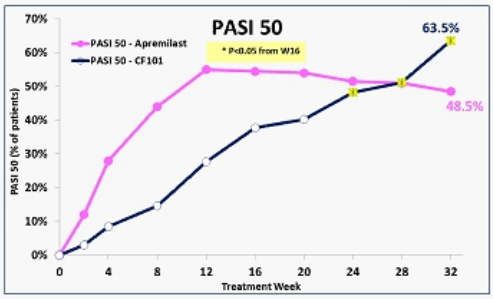
Piclidenoson for Psoriasis

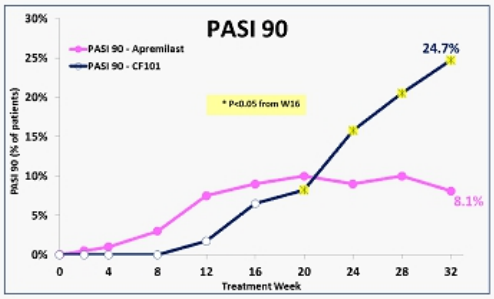
Phase II/III study, Placebo controlled, 325 patients

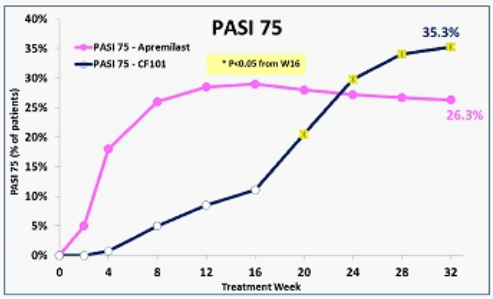
- The study did not achieve the primary endpoint of PASI 75 at 12 weeks
- Excellent safety profile in all tested dosages
- Positive linear data on Weeks 12 to 32

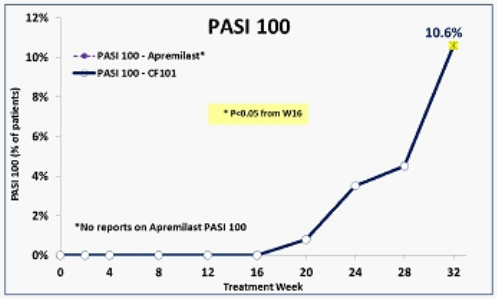


Piclidenoson Compares Favorably To Celgene's Otezla









- **Celgene off to a very strong start with Otezla®, posting sales of $472 million in 2015[1]**
- **Peak Otezla® sales estimated at $2.35 billion in 2020[2]**
- **Piclidenoson compares well to Otezla® at weeks 24-32[3]**

(NYSE MKT:CANF) (TASE:CFBI)

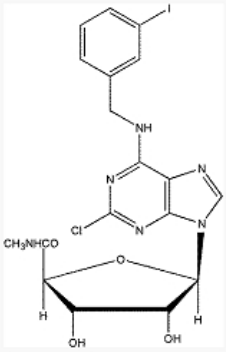
CANFITE BioPharma Ltd.

Sources: 1) Celgene 2015 annual report 2) DrugAnalyst, Ltd. 3) Based on Otezla Phase 3 data vs. CF101 Phase 2 data.

Namodenoson (CF102) – Anti-Cancer & NAFLD/NASH

Drug Profile

- Highly Selective A3AR Agonist
- Nucleoside derivative
- Molecular weight - 544.73
- Water insoluble
- Orally bioavailable
- Half life time in blood – 12 hours

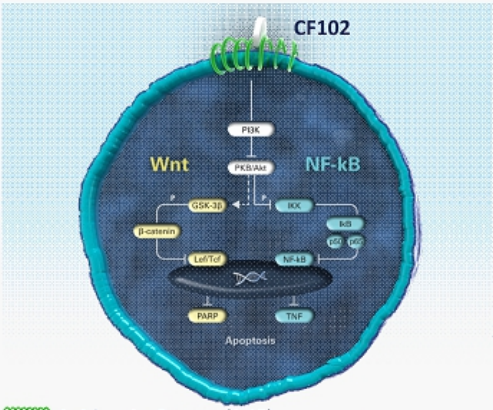


Pharmacology Profile

Proof of concept in pre-clinical pharmacology studies:

- Hepatocellular Carcinoma
- Colon Carcinoma
- Prostate Cancer
- Melanoma

Mechanism of Action

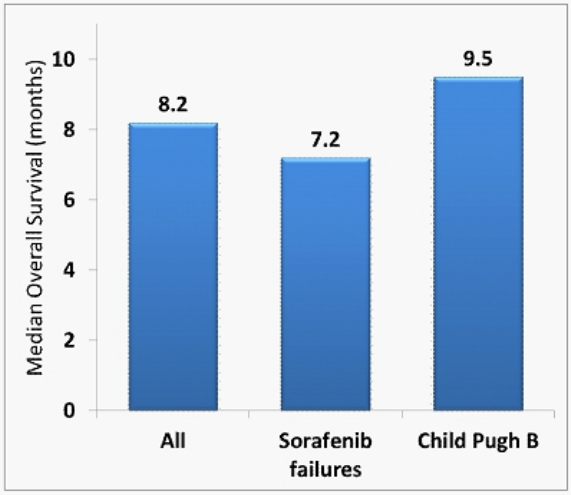


A3 Adenosine Receptor (A3AR)

Liver Cancer – Positive Data from Phase I/II Study

Phase I/II Positive Results

- Very favorable safety profile and lack of hepatotoxicity
- Prolongation of survival time
- Regression of skin tumor metastases
- Stable disease (22%)
- Proof of concept for A3AR utilization as a biomarker



Stemmer et al. The Oncologist, 2012

Market Opportunity

- Significant unmet need – there is only one drug registered to treat primary liver cancer patients - Nexavar® (sorafenib)
- According to Datamonitor, the hepatocellular carcinoma market for drugs was projected to reach $1.4 billion in 2019. Nexavar® annual sales, as reported by Bayer, were €773 million in 2014

Liver Cancer – Phase II Global Study Ongoing

Phase II - Study Protocol

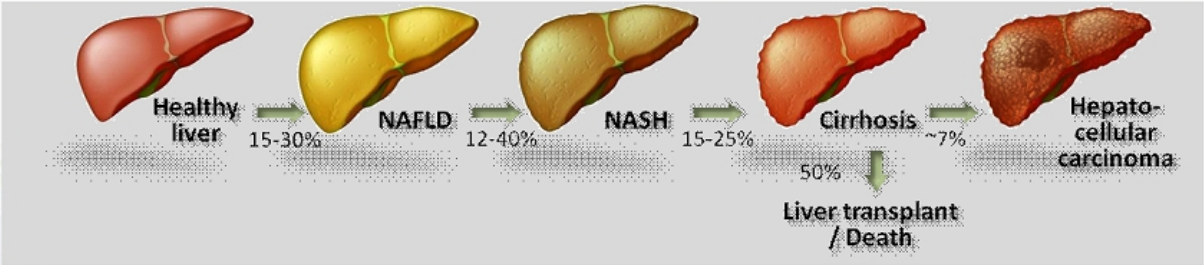
- Second-Line Treatment
- Advanced Hepatocellular Carcinoma; Child-Pugh B
- 78 patients;
- US, Europe and Israel
- Primary end point: overall survival

Orphan Drug Designation US & EU
Fast Track Designation

Regulatory Status

- FDA and EMA have granted **Orphan Drug** status and FDA granted **Fast Track** status as a second line treatment
- Study is ongoing in the US, Europe and Israel

Namodenoson for the Treatment of NASH



Namodenoson markedly improved liver function & pathology in NAFLD and NASH experimental models

- **Namodenoson reduces NAFLD Activity Score (NAS)**
- **Significant decrease in steatosis, ballooning and lobular inflammation**
- **A decrease in plasma ALT and triglyceride levels**
- **Hepato-protective effect (liver regeneration)**
- **Anti-Fibrogenic effect *in vitro***

- **Market size - ~$35B by 2025[1]**
- **Recent M&A – Gilead/Nimbus; $400M upfront payment[2]**
- **Leading KOLs on board**
- **Recently filed Phase II protocol with IRBs**

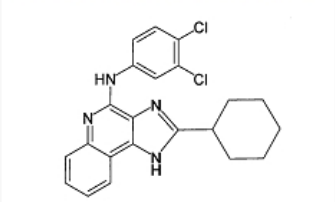
Sources: 1) Deutsche Bank 2) Gilead press release

CF602 – Erectile Dysfunction – A Safe Drug

Properties

- A_3AR allosteric modulator
- Molecular weight – 411.34
- Water insoluble
- Orally bioavailable
- Belong to the family of imidazoquinoline derivatives

Chemical Structure



1*H*-imidazo[4,5-c]quinolin-4-amine Derivatives

Current status

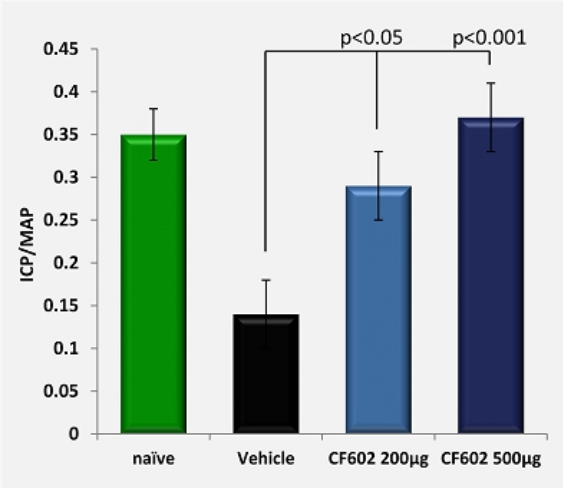
- Manufacturing of CF602 to be used in pre-clinical studies has been completed
- Pre-clinical studies – ongoing

Cohen et al. Mediators of Inflammation. 2015

CF602 – Reverse Erectile Dysfunction

Significant full recovery from erectile dysfunction in diabetic rat model

- Dose-dependent, linear effect
- Response after single dose of CF602



Novel mechanism of action

- Up-regulation of eNOS and VEGF
- Improves vasodilation and smooth muscle relaxation

Worldwide Sales In 2015

Viagra® = $1.708 Billion[1]

Cialis® = $2.311 Billion[2]

1) Pfizer 2015 annual report; 2) Eli Lilly 2015 annual report

Spotlight on 12 Month Milestones

Piclidenoson – Rheumatoid Arthritis (~$38B Opportunity)	
Phase III Trial Initiation Based on Agreement Reached with EMA	2017
Piclidenoson– Psoriasis (~$9B Opportunity)	
Phase III Trial Initiation Based on Agreement Reached with EMA	2017
Namodenoson – Liver Cancer (~$1.4B Opportunity)	
Complete Patient Enrollment in Phase II Study	H1-2017
Namodenoson – NAFLD/NASH (~$35B Opportunity)	
Phase II Trial Initiation	2017
CF602 – Sexual Dysfunction (~$2.6B Opportunity)	
Preclinical Studies Ongoing	2017

*Sources: Visiongain estimates global psoriasis drug market will be $8.9 b by 2018 and the global rheumatoid arthritis drug market will be $38 b by 2017; Datamonitor estimates the HCC drug market at $1.4 b in 2019; GlobalData estimates the global erectile dysfunction drug market at $2.6 b by 2018; Deutsche Bank puts the peak market for NASH therapies at $35 b to $40 b by 2025.